

Everyday Errors in Checker Play

By

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In studying backgammon over the years, many of my greatest pleasures have come from problem books where the correct play is surprising, counter-intuitive, and just plain dazzling. Of course, it is possible to improve your backgammon by the study of these arcane brilliancies. Any thoughtful attempt to understand positions in this beguiling game can lead to improvement. However, this book has few of these types of sparkling plays. In this book we examine the everyday stuff --- moves where Black bleeds equity without even realizing it, game after game, drop by precious (cube) drop until eventually it causes his game to fall short of the beautiful ideal of simple play. The shocking truth is: *This is why we lose!* The mishandled backgame; the subtle machinations of prime versus prime; the precise moment at which to switch from a blocking to an attacking game; the animal handling of hungry jackals poised to kill a lone straggler: These scenarios are all part of great backgammon, yet they don't occur often enough to account numerically for our failures. We self-destruct over the everyday stuff: positions that seem the same but really aren't the same, although we insist upon treating them in the usual way.

Backgammon, our magnificent obsession, has entered a golden age. With rare exceptions the modern backgammon bots choose the best play. They are, however, stubbornly silent as to why it is the best play. Humans are left with a dilemma: backgammon is highly competitive among human players yet each of us now needs another's insights to understand why our chosen plays are not the best. The key question was: "What is the best play here?" but has shifted to: "Although I once saw it that way, must I now look at it this way?" It seems therefore that a modern backgammon book must become substantially more confessional, exposing our wrong thinking to public scrutiny and working our insights into a new viewpoint either alone

or better with friends. We try to sing that old hymn: "Once I was blind but now I see."

Perhaps the strongest players will solve the problems but skip the written annotation; I hope that they do not. These backgammon problems are chosen from everyday errors and not from dazzling puzzles. The real purpose of this book is not the cleverness of the problems but the written annotations, which try to capture my journey of personal realization that an old idea is wrong and must be replaced with a newer idea that might be right. I don't claim my reasoning is flawless. Feedback from all players is vital, strongest included. The problems span many years of playing time precisely to permit that process to ripen. Also, a couple of these problems will be correctly answered by all experienced players and thereby labeled dull, yet these problems too are included because each of us sometimes goes mad and ends up completely off the rails. Finally, since the shift in ideas is personal to me, upon reflection there are few prime versus prime positions, backgame positions, or brutal blitz positions, maybe because my backgammon obsession began in the 1970s when we got plenty of practice in these extreme styles at the expense of a more balanced and profitable approach to the game.

You will learn from these backgammon problems in one of two ways. First, the wrong-to-right idea process will sometimes tweak a response in your thoughts that something similar happened recently in one of your games. In short, you may make the same mistake I make. Second, if you take the time to produce written annotations of some of your own recent errors, then the blind-but-now-see process will be personalized and customized to your insights. When you share your analysis with us, we can all be better for it. So that is your homework assignment. After finishing (by your definition) this book on everyday errors in checker play, please play some cash games using the Jacoby rule and annotate your errors. If you are crazy enough, you can even publish an online book of them. I'll read it.

That is what I did to create this book. With my backgammon bots, I played a bunch of cash games with the Jacoby rule. I saved every game,

then used the bot to analyse every move. I examined each mistake, including the madness of oversights due to the kid's screaming, or the telephone ringing, or C_2H_6O . We can look at ourselves in these everyday errors. What does it tell us about our backgammon game? Don't be shy; we know deep down we can sometimes be dull-witted. After a dozen years of collecting, each mistake has been saved and catalogued, and from the ocean of errors this book is spawned. I could try to con you by saying that all these errors occurred long ago, before the flood, but truth be told some happened just last month. That's fine. We are friends. We can both admit it. There is stuff in backgammon that we may not fully understand. In this book I admit my mistakes.

Here are a few ground rules pertaining to the positions below. They are aimed at experienced players trying to become experts, although perhaps there will be a few ideas for world-class players to mull over. First, place the board alone into view and think about the position awhile without reading the analysis. After all, why spoil the fun? Usually I give (if not, behind the scenes I make) an assessment of who leads the race, what are Black's assets, what are White's assets, whether the cube plays a role, and most importantly what might be Black's best game plan. Then I discuss some of Black's possible plays. Given that I messed up, I may tell you what move I chose and therefore display how dumb I am.

Now down to brass tacks. You and I are Black and our gender is male. White is our opponent and she is female and exceptionally good at backgammon. Every position has Black on the move, traveling clockwise with his house at the bottom left.

Yes, all the positions have been rolled out. However, as the American computer scientist Richard Hamming noted: The purpose of computing is insight, not numbers. I agree. Later with your own bot you can cross-check my statements to your heart's content. But let's get some insight nailed first, shall we? The XGID coding of each position is in the Appendix.

It is not necessary to do pip counts for these problems. There are positions in backgammon where it is strongly advised to do pip counts, but not in this book. Here we must be able to estimate the relative racing advantage into one of nine bins labelled as:

- The race is about even,
- Black has a small racing lead,
- White has a small racing lead,
- Black has a healthy racing lead,
- White has a healthy racing lead,
- Black has a big racing lead,
- White has a big racing lead,
- Black has a huge racing lead and gammon looms,
- White has a huge racing lead and gammon looms.

That's it. It won't take long to learn to characterise each position accurately into one of these nine racing bins. Hence pip counts are not displayed.

If you are unfamiliar with the board "double-dozen" notation, just note that the backgammon points are labelled from Black's viewpoint. From White's point of view, read the equivalent numbers directly across from Black's viewpoint. For example, Black's 15pt is directly across from Black's 10pt, and is White's 10pt. Related point numbers add to twenty-five.

Each game is a cash game and the Jacoby rule is in force. In case you have forgotten, the Jacoby rule states that neither player can win a gammon (or backgammon) unless the cube has been accepted by someone during this game. Then gammons are activated. In effect, the rule causes earlier doubles and provides relief from late drawn-out gammon attempts. It's a good rule in my opinion.

Each position is numbered and has a brief heading which is a quote from William Shakespeare. They are not hints to the problems, only bits of word play. Although Will was a master of timing, scholars and historians are unclear as to just how strong his backgame was.

I gratefully acknowledge the kind permission to use the XG board graphics in this book. If you don't yet own a copy of the XG backgammon bot, please consider buying it. See www.extremegammon.com for details. As of 2011 December it is the best computer backgammon program available. Thanks, Xavier, for the great software.

Enjoy the backgammon problems. This book is free, but it is still copyrighted. If you have fun with the problems, please give a donation to one of the four medical charities whose diseases have affected my family: Crohn's disease and colitis; Parkinson's disease; cancer; and Alzheimer's disease. A contribution to these charities for medical research in your own country or in Canada would be greatly welcome. If you read this book again and still enjoy it, perhaps make an additional donation. The websites for these Canadian medical charities are:

www.cafc.ca

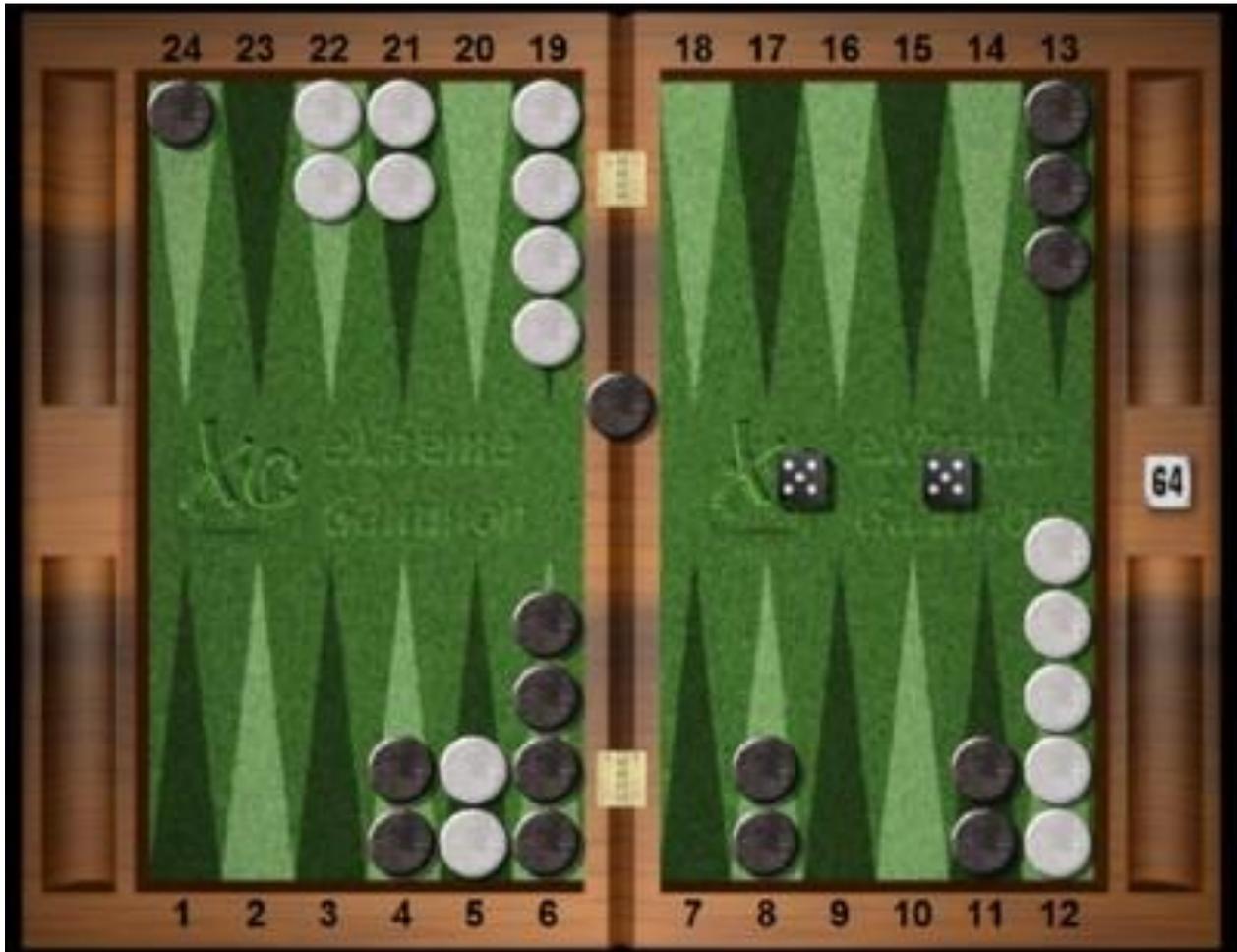
www.parkinson.ca

www.cancer.ca

www.alzheimer.ca

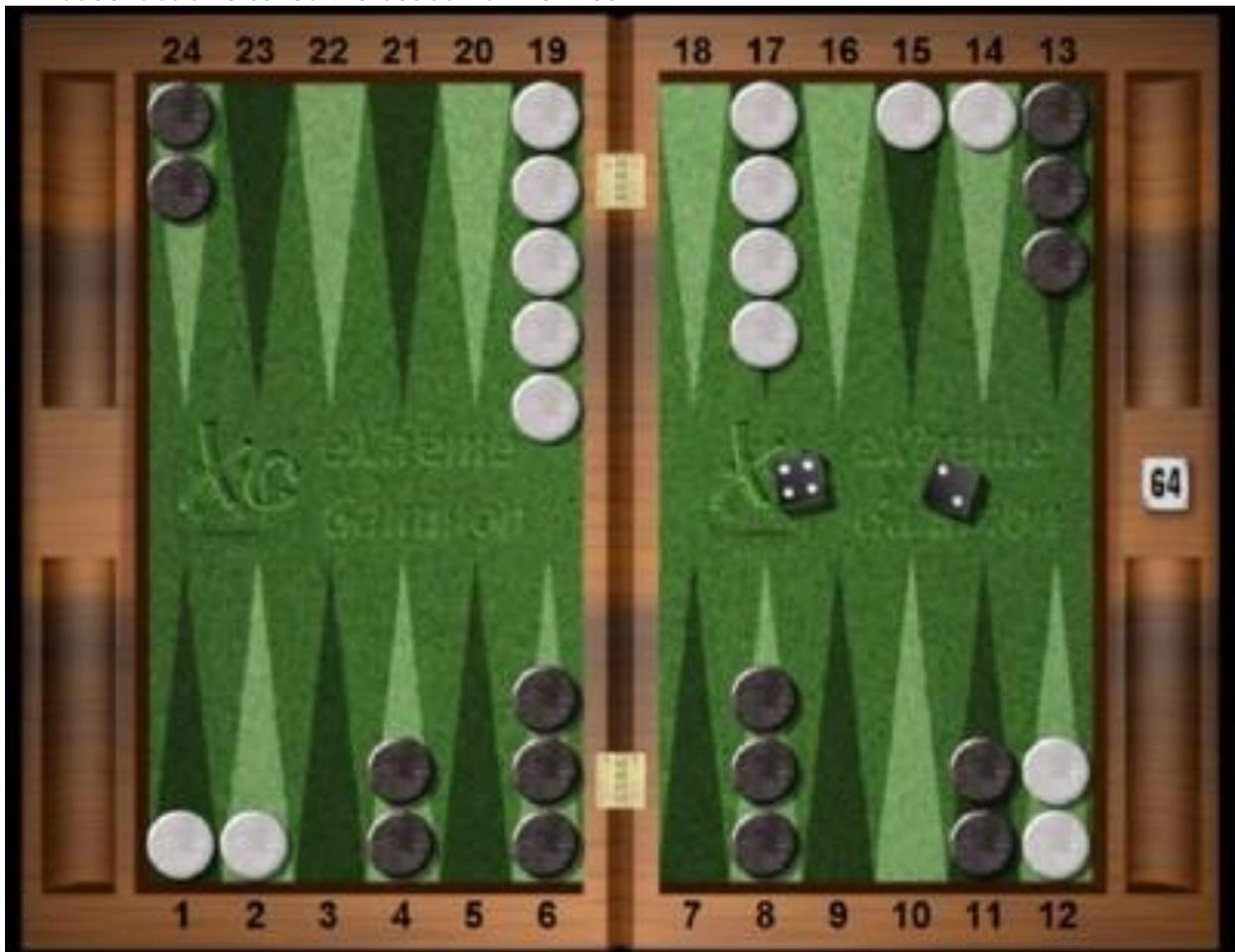
I receive no monetary advantage from your gift, only the happiness that one day these diseases will be defeated.

1. *It is not in the stars to hold our destiny but in ourselves.*



Black's chosen play went completely off the rails here and left blots on his 3pt and 15pt. The race is about even. White has the excellent 20pt anchor, a better home board, and more spares for timing on her midpoint. The key to Black's correct move is White's midpoint spares. One common error is to leave a blot in range of a stacked point when another blot can be left in range of a stripped key point. Here is the classic example. Black should instead leave his blot on the 10pt in front of White's golden anchor. Adding a useful builder to his stripped 8pt stylishly completes Black's play. Try B/10 13/8. Make White pay to hit the black blot by offering to start an exchange of hits. When White hits with a spare (such as from her 13pt), then there is no structural damage to White during an exchange of hits.

2. *Modest doubt is called the beacon of the wise.*



Black chose to make the 9pt which seems like a natural progression towards a black prime. And it is. However, Black must also consider White's side of the board and White's game plan. The white midpoint is already stripped and, given that she has not yet made a new home point, she has the maximum possible builders for her board that an opening position can offer. Black's goal is to make a high anchor. Black wants to get there first to thwart White's objective, and his plan is feasible because he has the better board --- for the moment. When Black makes a grab for a high anchor, this position becomes a classic case where Black prefers to be hit in the white outfield rather than in her home board. In this situation White would often hit and point in her home board. Therefore Black's return hits or return anchors from the bar will be easier if White has still not made a new home point after she has hit. Start the barpoint with 24/18.

3. *No, I will be the pattern of all patience; I will say nothing.*

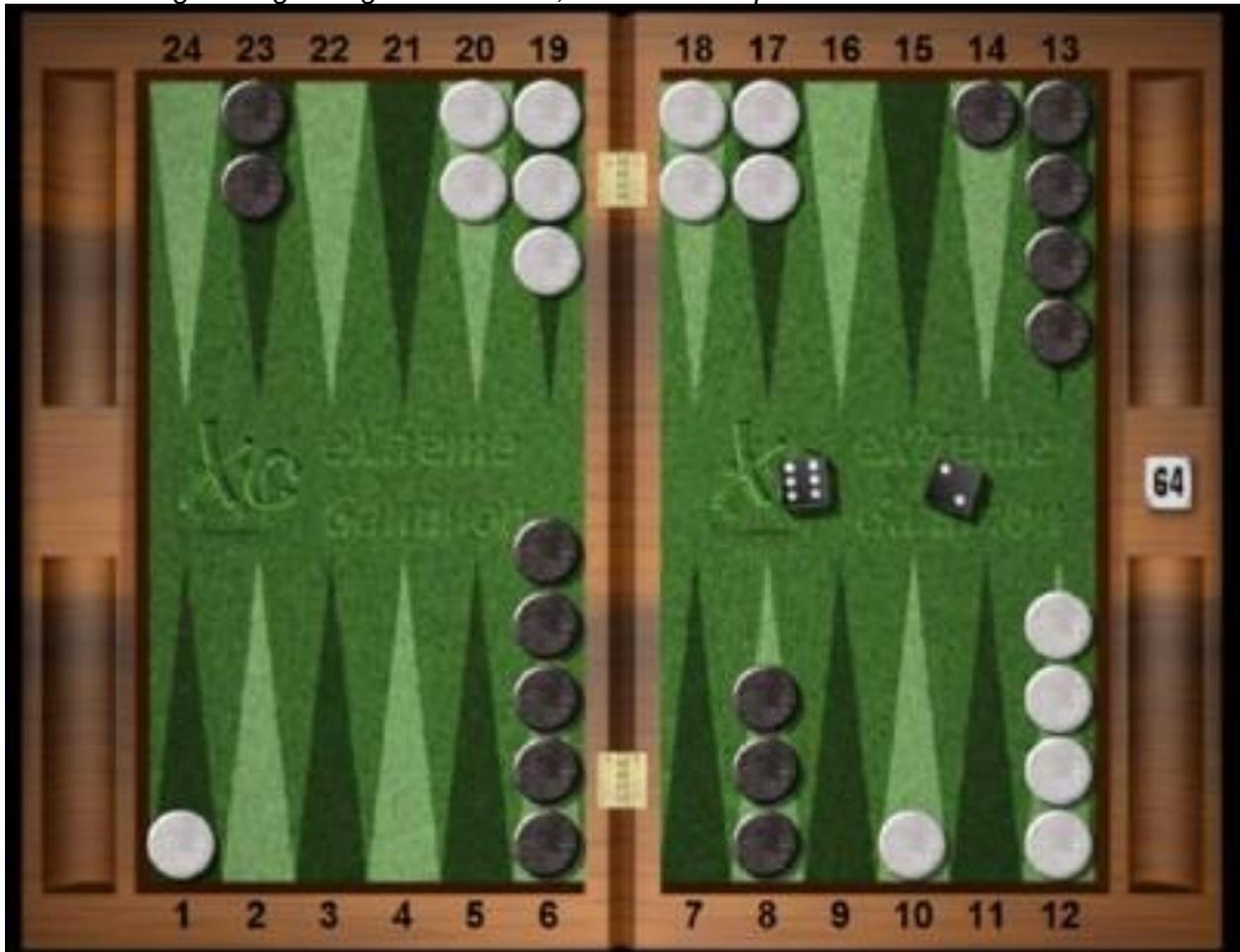


Black has a slight racing lead and a prime that, although not perfect, is doing useful work. White too has a blockade yet Black could escape it without much trouble, except for one vital fact: White has control of the outfield and has builders trained on her vacant blocking points. Black, by contrast, has mediocre builder structure. And Black is running out of time. His two backmen to the lone white straggler do not help his timing despite the slight superiority of Black's prime.

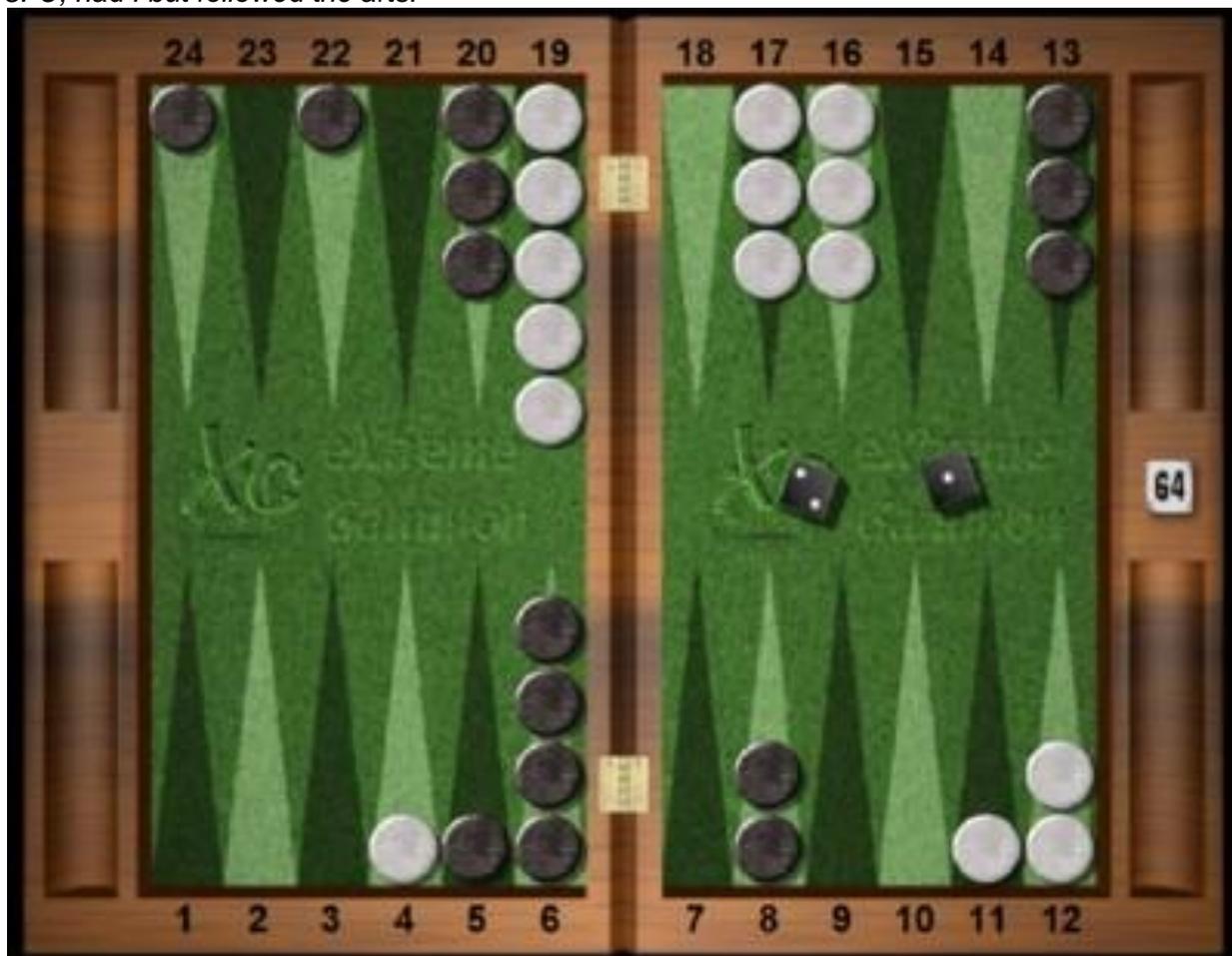
Hence this is the moment for Black to seize the initiative with a provocative play: start to run; hit loose; or slot his key 3pt? The white builders are too scary for any running. Slotting or hitting are close in equity, yet represent quite different strategies. The loose hit gets the nod because it could freeze White's development and permit Black an instant reversal. Play 7/1*. Slotting the last prime point with 4/3 is a longer term plan and more precarious when White has the greater flexibility.

White owns the cube. Suppose Black had access to the cube.
Where would he play then?

4. *To believing souls gives light in darkness, comfort in despair.*



There is a naturalness or Buddha nature to the flow of backgammon. Sometimes it is overshadowed by violence and aggression, but often it is right up front. In this opening White has made a great 4-prime and sprung one backman. Black has inched his anchor ahead and added coverage to his outfield, hardly an equivalent development. Running into the white outfield and leaving twin blots to the whims of a pair of white builders is not natural. The natural play starts the key 21pt and safeties the black builder with 23/21 14/8. The natural play acknowledges White's better position and seeks to solve one black problem at a time, starting with the vital issue of a better black anchor.

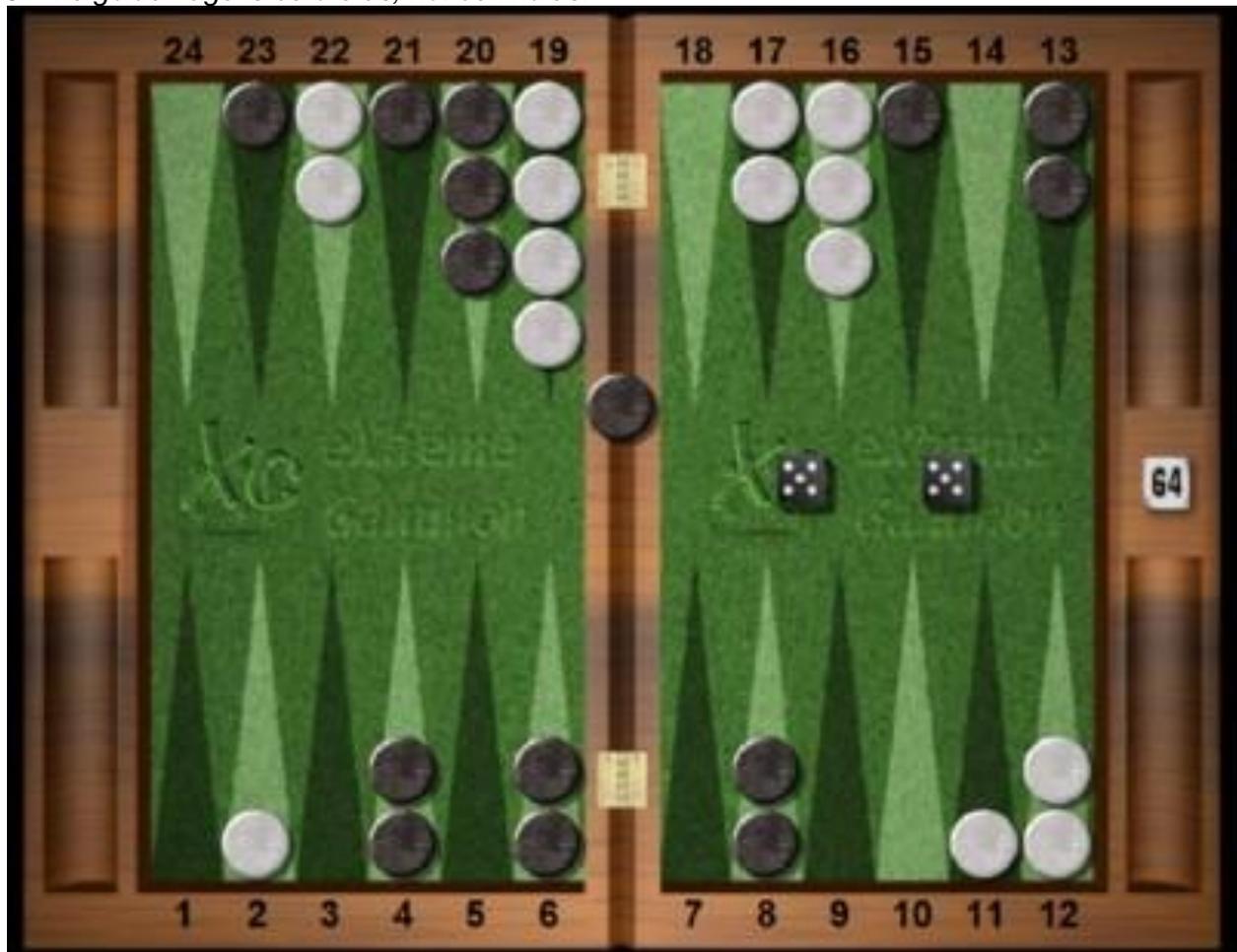
5. *O, had I but followed the arts!*

An interesting question arises in the opening when the early play revolves around the combination of a black 5pt blot and a white 21pt blot. Which attack is best? Pointing on the 4pt blot is often incorrect, but not always. Making the 5pt and hitting loose on the 4pt can be correct, but not always. Sometimes other choices override these plays, but when?

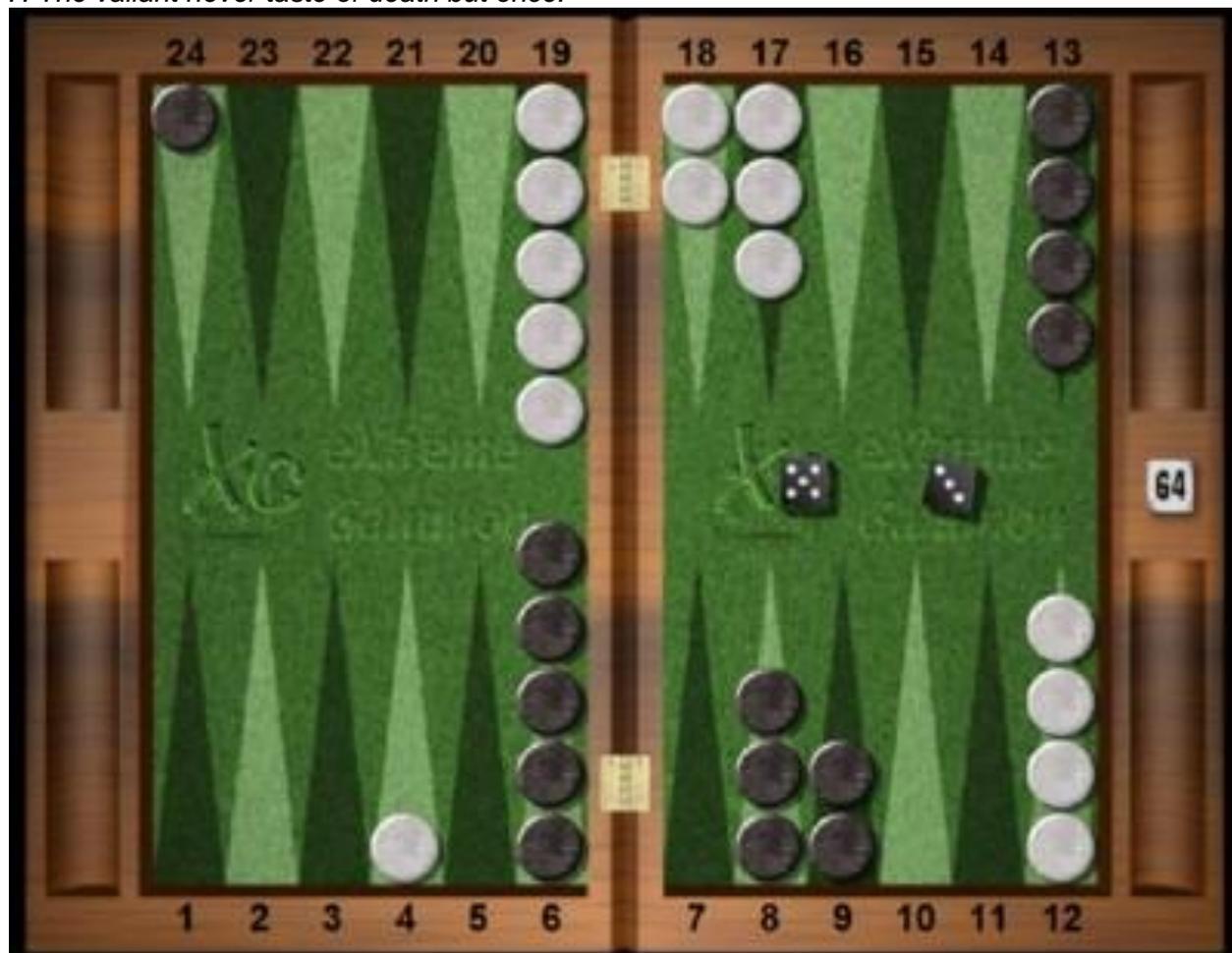
With five backmen Black is ridiculously far behind in the race, although his 20pt anchor is great compensation which embarrasses the five white spares on her side of the board. Her spares are all dressed up with nowhere to go. Black needs to realize that five backmen with a great anchor alter the tactics and strategy pertaining to his side of the board. For example, without the ready builders Black cannot expect a blitz to work starting from a 4pt loose hit. This promotes the pointing play ahead of that play. However, the pointing play also suffers from a lack of builders. Black should instead begin to redress the imbalance in racing deficit with the

completely safe play of 13/11* 6/5. In what will prove to be a long game White's midpoint is stripped and her own blockade is thwarted by Black's anchor. If White's checker now on the bar enters as her 21pt anchor, Black could outlast White in any holding game. If White enters without anchoring, Black can replenish his outfield builders and gradually construct an outfield prime. Black's well-supplied anchor converts all of the checkers on his midpoint into instant spares. He won't mind breaking the midpoint. White suffers the timing problem and a black outfield prime is the ideal antidote for exploiting White's advanced position. Begin with 13/11* 6/5.

6. *The golden age is before us, not behind us.*



Black rolled big doubles when he is far behind in the race. When this happens Black must make sure he creates lasting assets such as new points that are strategically meaningful. Hitting a white blot rarely qualifies. Under no circumstances should Black advance the 23pt checker with this roll because, still far behind in the race, Black must maintain contact in all quadrants of the board. Best is moving the checker on the bar to become an outfield builder on the 10pt and creating an additional outpost on the 15pt. These moves increase coverage of his outfield, which diminishes the chances of White's straggler escaping while also providing further development of Black's nascent prime. Play B/10 20/15.

7. *The valiant never taste of death but once.*

The race is even. Each side has made one new blocking point; each side has escaped one backman. Neither has improved the home board. With this roll Black can indeed make a new home point, obviously of value. However, the play is second best. This problem is an introduction to the topic of first-strike capability. The positions are parallel. It is quite possible that White too will next be faced with running or making a home point. Suppose Black runs now. Even though fifteen shots will hit, that is still a minority. If Black's blot is missed, it now covers both outfields and suddenly White's running prospects are diminished. By striking first with his run and succeeding, Black will have broken the parallel structure in his favour and found a game plan that might work. If Black is hit, he should enter easily and then, by and large, the situation will be reversed with White enjoying first-strike capability, but not much more. Play 24/16.

Backgammon is not like other games where there is advantage in maintaining a static parallel balance between armies. Backgammon is too fast-paced for that and often rewards the player who seizes the initiative, who strikes first and asks questions later. In the opening of many backgammon games we have all been forced to dance even before we have our dancing shoes laced up. The concept of first-strike capability is very real.

8. *Things won are done, joy's soul lies in the doing.*

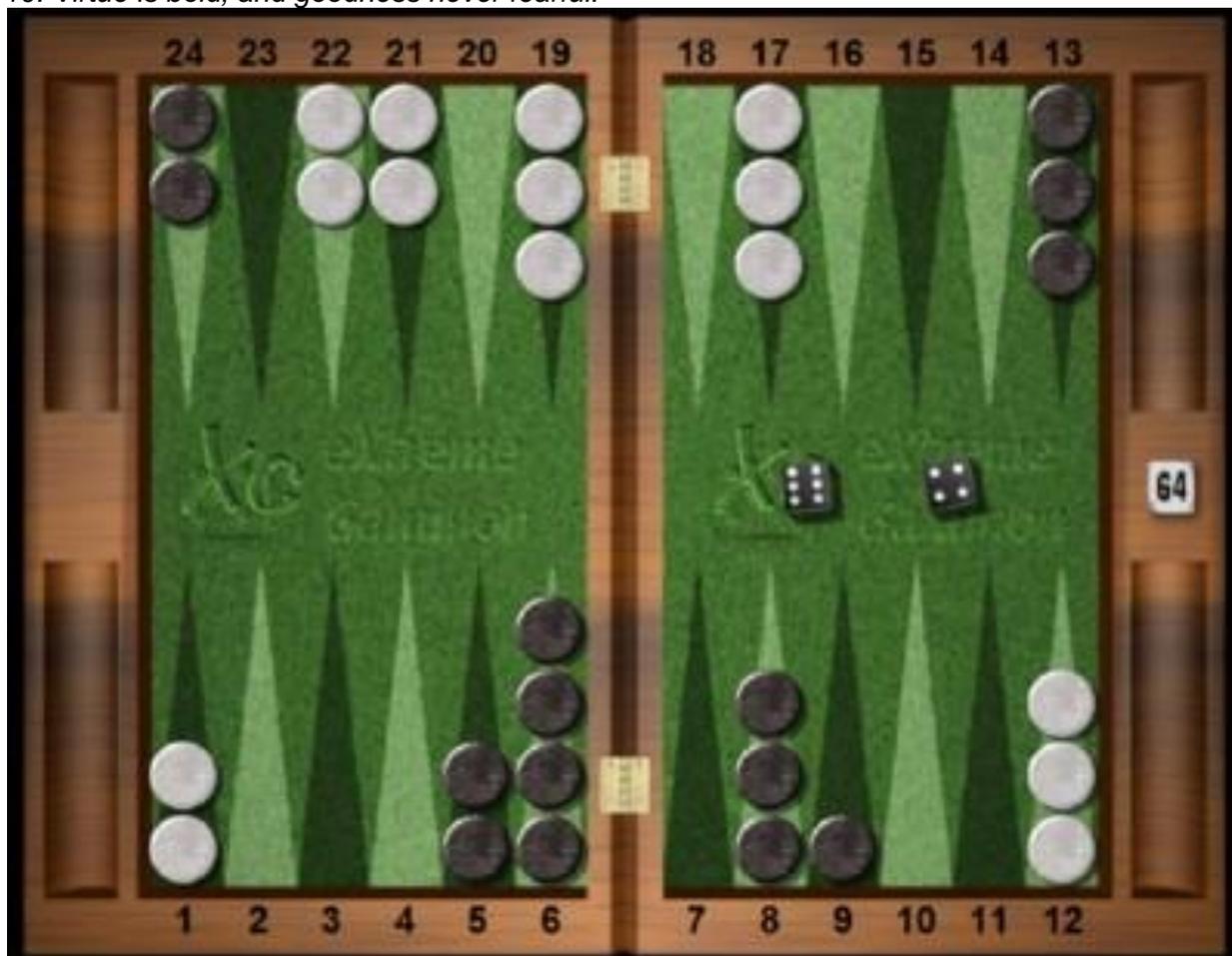


The stronger Black is on one side of the board, the weaker he can afford to be on the other side --- within reason. Here it is quite reasonable to make the 7pt with 13/7(2). Black has the better home board. White has builders but also has gaps in her home board. Black's abandoned midpoint blot is admittedly vulnerable to an ace, but White is stripped on her midpoint and if she hits, the entire outfield is up for grabs. By hitting the black outfield blot, White creates a happy situation for Black if he manages to anchor from the bar on the 20pt or 22pt. Then the remaining black runner can stake claim to the outfield. After that, Black's 5-prime will really be effective.

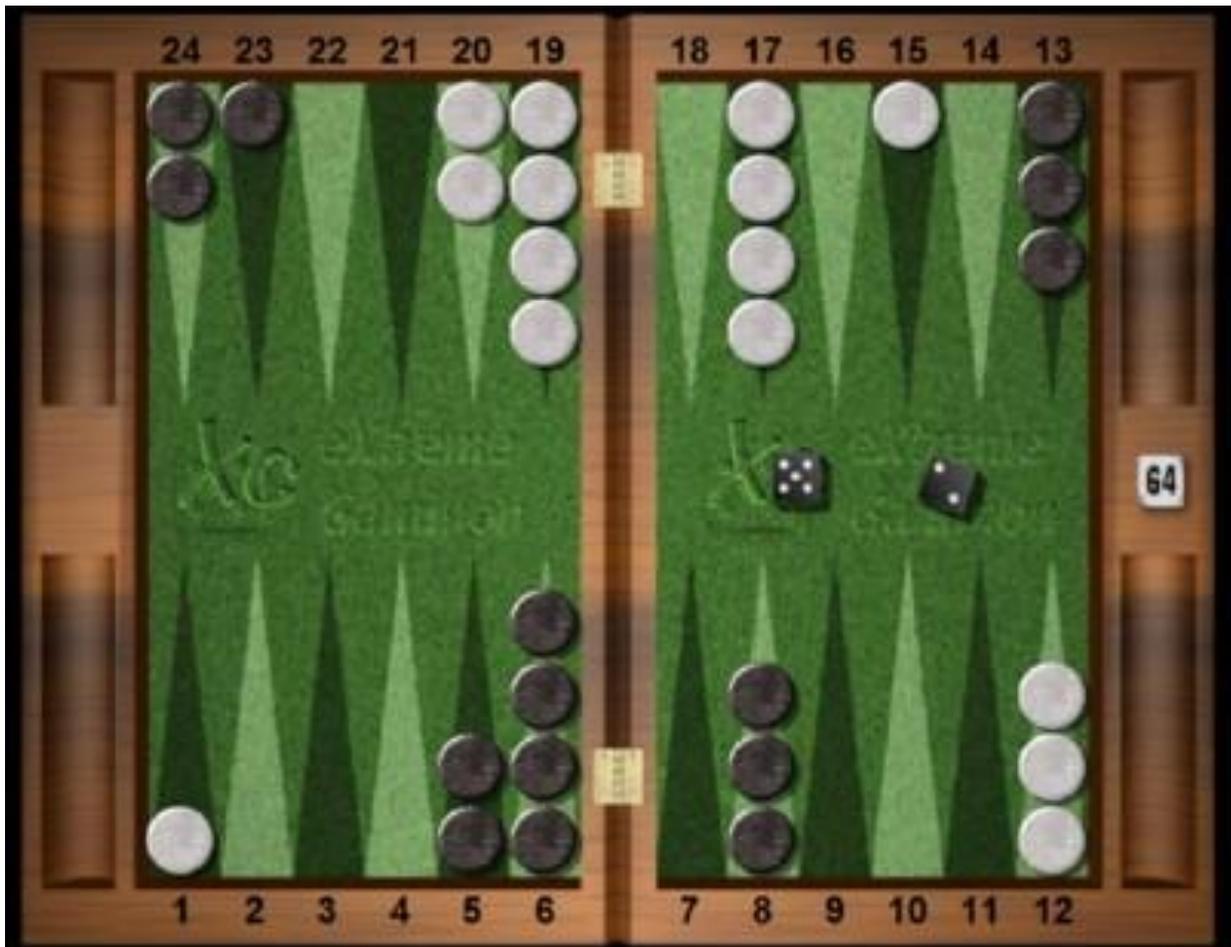
9. *Time and the hour run through the roughest day.*



Even though the 16pt is covered by two white builders, running from the bar to the 16pt is still a better play than starting the 8pt. True, Black would be happy to see White break anchor to hit, but that is mostly wishful thinking. White won't hit without a perfect roll. If White doesn't hit, what can Black do with his 8pt blot? White owns the golden anchor, so a priming game is out of the question, especially since Black would have five checkers behind White's anchor. This game still has plenty of play and therefore it's too early to strip the midpoint. Run with B/16 into two white attackers and view the play as an investment in timing. Timing is a nuanced balance between pips and flexibility. If missed, Black's timing is improved in flexibility; if hit, Black gains more timing in pips.

10. Virtue is bold, and goodness never fearful.

White has a slight lead in the race. Although Black would like to make his deuce point to keep up with home board development, the tenor of this game seems to ask who will improve the backmen first. Black can run to the 14pt, but his 9pt blot may prove to be an awkward and untimely flaw and then become a deadly distraction. If White hits anywhere, Black's extra blot may be his undoing. Afterwards the game turns ugly. Better to cover the 9pt while he has the opportunity. Thus starting the 18pt is the move which, when successful, could vault Black into a commanding position in this game. If his 18pt blot is hit, White still has openings in her board for Black to anchor. Play 24/18 13/9.

11. *To do a great right do a little wrong.*

In backgammon tactics can work together, or they can get in each other's way. The best move hits loose on the ace point. The fifth best move hits loose on the ace point. Evidently the play of the deuce matters here.

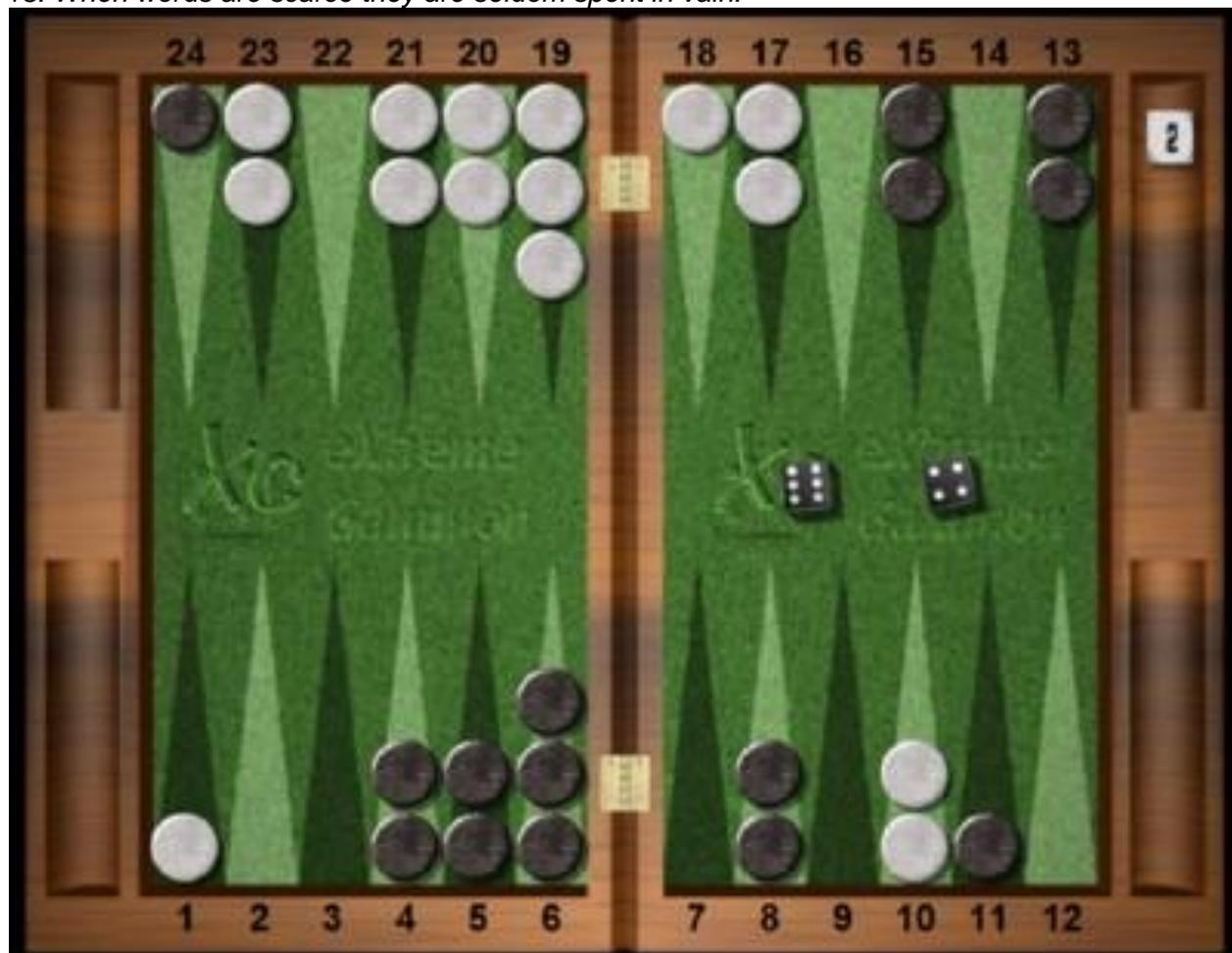
Both sides have made their 5pt. Black has two extra checkers back. White has an attacking blot in her outfield also aimed at new blocking points. Should Black split to the 22pt or creep to the 21pt? Because sixes do not play well for White from the bar, White would be satisfied to hit loose from her 10pt with any six, possibly whacking two black checkers with her roll. Even though a black creep to his 21pt threatens White's outfield blot, it is wiser (and safer) to try for a high anchor with the full split of 24/22 6/1*.

12. *When sorrows come, they come not single spies, but in battalions.*



Only one choice makes sense here and all others are massive blunders. Nevertheless we all take our eyes off the ball occasionally. Black decided to hit twice by clearing his barpoint blot. The problem here is the game plan --- Black lacks the immediate builders to close out White. Black has the safety of a good anchor, which is traditionally required for blitzing, but his two runners on his 22pt and 15pt first need to be on his side of the board. Black's anchor also supports the game plan of priming and here is a perfect roll to create that prime. Of course Black must play 13/7 making his 5-prime and trapping three white backmen. The two black blots in the outfield are a nuisance, but no more than that. With any white hit from her midpoint, the outfield will be relinquished to Black and the exit of any black backmen via the vital 21pt black anchor will replenish his outfield control. The obvious play has deep strategic thinking behind it.

13. *When words are scarce they are seldom spent in vain.*

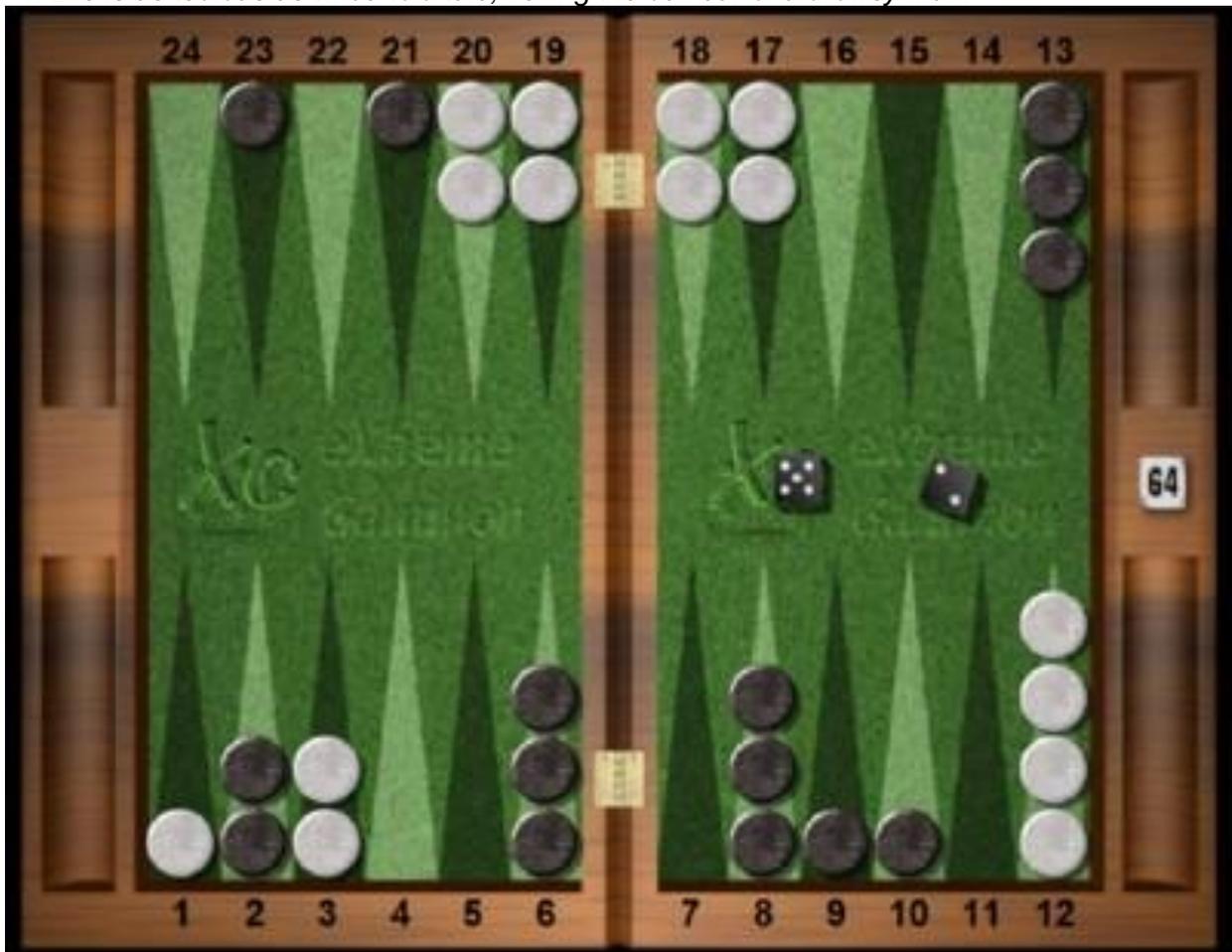


This is a small quiet problem of a technical nature but ignoring the reasoning can ruin a successful outcome of the game. Of course Black will hit the white blot on the 18pt. Now what? If Black breaks his midpoint he leaves four blots scattered around. That's too many blots. If Black advances his 11pt blot to his bar point, he leaves White unused aces and sevens to hit one of the two black blots, thus eleven shots in total. If Black covers his 11pt blot he leaves again two blots and eleven shots in total. If Black continues to the 14pt, he still leaves two blots and eleven shots. Given White's board, from a safety perspective all these may be too many shots. How to choose?

The technical issue is the question of Black's return shots. In middle game situations like this, where the home boards are solid and where a blot-hitting frenzy may suddenly erupt, try to orchestrate the return hits to attack the weakest white point (or blot) by arranging substantial black

coverage beforehand. This is a very important and often overlooked principle. Specifically, Black should play 24/18*/14. Here's why. The other move choices had the black 18pt blot perhaps attacked by White's 8pt. Then, if Black is hit, only this same black checker now cooling his heels on the bar has (indirect) shots at White's new blots. Instead if White breaks her 15pt to hit Black, then at least three black checkers bear on the white outfield blots. If Black does enter, the return hits are many and devastating. Nor is it just the number of return hits that matters. The surrender by White of the outfield has major implications for the white backman and for Black's chance of picking up two white blots. Further, if White misses the shot on her next roll, Black's position after 24/18*/14 is well connected and well situated to button up blots or sprint to safety. Despite being a small technical issue, it is a common and useful theme and therefore should be mastered.

14. *Life is as tedious as twice-told tale, vexing the dull ear of a drowsy man.*



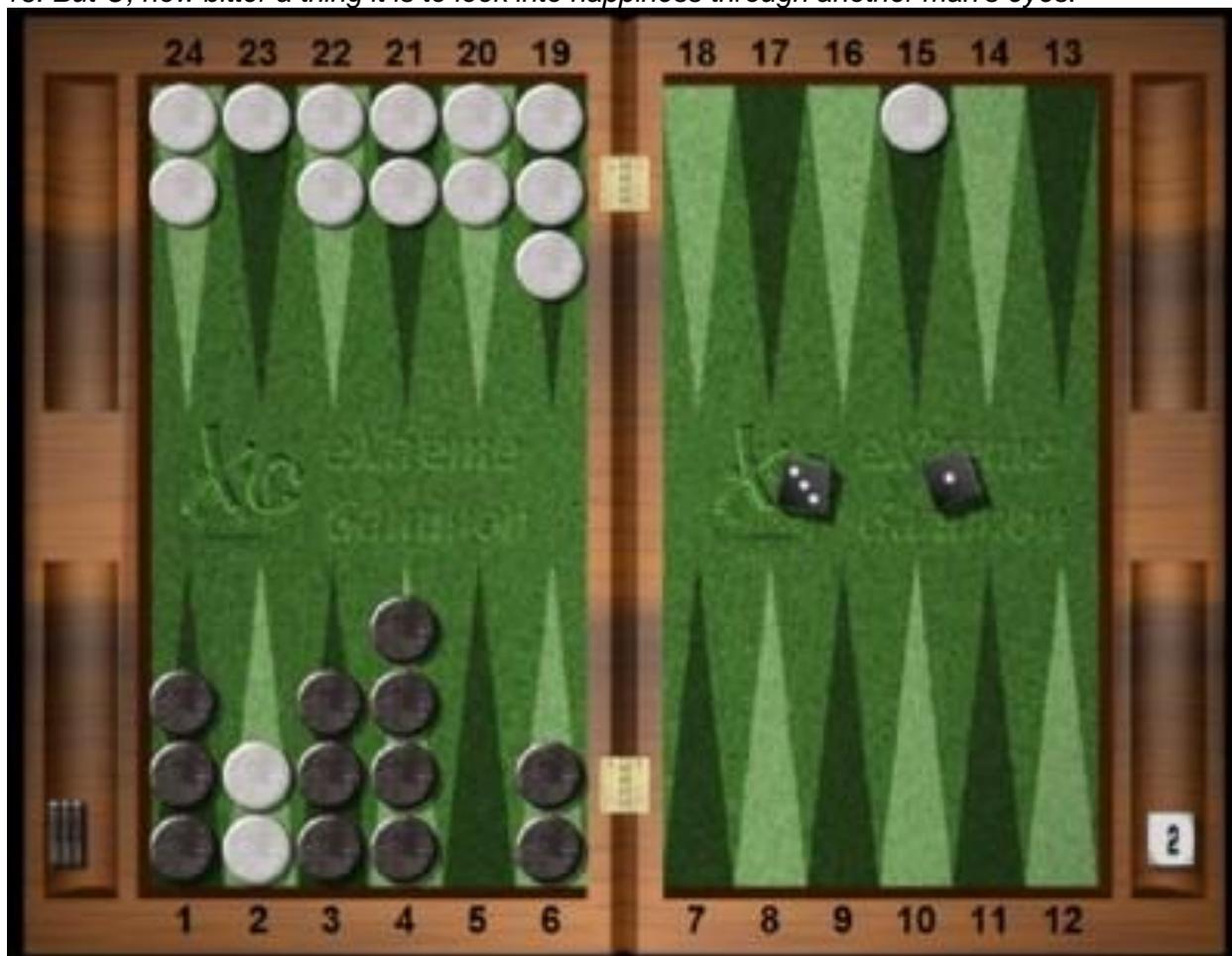
White has a tight 4-prime which has tempted Black into thinking that he should make a high anchor on the 21pt. The trouble is that, although he is not winning the game, Black is leading in the race. White has three checkers back, spares on her midpoint, but currently no builders on her side of the board. This lack of ammunition makes it too early for Black to worry obsessively about an anchor, especially if he has a constructive and threatening move on his own side of the board. And he has. Black should make his 4pt, which puts teeth into his blockade and supports any future attack. Also, the play lifts a blot under direct aim from the white anchor, thus preserving Black's racing advantage. Furthermore it indirectly defends against a white attack on Black's 21pt blot. Play 9/4 6/4.

15. *Heat not a furnace for your foe so hot that it do singe yourself.*

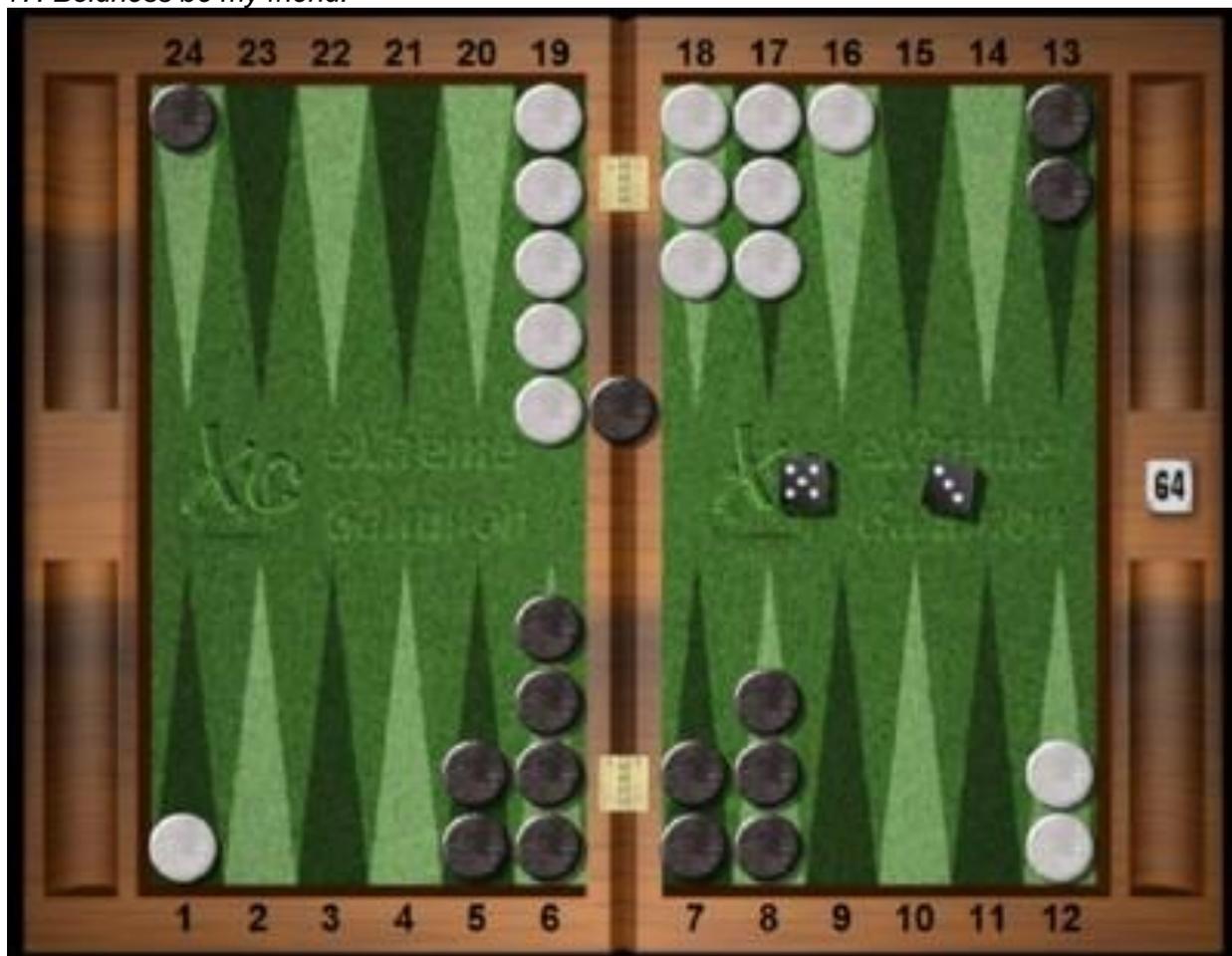


There is really only one play here but in the heat of battle a warrior can sometimes lose his bushido way. White has a fine 4-prime and the golden 20pt anchor. Black has some outfield development and control, a medium-quality anchor, but has not strengthened his board yet. Particularly, his 6pt stack is paralysed by White's anchor with his three spares stunned and inert. Both players have more checkers back than they started with although, despite this, the race is still close. Black chose to hit a white blot, but the choice is not the direction of play. Given that Black may not build a decent home board for quite awhile, it is best to upgrade his defence to the far better 21pt anchor. Now White's 6pt spares are also stunned. Play B/21 22/21 and await developments.

16. *But O, how bitter a thing it is to look into happiness through another man's eyes.*

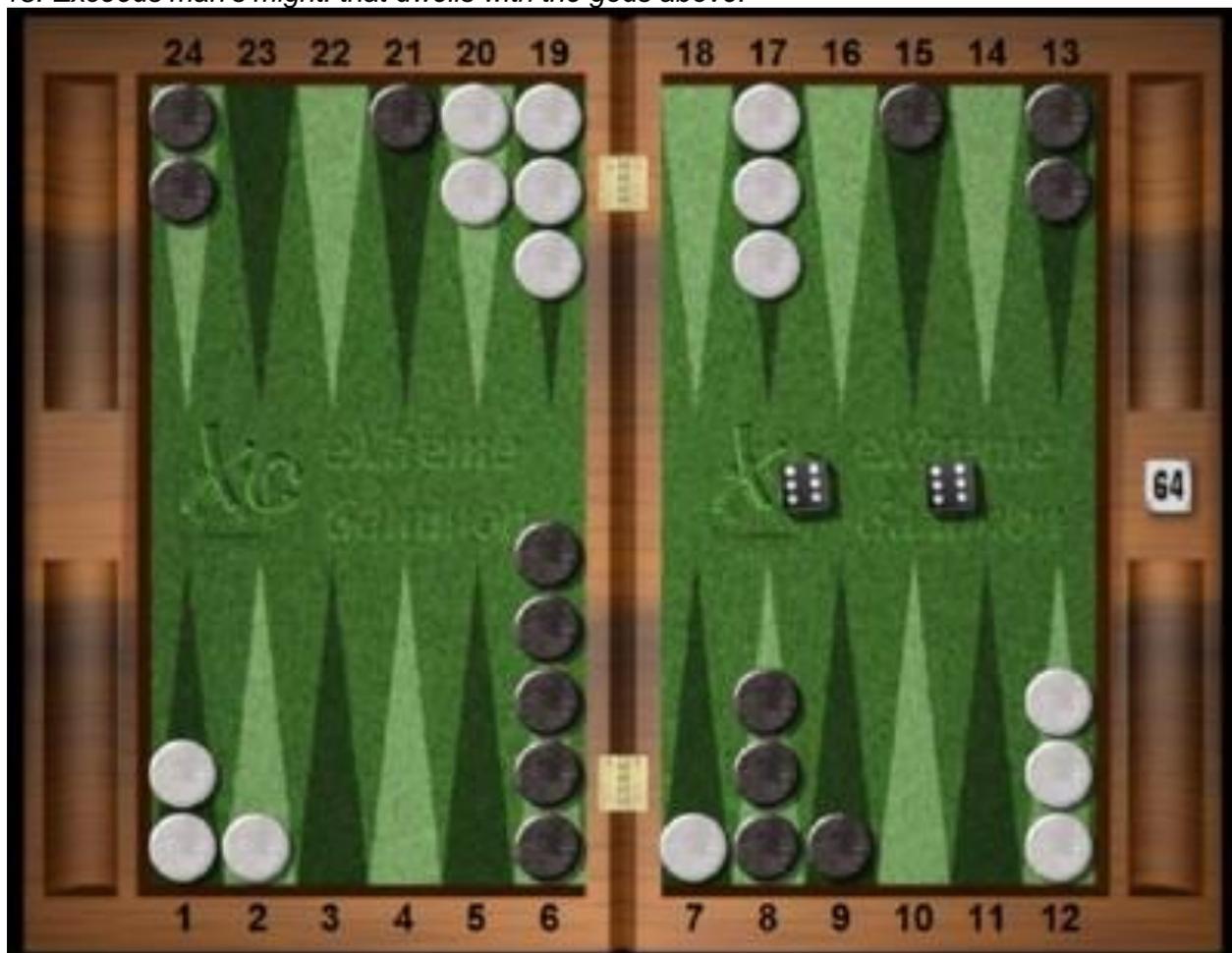


Black is cruising along to victory here but he needs to keep alert to the practical possibility of winning a gammon. How practical is that hope? Black has three checkers off, leaving an even number remaining --- perhaps six rolls. White has the 23pt anchor as irritant backed by the muscle of a fine board. Without delaying, White needs eight crossovers to save her gammon. That means the tally is within one roll --- high black doubles would make it about even money. White's low anchor also means that middle-sized dice may not generate her full complement of crossovers. Therefore, Black should take two checkers off with 3/0 1/0. Removing only one checker harms Black's gammon chances appreciably. The fact that the gammon is close means that excess safety could be costly.

17. *Boldness be my friend.*

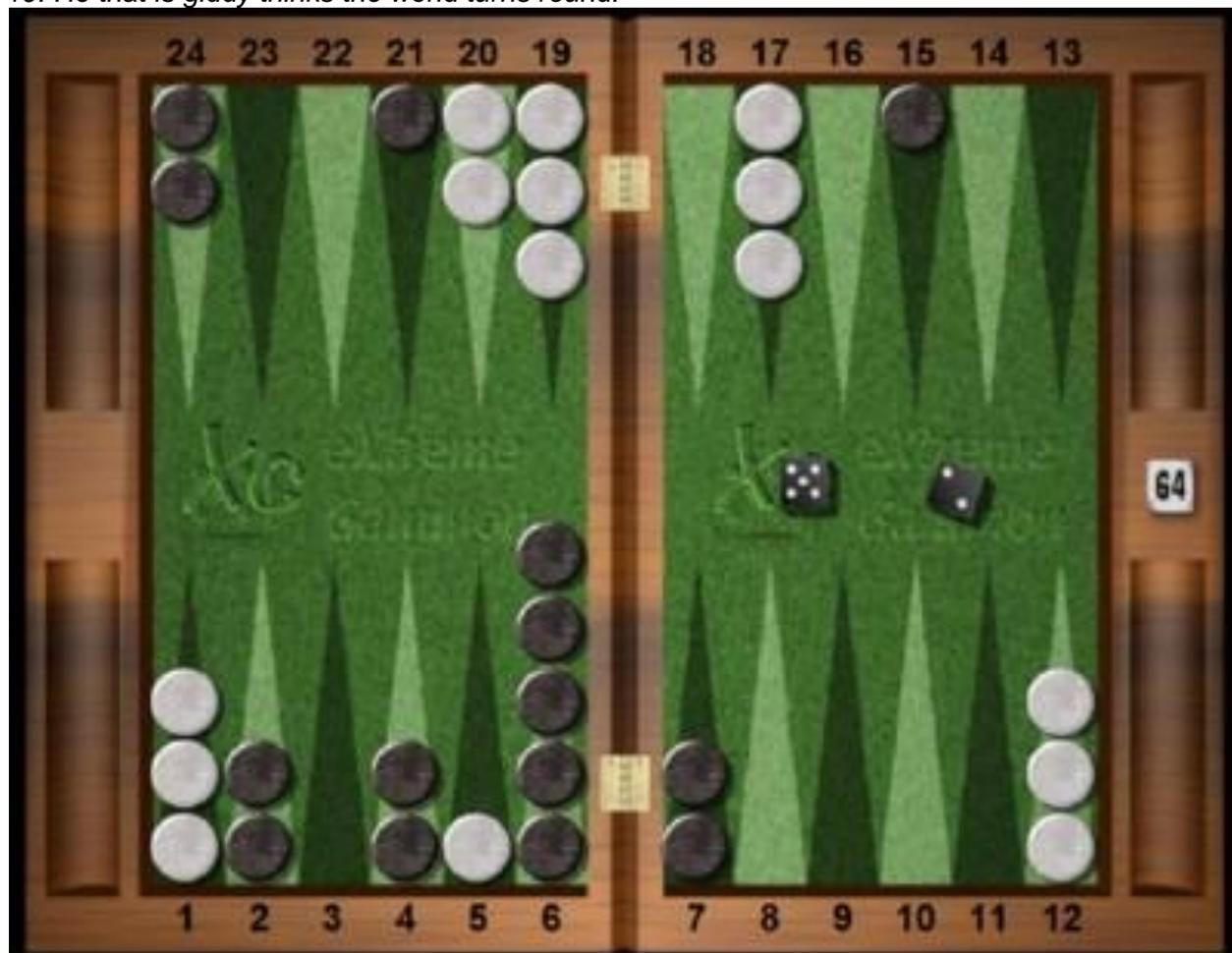
Both sides have the makings of excellent primes; both sides have stripped midpoints. Black has the better board with his golden point but White has an avalanche of builders poised to equalize that difference in a flash. Black has two checkers back (one on the bar) whereas White has only one backman --- this difference alone shows that White has a small racing lead. If Black enters quietly from the bar, White will have free rein to improve. Given Black's current better board and more backmen, this moment is the perfect time to hit White's blot loose on Black's 1pt. White is licking her chops in anticipation of fresh meat, so Black serves her a less tasty meal. The smooth development expected by White will be set off-kilter and the balance may not recover for a roll or two. Further, the checker from the bar will aim all sixes at the white outfield blot. Play B/22 6/1*.

18. *Exceeds man's might: that dwells with the gods above.*



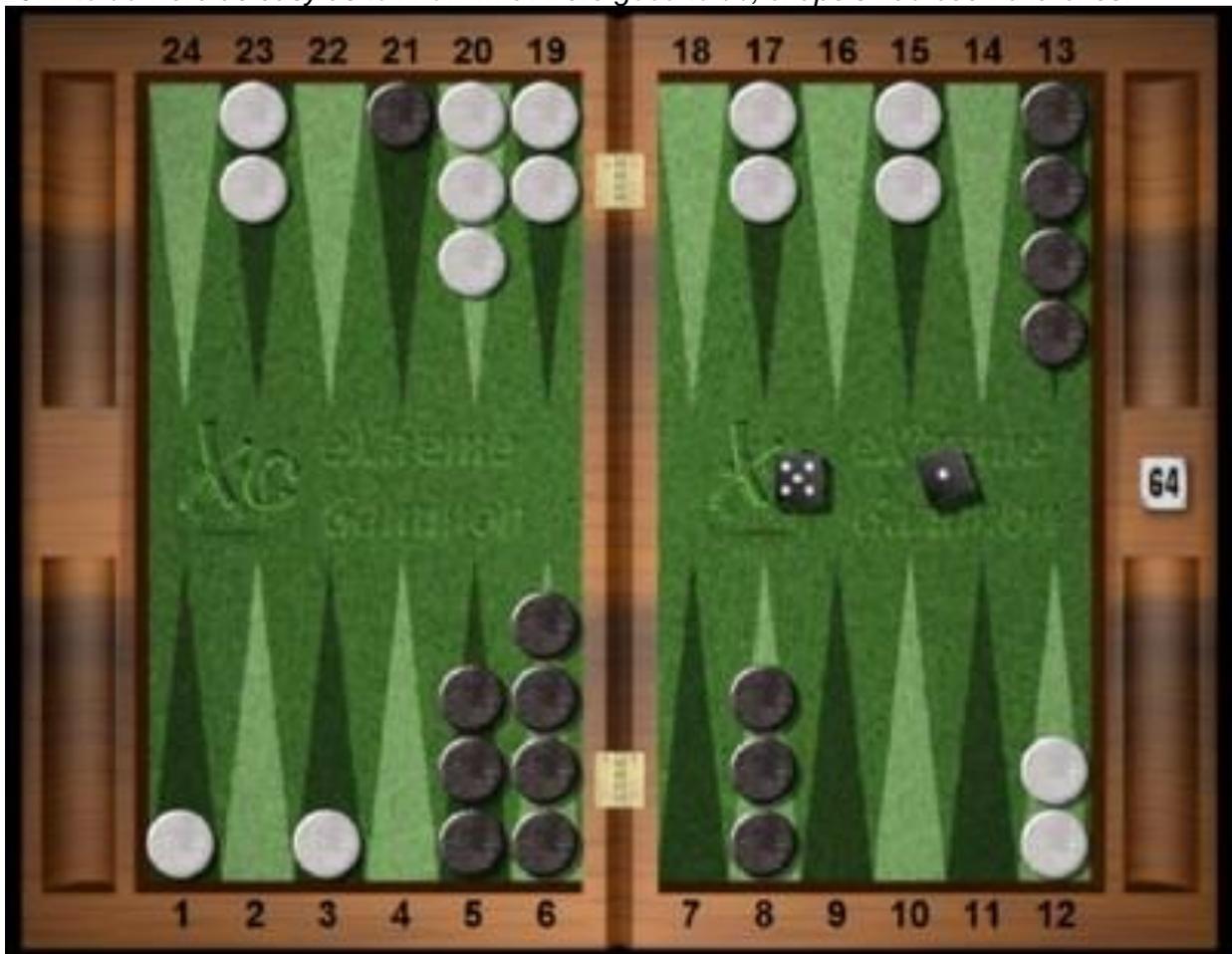
Black has just rolled sweet dice. Boxcars move plenty of freight. Although not always the best decision after rolling high doubles, Black should first consider the play that moves his checkers in pairs. Travel is more enjoyable with a buddy and this position is no exception. With this great roll Black should grab the 18pt anchor and point on his 7pt with the usual freight-moving play of $24/18(2) 13/7^*(2)$. The other reasonable choices try to squeeze out an extra drop of advantage, but ultimately sacrifice too much structure. This roll hits and makes two excellent points while changing Black's status to race leader. That should be enough progress for one day's work. Off to bed, head nestled on a pillow dreaming of the cube. Don't get greedy.

19. *He that is giddy thinks the world turns round.*



Although counting pips here is hard work, Black can readily see that he is far ahead in the race. Black has more home board points and has neatly made his barpoint block, although White's board is structurally better. Black unfortunately has ceded the outfield to White. Then again, White's batch of four runners with a trio poorly placed on her 24pt makes her defensive development embarrassing. Yet Black's anchor is nothing to brag about. Fours play very well for White so it won't cost Black much to place his blot on the 16pt. All in all, the game itself is about even and neither side can currently claim an advantage. Structure usually dictates game plan. Here Black's racing lead, his need for an outfield presence, and his preference for a better anchor suggest that the blot-infested 24/22 21/16 is best, although lifting the 15pt blot is a close second choice.

20. *If to do were as easy as to know what were good to do, chapels had been churches.*



Black has only mundane choices with this roll. The race is slightly in Black's favour. White has the better board but a stripped outfield. Black has some home board strength with excellent builder structure. The major difference between the two armies is the backmen: White has two and split; Black has only one and forward. Although mundane and no guarantee of success, Black should just run his backman into White's stripped outfield with the play 21/16 6/5. If White misses then Black can try to nurse the race into a healthy victory. If Black is hit, White disbands her outfield. In this situation it is better to be hit *outside* rather than *inside* White's home. If Black stays put inside, three white builders target the black blot whereas outside only two target it. Inside, White may hit making a fourth home point; outside, she rarely does and she weakens her outfield. Lastly, since the white runners are split, Black has the desperate option of hitting loose

in his home board if he gets into trouble. If that happens Black would rather White did not have a fourth home point. Play 21/16 6/5.

21. *Mind your speech a little lest you should mar your fortunes.*



This is a difficult problem to explain and an unlikely situation to play correctly under game conditions. Black chose to advance his midpoint spare to the 4pt. Hard as it is to believe, this quiet move is a blunder.

Applying the usual analysis, Black is trailing in the race by about a roll after his play of 63s. He has a terrific 5-prime trapping a lone white checker. White has successfully slotted her 7pt which, when covered, would create her 5-prime to trap two black runners on the anchor. White has only seven rolls that do not make either her barpoint or her 4pt, and none play horribly. For simplicity, suppose during her next roll White does cover another blocking point. Now what? Both White and Black could have a stripped midpoint to accommodate the mutual timing issues of a prime-versus-prime situation. It would be Black's roll and White would have more spares on her blockade. The positions are nearly parallel except Black's precious flexibility is locked into the existence of his second

backman. Hence, Black is losing the timing battle by the equivalent of moving his second backman forward by two rolls to land on his own prime. Of course, this is precisely what White's prime prevents him from doing.

Now briefly imagine an alternate universe where Black has sufficient timing, created by somehow moving White's 13pt to her 7pt and her 8pt spares to her 5pt. In this strange world, Black has the better timing and may win this game by the strength of his anchor. Typically White would break her wave of blockers on the immobile rock of Black's deep anchor. Meanwhile Black would use up his timing until the white crunch opens some escape routes for his backmen beyond her broken prime. Then Black could point with glee on the isolated white blot, freezing White's broken formation and extracting Black's runners. Fantasy, yes, but this is a common game plan in many prime-versus-prime games. Unfortunately, the assumption was that Black had the better timing. He doesn't.

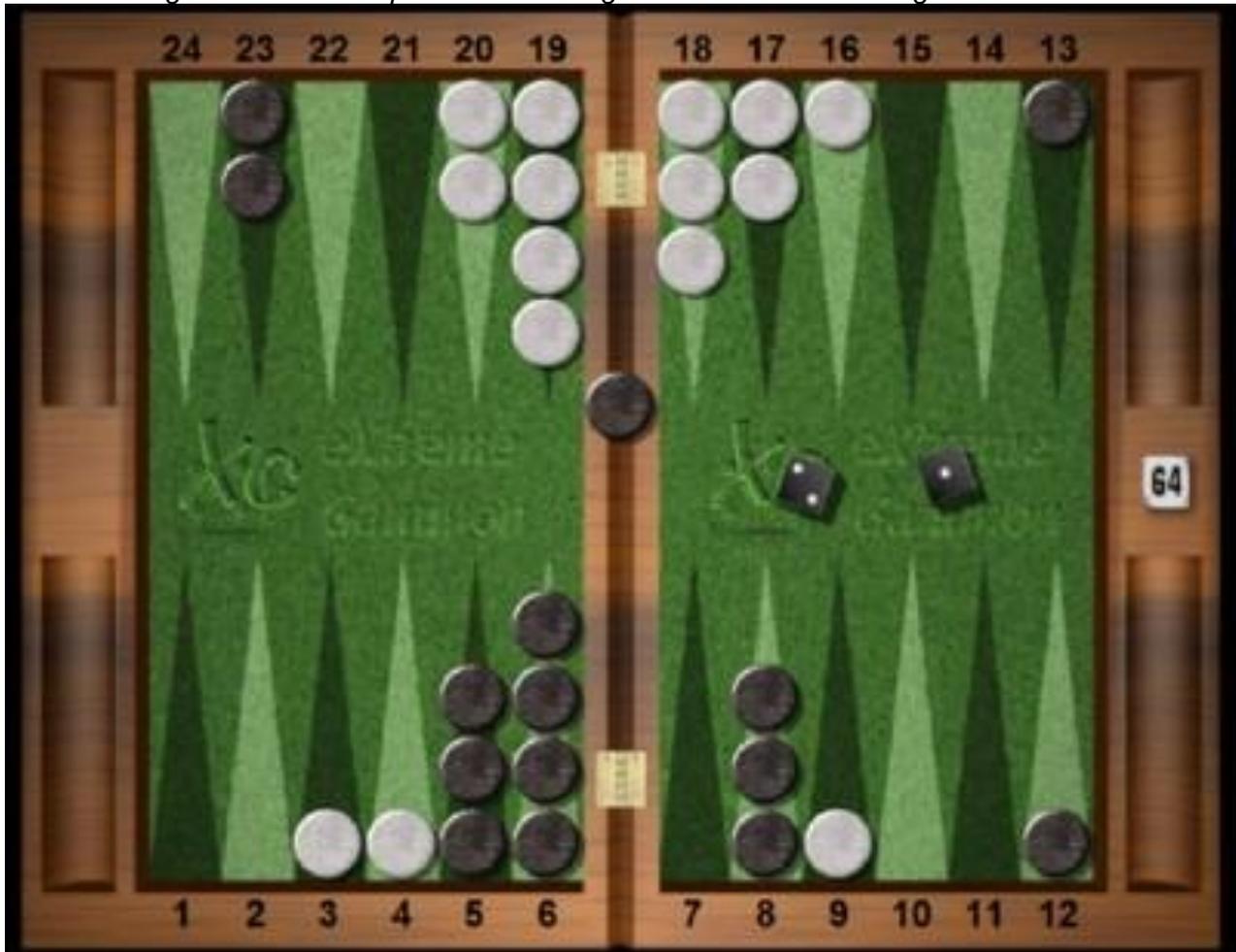
Return to the real world. Here is an insight into this commonplace problem. Right now Black can enact the above game plan in miniature. Black's classic strategy for winning a prime-versus-prime battle fails because of poor timing, but the current situation can be viewed as the baby brother of that situation as long as Black freezes White *right now* with an action play and begins to extract his backmen soon. The freeze of White's options requires an immediate loose hit on the ace point. Since this strategy is strictly do-or-die, the placement of an extra builder in the black outfield is vital. Boldly play 13/10 7/1*. If Black is hit, perhaps slow dancing on the bar could also make White's blockade crumble.

As an epilogue note that, if Black's bold play succeeds, he will then greatly increase his chances of gammoning White. That reward in itself is not the reason for Black's bold play, however, but a happy side effect. The cause of the potential reversal in Black's fortunes is the dramatic increase in *volatility* that the bold play creates. If the volatility of the opening roll of a new game is defined as one unit, then by comparison the chosen quiet play of 13/4 has a volatility of about two units yet the bold play of 13/10 7/1* has a volatility computed to be about four units. The more volatile, the less is the long term predictability. The very fact that the above paragraphs could meaningfully discuss the multi-roll scenarios of primes crunching, timing delays, and eventual escape says that the quiet move has less volatility than the bold action play. In summary, if a winning game plan is foiled by an analysis that imagines a slow development, then a shock attack that increases the volatility may be the only winning alternative. Provoking more volatility is a common theme when Black feels his game slipping from his grasp.

22. *Men shut their doors against a setting sun.*

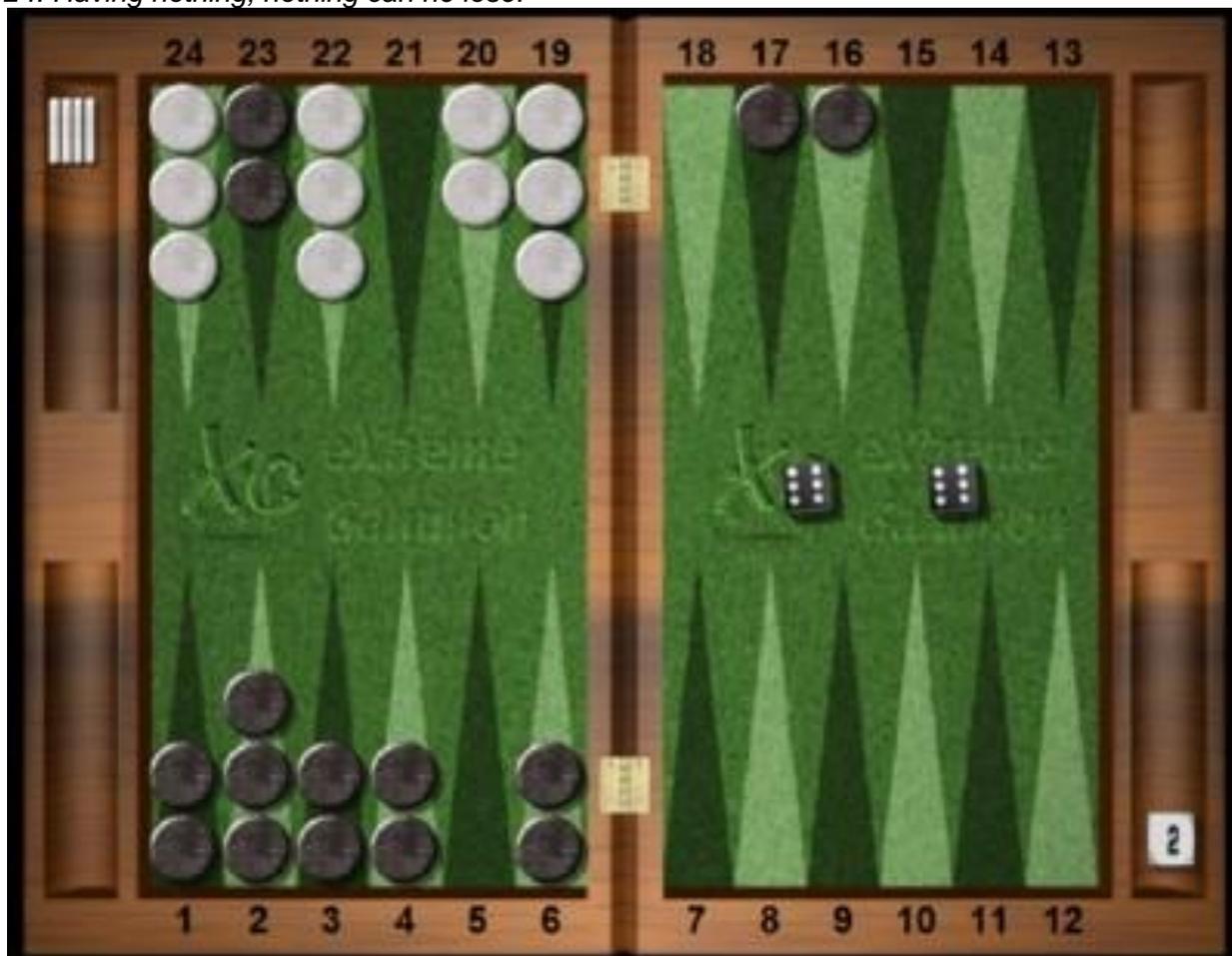
Black's flexibility has just run out and if he does not roll that darn five soon, he will be in jeopardy of breaking and perhaps be the proud but frustrated recipient of another hard luck story. Rather than squeeze his timing down to the last drop with two spares on his 3pt, Black should slot his 2pt with the play 7/2. Granted, the last thing Black wants is to have another checker sent behind White's blockade, but White is still two-to-one against hitting. Even if Black is hit, his full prime will contain White's escape whenever Black dances. If the slotted blot is missed, Black now has paid the fee for some new timing when he can roll his prime forward to cover the 2pt.

23. *Most dangerous is that temptation that doth goad us on to sin in loving virtue.*



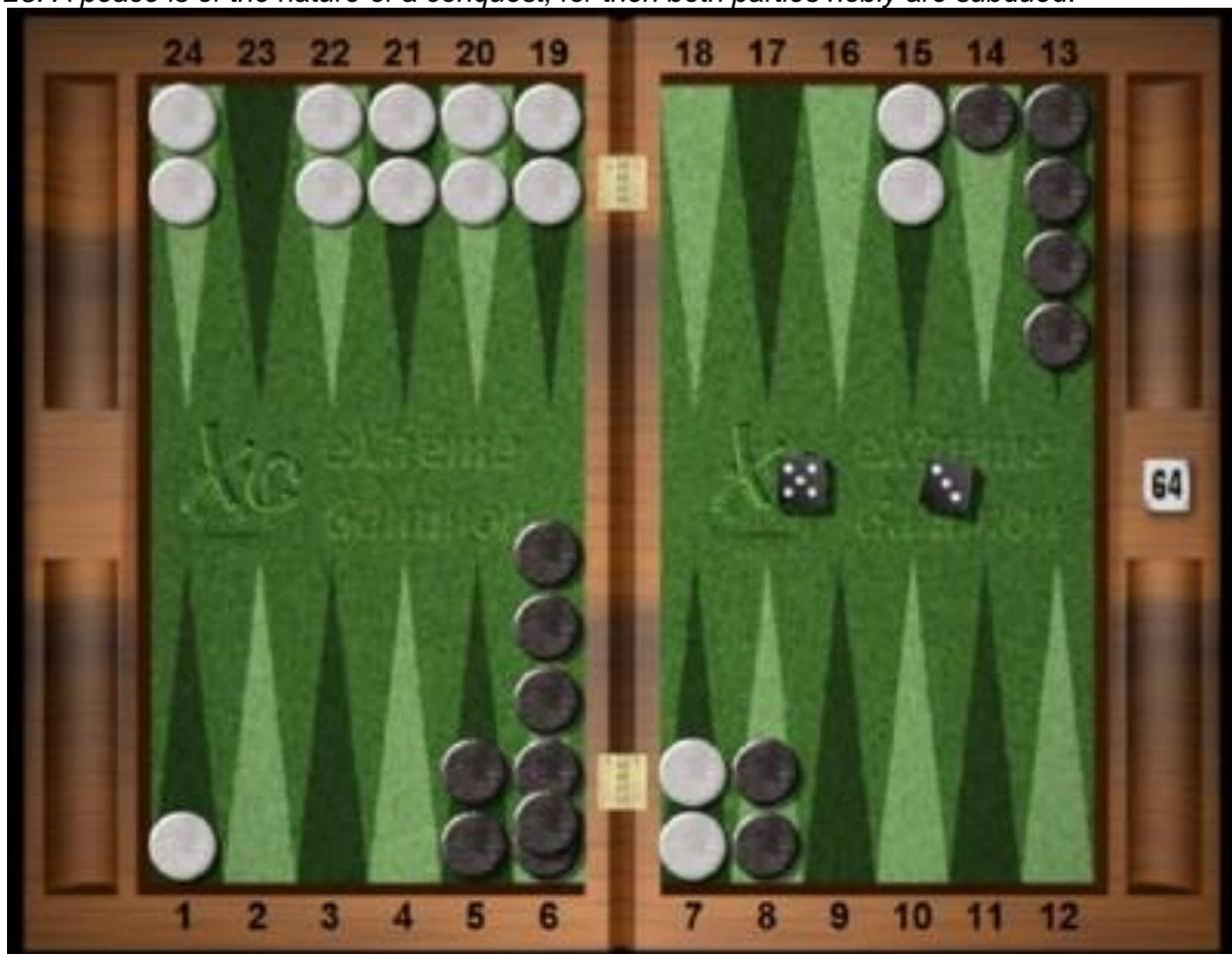
Black trails in the race. White has a better blockade. Fortunately Black entered from the bar as his two outfield blots are sitting ducks when White gets the chance to attack them. White will soon be cubing Black. What can Black do to stave off a resignation in this game? If Black makes his 12pt to pair his blots, White will immediately cube. Perhaps White can anchor majestically and let her 4-prime squeeze Black into oblivion. When White has a free hand, does Black have a take? It doesn't look like it. Stated this way, the only sensible choice for Black is to distract White with a loose hit, hoping White's response is awkward or anaemic. Therefore Black must hit either White's 21pt blot or 22pt blot. Which one? His outfield blots are vulnerable to threes and fours which are the same good dice as White's entry to hit or to anchor. Thus, there is no way to use duplication to decide. When missed, to maximize coverage of his slotted home blot, Black already has all his builders working. Therefore Black

plays B/24 6/4*. This choice does not disturb his coverage builders yet pockets a free coupon perhaps to allow an anchor upgrade or to establish a second anchor if things go badly.

24. *Having nothing, nothing can he lose.*

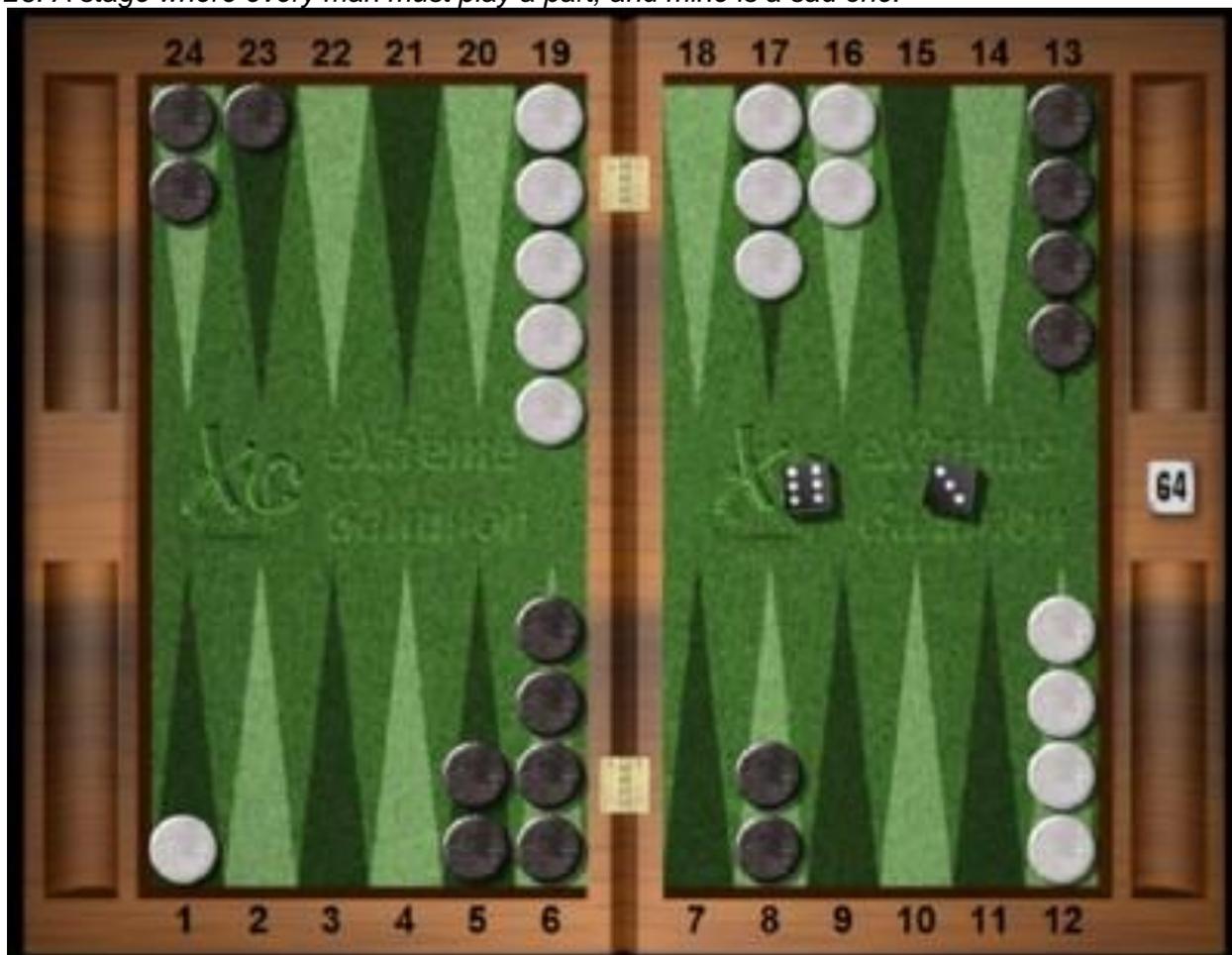
Black gets a terrific roll to save the gammon. As his four stragglers are all located on the deep half of each board, it may take a shade more than the obvious number of crossovers to save the gammon. Currently, before the 66s, that means more than eleven crossovers. White needs an easier eleven crossovers to bear off. Reviewing all the combinations leads to the realization that Black must break his deep anchor. Perhaps Black should not waste even a single pip in his home board. This idea suggests occupying the 10pt and 11pt. On the other hand, his 5pt is vacant, so perhaps landing a runner there would be enough compensation for the wasted single pip. Rollouts confirm that, by a small margin, Black should slot his 5pt with either 23/5 17/11 or 23/5 16/10, partly because if Black does hit, his home board can be readily closed.

25. *A peace is of the nature of a conquest; for then both parties nobly are subdued.*



White has a dangerous home board and has checkers covering the outer and inner boards on Black's side. Obviously Black does not want to be hit. Black has escaped his backmen and, thankfully, has his golden point. The fly in the ointment is that his 6pt is grossly stacked. Is it worth leaving four shots to add a spare to his 5pt? Yes. The main reason has to do with White's coverage. Her spares on her 10pt mean that her coverage of Black's side of the board will remain menacing for several rolls. Black will therefore need to be pointing and developing in order to expect to bring his outfield checkers home. The race is close, so the transit home is not really a sprint but more like an extraction. If Black succeeds in advancing, many of his wins actually come from attacking the white straggler than from the race alone. Play a spare to 13/5. If White misses the black blot, making home board points and outfield points are now quite possible.

26. A stage where every man must play a part, and mine is a sad one.



Here is an opening position. In the early stages a principle of opening play worth remembering is: *Put the standard opening move on the top of the priority list and keep it there until better reasons demote it.* This principle is based on the observation that correct opening moves have strategic purposes that often persist over many exchanges of the dice. Not always, but often. The typical opening play for 63s is starting the enemy barpoint and bringing down an outfield builder: 24/18 13/10. What has happened so far in this opening?

Black made his 5pt, a great start which makes every strategy of correct opening play more correct. In other words, if splitting to the white barpoint is acceptable on the initial roll, it is more correct in nearly all cases when the black 5pt is already made. The 5pt is an enabling structure. It gives permission and encouragement to play an aggressive game, a blocking game, and a racing game.

Black had a third checker sent back. Usually this means that Black trails in the race, and this position is no exception. Since White has not yet improved her home board, Black would now like to make a high anchor.

White has managed to run one backman to safety. This means that the building portion of the standard opening play of 63s is more important than usual, for Black wants to contain the straggler to counteract White's strategic plan of running. Based on the last three observations, the Magriel criteria of safe versus bold play strongly suggest boldness for Black.

White has made her 9pt. This asset threatens a black slot on the 18pt, but for Black there are some upsides to it as well. For example, White would prefer to strengthen her home board next, but that could leave Black a direct shot at a white 9pt blot. It would be a happy distraction for Black if White attacked the black barpoint blot, but in the exchange Black managed to grab a high anchor with his three split backmen.

In summary, the initial meaning of an opening 63s roll is enhanced by what has happened early in this particular game. Black should play 24/18 13/10 with confidence. Due to his racing deficit Black is losing the game, but he still has plenty of counter play.

27. *Nothing can come of nothing.*

After the move Black will trail in the race by two rolls. If Black wants to run a backman, it should be from the 20pt and not the 22pt. It's a matter of keeping contact with the white army to produce future shots. But should Black run at all?

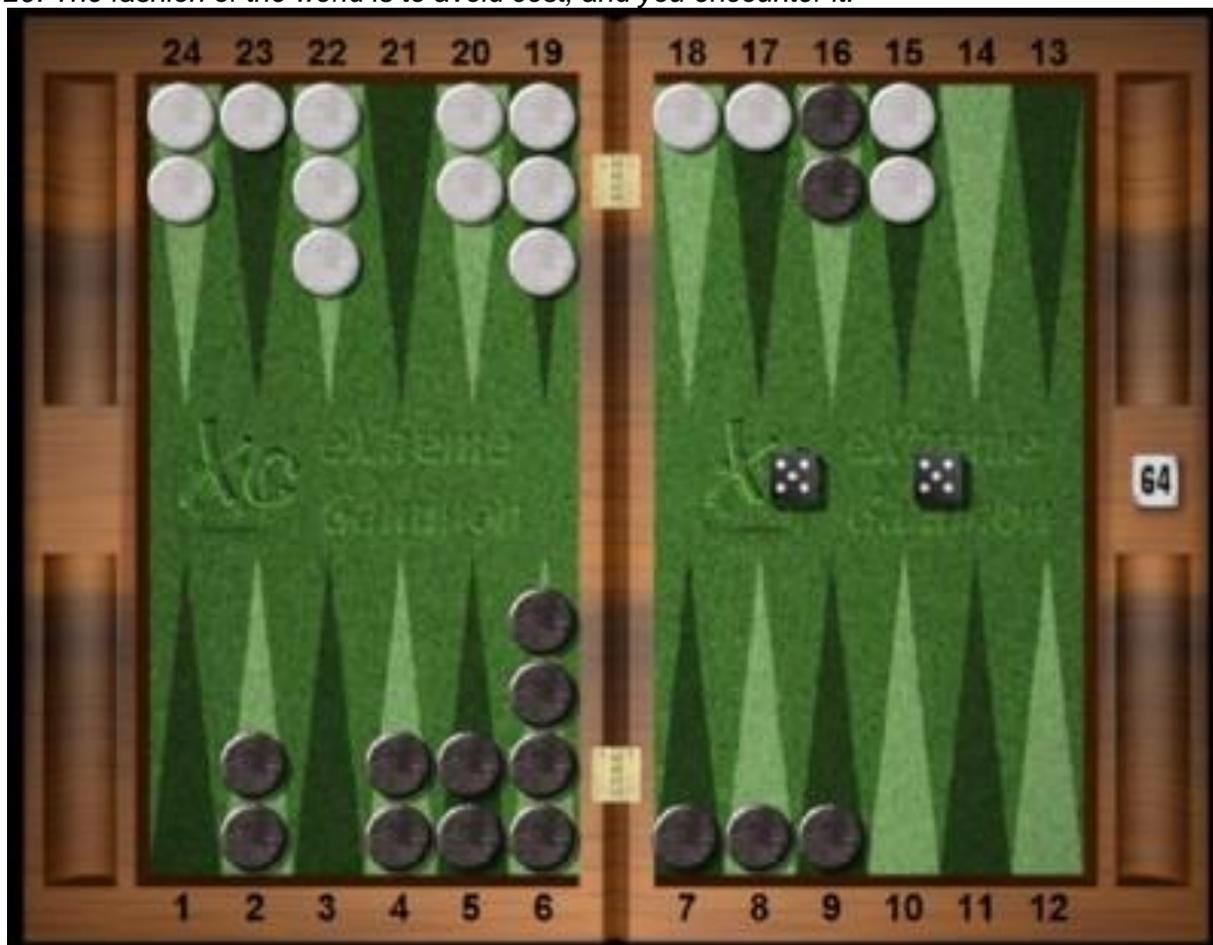
Breaking the midpoint strands the split black backmen. Since White has spares on her midpoint, she can quietly await a pointing roll that crushes Black's blot and maybe pick-and-pass in the meantime. Then Black will be demoralized trying to run the gauntlet of the outfield. No, Black needs his midpoint because to abandon his runners now is too dangerous. Black could roll his prime forward into his house by breaking the 8pt. This looks good at first glance, but what's the encore? All of the above arguments about White's flexibility of attack still apply. A stronger black board does deter White but White is unlikely to get reckless here anyway. Her flexibility allows her to wait for safer attacks with negligible

downside. The conclusion is that White's flexible structure and the threats to Black's runners should direct Black to save a backman. Play 20/9 and hope for big dice or unlucky white rolls.

28. *The attempt and not the deed confounds us.*

This position is prime-versus-prime, gap style. Black has only one checker back and has control of the outfield. White has two backmen conveniently lodged on her 22pt. The race is close. Normally it is ill-advised to advance the lone 24pt blot into an extra attacking builder such as White's stripped 8pt. The play activates the rolls 61s, 64s, 51s, 41s, 54s and 65s (now better) as pointing plays for White. However, all of White's sixes must be played on her side of the board. Hence Black will have a few rolls to either get a deuce (then out) if his blot is missed or a four from the bar (then out) if his blot is hit. There is more to this position than meets the eye and a hand rollout is strongly suggested. Play 24/23 10/4.

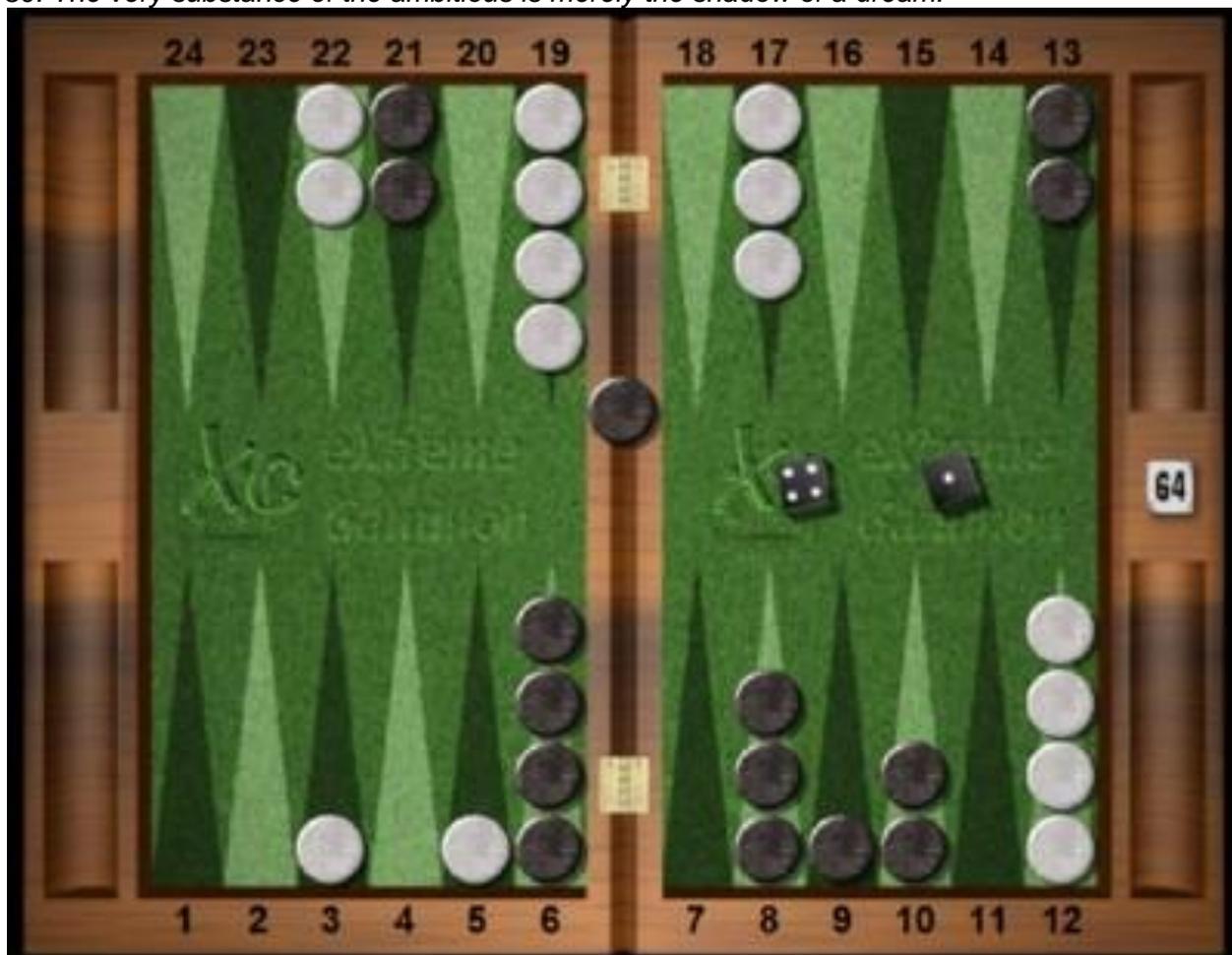
29. *The fashion of the world is to avoid cost, and you encounter it.*



Down in the race, these welcome 55s let Black consider a race as his real hope. After the play he is trailing by five pips. However, White's bearoff structure deserves more than a glancing assessment. Her 4pt is currently a gap, her ace point is made, so her bearoff might begin with some minor flaws, though no guarantee. Note that if Black buries his checkers in an attempt to keep contact, he will be volunteering similar bearoff flaws as White has. It is better to try to overtake a five pip deficit by creating a flawless black bearin than to pretend that White cannot clear her 10pt in the next three rolls. Run. Any of four plays that don't go past the 4pt and have four crossovers is fine.

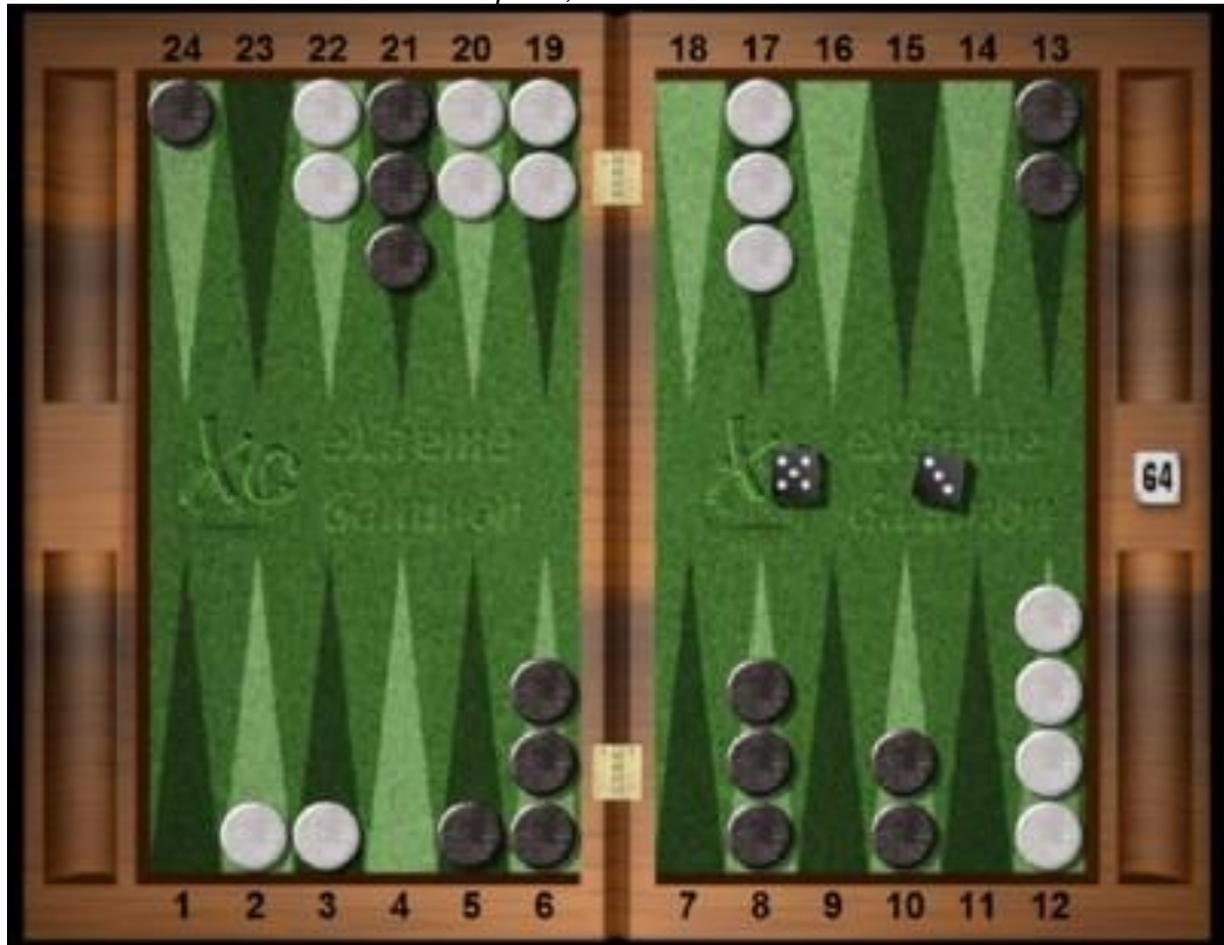
A rollout comparison of 16/11 16/6 9/4 and 9/4 8/3 7/2 6/1 gives an equity difference of 0.125 between fleeing (good) and holding (bad). Hand rollouts of these two cases might also be an instructive reminder.

30. *The very substance of the ambitious is merely the shadow of a dream.*



Before this roll neither player had an overwhelming structural lead although White does have a racing lead and a second home board point. Hitting loose on the 5pt is an aggressive action play. Yet there is a fine line between aggressive and reckless. Although some quieter plays are worth consideration, the loose hit is correct. Strikingly, one way is a blunder. The rabid play of B/21 6/5* leaves maximum builders but also maximum return shots. Not only fives and most twos hit the home blot but most sixes hit the outfield blot: too many, too reckless. Also, if things go bad for Black, he would like the option of a second anchor which is now precluded by entering a spare on his 21pt anchor. Playing B/24 9/5* tempers the aggressiveness both tactically with the outfield blot and strategically with the possibility of a second anchor. Before the roll Black was not desperate, so a calmer aggressiveness is his calmer choice. As an aside, the quiet play of covering his 9pt blot has merit, but breaking connection with three backmen is rarely correct, not to mention the fate of a new blot.

31. *The stroke of death is as a lover's pinch, which hurts and is desired.*



Any aggressive player worth his salt would be thinking about hitting and pointing here. It just feels good to whack your opponent. But good backgammon is more about reason than emotion. Black has an anchor and more checkers back, but White has the better board --- a key factor in deciding against a bold play. If Black hits and points on his 3pt, he is stripped on every point except his distant anchor. Other combinations of covering and hitting loose are about the same. A stripped position affects not only point-making ability but also re-entry flexibility should Black's home blot be immediately hit. It is far better for Black to make his 5pt and release the spare on his 21pt anchor, improving timing, connection, and flexibility. Play 21/16 8/5 and await developments.

32. *Let every eye negotiate for itself and trust no agent.*



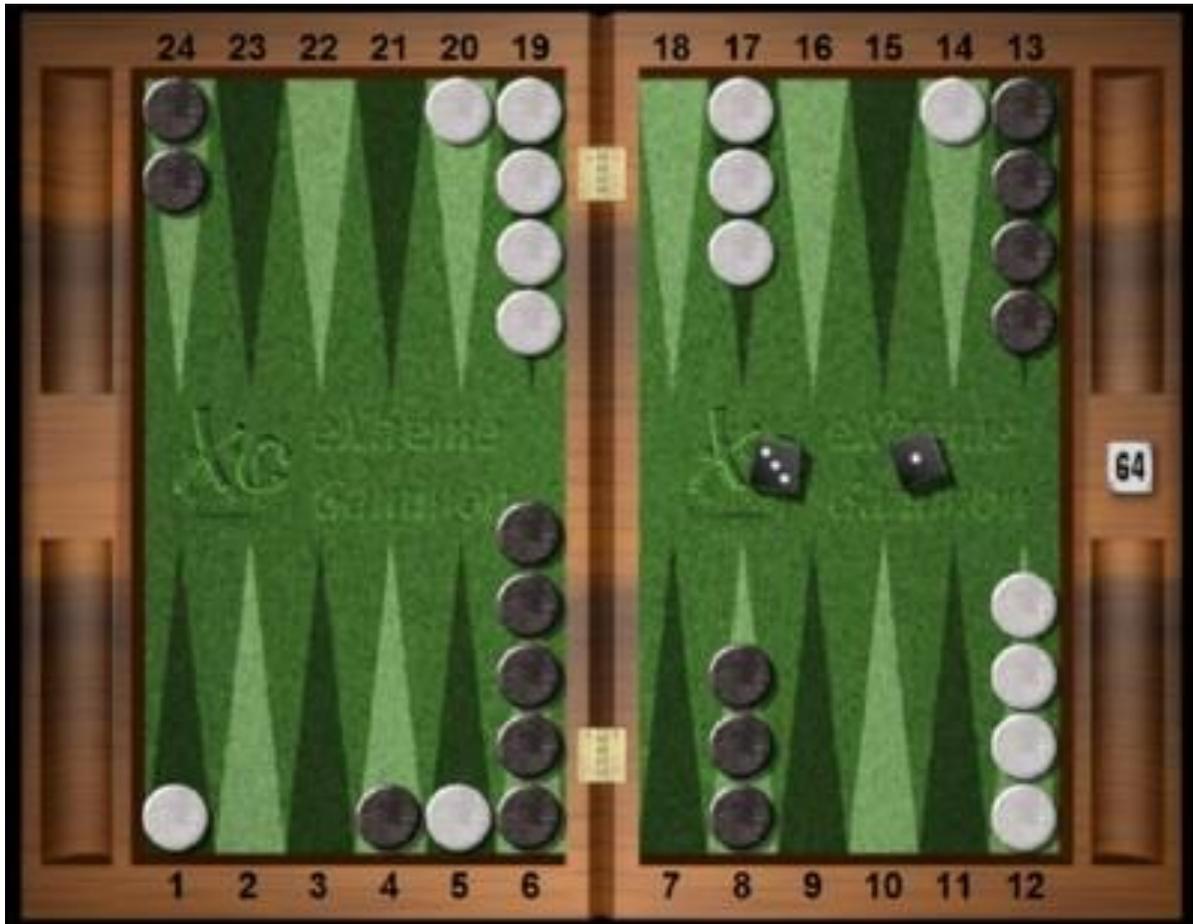
White is already on the bar, but she still has the better board and a massive racing lead. There is no doubt Black will hit the 18pt blot with the six. What should Black do now? Continue to his midpoint to supply a distant spare for his slotted 5pt? Add another attacker on the 16pt for White's remaining blot? Or leapfrog his anchor to the defensive barpoint? With so many checkers back Black does not have the ammunition in place to succeed in a blitz. Thus his 5pt blot must fend for itself. Good luck to it. Creating a midpoint spare looks like an advantage but consider this: If White missed Black's home blot and did not enter both of her checkers, would Black be willing to break his midpoint to cover the golden point with an eight? Obviously yes! Then why bother to run a spare to the midpoint, a move that has little short term gain, only longer term? If Black is willing to break his midpoint soon then, to maintain connectivity, Black needs to move a point forward into White's outfield to maintain balance. This will be a long game where connectivity and outfield control matter most. Hence the

barpoint anchor becomes an essential asset. After the hits of the white blots, Black no longer is committed to a backgame or even a holding game and could soon progress to a forward game. A barpoint anchor enables such flexibility. Play 24/18* 23/18.

33. *I never see thy face but I think upon hell-fire.*

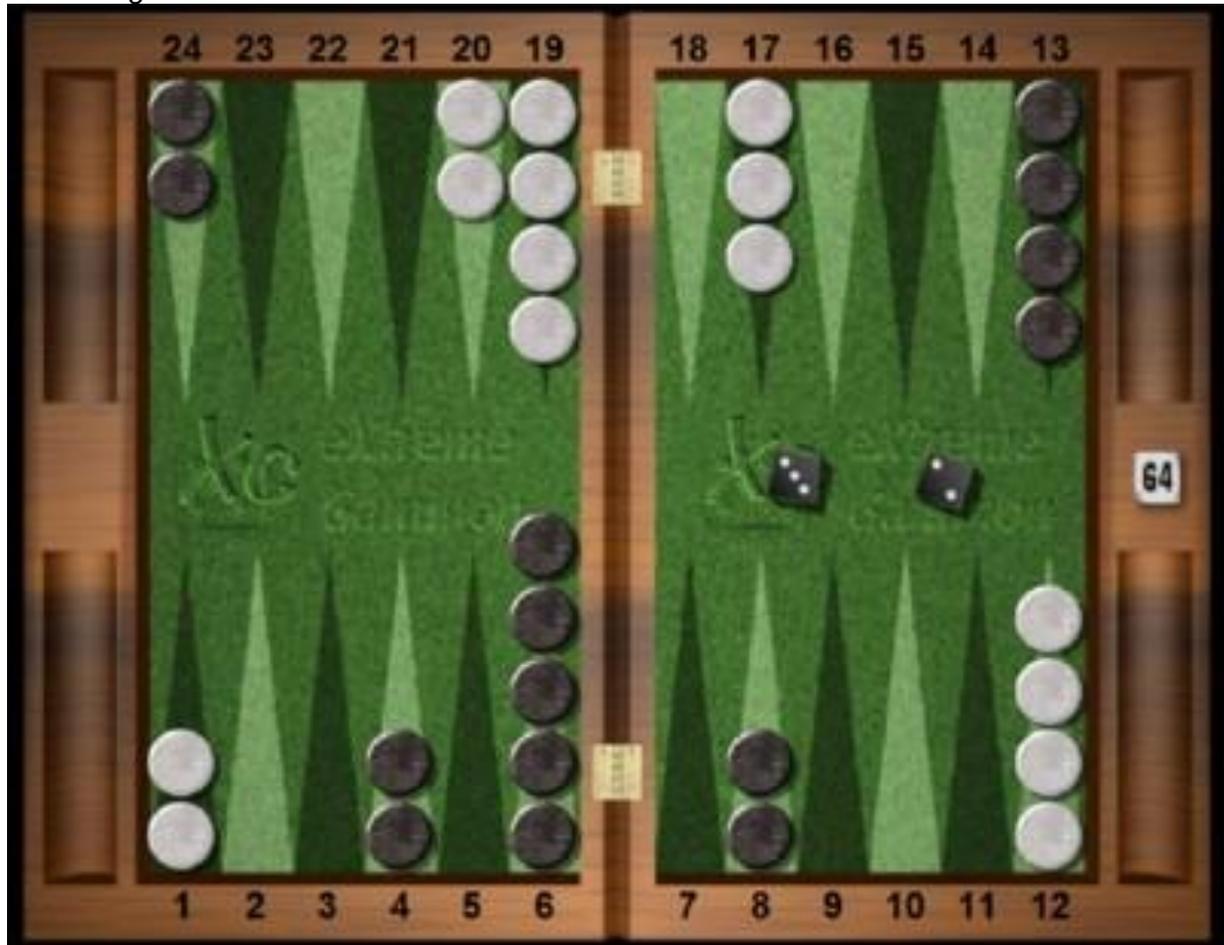


Black owns the cube and is playing on for the gammon. White has some assets and, if she anchors, could conceivably play an ace point game if Black lets things go that far. Of course Black has a perfect 5-point board, which is an asset that places him in the wealthy category. He could lock up the full prime by breaking the midpoint, but this produces no builders to *make* the ace point except 66s and 33s. He could hit loose and bring the midpoint spare to his outfield, but again there aren't many covers. This position is an example of when it is best to wash immediately with B/22 13/10 4/1*(2), putting two white checkers on the bar, avoiding return hits, and making the gammon chances more real than just talk. Black gets about 20% more gammons as compared to the full prime move. If White rolls well and survives, it is easier to clear the black checkers past her alleged 21pt anchor. Besides, Black can cash the game when necessary.

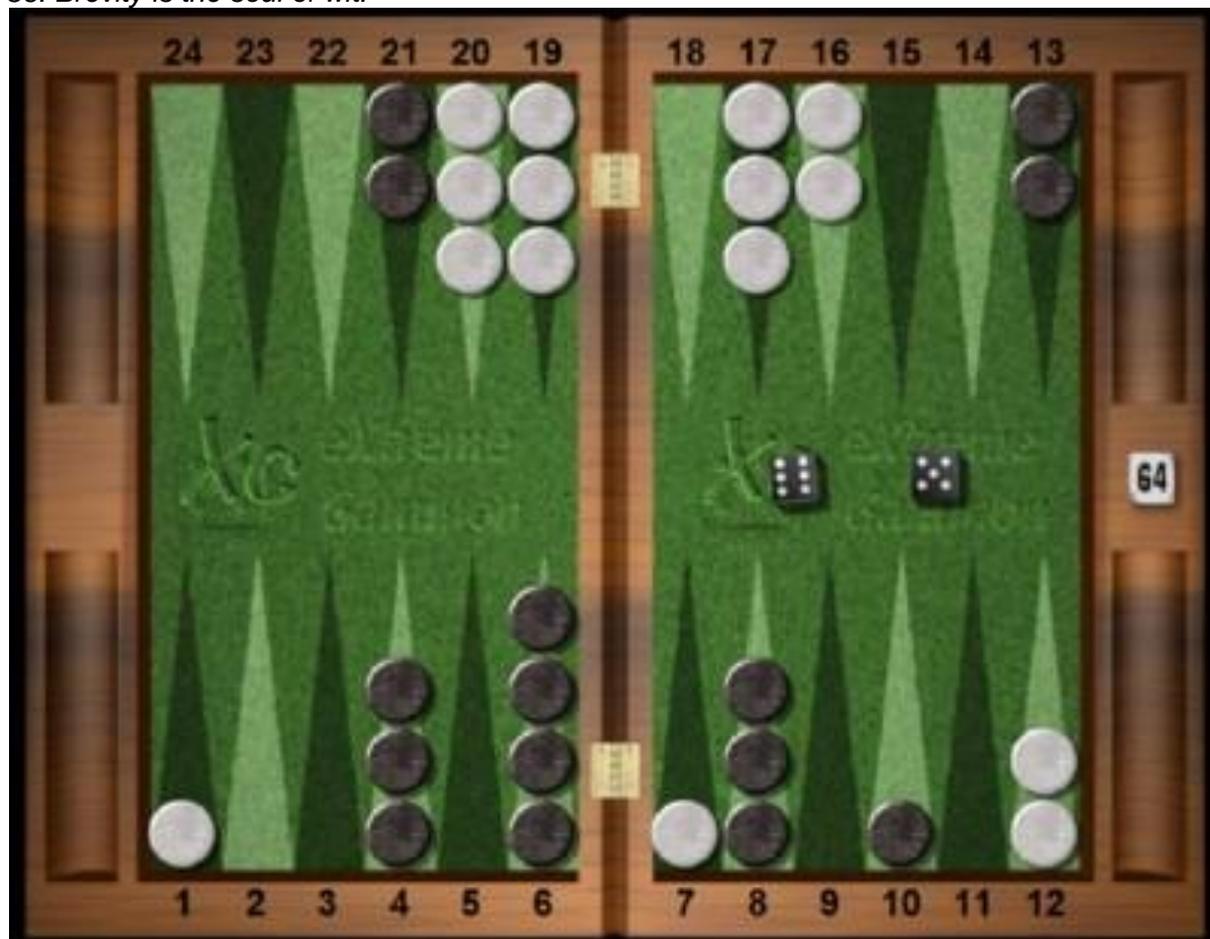
34. *Ambition should be made of sterner stuff.*

Here is a classic opening problem. No situation can better teach a beginning player about backgammon strategy. Backgammon is a race and this race is close, so hitting the white blot on the 20pt seems a good move. It is, but it's nowhere near the best. Backgammon rewards aggressive attack and here the white blot on Black's 5pt can be hit during Black's transition to make his 4pt, placing a white blot on the bar. What is better than simultaneously hitting and pointing? A very good result, but a distant second place move here. In the opening with plenty of play left in the game backgammon is, first and foremost, about creating assets and structures that will produce lasting advantages throughout the game. Most important of all is Black's own 5pt. The best play is to make the 5pt with 8/5* 6/5, pointing on White's blot but leaving the 4pt slotted and a target for White's re-entry. This move unstacks Black's 6pt, giving a natural flow to his game. The key opening idea is: press to make moves that, if successful, yield a **decisive** advantage. Black holding the 4-5-6-8pt combination is a decisive

advantage. Play to win. Making the golden point gives an immediate chance to win and leaves lasting structure for a longer-term future.

35. *Parting is such sweet sorrow.*

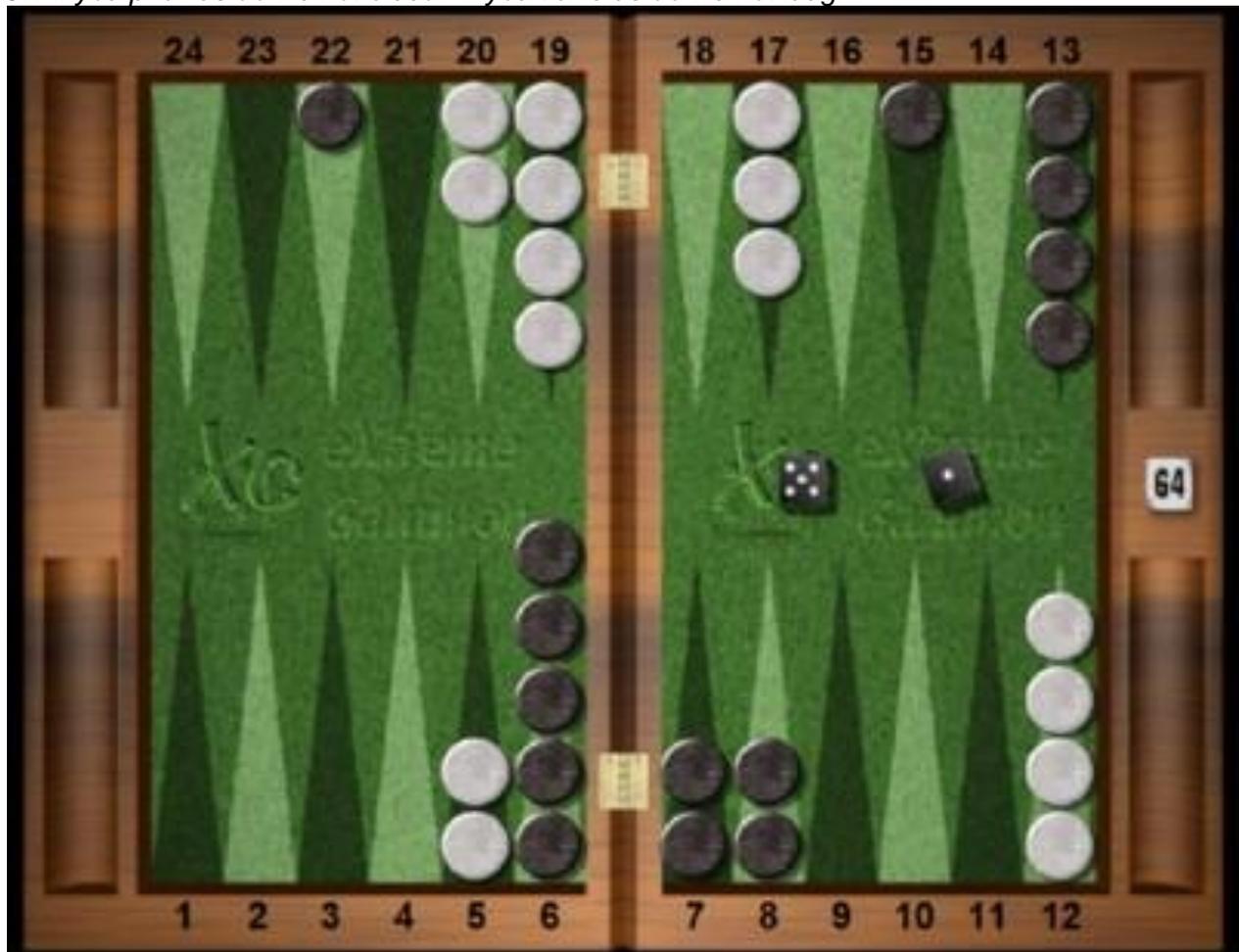
Despite the preferred plan to create an early decisive advantage, the opening is often about an accumulation of small advantages. In good backgammon there is a natural flow to each game, and this flow is always established in the opening. Both White and Black made a good home point and began to unstack their midpoints and, in White's case, her 6pt. Just describing it this way suggests that Black is slightly behind here, although there is still flow to his game. What is the direction of play now? Before the roll the flow would suggest doing something about advancing Black's backmen. That seems natural. And, with a 32s roll, Black can advance one or both checkers. Advancing both checkers with 24/22 24/21 is quite playable here, perhaps the best. An equally playable move advances one backman 24/21 and then corrects a flaw previously mentioned: unstack the 6pt with 6/4. Black can take his choice, as long as he goes with the flow.

36. *Brevity is the soul of wit.*

The quick run of 21/10 from the black anchor looks natural, but White can comfortably choose between viciously attacking the lone black runner and smoothly making her barpoint anchor. Black's run is just not severe enough to offset her options.

Instead Black will hit White's barpoint blot. This common situation has many combo return hits from the bar for White. Both home boards are about equal and Black still has an excellent anchor. Breaking his midpoint to hit begins to disconnect his anchor from the rest of his army and Black would like to keep White busy for awhile so he can use his forward position to advantage. With a solid anchor and plenty of builders, Black should hit twice with the play 13/7* 6/1*. It is actually two shots safer than clearing the midpoint and has great upside if Black's ace point blot is missed. As a bonus, if both white checkers dance, Black can cube. If White enters only one checker to her 20pt, Black often has a sporting double.

37. *If you prick us do we not bleed? If you tickle us do we not laugh?*



This position illustrates a common principle: if a blot must be left then put it where it is uncomfortable for White to hit it. White has spares on her midpoint, so there is no discomfort to White if Black leaves his 15pt blot. Similarly, running the backman to the 16pt leaves two blots to be hit gleefully by two spares on White's midpoint. Therefore the blot should be placed somewhere in Black's outfield, since White will be reluctant to break her anchor to hit. If White's anchor hits, Black will be pleased at the future possibility of unstacking his 6pt, perhaps hitting loose immediately upon re-entry. The stacked 6pt is also the reason Black does not want to move a midpoint spare to his barpoint --- what point is this spare building? Back to the correct play: Leave a 9pt or 10pt blot? A black 21pt blot just invites White to hit loose on a better point without enhancing Black's running chances much. A blot on the 9pt, if hit, permits more immediate return hits from Black's midpoint with the extra doubles 44s and 22s and also

sidesteps the duplication of threes which Black may need to counter attack on his 5pt. Hence play 15/9.

38. *Now is the winter of our discontent.*



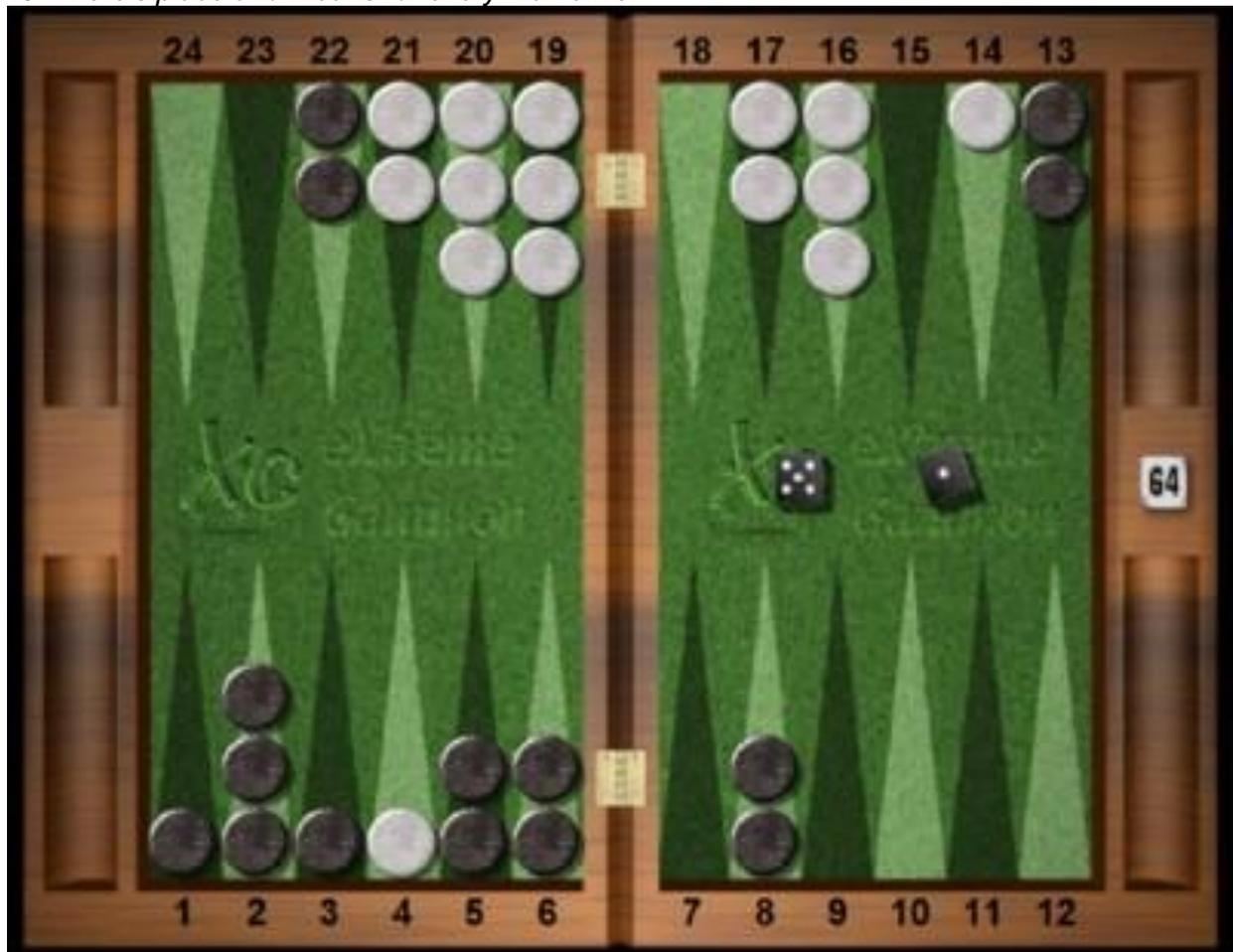
This is a small problem with an important lesson. Duplication is a tactical tool but not a strategic concept. Never base a game plan on duplication; only use it to enact the tactical objectives demanded by a game plan. Here Black has a slight racing edge and is happy he entered into White's 4-point home board. Invitingly, White has four blots strewn around. Black needs to take action now before White can consolidate, but White's board is undeniably menacing. The correct move here is to hit loose on Black's 3pt. Hitting loose is a concrete example of a tactical play with a tactical objective --- to keep White from having a free hand right now to consolidate her position. Duplication can only influence these tactical decisions. In this position, White needs a three to hit both black blots. To study this situation, temporarily move White's home spare by one pip to her 4pt or her 6pt. In both cases hitting loose by Black is no longer the best play, although the equity difference is small as noted in the introduction of this problem.

39. *The course of true love never did run smooth.*

Four possible moves and two of them create a blot without purpose. Black is rightly concerned about venturing to the 18pt since 25 shots hit and only 11 miss. If Black is missed he will have a small racing lead, although the game will be nowhere near won. Black chose to bury a checker on his deuce point --- an awful play. This play is a huge conceptual error. In winning backgammon Black should always give himself a chance to get lucky to win. Burying a checker doesn't give Black any foreseeable way to win by getting lucky (except 66s); the bold dangerous jump to the white barpoint does. White could miss Black's blot. On top of Black rolling high doubles to convert his game into a race, White may then have a problem getting her blots to safety. If Black gets lucky after B/18 he could win.

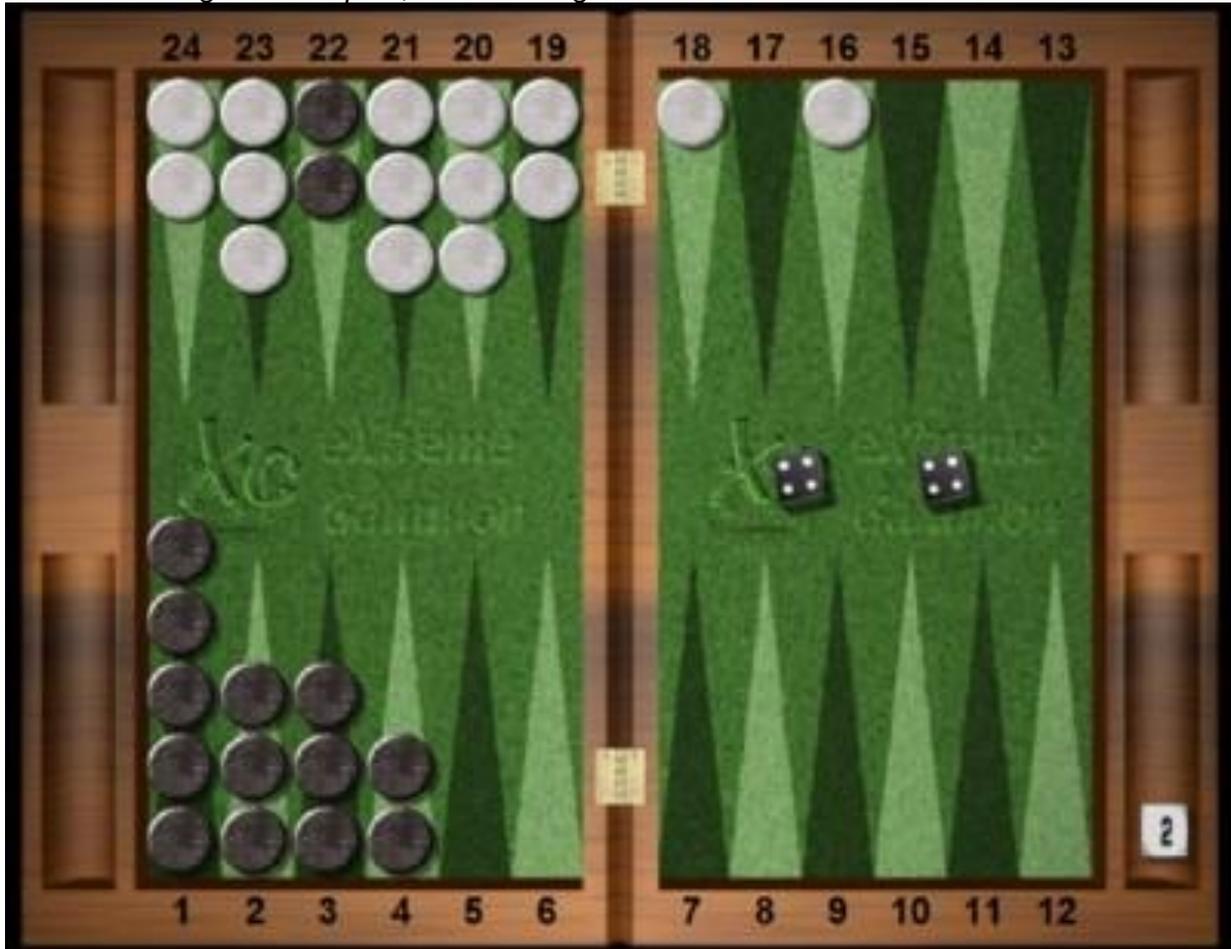
Play to win --- not to not lose. In backgammon they are not the same thing. This is particularly true when cube position is factored into the mix. Here Black owns the cube and the equity increase of B/18 is 0.05, a nickel

on a buck. Black can see a few reasonable sequences (White misses, Black hits a blot, White dances) where he could even be in a position to cash the game with his cube. In fact, if the cube were centered so that gammons wouldn't yet count, all other plays would be big blunders as compared to running B/18 --- an interesting observation that quietly speaks volumes about cube play.

40. *There's place and means for every man alive.*

The race is close. White has a menacing blockade, builders trained on Black's anchor, and only one straggler to safety. White is close to an initial double. Black's anchor is keeping him in the game, he controls the outfield for now, and he has some strength in his home board, although his checkers are awkwardly placed there. Black could break his midpoint leaving a blot with five shots and clean up his dilly builder on the deuce by making the ace point. Since he hasn't lost the race yet, his game plan could well include hitting White's straggler and having it dance awhile. To do that effectively, Black needs a solid home board. This roll allows Black to make that board now by 8/3 2/1 giving thirteen shots instead of five but getting return shots from the bar instead of none. If his return shots hit, or if White then rolls low after her hit, Black may even get a second chance to recapture the white blot. If White misses and stays put, Black may hit loose on his 4pt with a nine or a four of his own.

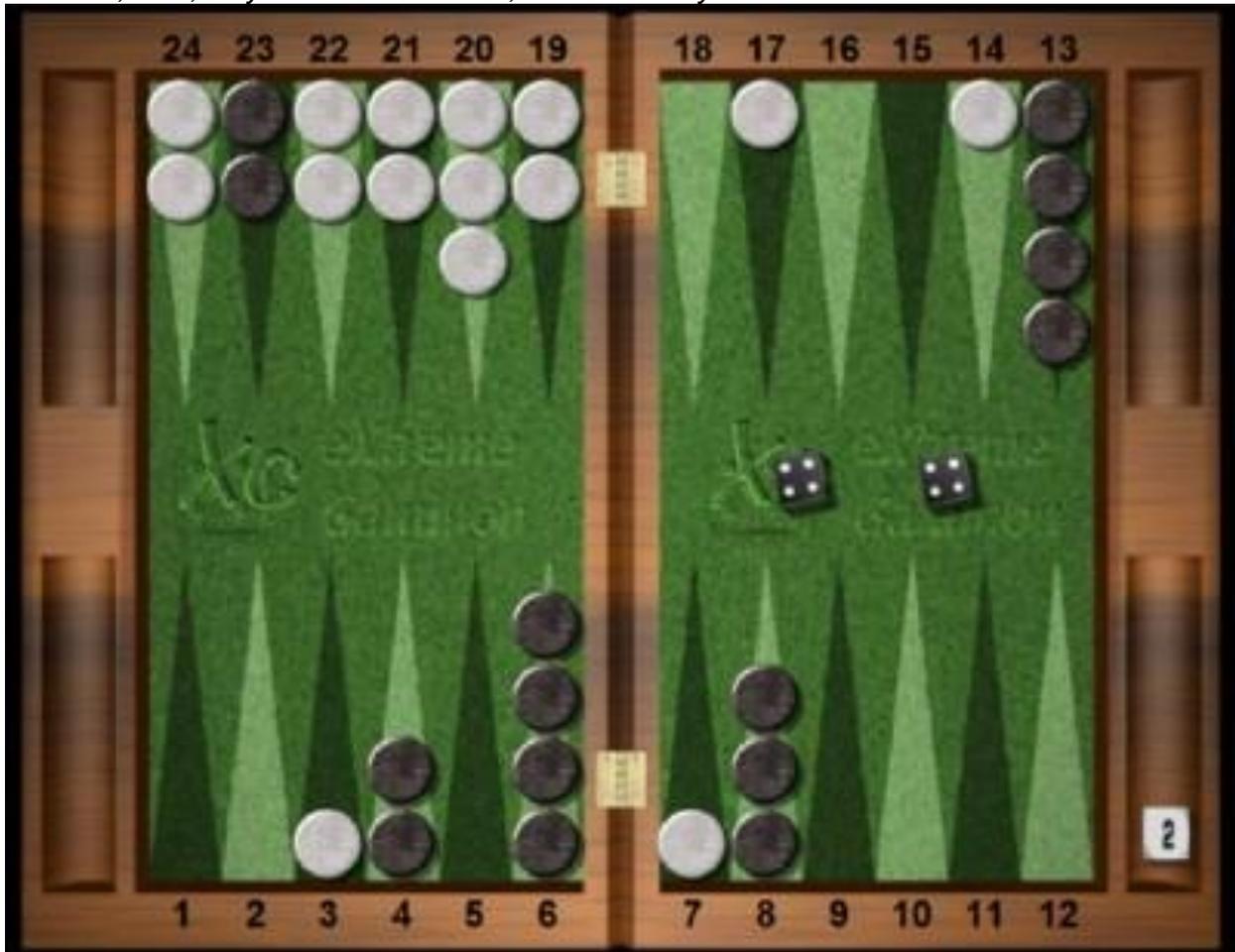
41. *It's one thing to be tempted, another thing to fall.*



Pick up a second checker or begin a race with a three roll lead? Black has been lucky enough to hit White from his anchor and now must win the game. Black's board is crunching but White's board still has teeth and can even improve. In short, Black does not want to be hit. The play of $22/18^*(2)$ $18/10$ leaves eight return shots for White in exchange for a chance to hit White's second blot with an immediate twelve shots. Is it worth it? It is not. Advancing Black's anchor to the 14pt with $22/18^*/14(2)$ likely leads to White getting at least one shot, but several of Black's rolls (all doubles and big dice above eight or nine) leave at worst indirect shots. If White hits immediately from the bar after Black's 10pt-18pt combo, she is far more likely to gammon Black. If Black can safety one checker after his pointed play, his chance of being gammoned drops considerably. Study using hand rollouts (i.e., play from here with bots) shows that the blot on

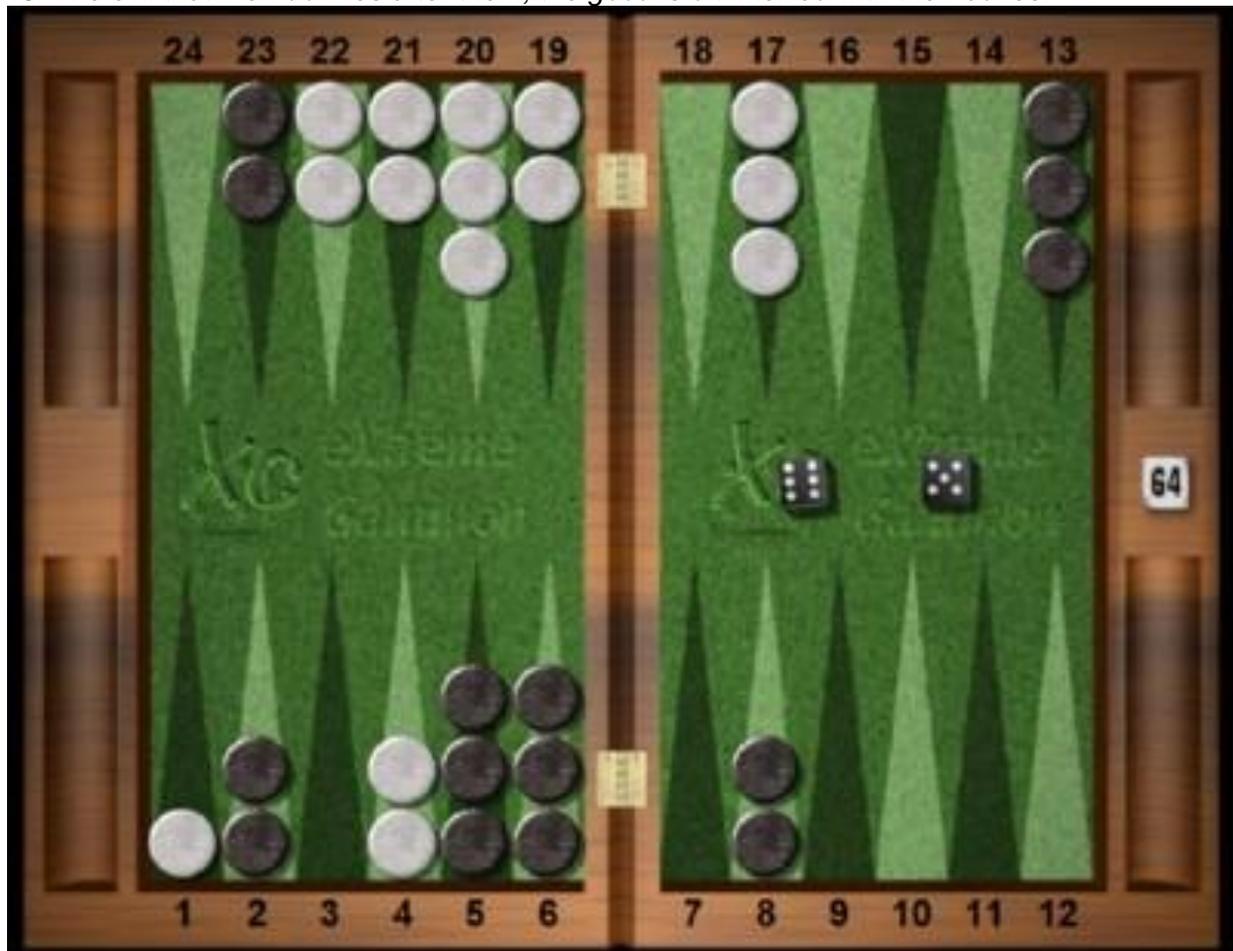
the 10pt is a liability because only a six will save it. Thus if Black hits the second white blot, he will often be scrambling two checkers. Alternately, when Black misses, he may have to bury his 10pt checker using both dice, thereby offering White a second crack at entering with a deuce to hit Black's blot. Finally, when White enters immediately without hitting, Black always must scramble two checkers, which leaves plenty of fly shots. Cube ownership is valuable, but here only to cash the non-contact races. When Black does capture a second blot, it rarely leads to gammons, so he is still likely to cash his racing lead. Then why take extra chances? Advance the anchor in tandem, hitting along the way.

42. *What, man, defy the devil. Consider, he's an enemy to mankind.*



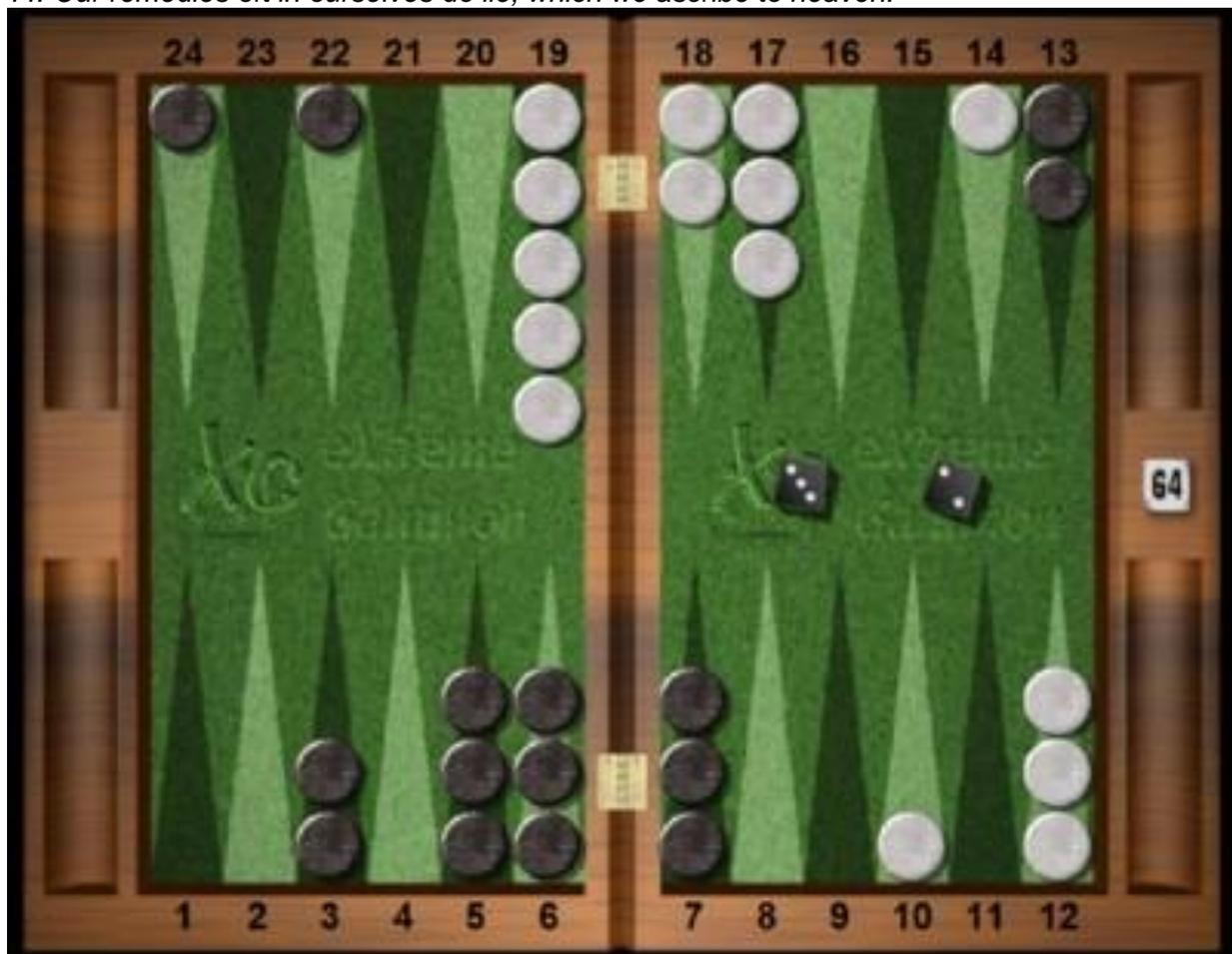
As long as there is contact between the two armies, making the 5pt is a cheery thought. Blocking sixes for White's trailing runner is useful, but making the 5pt with 13/5(2) puts the strength of iron into Black's board and Black's game. After a loose hit on his barpoint and a little dumb luck, Black may well be soon on his way to an effective prime. With White's four blots, fly shots included, Black would love to hit and present White the terrors of his own powerful board, the golden point featured. In addition, White's four blots may not be cleaned up immediately. Black's alternate move of 9pt and 2pt is bad, mostly because those two points can never be part of the same prime: Let man not join therefore what the dice gods hath put asunder. Besides, the meager 2pt lacks the manly vigour of the golden point.

43. *The evil that men do lives after them; the good is oft interred with their bones.*



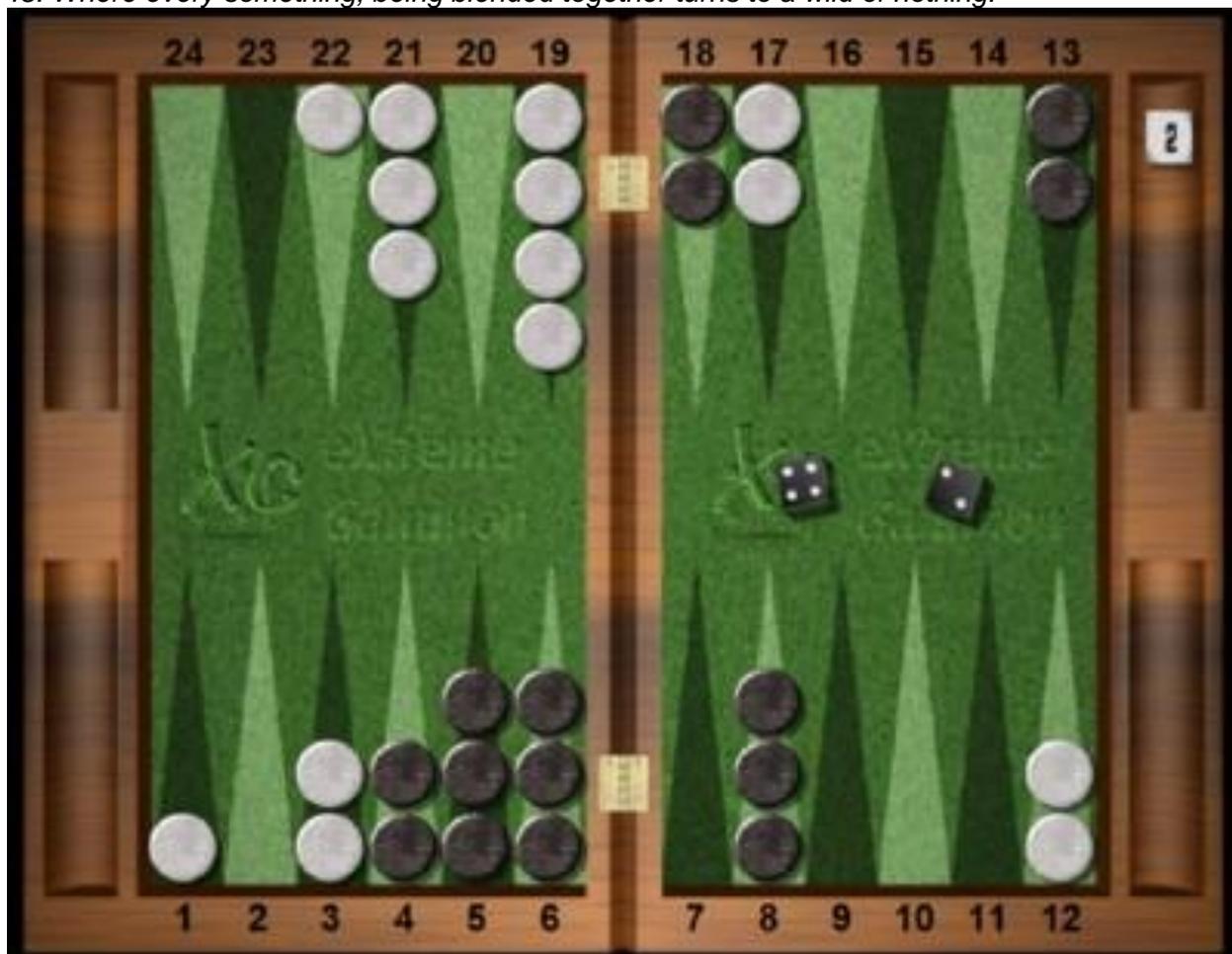
In many positions the courage to run off an anchor is very difficult to find. If Black bolts, White has a great board, two builders trained on the remaining black checker, a high anchor valuable for attack. Why would Black try to run? Of course the answer must lie in the analysis of waiting. White has more timing here. If Black delays by placing a dilly builder on his 2pt, he is stripped everywhere outside of his house. White can exit her 24pt blot easily which creates yet more timing. It's difficult to see (apart from 55s) how Black can outlast White. At least the play 23/12 leaves a forward blot attacked only by indirect shots and able to safety if Black survives the next roll. Since Black keeps some outfield control, his straggler has hope and does not feel stranded if White cannot attack immediately. In other words, there is a viable game plan to win if Black gets lucky.

44. *Our remedies oft in ourselves do lie, which we ascribe to heaven.*



Of course Black must recapture the white blot on Black's 10pt. Black has a far better board and terrific builder structure, allowing him to concentrate on priming the recaptured white checker. White has not yet made a new home point, so Black's two split backmen are not yet in much danger. Thus Black is best to bring the second builder down from his broken midpoint, eliminating the irritant of a white tempo hit upon her re-entry with any unused ace. Black actually chose to advance his backman 22/20 to bring White's second blot into range. However, if Black primes the recaptured white checker, he can cash with the cube, so the extra complication and the counter play involved in Black's 20pt threat are not really needed for victory.

45. *Where every something, being blended together turns to a wild of nothing.*



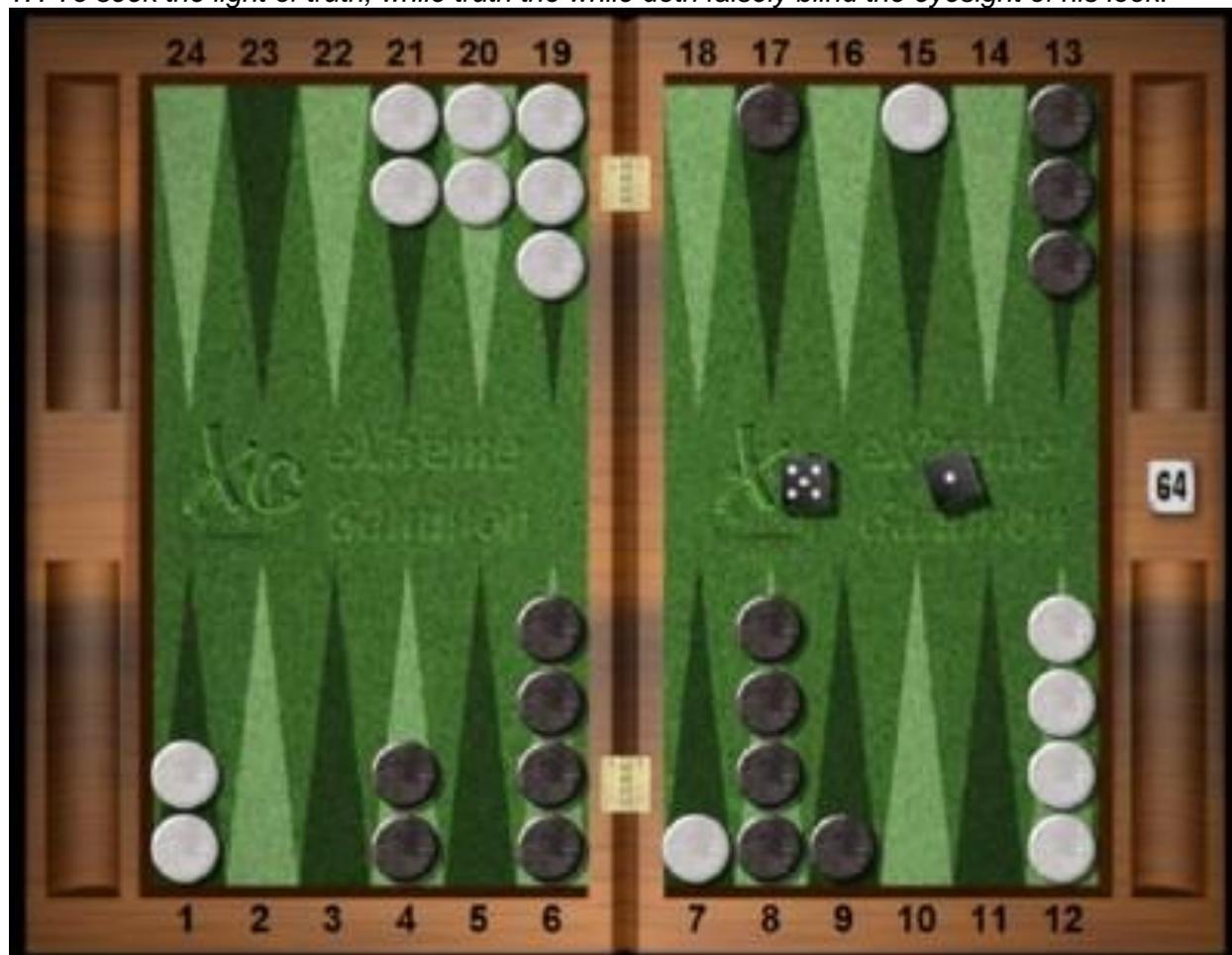
This is not an easy play to see. White is stripped everywhere except her home board, which has a blot and one fewer point than Black's home board. Since stacking the 4pt is out of the question, Black will be leaving a blot or two somewhere. Cleanly breaking the midpoint or the anchor would tempt White's anchor or midpoint respectively. The temptation would be without much guilt, however, because White would have the freedom to choose when and how to hit. Instead Black should hit loose on his ace point and break the midpoint with the play 13/11 5/1*, duplicating ones. With this play White's stripped points can often be cracked and White has far less freedom of motion. Further, Black minimizes both the white hitting chances and the white covers of her home blot.

46. Was there ever any man thus beaten out of season?



It's fair to say that this game is not going well for Black. It is not yet a disaster, but Black has his 22pt anchor trapped by White's powerful 5-prime. White has only one checker back and Black has missed this blot entirely. Black even has a blot in his outfield which White could hit along the escape route of the white runner. Black does have four home points, though gapped. There is, however, one area of the game where Black is about equal --- the race. After this roll White will only be one roll ahead. It will take combination dice for Black to spring his backmen and, behold, here is one such roll. In lieu of anything better, Black should run one checker past White's prime with 21/15. White's fives are duplicated for both hits and for the ace point cover, a minor advantage. Running here also increases the chances of Black recapturing White's straggler when it is advanced to the outfield.

47. *To seek the light of truth, while truth the while doth falsely blind the eyesight of his look.*



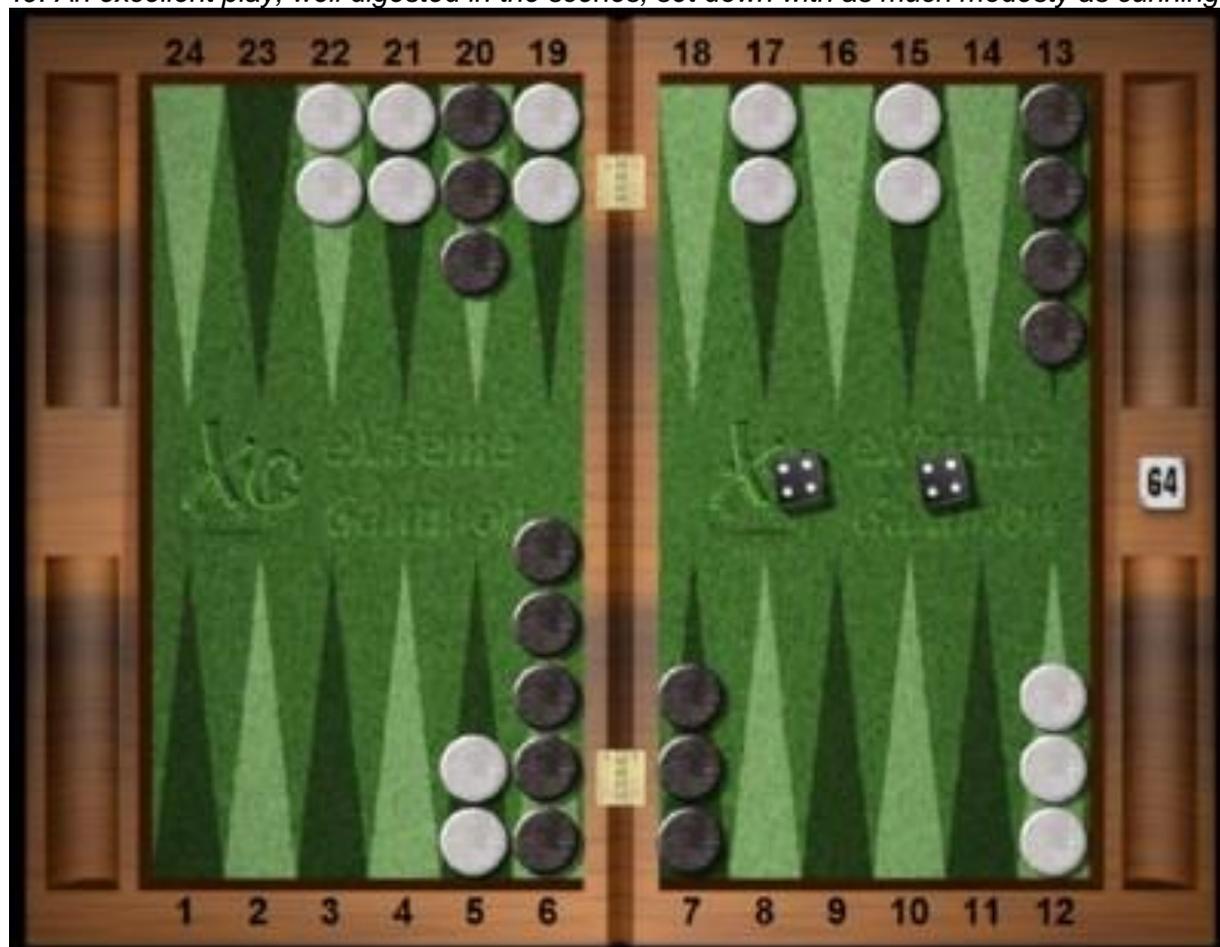
Advancing Black's runner to the 11pt leaves two blots but, surprisingly, is not as bad a move as it looks. Even so, Black is going to hit the white checker on his 7pt instead. Black chose to hit with his midpoint spare, but this was a poor tactical decision. Black's deuces to cover and to hit the second white blot are self-duplicated, which is bad, and Black's midpoint cover also leaves a midpoint blot. Finally, White has a better board so Black would like to balance that by building his own home board quickly. Best to play 9/4 8/7* which flexibly targets the 7pt, 5pt, and 3pt, in addition to reducing Black's blot count. Since White has three checkers back, the black barpoint is less important than his high home points when compared to only two white checkers back (paired or split; and even less so if White had only one checker back).

48. *Pleasure and action make the hours seem short.*



Black didn't want any trouble and thus chose to clear his 6pt. However this play gives up too much gammon equity. In these situations always count crossovers. White needs twelve crossovers to take a checker off. Black's hyper-safe play leaves fifteen crossovers, which is too kind to White. Black must play 6/0(2) leaving thirteen crossovers. Black's Hollywood disaster plot requires a lengthy parlay: Black rolls one of seven blotters, have White hit about one-third the time, and then for White not to lose any of those games since Black owns the cube. It's less than two games in thirty-six for that feel-bad blockbuster movie to happen. By chancing it now, Black wins approximately 20% more gammons, so clearly the extra gammon equity is worth the risk. Then again, put on the 3D glasses and pass the popcorn.

49. *An excellent play, well digested in the scenes, set down with as much modesty as cunning.*



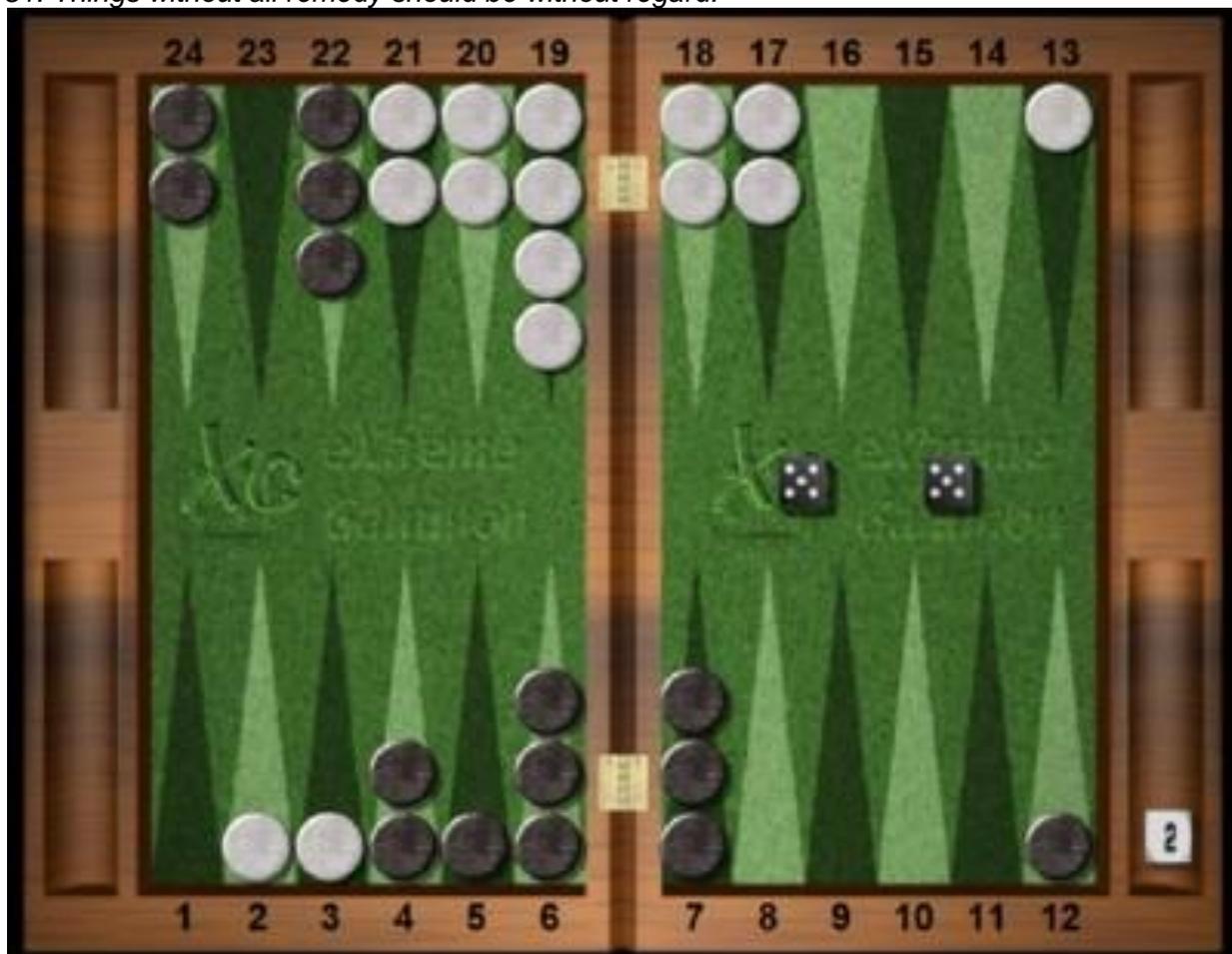
Even after this roll Black trails in the race. Hence moving Black's stacked anchor is not appropriate (although Black chose it). Moving the midpoint en mass is acceptable, but it would be a better choice if Black had no spare on his anchor as the 13/9(4) play reduces connectivity. The dull unstacking play 13/9(2) 6/2(2) is the best. The key idea of this problem is that dual 5pt holding games are very likely to evolve into races, primarily because successful priming game plans are impossible. Attacking game plans are possible but short lived since the checker on the bar can enter on the high anchor. Therefore, in holding games, always check the pip count to confirm the strategy before moving the anchor ahead with large doubles.

50. *I must be cruel only to be kind. Thus bad begins and worse remains behind.*



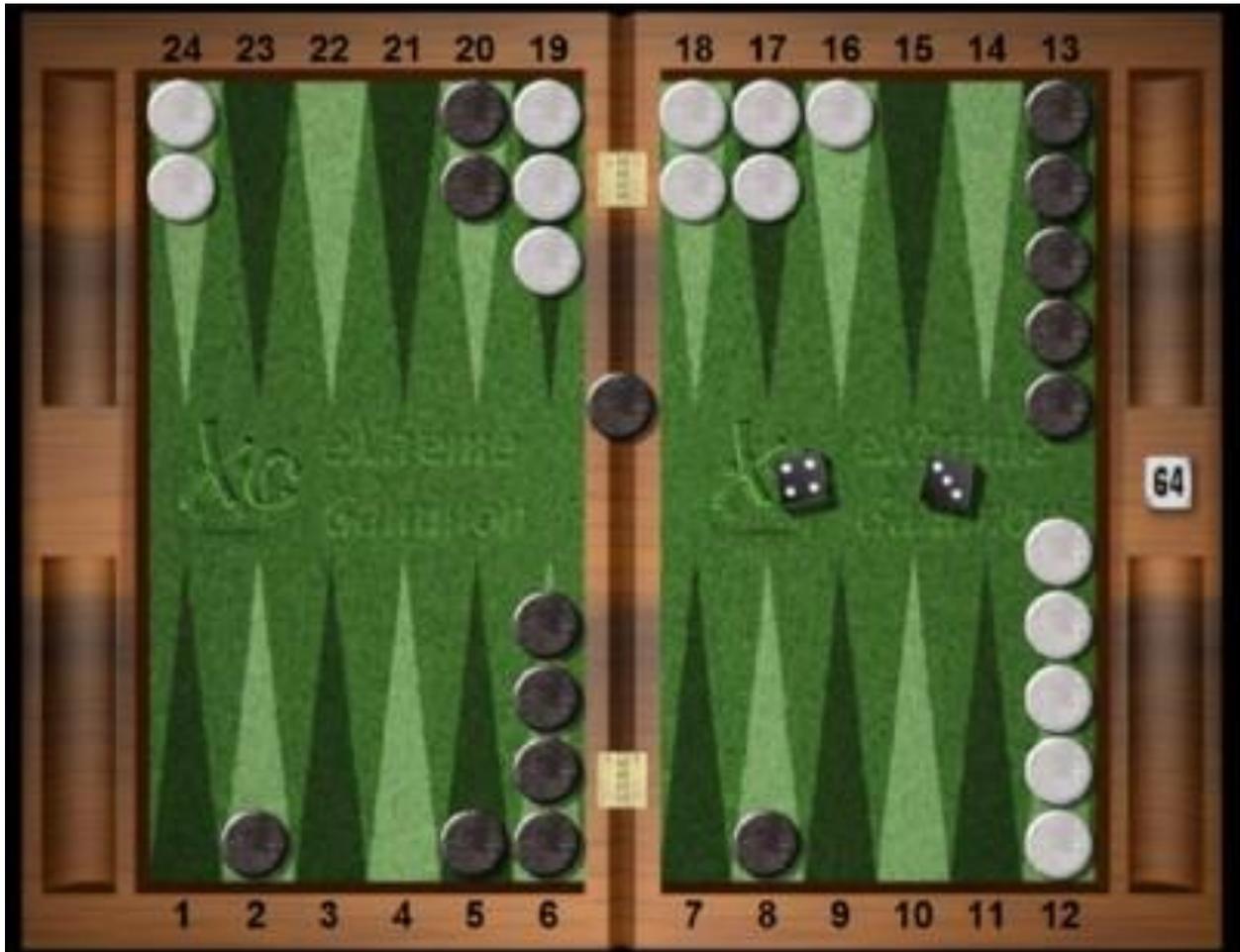
Black is in a very high backgame but is only two rolls behind in the race. Hence Black needs another game plan that could also succeed. Running her straggler is White's only real danger here, therefore Black must take control of the outfield as best he can by playing 20/14 8/6. If White hits on her 5pt, perhaps pointing, then Black has his 21pt anchor and the white home blot to counter. Placing the spare on Black's 6pt is a definite improvement, both for covering Black's home blot if White runs or for attacking her straggler if she stays. The play also leaves Black's outfield builders as far back as possible, thereby giving maximal coverage to permit the white runner to advance into optimal range.

51. *Things without all remedy should be without regard.*



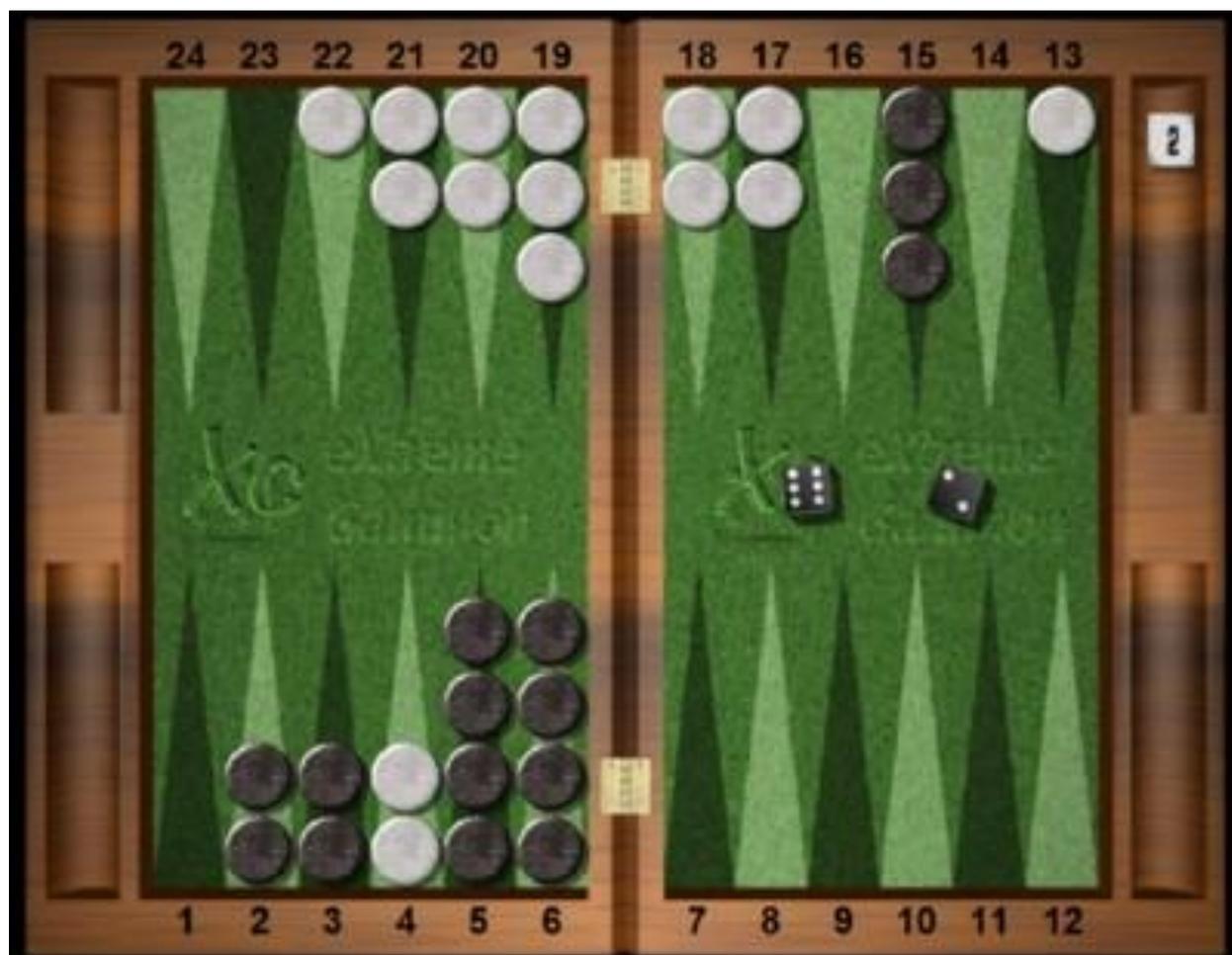
When playing a backgame the roll of big doubles gives a sudden sickening feeling in the stomach. It will now be next to impossible to win with a backgame strategy. It gets worse. Although this is the time when Black should start to think about minimizing his gammon danger, none of the available plays help much in that department. The one possible long shot is: Black points on the 2pt while slotting the 1pt, then White misses the 5pt blot, the golden point gets covered, then White enters hitting on the 1pt, Black dances, White rolls and cracks her prime, and bingo --- Black wins by the most incredible parlay. Try 12/2* 7/2 6/1 and pray for this parlay, or perhaps for a few other marvels in this desperate situation.

52. *Take upon command what help we have that to your wanting may be minst'red.*



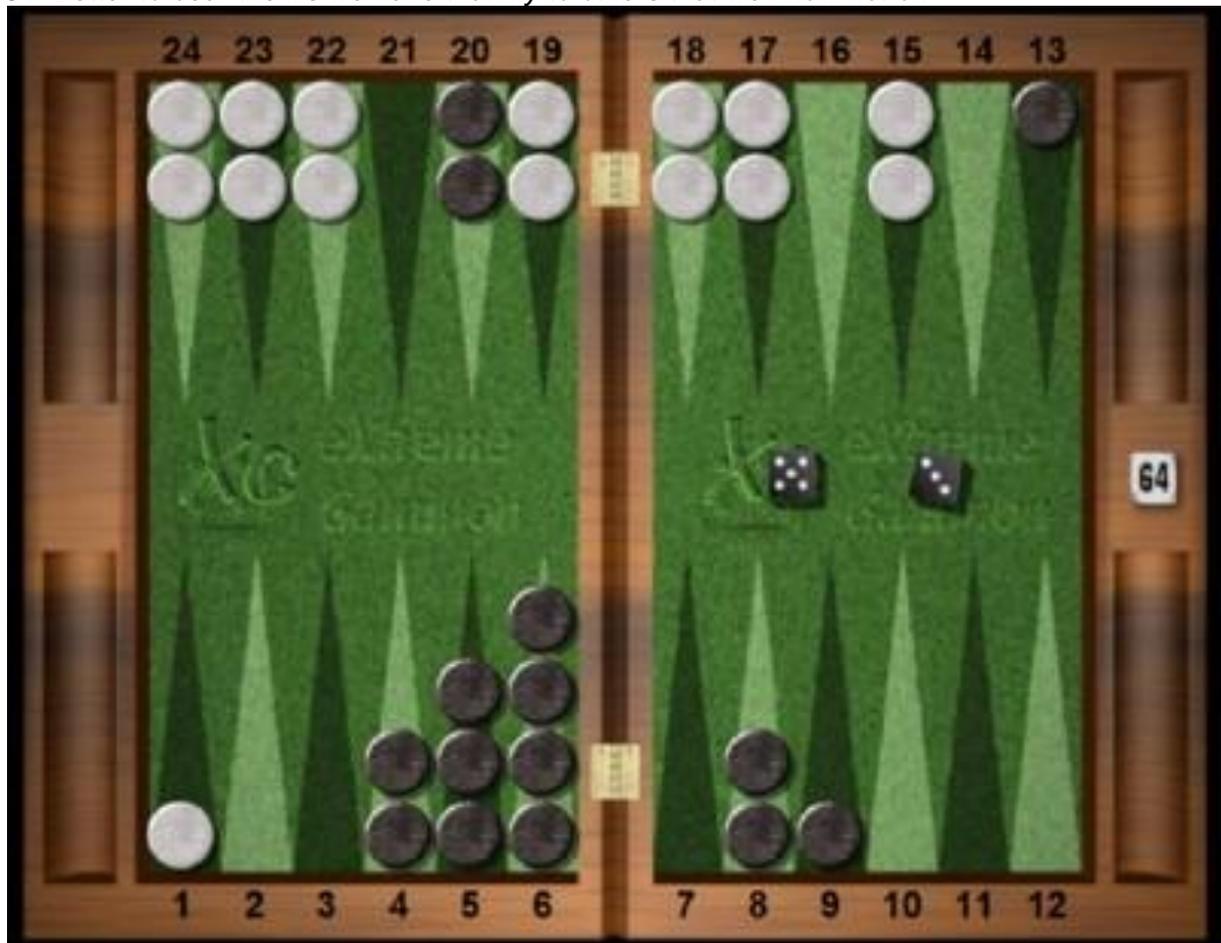
Black is well behind in the race. White has succeeded in freeing her backmen although in the process she has awkwardly made her 1pt. White is close to a cube yet Black's perfect anchor guarantees that Black can take a cube. That says volumes about the value of an anchor. Hitting the white blot induces White to cube immediately and thus Black must not break his anchor to hit. In this position Black needs to keep as much contact as possible and therefore should enter on the 22pt. His midpoint supply of spares means Black can maintain contact for awhile. Black's best four is to make his deuce point. Notice that his 8pt is already broken, so the deuce point becomes a legitimate point for a prime. White may be leaving blots soon and Black wants to be ready for them both now and later. Play B/22 6/2.

53. *Cudgel thy brains no more about it.*



White has a deadly prime and a good anchor and the cube. Black has a reasonably strong home and one outfield point beyond White's prime which is the only direct presence in the outfield. Black has a healthy lead in the race. Black of course must hit White's outfield blot, not only to pad his racing lead, but also to weaken White's connection and to permit Black a freer hand in bringing his checkers home. Slotting the barpoint pays off unnecessarily to an additional white joker (six shots) from the bar and ignores the value of buttoning up with Black's outfield checkers. The correct play is 15/13* 15/9 which leaves only four joker shots and smoothes Black's journey home by allowing outfield points to be made and broken flexibly. The horror of leaving three outfield blots after the correct play and a white joker is partly mitigated by White's cube ownership.

54. *Better to bear the ills we have than fly to others that we know not of.*

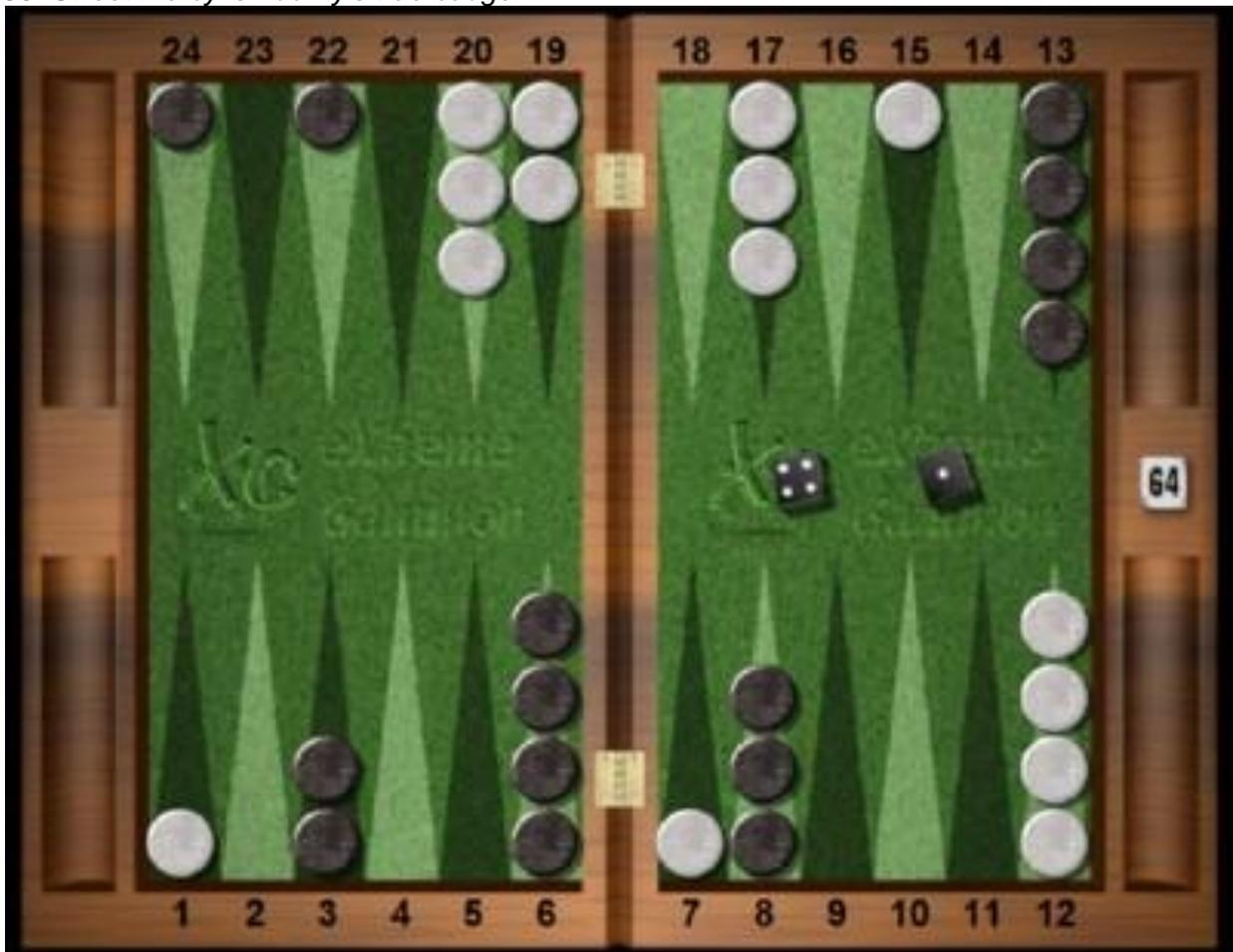


The solution to this problem is the obvious move, but in fact Black chose something else. White has recently improved her board, but her straggler still motivates Black's game plan of priming White. Black's anchor is a tower of strength and permits a measure of uninhibited action on his side of the board. If Black moves his midpoint checker closer, he risks having White vault past his army. Thus Black should pay off to white 66s by not touching his 13pt builder. If Black were allowed to pick up his dice and not move, he offers three shots to the white straggler. If Black makes his 3pt, thereby creating a new outfield blot, he offers only five shots. Hence in general a fourth home point which blocks a straggler does not increase the outfield shots by much. Since for strategic reasons Black does not want to advance his midpoint blot, then making the 3pt is nearly risk-free (except possible gammon danger) and trains maximum builders on the now vital barpoint. Play the obvious move 8/3 6/3.

55. *Present fears are less than horrible imaginings.*



Which three? Black has a small racing lead, has broken his outfield side, stripped his midpoint, and made a better board than White. His backmen, however, are forgotten whereas White has rallied to make her 22pt anchor. If Black tries to make outfield points now, the two checkers on his 1pt will plague his timing for the rest of the game. Black must get his backmen running. Remaking his 8pt is of marginal value. When Black runs, any other blots on his side of the board are just asking for trouble at an inopportune moment. Therefore play 24/21 8/4 which lifts a direct shot and gets Black's runners moving while he currently has the better home board.

56. *Sweet mercy is nobility's true badge.*

This problem is baffling. Strategic arguments alone may not lead to the direction of play. It may be necessary to study each roll for White to determine what tactical damage can be done by White after each candidate Black play. But first, note that the race is even. The list is:

- 22/18 8/7*. Apart from four dancing rolls, only White's 42s, 44s and 55s leave Black better off than he was before his current roll 41s; not very encouraging.
- 6/1*. In addition to the above rolls Black can include White's 62s, 64s, and 65s as encouraging. But when things go wrong, they go very wrong and Black can either fall far behind in the race or get blitzed and possibly lose a gammon.
- 13/9 8/7*. Several more white rolls grant modest gains to Black, but again the downside is amplified by offering yet another black blot to hit.

- 8/7* 7/3. The dilly builder pick-and-pass is ugly, but restricting Black's blot solely to White's side of the board means the downside to White's follow-ups are muted, primarily because Black stays within range of a playable race.

Best is 8/7* 7/3. As White has the better board and a more flexible builder structure, it seems that Black needs to counter with an anchor and cannot afford stray blots on his side of the board to distract him from this immediate objective. Perhaps the underlying lesson is that sometimes you simply must examine each of White's coming rolls.

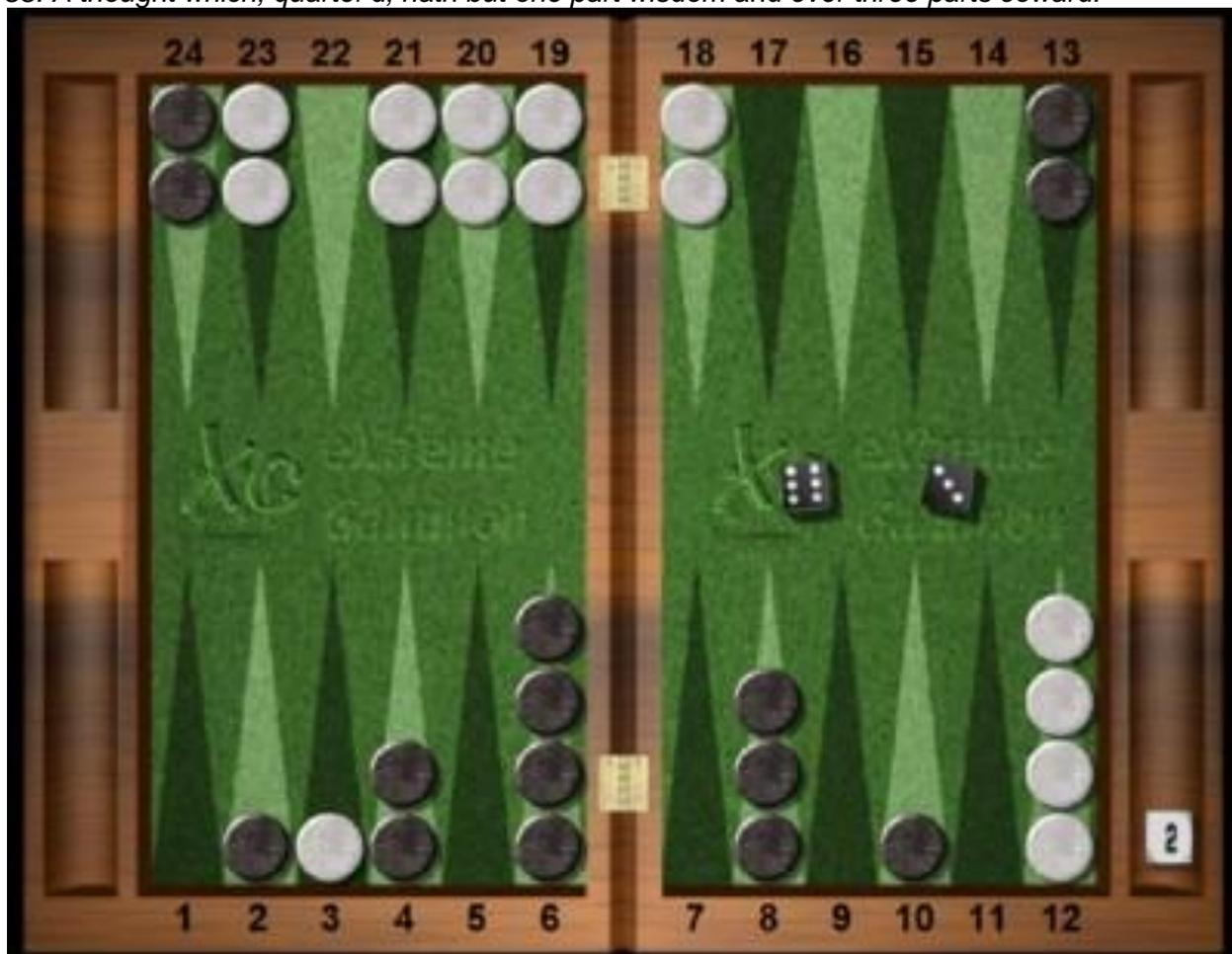
57. *Our revels now are ended.*



In this position Black has the cube and considerable flexibility of play on his side of the board. Even after these 33s Black trails slightly in the race, so there is no incentive at all to abandon the holding game by moving his 16pt. The white runners paired on her 15pt are perfectly place for Black's eventual attack as they are precisely six pips away. White has already started to dismantle her board and soon may need to continue its dissolution. Since the differences in equity are tiny, any reasonable move (other than advancing his outfield 16pt) is acceptable; perhaps build, slot, and cover with 8/5 7/1 6/3.

This position would be a good candidate for a “play-from-here” style hand rollout. The main question to answer is: How often does White leave a blot with her runners?

58. *A thought which, quarter'd, hath but one part wisdom and ever three parts coward.*



Black chose to make his barpoint. This would be a sensible strategy if he had already made the 9pt to block White's straggler, but he hasn't and the straggler can jump free with any six. Black is in serious jeopardy because he is trapped behind White's prime and White has ample spares on her midpoint to maintain the prime. White has good gammon chances and has cubed. Since White's straggler is still mobile, a priming strategy for Black is wishful thinking at best. Further, Black is behind in the race and, primed himself, can never make up the pips with large doubles until too late in the game when his backmen are finally free. So, Black can't win priming, Black can't win running. The only possible strategy that might work is: attacking. Black should hit loose and cover by playing 8/2 6/3*. He has the cube and cannot be doubled out during his aggression. If, by luck, Black establishes a 22pt anchor during the scuffle, fortunes just might flip around.

59. *The undiscovered country from whose bourn no traveler returns.*

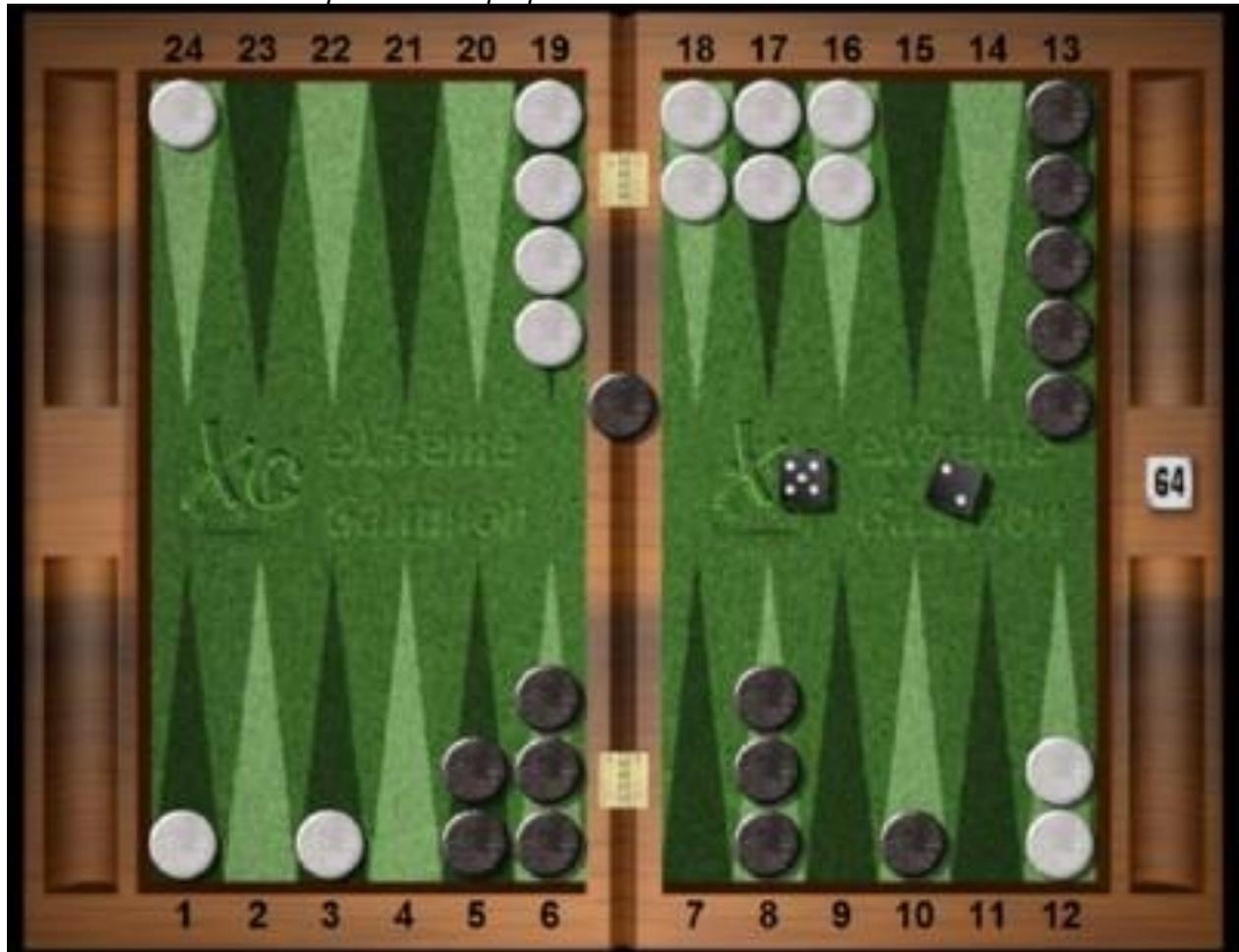


What a pathetic roll. Black has managed to turn the game around and surprisingly now leads in the race. White, however, is itching to enter her checker and hit Black somewhere --- loose on her 3pt might be even better than in Black's outfield. What Black needs to realize is that, until he exits young Bart from inside White's board, he is unlikely to win this game anyway if White enters. Black is just too vulnerable, White's board is too menacing, and her builders too ready to strike. Since White likely wins if she enters now, then who cares if Black's outfield blot gets hit in the process? Don't break the 4pt, thereby giving White seven more dancing rolls. Play 8/5. Note that shifting a 2pt spare to the ace point does *not* duplicate sixes when the black blot stops on the 6pt, since it also gives White 51s to hit. A white entry is a white victory, more or less.

60. *And do as adversaries do in law, strive mightily, but eat and drink as friends.*

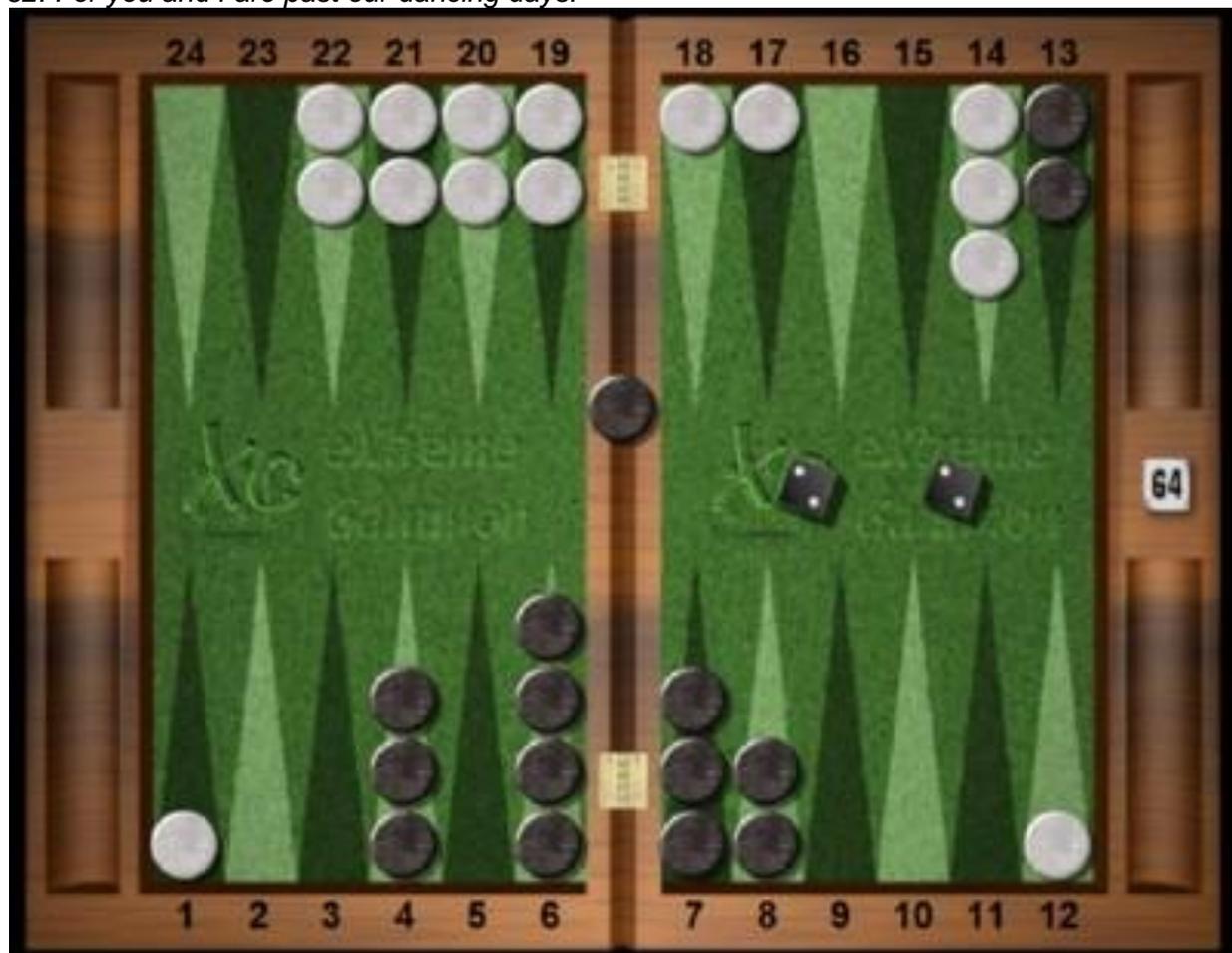


At first sight the positions look similar and parallel, although White has an extra home board point and a small racing lead. Study indicates that White should double next no matter what play Black chooses and, if the play is at all reasonable, Black should take. After second sight, White's position is far better than it first seems, primarily because with a free hand and the initiative White can launch an aggressive attack on Black's blots, even if Black lifts his 7pt blot with the four. Therefore Black should guide the position into higher volatility by hitting loose on his 4pt from the 8pt. Then sequences appear where White either dances or cannot harm Black on her next roll and, although White will still double, the additional volatility means White's double is not particularly efficient. With luck, Black could find himself turning the tables here. Play B/22 8/4* and take the cube.

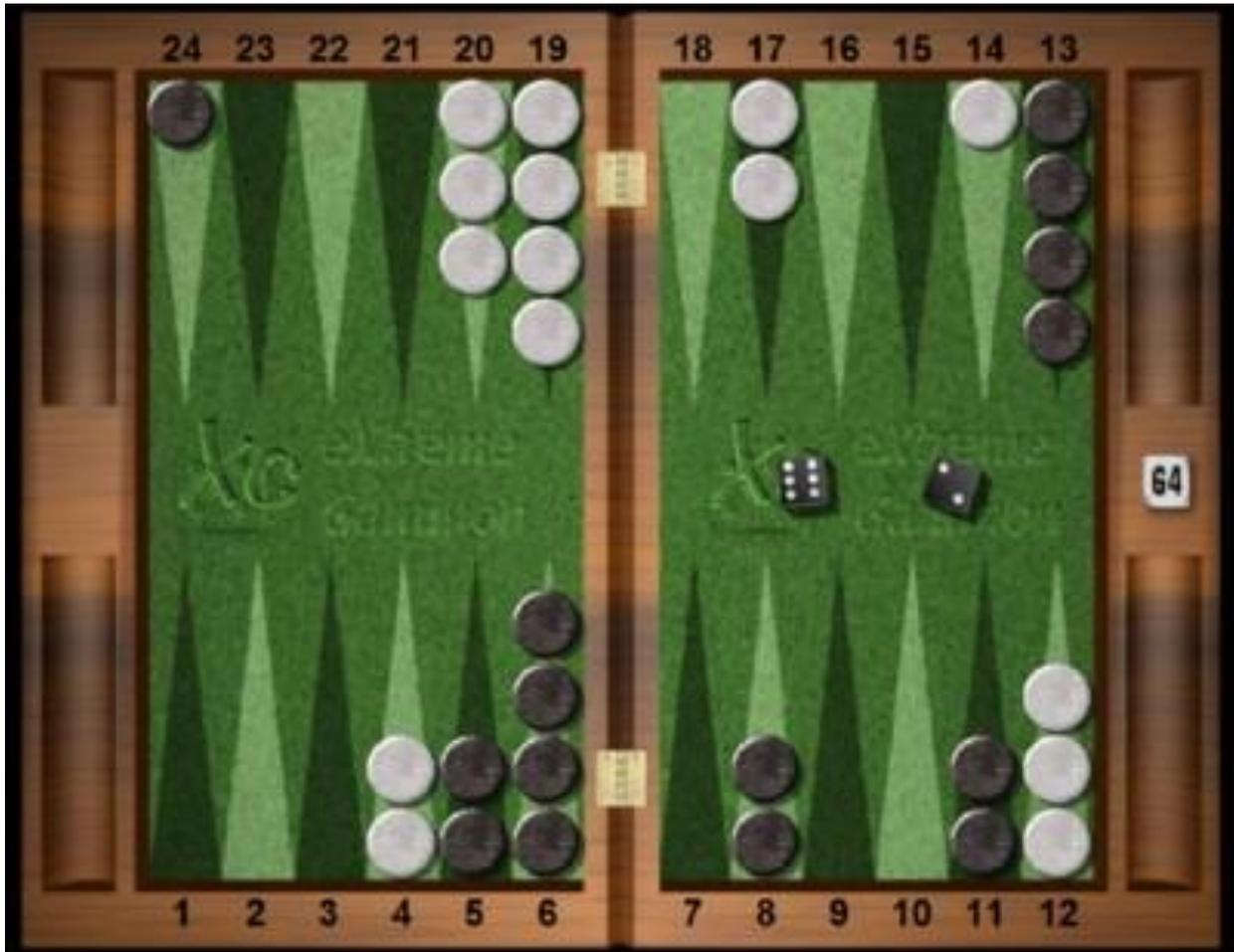
61. *The devil can cite scripture for his purpose.*

This is a close race. Black has the golden point while White has an outfield prime shaping up. White has two backmen, Black only one. White's ace point blot is a small flaw in her home board, particularly since her game is shaping up as an outfield blocking crusade, to which ace point blots can contribute nothing. Black chose to play "safe" by lifting his 10pt blot. Better is hitting loose on the 3pt while entering low. Play B/23 8/3*. This play keeps White's cascade of builders from rolling ahead into the home board and trapping Black's straggler, at least for this roll. If White hits back on re-entry, perhaps Black can make a high anchor. If White rolls awkwardly, her stripped outfield points could crack like bone china. Notice Magriel's criteria for safe versus bold play give mixed signals. A close race suggests easy on the blots but don't yet promote a racing strategy to top priority, again mixed signals.

62. *For you and I are past our dancing days.*



Here is a very interesting choice and a theme that can be difficult to plant in one's head. White has a great home board, and Black is envious. In fact, Black chose to make his 2pt, which appeases his envy by creating a new home point. However, his 8pt cannot be part of the same prime as the 2pt, so in essence Black has tainted the value and reputation of his 8pt. Better is the unorthodox shift of his barpoint with the play B/23 7/5(3). Once his golden point is made, his straggler has better protection. Certainly, White now has an easier run into the outfield, but her 13pt is a blot, not a point, which means White's backman has fewer friends than expected. Except for White 65s, Black's midpoint will get a direct shot at a white runner if White bolts. The upside for Black is the growing strength of his own board. The black builders are perfectly placed to attack White's straggler.

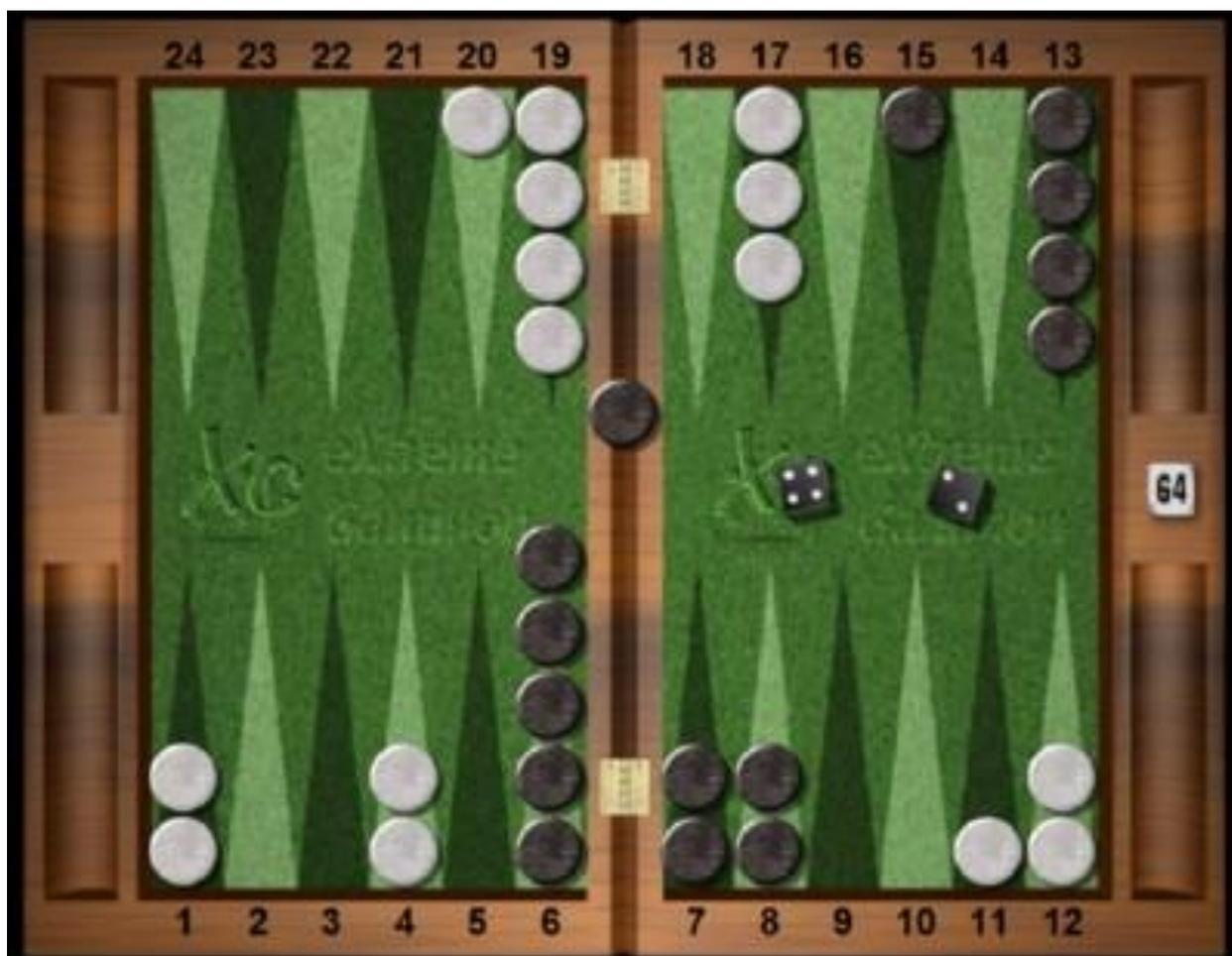
63. *Sweet are the uses of adversity.*

In all honesty no matter how long you play this game, certain positions will surprise you with the fascination of backgammon. Here's one.

The race is essentially even. Each side has a solid start at its home board, working but stripped 8pt blocks, and midpoints that boast spares. Black has one lone backman; White has her 21pt anchor. Black rolls 62s, hardly a poster child for the race. Yet the correct play is to run to the 16pt, right into the clutches of two direct shots and without a big racing lead. How can this be? The secret to this position is White's anchor. It is powerful here. First, the anchor makes a mockery of Black's two spares on his 6pt. They are doing no work; what are they building? Second, Black's 11pt is not blocking anything, nor ever will. It is merely a cluster of builders, and yet the points they aim at building are only good points, not great points. Due to White's anchor, Black's position has stunted forward momentum. And the antidote for that is? Run! If this game is converted

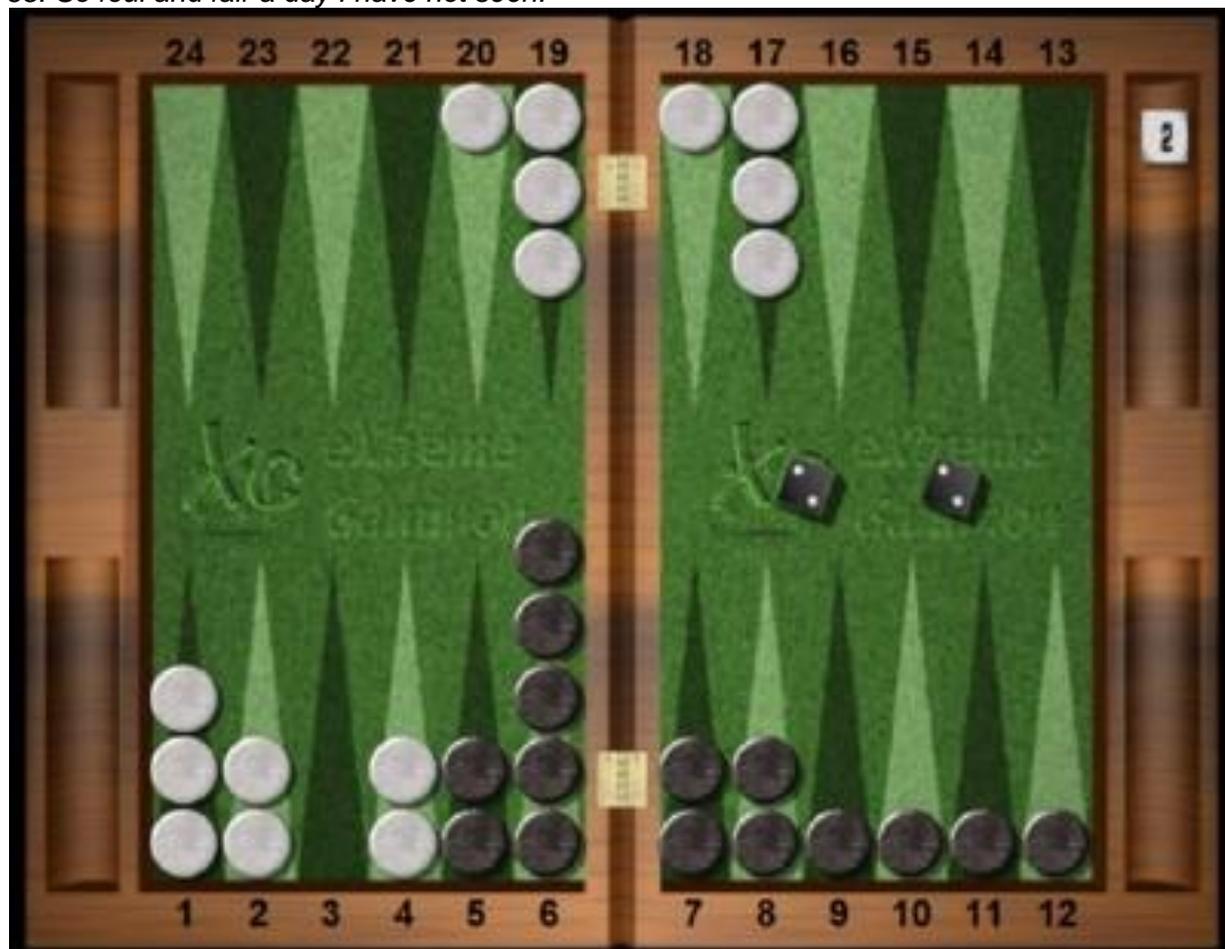
into a race, disengagement will soon become the preferred strategy. When checkers and points disengage, their previous dreams are forgotten. Whether they dreamt they were builders or blockers, now they are making a quicksand transition to runners and landing posts. Admittedly, Black is taking a risk with the play 24/16, but if it succeeds the new motto will be *run* and all checkers in Black's position are well placed to do that. Never forget, backgammon is a race, first and foremost. Throw in the towel and flee is often the best strategy.

64. *Their defeat does by their own insinuation grow.*



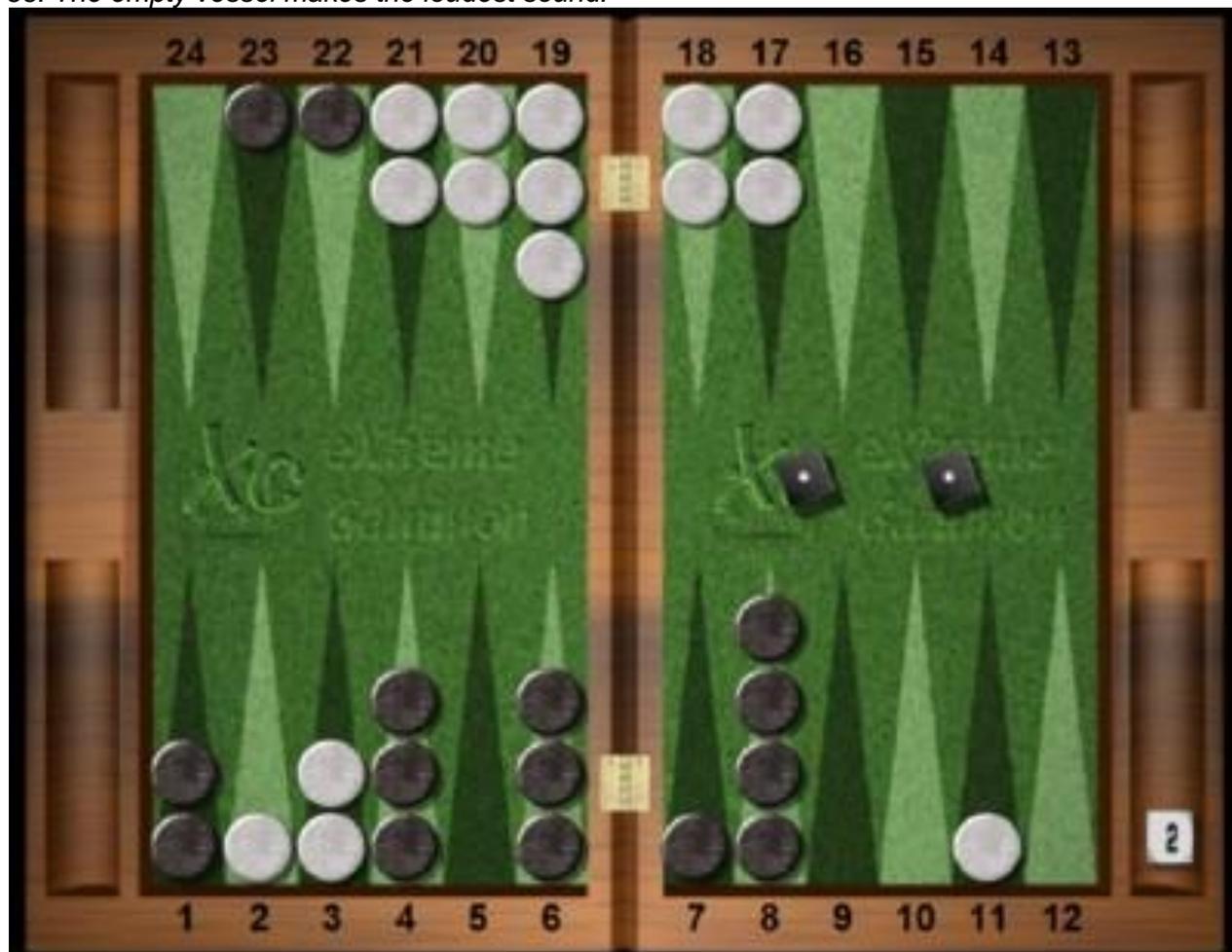
With so many white checkers back, Black can play more flexibly in an attempt to improve his connectivity between all parts of his army. Connectivity, always an important concept, becomes more so when it is clear the game will be a long one. Expected longevity is usually a hint to prefer the pure play. The high entry B/21 and the spare hit 13/11* is best, leaving an extra 15pt blot in direct communication with Black's runner and poised to build or button up in the outfield. The black attacking blot on the 11pt is not threatened by White's pair of anchors. The idea here is that Black is willing to trade part of his racing lead for a more connected structure. This trade makes sense whenever the game will be a long one and the player with the big racing lead can swap part of the lead for better long-term structure.

65. *So foul and fair a day I have not seen.*



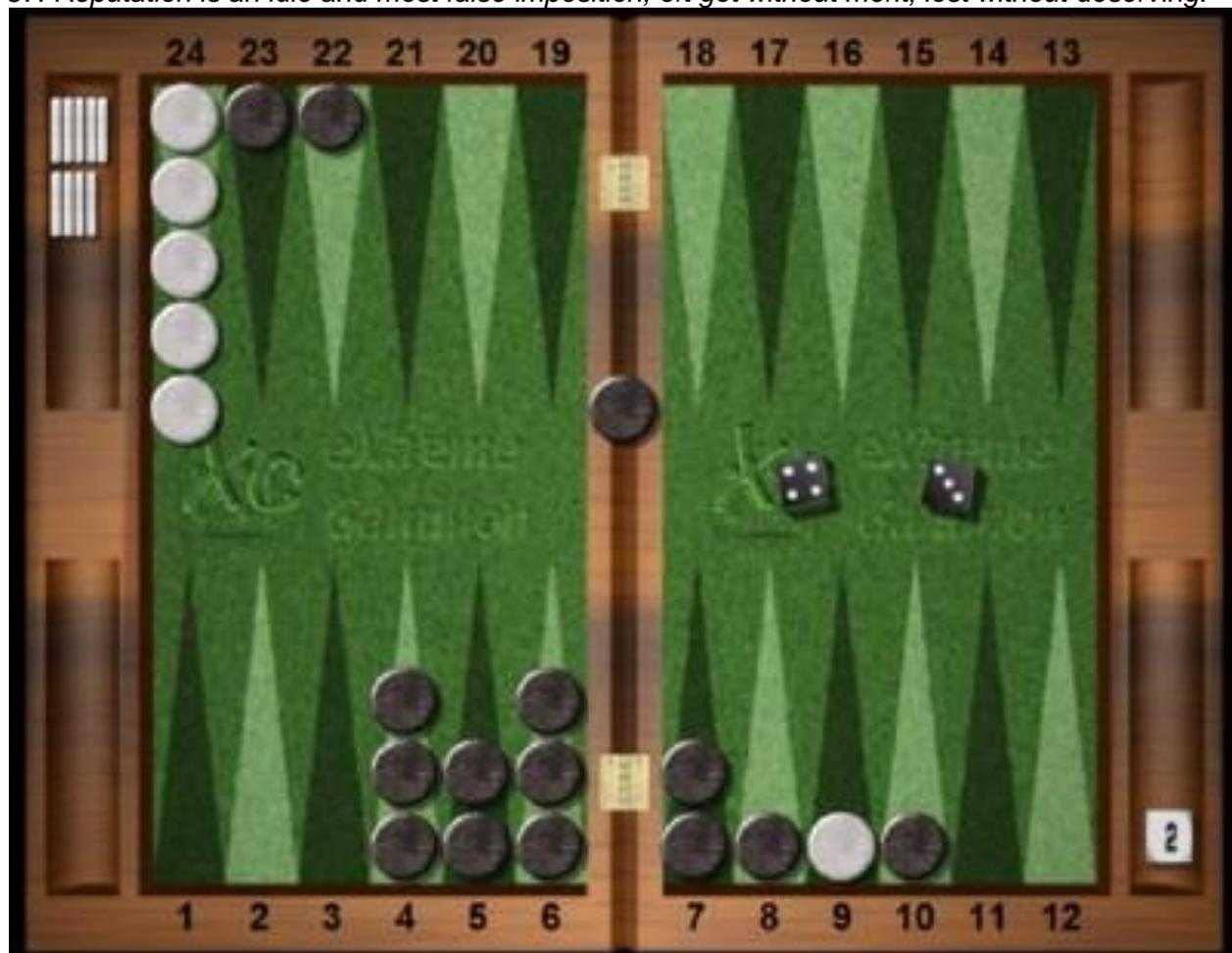
Many times in defeating a backgame there will come a moment when Black wishes he could recycle a checker because his prime is strong enough to cause White's front block to crumble. One way to detect this moment is to note Black's unmade home points, for example the 3pt here. White's backgame does not want to hit too early while the outfield part of the black prime is still strong, since it will be next to impossible for White to resupply enough checkers to contain Black's new runner. Slot the 3pt from the 9pt and add a blocking point for sixes with the play 12/10 9/3. Maybe White will start to crunch now if luck goes against her, as fours and sixes play awkwardly. White needs a three to shift her back spare to her 21pt anchor. Yet White prefers only threes, twos, and ones to put iron into her growing blockade. There are not many rolls where White would choose to hit Black's slotted 3pt.

66. *The empty vessel makes the loudest sound.*



Black must make the 22pt anchor; otherwise his backmost checker is trapped by White's perfect prime. Advancing to the edge traps Black's anchor behind an *almost* perfect prime. The key to this problem is White's 14pt blot. It provides some timing to maintain her prime, particularly if Black chooses to make his barpoint by advancing both spares on his 8pt, stripping it. Then it would be prime-versus-prime, but either White's anchor or lone runner can exit, thus White wins most timing battles. It is better for Black to make the 5pt, which bolsters his attacking game, and then to concentrate his efforts on keeping one of the three white backmen trapped permanently, preferably on the bar. Play 23/22 7/5 6/5. Transfer White's 14pt blot to her 4pt and the two choices of play become equal.

67. *Reputation is an idle and most false imposition; oft got without merit, lost without deserving.*



This is an interesting and unusual position. Let's contrast just two moves which greatly differ in equity. The plays are B/22 10/6 and B/21 10/7. Black's objectives are to save the gammon and to win the game, in that order. First let's guess how often Black wins from either of these starting positions. Answer: somewhere between one in four and one in five games. Surprised? That's quite a lot. Now guess how often Black is gammoned (or worse). Answer: somewhere between two in five and even odds. There's nothing surprising about that sad outcome.

Which play saves more gammons? Here is some fuzzy reasoning offered by the captain for B/22 10/6 in a chouette: To save the gammon from the bar Black must make fifteen crossovers. He will get two done by this play. So let's get started with crossovers, he argues. This is the wrong play of course. Why? Let's simplify the situation to a race with the current pip counts but no contact. Then we hobble White by stating she must

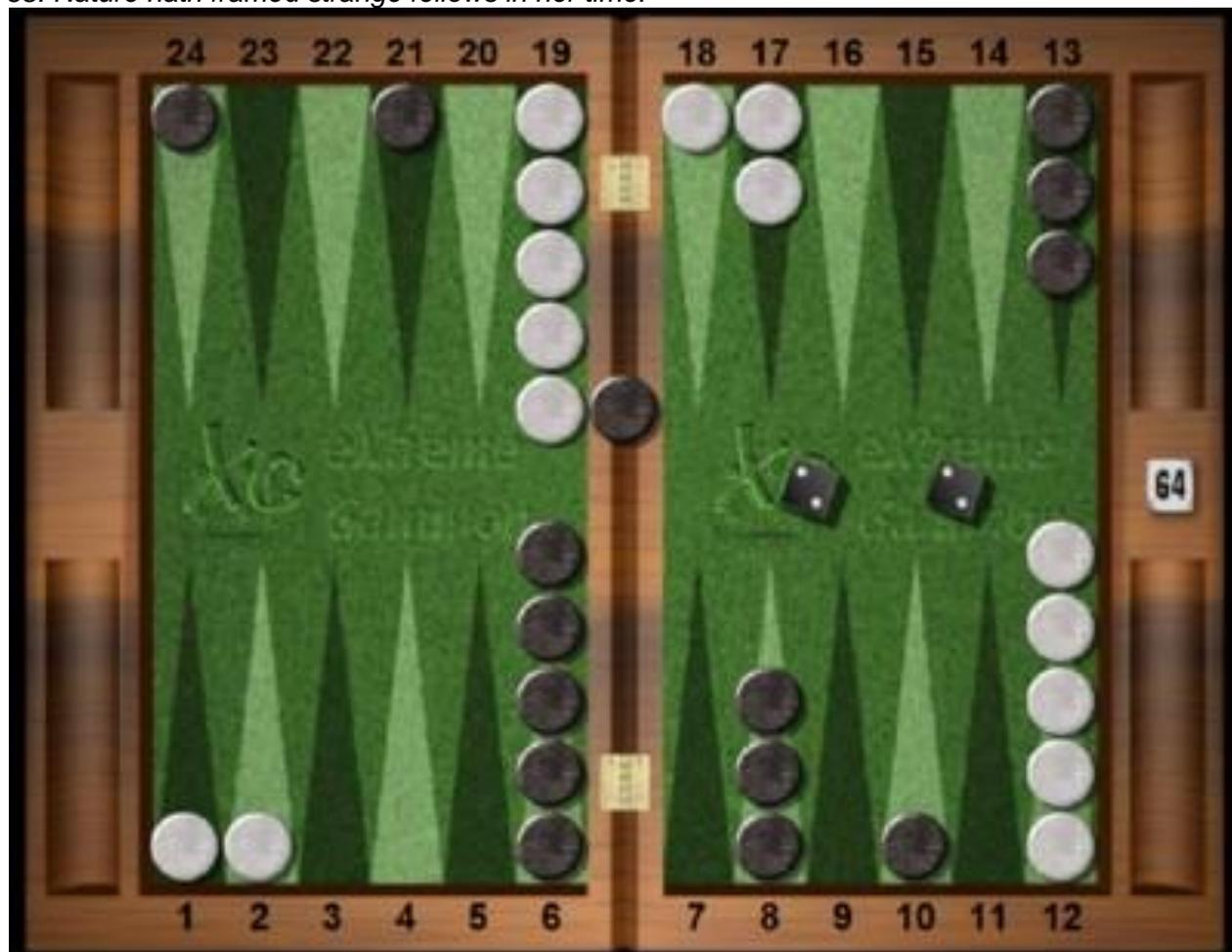
advance her straggler fifteen pips before any checker can bear off. How many rolls does that take? The absolute minimum is five, the average is about two, and often the second roll will resume her bearoff. Now we grant Black a sequence of miracles --- roll back to back to back high doubles and enjoy White's subpar rolls three times out of four. If we set this racing position up, White can *still* win a gammon by rolling *any* doubles along with three subpar rolls in any order. In other words, Black rarely saves a gammon by racing. Thus why make a crossover?

How in fact does Black save those gammons? This is the right question to ask. The observation, now clear, is that Black *must* hit White's blot *at least* once to have any hope of saving the gammon. And to win the game, Black must surely hit many times. It's not a mystery, it was obvious all along. But it creates a new rule of thumb for saving a gammon with jackals: *Never make a point on White's side of the board.* Always spread the checkers out on her side of the board to maximize shots as the white straggler advances. This is true even at the expense of more crossovers and hence more racing gammons.

How much equity is this advice worth in this position? In winning the game (not just saving a gammon) the advice improves the equity from one game in five to one in four.

Here is the clincher. Transfer Black's 23pt checker to a 22pt anchor before the same roll of 43s with Black's third checker entering from the bar. Then Black loses seven gammons in ten games and Black wins less than one in six games when he plays B/22 10/6 which triples up his anchor.

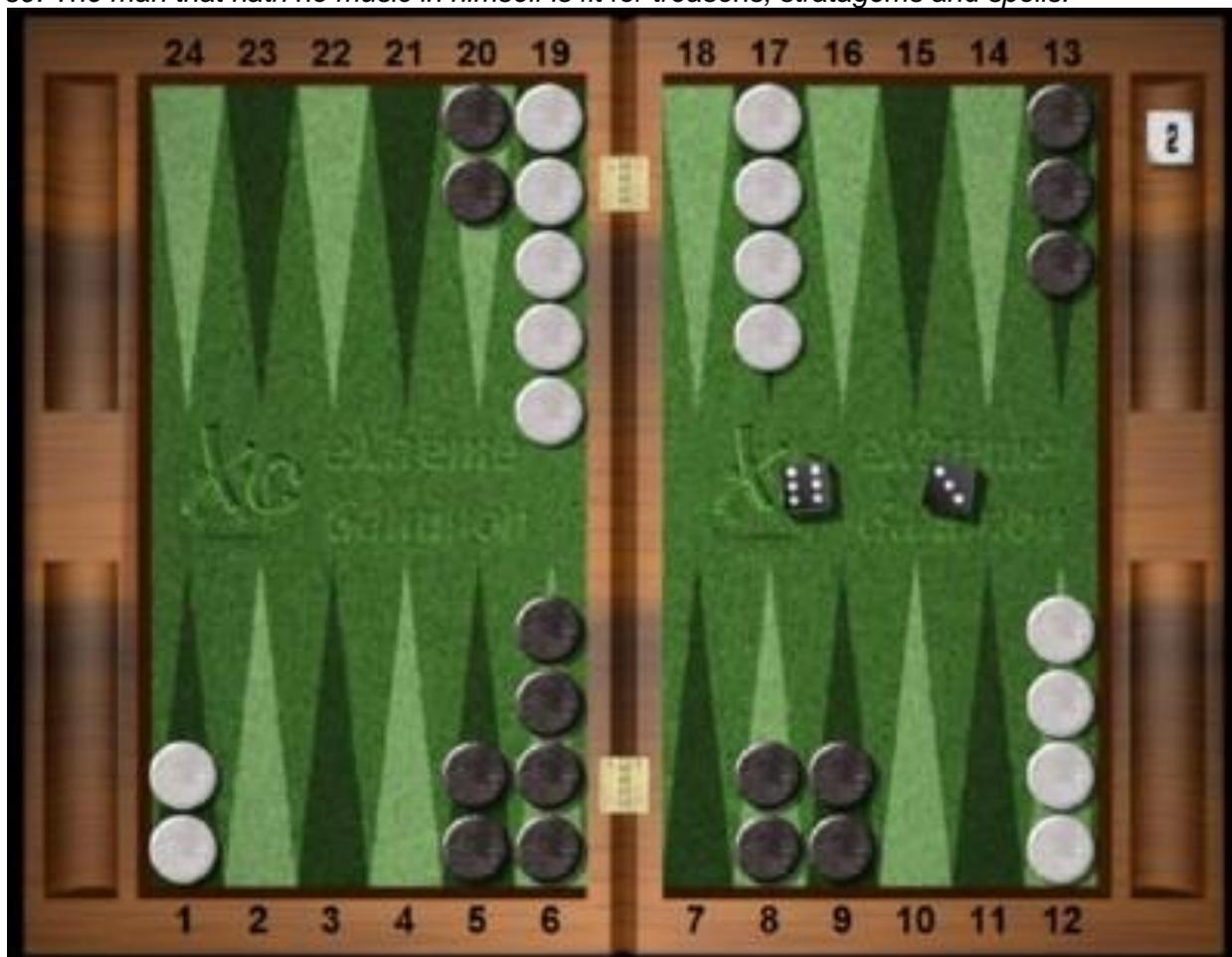
68. *Nature hath framed strange fellows in her time.*



Entering and hitting the white barpoint blot seems natural as cow's milk. Surprisingly, one play here stands out from the herd. Make both four points: play B/21 6/4(2). Although Black has a third runner, the race is still close in this opening. The key to this position are the stacks and their role in early game development. Black has only one stack and unstacking it now to make a new home point is very attractive. White has two stacks and has already stripped her 8pt. A new black anchor stunts development of White's front block. Where can her three spares on her 6pt efficiently go? The third black backman helps Black flexibly hold his new anchor well into the future. Black establishes a balanced robust position that can survive short-term buffeting. Black's anchor also plays a big part in improving his connectivity. The other play of the hit 24/18* only targets the race, but it creates insufficient racing lead to be decisive. The correct play not only illustrates specific tactics, but also touches upon many strategic

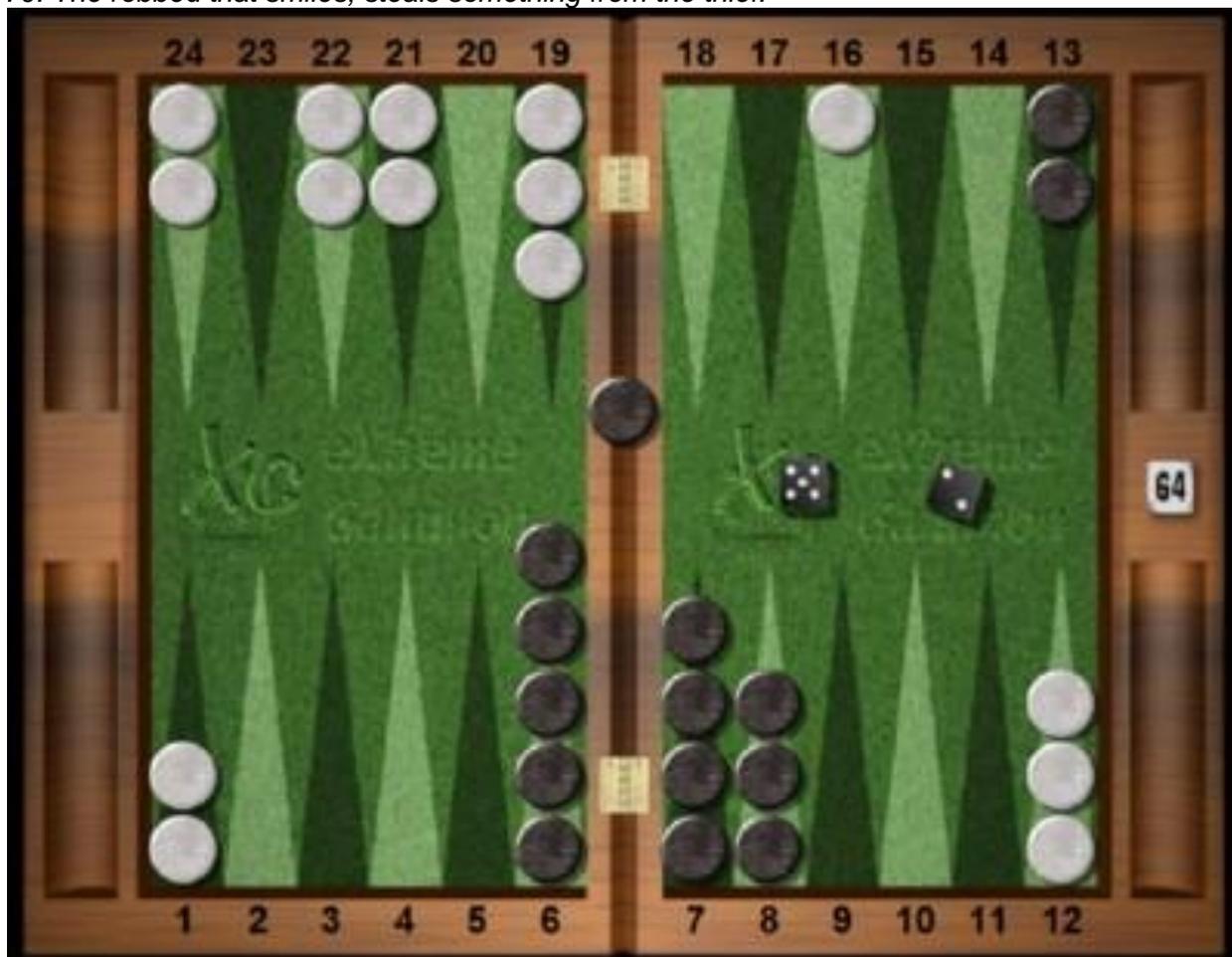
goals --- efficiency, connectivity, robustness, and non-committal flexibility, the smorgasbord of strategic concepts so well described in Robertie's *Modern Backgammon* book. Making both 4pts is the clear strategic choice. It takes the cheese: milk's leap to immortality.

69. *The man that hath no music in himself is fit for treasons, stratagems and spoils.*



Although Black is not keen on being hit and watching his racing lead vanish, his powerful anchor should save him. Black chose to slot his 4pt, arguing that points should be made in order and his anchor can backstop him. This sounds reasonable, but there are flaws in the argument as well. Black's 8pt-9pt combination is good, but those points are stripped. Hence covering his 4pt blot by breaking either is two steps forward and one step back. Also, slotting the 4pt strips his midpoint and now all points outside his house are stripped --- not a flexible situation. A far better play is to make the 3pt now with 9/3 6/3. When a roll uses a six to break the last blocking point to make a point, then the prime is rolling forward efficiently. In other words, the broken point and the made point cannot be part of the same prime. Also the midpoint still has a spare, so fours, fives, *and* sixes are working as builders for the bar and the 4pt.

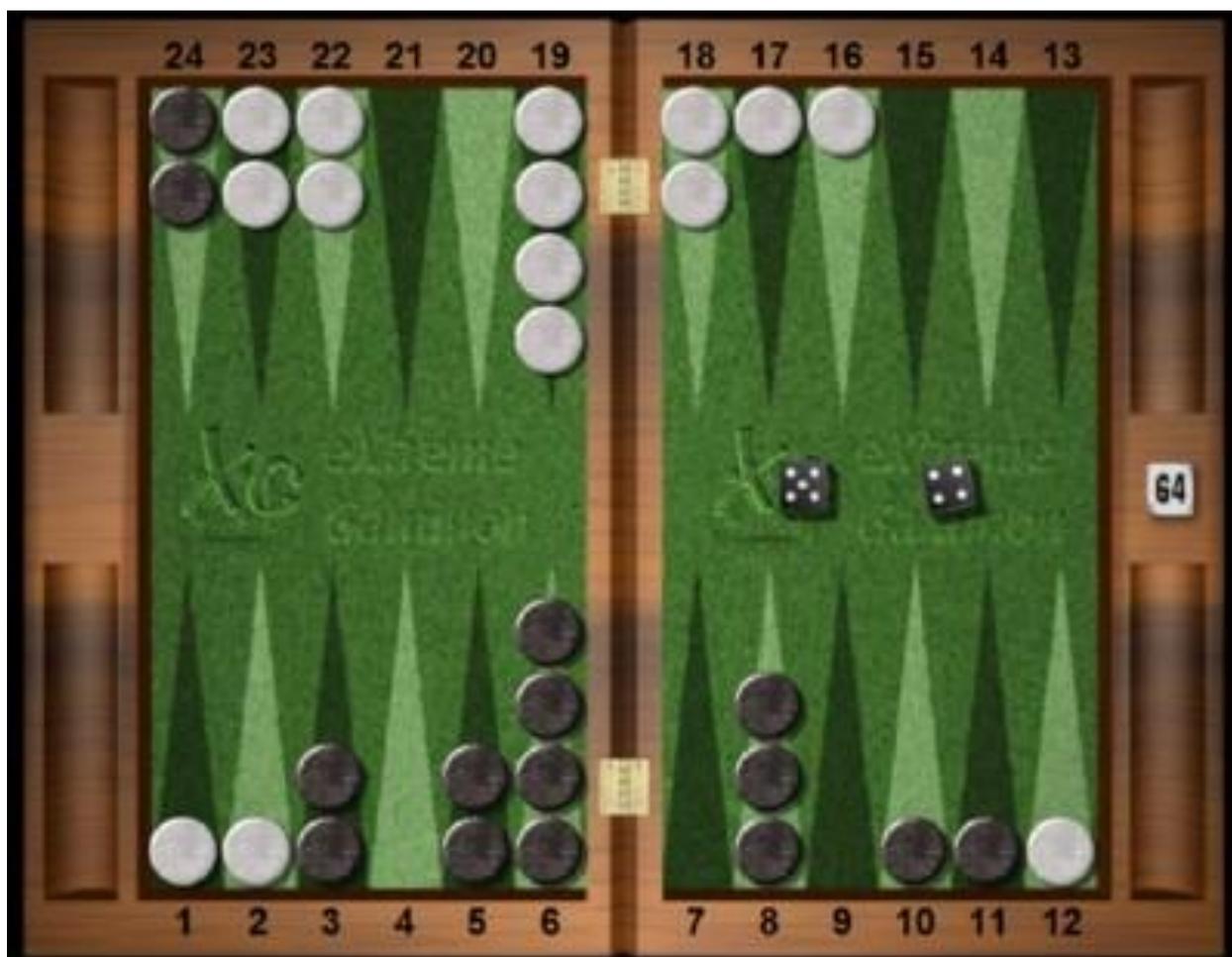
70. *The robbed that smiles, steals something from the thief.*



Although only a small equity difference here, the position contains the germ of an idea worth reviewing. Black has nothing but builders on coffee break and a harassed straggler named young Bart. White has a strong blitzing board and threats, but still has a deep anchor. The race is even.

Black does not want to be hit. If hit and dances, he may not be able to take a cube. Black could jump to the barpoint, leaving 24 shots. Black could play B/20 7/5 thereby duplicating fours and, if missed, create a structure that can improve. Duplication usually reduces the number of shots. Here's where things get interesting. In this case, duplication *increases* the number to 25 shots although the loose hits from the white midpoint are to blame. Black should still use duplication, but as a tool to try to steer this game into a new direction where a winning game plan may emerge. Nearly always, the plays that steer into deep waters will mix things up, primarily by increasing volatility. Here, the slots of two 5pts

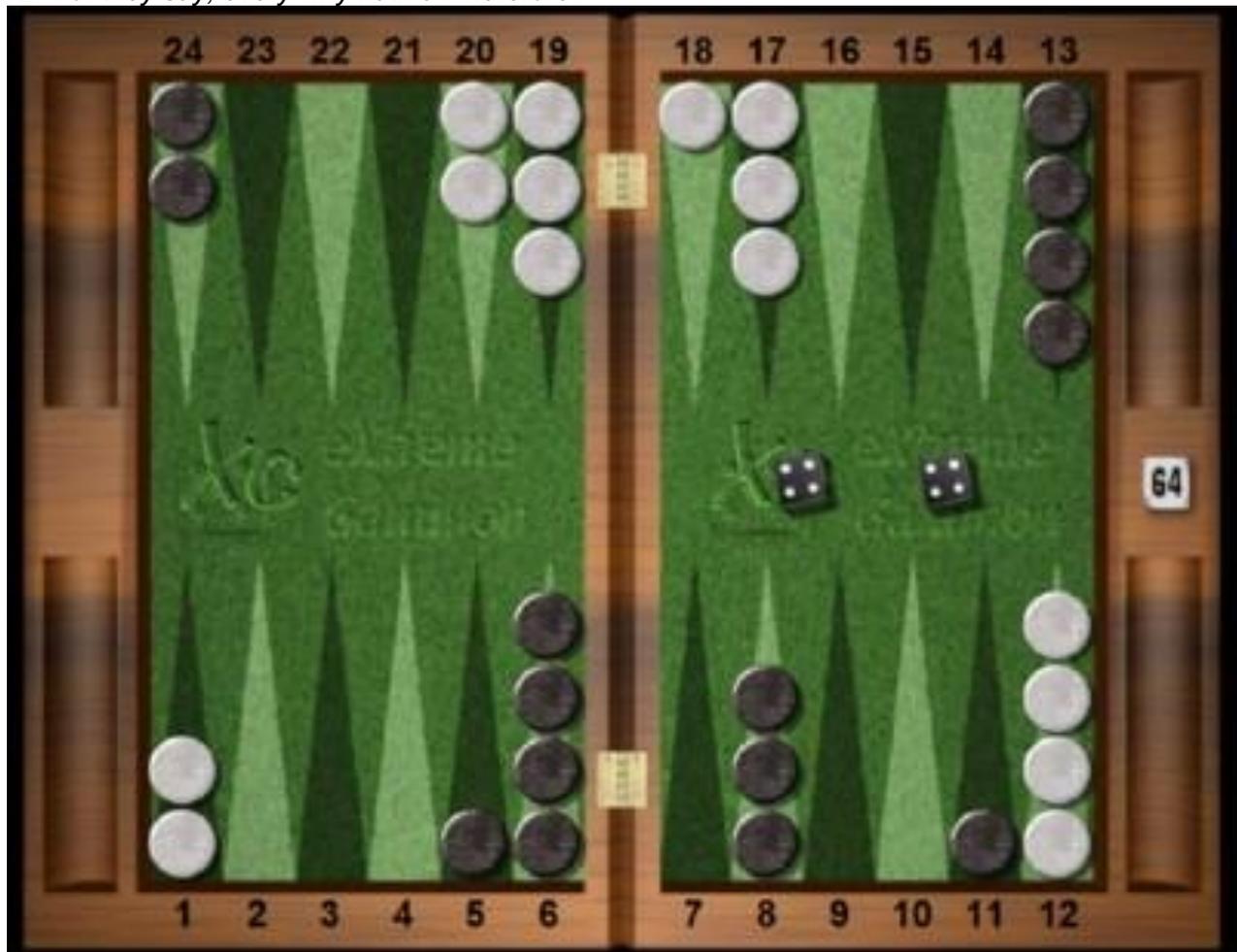
increase volatility by 50% over the jump to the barpoint. (Same dice, additional puzzle: If the white blot shifts to the 17pt, the same volatility increase happens for a black 4pt slot.) Black's new game plan may sprout from: 1) White hitting loose on her 5pt leaving Black with *direct* return shots from the bar; 2) White hitting Black's 5pt blot and Black managing a successful blot-hitting contest primarily by anchoring. Neither of these potential game plans is as fully available if Black jumps to the barpoint. Duplication is needed since any second blot without duplication is a clear blunder, but the attempt to develop a new winning game plan is the vital idea. Duplication is just a tactic that could enable a change in game plan, like buying wine on your way home from work for a fancy dinner. Play B/20 7/5.

71. *The time is out of joint.*

There is a vague symmetry in this position. Black has the slightly better board. The race is even. Both sides are rolling toward primes based on new home points. Timing is about even, though perhaps White's timing is slightly better. The outfield is no-man's land. Black could run one checker, but that leaves White with complete freedom of movement: hit Black's runner, jump her split backmen with possible fly shot hits, or lock up another home board point. Everything works for her. This breadth of flexibility in White's position is the key theme of this problem. Now suppose Black hits twice by the play $6/2^* 6/1^*$. Instantly White's many options are halted, in exchange for a five in nine chance of hitting a black home blot or two. One-quarter of the time White dances completely and one-quarter she enters both checkers, though not always twin return hits. Most of the time White's three outside blots and prime development remain in suspended

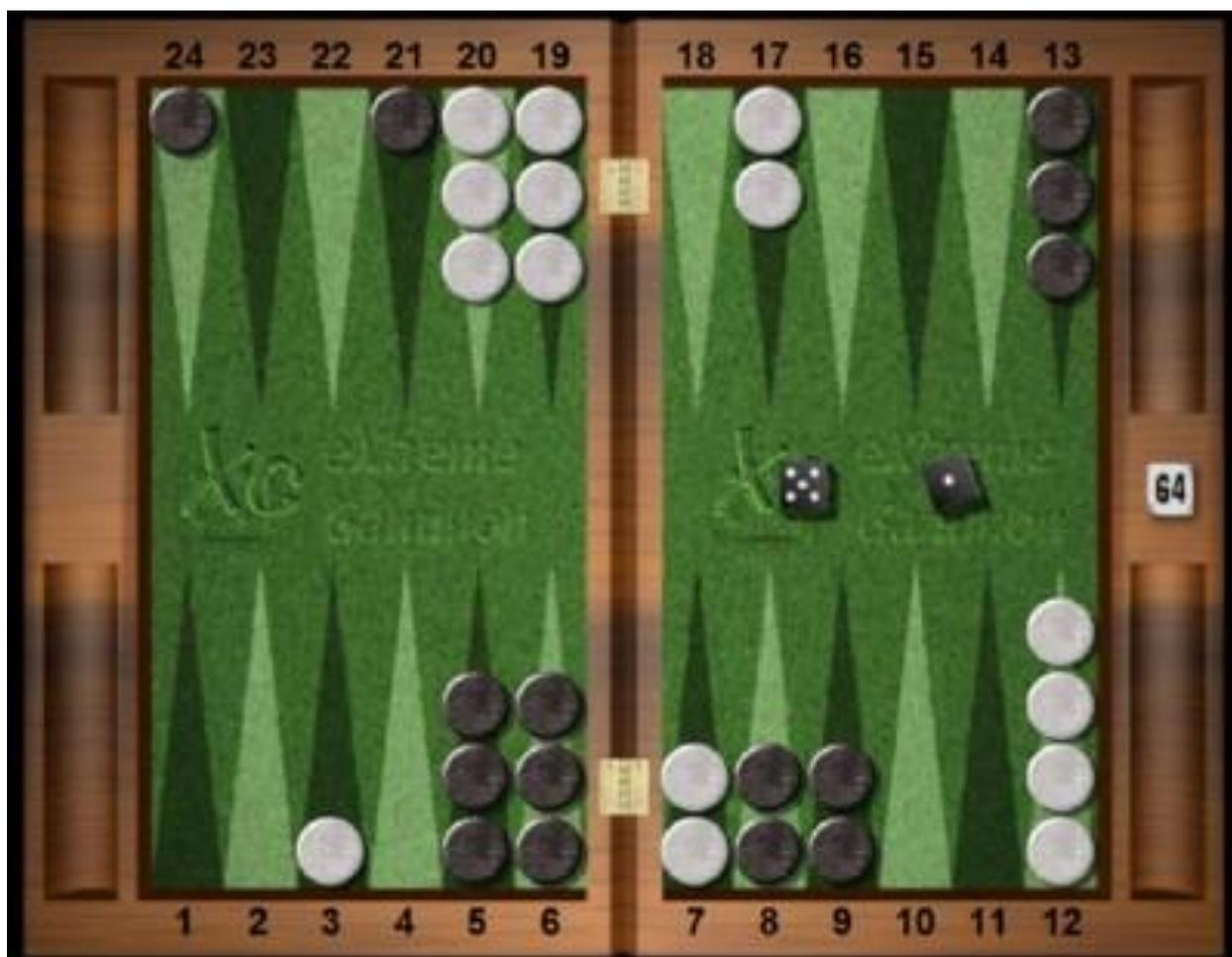
animation, awaiting Black's attention and devious pleasure. In positions of symmetry or parallel development, advantage often accrues to the player who first breaks the strategic symmetry, a concept known as first-strike capability. Here it catches White flat-footed.

72. *For they say, every why hath a wherefore.*

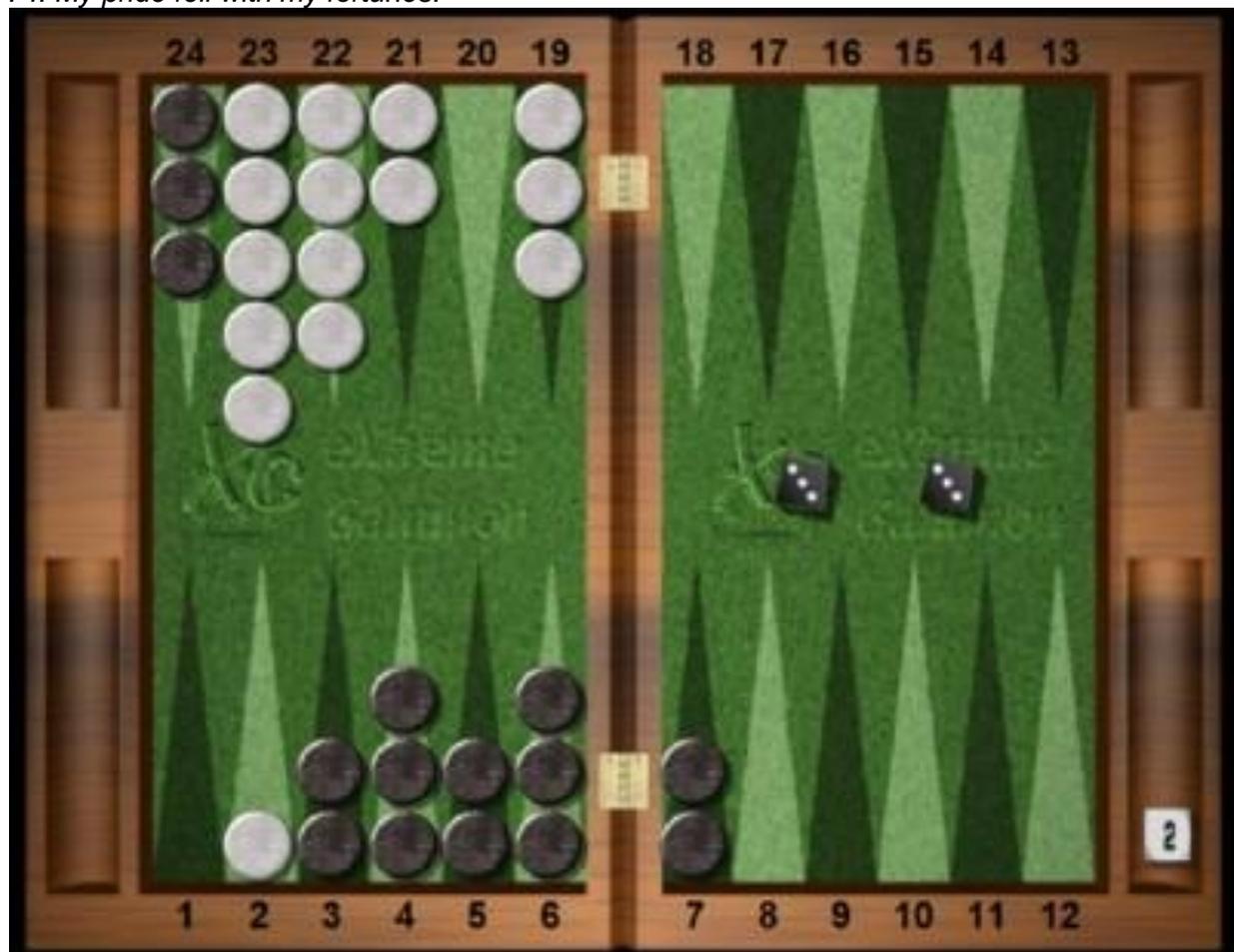


Before he is hemmed in, Black needs to get his backmen moving, but he cannot with this roll --- an excellent 44s destined for point making. Black covers his golden point. Then he chose to make his deuce point. What Black must recognize here is he will soon be trapped by White's 4-prime and perhaps 5-prime. This fact places a premium on Black's connectivity, since it may be awhile before Black can escape or shift anchor with his backmen. The deuce point is too far forward to keep his structure intact. In terms of blocking the white backmen, it is the 7pt and the 4pt that are required, not the deuce point. Black should play 13/5 8/4(2), a play with stronger connection and one that trains three builders on his key barpoint. If White cannot escape on her next roll, or chooses instead to cover her barpoint with any six, Black may equalize the position and have a better than equal game plan since he would have the superior board just when all backmen will soon split. Black is thinking ahead, which is always better

than moving the checkers too far ahead as if those checkers had minds of their own.

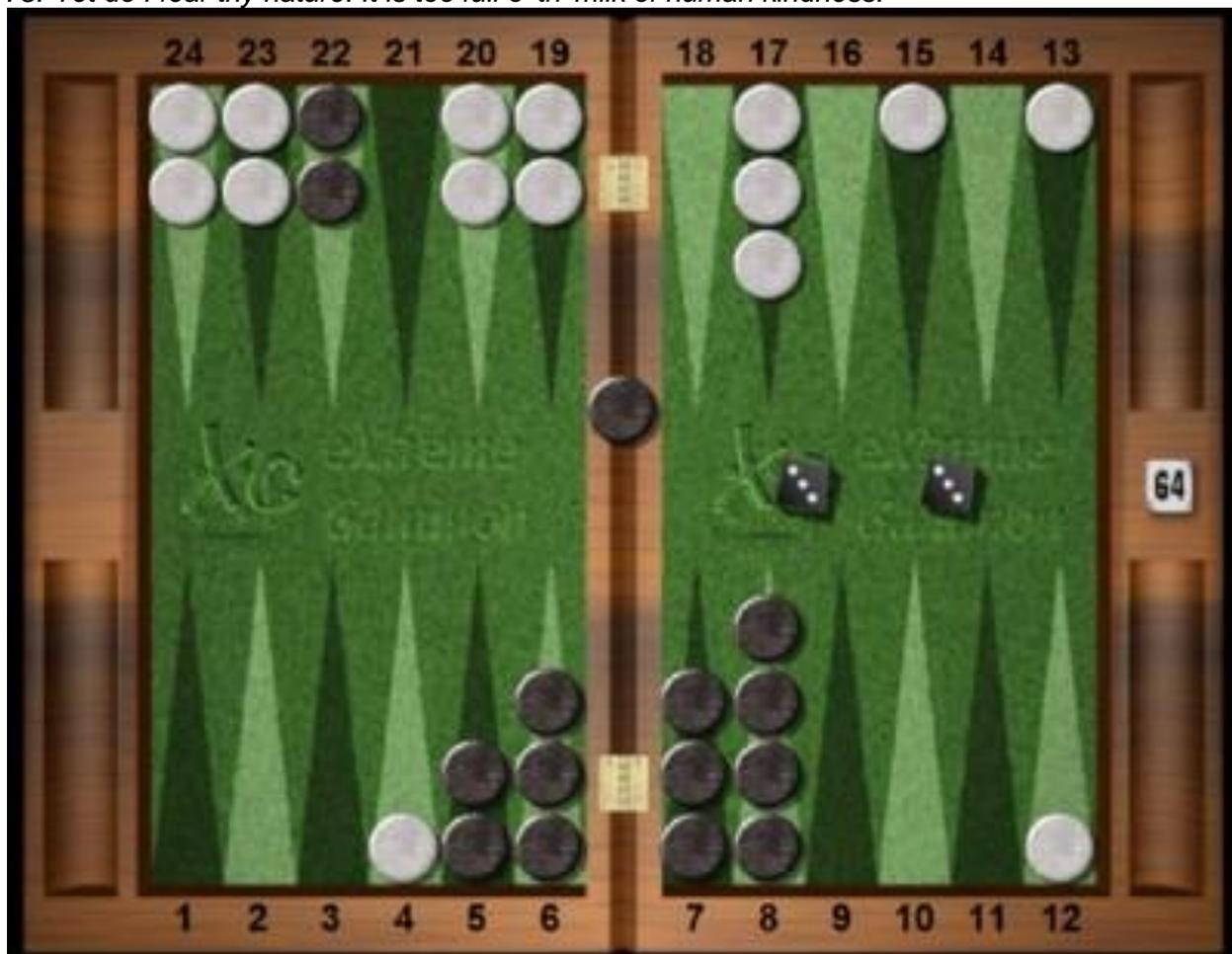
73. *Vaulting ambition which o'erleaps itself.*

Black has a slight lead in the race. Both sides have good starts on home board points, some outfield blockers, and spares on the midpoint. White has three checkers back and a fine barpoint anchor. Black has two split backmen. This roll of 51s is nothing special, and Black should just follow the natural direction of play and run with 21/15. Nothing is duplicated, nothing fancy, nothing else sensible to do. When nothing much seems to be happening, there is merit in following the flow. As a racing game, backgammon's natural flow is often to run. An alternate play of 24/23 21/16 does duplicate white fours but it also grants White some sixes that point on Black's 23pt blot. This move is poorer than the straight run 21/15, because of the extra danger to the 23pt blot and because the 9pt landing is no longer six pips ahead of the outfield blot --- an important consideration.

74. *My pride fell with my fortunes.*

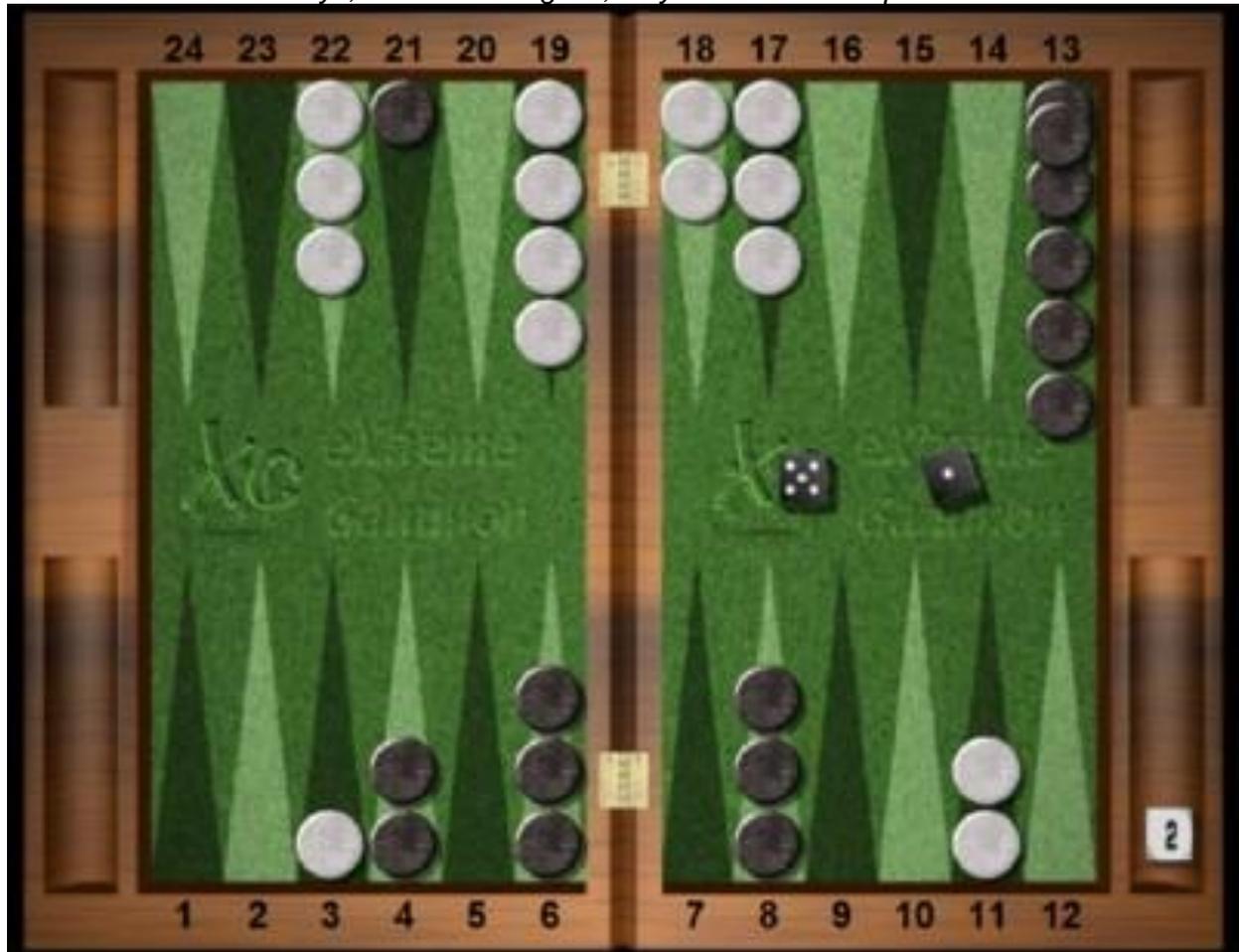
This is a disappointing roll for Black. Black must keep his wits about him and realize that the dice have thrust him into a brand new game plan. However he leaves his shattered board, in the near term he won't be banking on a blocking game. Suddenly his best chance to win is to hit the white straggler as it races for home. Hence Black needs to keep his home board at its strongest in case he gets the shot and hits the blot. Make the ace point with the play 7/1(2). This play allows White to escape with sixes and fives, but Black has five home board points, two working builders, and a sniper in camouflage soon to leave the 24pt on a mission. The alternate play of pointing on the white blot with 5/2*(2) can never expect to block White as the black 5pt is now open, and likely will stay open for many rolls. The play of the other two threes with either 7/4(2) or 6/3 4/1 destroy the spares and just make White's exit more painful for Black. Play 7/1(2).

75. *Yet do I fear thy nature. It is too full o' th' milk of human kindness.*



Black enters and then points on White's blot on the 4pt. How to play the final three? Lifting the barpoint blot looks tempting and, if White rolls a seven from the bar, Black will certainly be happy his blot was not hit. However, if Black lifts and White still rolls a seven, Black is an underdog to roll an immediate ace. When White escapes, Black will be in trouble whether or not his blot was hit. If White does not roll a seven on entry, then Black needs only one 8pt spare to cover his 7pt blot and make a 5-prime. The other spare should be shifted to a perfect location onto the 5pt. With a fourth builder Black now has ideal structure to attack or to block White's backman. Play B/22 8/5 7/4*(2).

76. *As flies to wanton boys, are we to the gods; they kill us for their sport.*



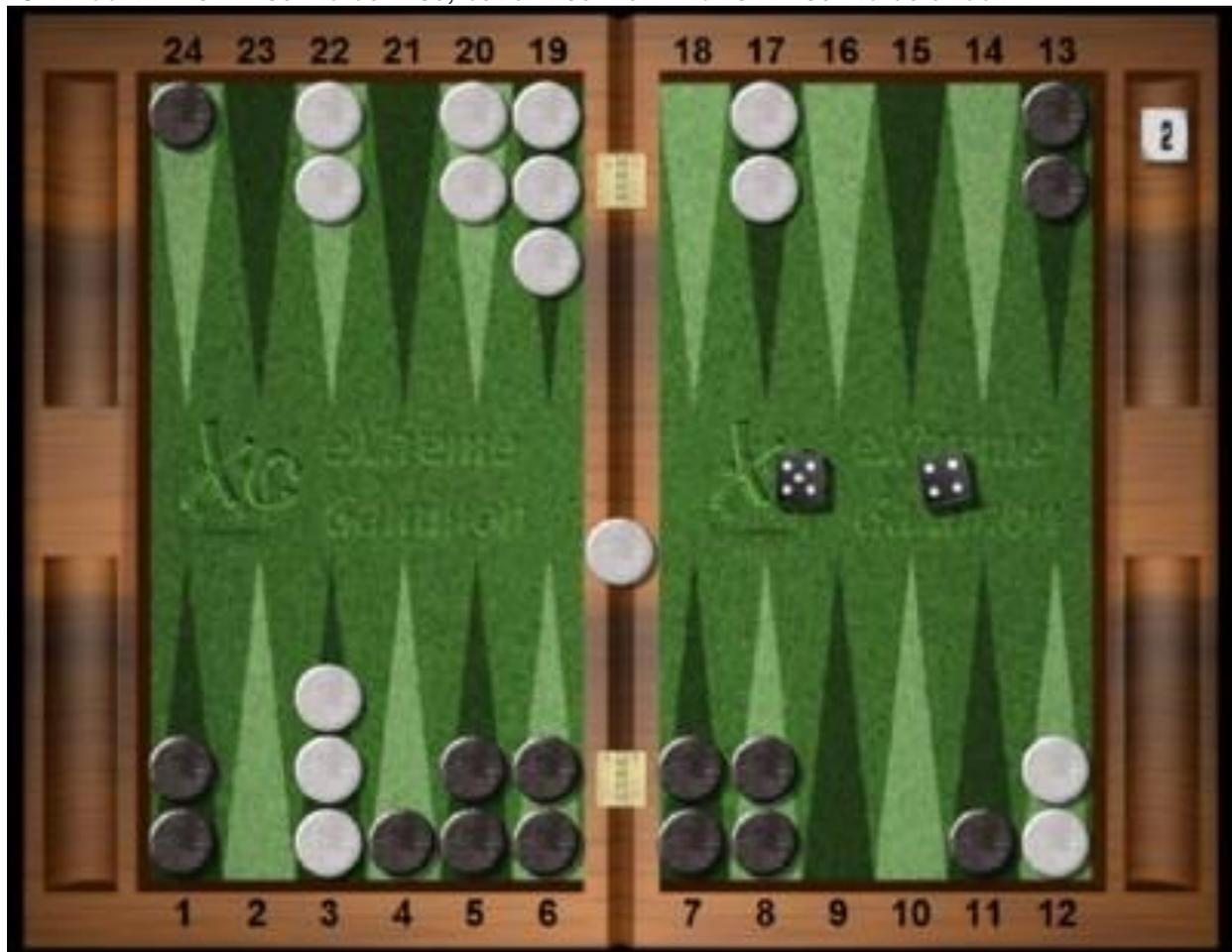
Black has the better board, primarily because of the dilly builder on White's 3pt. Black has better outfield presence. Both sides have a lone backman anxious for escape. On the strength of her racing lead, White has an edge in this game and has already turned the cube. Black could run his backman but the race would still be in White's favour. Despite lacking an anchor, Black's best play is to attack, hitting loose on his 3pt. It's the lowly ace that gives spice to this problem. One idea is to advance his backman, duplicating White's ones, twos, and threes used for entry and blot hitting. Another idea is to shift his attacking blot ahead to his deuce point. A third idea is to unstack a midpoint builder to the 12pt thereby offering a new blot to the stripped white outfield point. In general, duplicating too many numbers erodes the effectiveness of duplication. Starting the deuce negates any priming ambitions of Black's 8pt, as a cover of the 2pt by a spare means the 8pt block is superfluous. It is the barpoint that Black

really wants to make right now, and a builder on the 12pt could be very helpful. Play 13/12 8/3*.

77. *What's done can't be undone.*

White owns the cube. Giving White a free roll to jump Black's prime is like auctioning Black's resignation on eBay --- the resignation will undoubtedly be accepted, the only questions are when and how much. Despite the dangers of White's blockade, Black absolutely must hit the white runner off the edge of his prime. A white dance or entry on her 24pt means Black has a stranglehold on the game. A white return hit admittedly throws the game into turmoil, but the scene where White cracks her prime before escaping her backman is still good cinema. There is a huge difference between the mobile 5-prime that Black enjoys and the brittle 4-prime that White has. Hit loose with 6/2* to exploit that difference.

78. *A fool thinks himself to be wise, but a wise man knows himself to be a fool.*



Know thyself. Everyone has an occasional but repeated blindness and Black's pet oversight is not seeing home board covers from his midpoint. Other players sometimes view the opponent's midpoint blot as a still-paired point and don't hit it. This problem asks each of us to identify what is our own unique blindness and rectify it. How? Be alert to it.

Typically Black chose a senseless move here, covered by breaking the 8pt and brought a builder to the 6pt from the 11pt. It's not the size of this blunder that mystifies, but its lack of purpose. White is on the bar and already has a 22pt anchor *with a spare*. Black must cover his 4pt. Since Black has made his 1pt guff, his prime has already reached its peak because his 9pt is unlikely to be made in this game. White will own her 22pt anchor for a long time. Therefore Black's 8pt is an earnest hard-working grunt who prevents White from escape except with sixes. To break the 8pt and even risk the possibility of not remaking it later is foolish.

Second, Black's shift of the 11pt blot to a 6pt builder begs the question: What exactly is Black building? The play builds nothing but an eventual fill-in of the deuce point. If White enters there, Black already has her blot controlled by his 5-prime. Of course Black should cover his 4pt by the correct play of breaking the midpoint with 13/4.

This is an easy problem and only an oversight could lead to the wrong choice, and yet the correct reasons provide a good review of underlying concepts in structure and strategy. Maybe that blindness is subconscious gift? When assessing those repeated blunders that we would “never” make again (i.e., oversights) and that we are embarrassed to admit, focus on any violations of common strategic principles which, by their very nature, are transportable to other situations. Be alert. Know thyself. Thanks Socrates.

79. *How far that little candle throws its beams! So shines a good deed in a naughty world.*



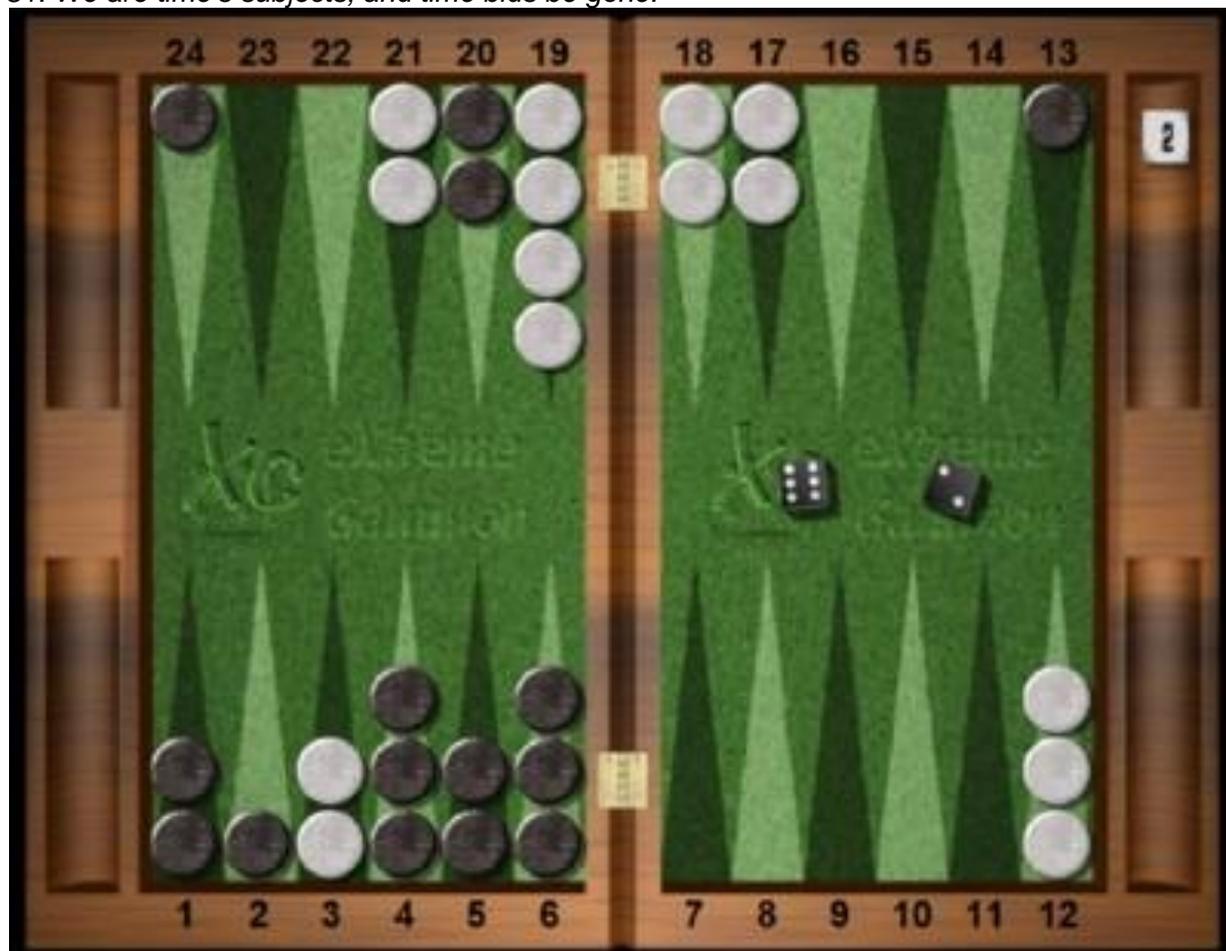
This position has something to say about gaps. When White is on the bar, Black's natural inclination is to make more home board points, which is often the right approach. Here White has a second backman currently on the 24pt. If Black makes his 2pt with 8/2(2), the empty 4pt in Black's blockade will be a gap in the upper half of Black's potential prime. The game is in its middle stage and thus Black wants those gaps at the lower half of any prime. Hence, Black's best play is to make his barpoint with 13/7(2). The gap analysis suggests this play. As a matter of sartorial style, a gapped 5-prime is far more chic than a gapped 4-prime. Making the barpoint also blocks the escape of the white 24pt checker, which is not impeded much when Black chooses instead to make his deuce point.

80. *A man loves the meat in his youth that he cannot endure in his age.*



Black should have doubled before this roll, and the echo of his mistake reverberates in the choice for checker play. If White owned the cube, the play of making the 18pt anchor and the play of hitting loose and unstacking his midpoint would be about equal. With a centered cube, Black should definitely make the 18pt anchor, and expect to double when White doesn't anchor. Since Black failed to double before this roll, he should not make the more volatile play of hitting loose now. That would compound the errors. There are three reasons: 1) he is not paid off for gammons; 2) any extra single game losses are not fully compensated; 3) on average his cube efficiency is less by hitting. The difference in equity between the two plays with a centered cube shrinks to half as much when Black owns the cube, but the anchor play is still better. The moral of this easy problem is: When a blitz is soon to be launched, be certain the cube has been turned.

81. *We are time's subjects, and time bids be gone.*

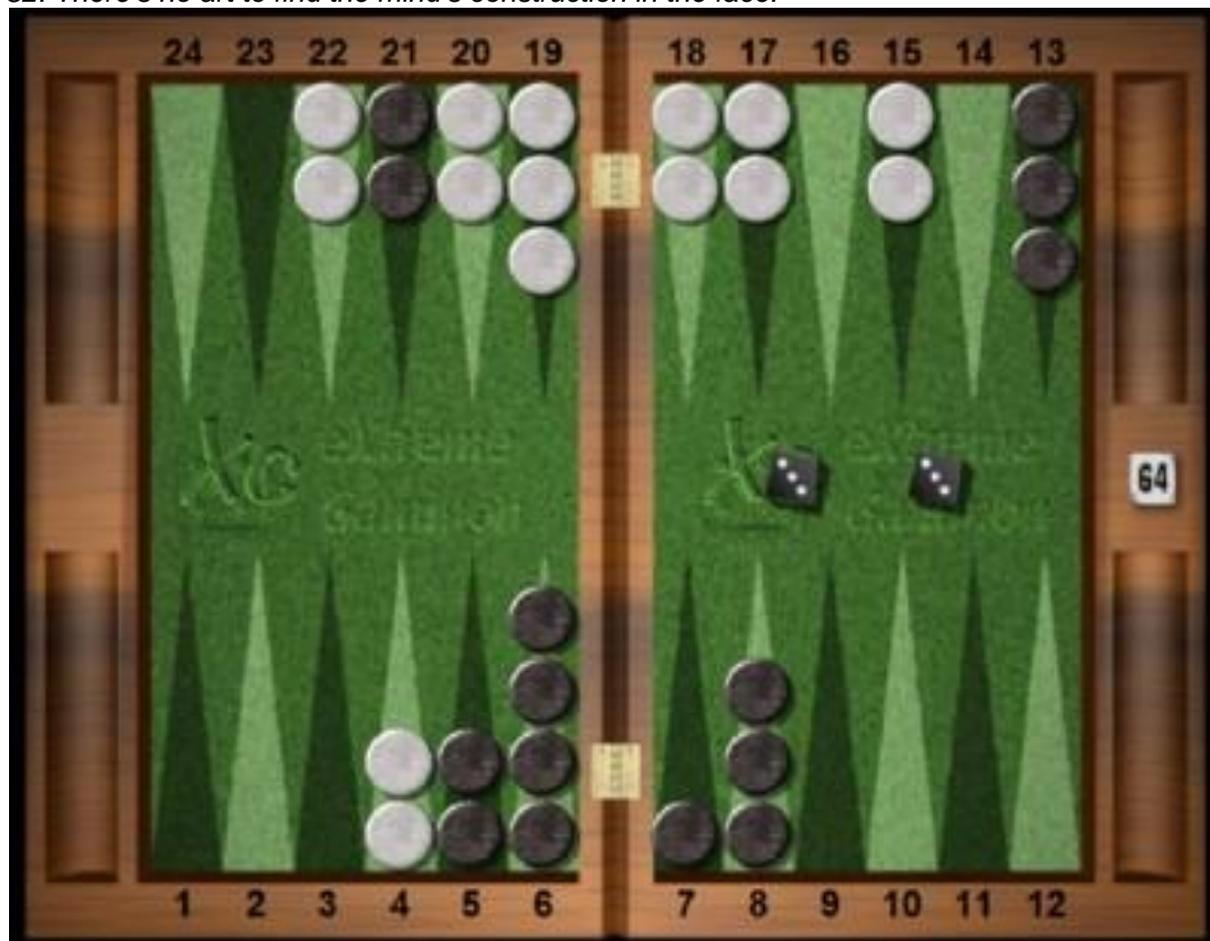


Here is a timing problem. If Black doesn't get his backman moving now, his timing could quickly evaporate and he may be forced to abandon his golden anchor. Run with 24/16 leaving two outfield blots. The midpoint blot, though vulnerable, is a very important asset. Suppose instead Black's midpoint blot was already home; for example, if Black played 13/5 now, then White advanced her midpoint spare 13/7, and Black rolled 62s again. This later run of Black's backman could be used by White to crack Black's anchor. How? After a hit of Black's 16pt blot, Black may enter with a six, which often breaks his anchor since the midpoint blot can no longer sop up the splatter of pips embedded in a six.

In summary, a common error is to wait one roll too long before moving a backman to restore timing. Yes, there is a danger in leaving two blots, but there is also a danger in leaving White's home too late. Take a look at some of the stored plays in your games where two outfield blots are

offered and the reasons are unclear. Perhaps those are further examples of the timing of the timing move.

82. *There's no art to find the mind's construction in the face.*



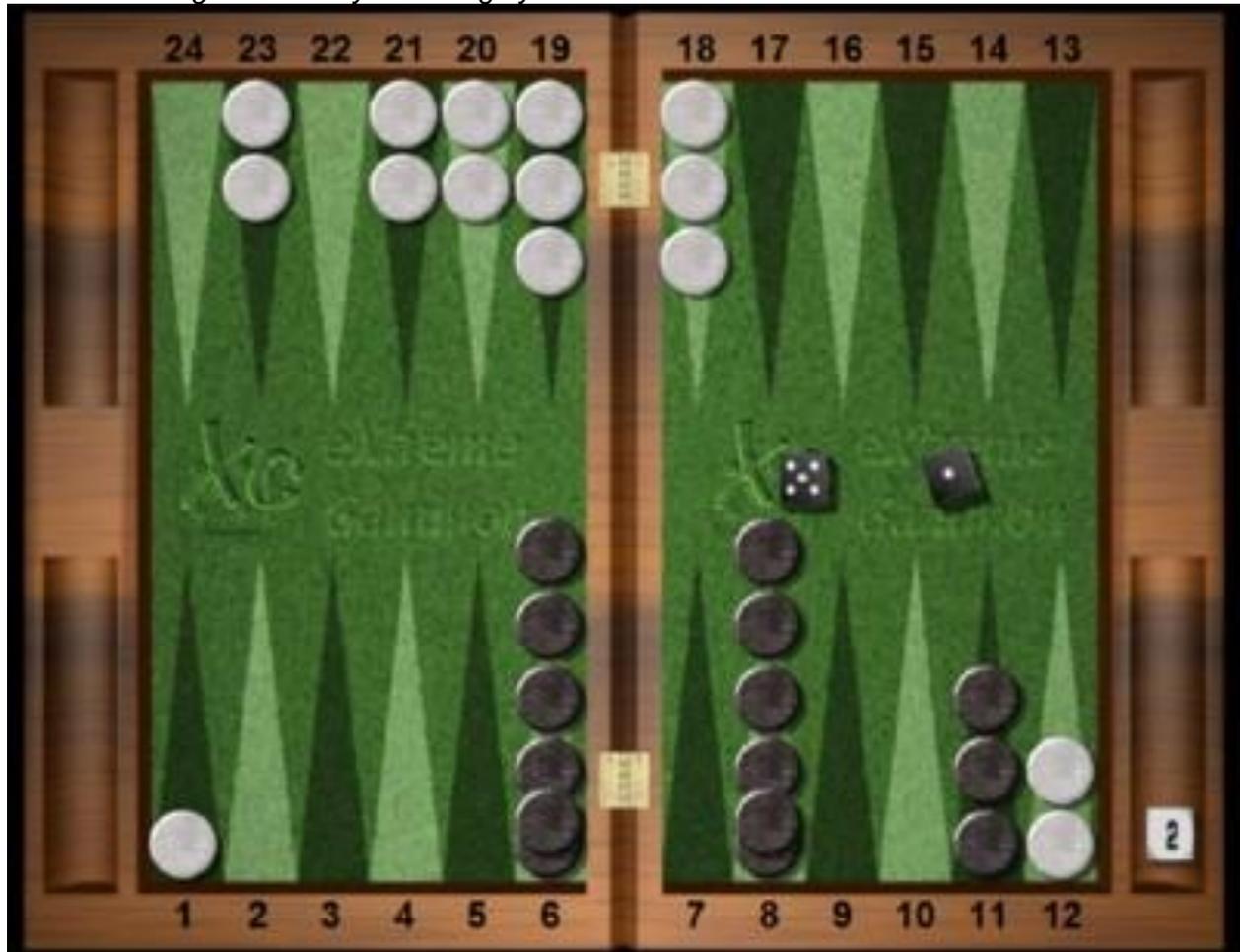
Get in the habit of looking for those situations where it is good strategy to advance the midpoint en masse. Here is a perfect example. Black has a better outfield presence; White is stripped in every outfield point. If Black can improve his blockade of White's anchor, it will immediately put pressure on White's stripped blockade. Hence play the excellent and effective 13/10(2) 13/7. This play capitalizes on Black's better timing in this mutual holding game. When White is stripped and ready to break, it is not always best for Black to lie in wait. Sometimes the crisis can be accelerated to an immediate head by blocking to reduce White's options. This position is an example of trying to control and change the pace of a game to Black's advantage. A deep appreciation of timing in an effort to shift the crisis point in a game is one hallmark of the expert player.

83. *It's not enough to help the feeble up, but to support them after.*



Pay now or pay later. Black has a modest lead in the race and has advanced the backmen well into the outfield at the 15pt. White has a stronger board, the high anchor, and tons of timing with the spares on her midpoint. Black has a better structure overall with good builder distribution. Black should pay now by breaking the 15pt with 15/11 15/10, even with a modest lead. The midpoint builders mean that White's board can only improve over the next few rolls. White's six from her anchor to hit now is duplicated with covering her 2pt. If Black is hit, he will have plenty of immediate return shots and White's key defensive asset will be gone. If Black is missed, he should have no trouble playing flexibly for awhile. When Black waits, his good distribution will slowly become stripped and perhaps offer a shot at the worst moment. Even the dilly builder on Black's 4pt, lonely and lazy, squeals in happiness for the bearin soon to begin.

84. *Best to weigh the enemy more mighty than he seems.*



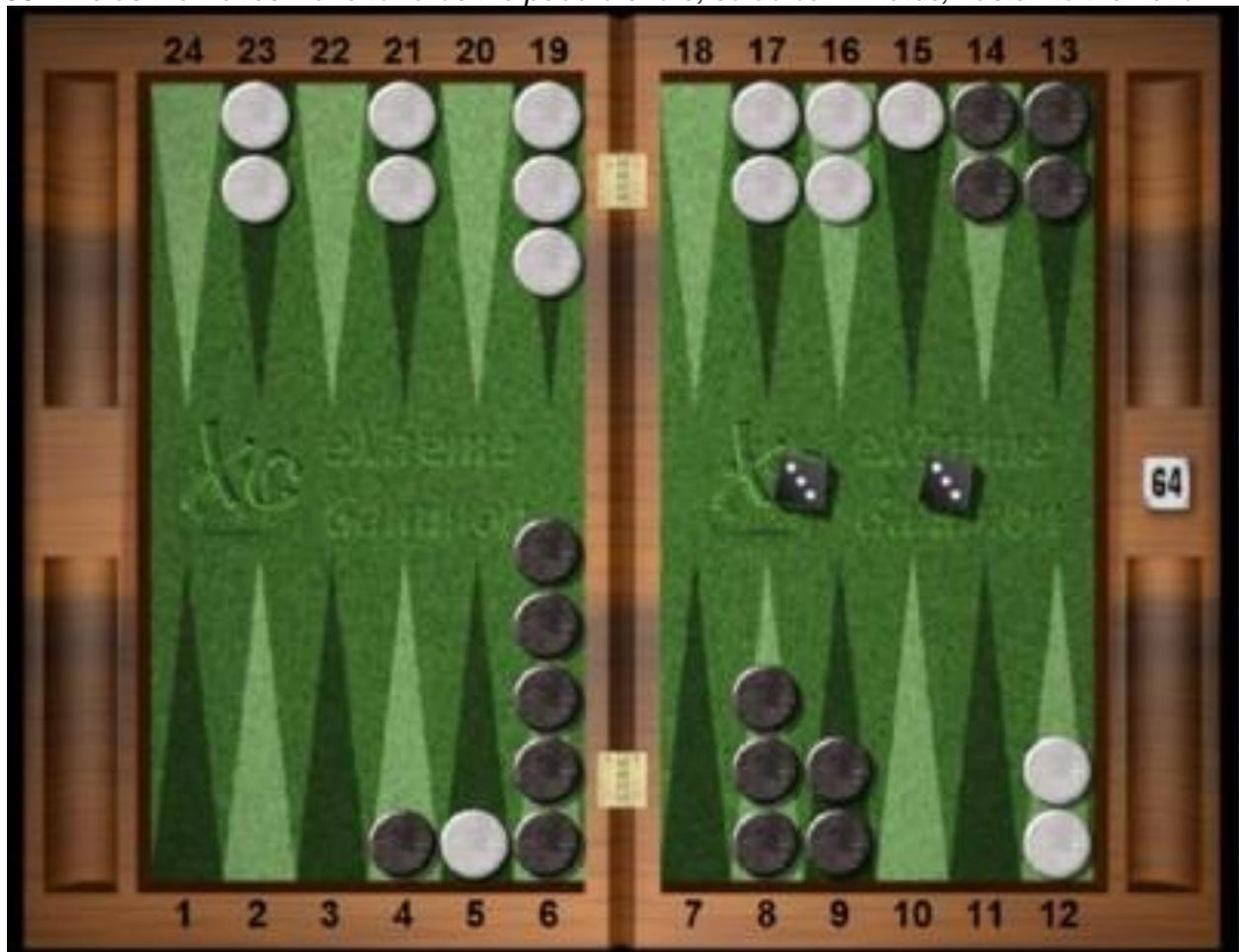
It is a bright sunny day, the birds are singing and chirping, the children are playing in the park, but Black senses that he is about to get whacked by the godfather. Black only has stacks. He has no structure at all, no home board points for defence, not even a racing lead. White has muscle, assets, and resources. Black chose the loose hit of 11/10 6/1* in a brave attempted to face facts boldly and force the white assassin forward. The play leaves 14 return hits. Only slightly better is the play of starting Black's 2pt. It doesn't force the assassin forward, but does leave 11 shots. Safety is Black's only real concern; getting a game plan going is currently a hope. To survive this one roll, risk the minimum. The best choice is 11/10 11/6 and leaves 7 shots. Even if Black survives, tomorrow will unfortunately be another bright sunny day.

85. *The wheel is come full circle.*



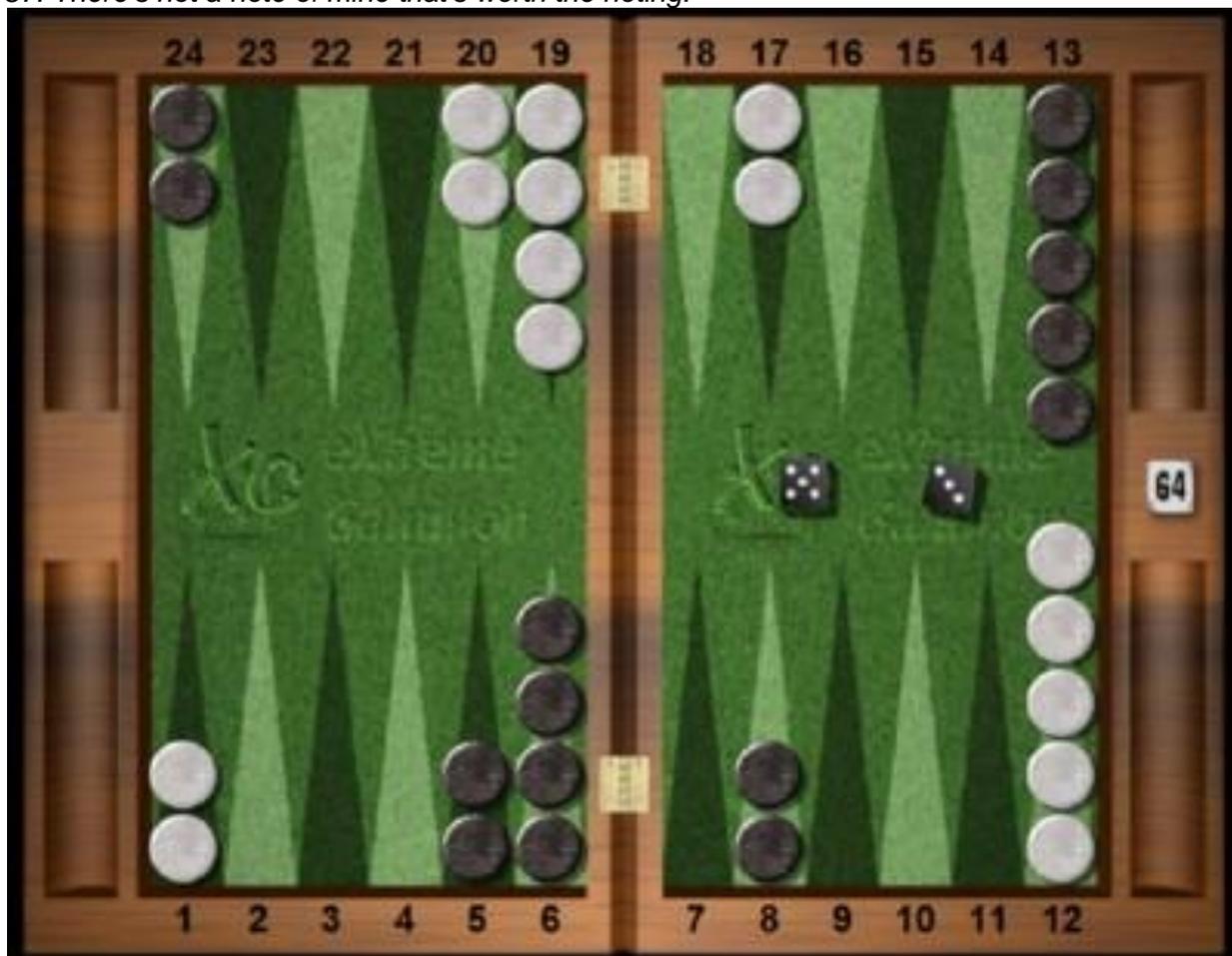
Although Black has basically saved the gammon with his late-night blot-hitting heroics, he still has a ways to go before he is a favourite to win. The key feature of this position is that White will soon be breaking her anchor. Therefore any play where Black advances his midpoint blot is a blunder. This fact whittles down Black's choices to two reasonable plays: starting the 2pt or unstacking the 8pt twice. In addition to building a better structure when missed and covered, the unstacking play has a secret hope of hitting White's 1pt blot from the bar. Since White is most likely to break now, however, Black should not offer any new distractions of exposed blots. The best play is to start the deuce point and wait, 8/2.

86. *Like as the waves make towards the pebb'l'd shore, so do our minutes, hasten to their end.*



It is a fortunate fact that the best play of doubles on the dice involves many complications. Black chose to point on the 5pt blot and to make the 3pt while leaving the 4pt and 8pt slotted for White's entry from the bar. In other words, Black attacked. However, after this roll, the race will only be equal if Black is not hit. Is attack Black's best game plan? The cube is unturned, so the volatile attacking play of paired points exposing a pair of blots may not collect the gammons if it works. Perhaps there is a hidden cube problem lurking in the background. Not obvious, but analysis of the effect of cube position says that the best move remains the same in cash games. Also, Magriel's criteria for safe versus bold play favours safety. Since Black has escaped both backmen, an alternate game plan is blocking White's straggler in an even race. Disengage with the play 14/11(2) 13/10(2). The downside is now all White's. Black can cozy up to an efficient double if things improve. This is an interesting strategy problem.

87. *There's not a note of mine that's worth the noting.*

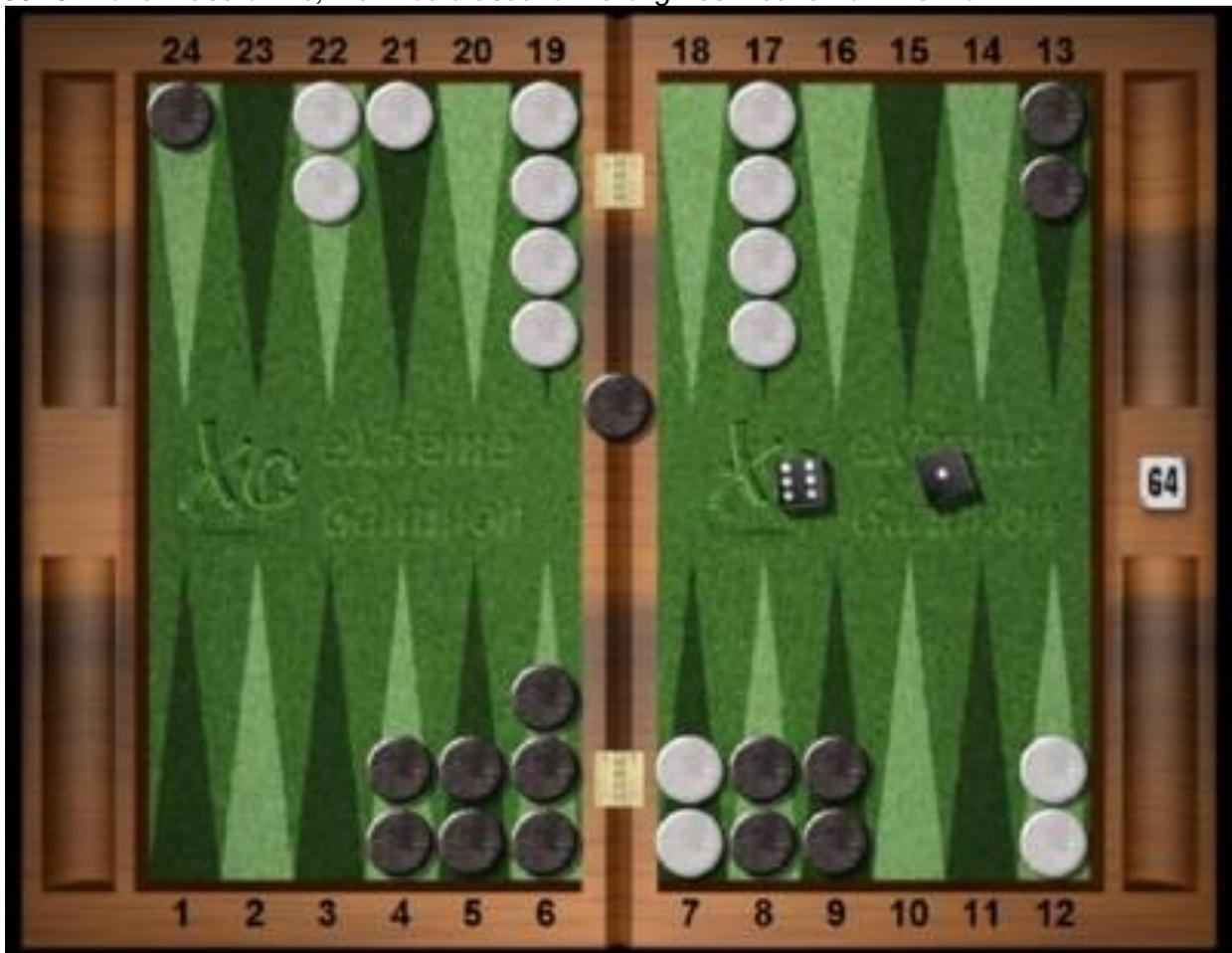


This is a mirror image position. With this roll it is important to start the high 21pt anchor and replenish the spare on the 8pt by unstacking the midpoint with 24/21 13/8.

This game started with quiet but powerful moves that made each 5pt. Although early in the festivities, the game has yet to see any fireworks. Tipping his hat to the standard opening play of 53s, Black considers making his 3pt. It is always an advantage for Black to build his home board faster than White, but here the standard move incurs a few unpleasant side effects. It breaks the 8pt which leaves a blot that, if hit, sets Black back in a close race. It starts to sever connection between Black's army as the stacked midpoint has fewer places to land. Most persuasively it does not extend Black's blockade but merely shifts it; although a new home point, Black still has only three priming points. Bringing two builders down from the midpoint is another idea. This move replenishes the 8pt spare and

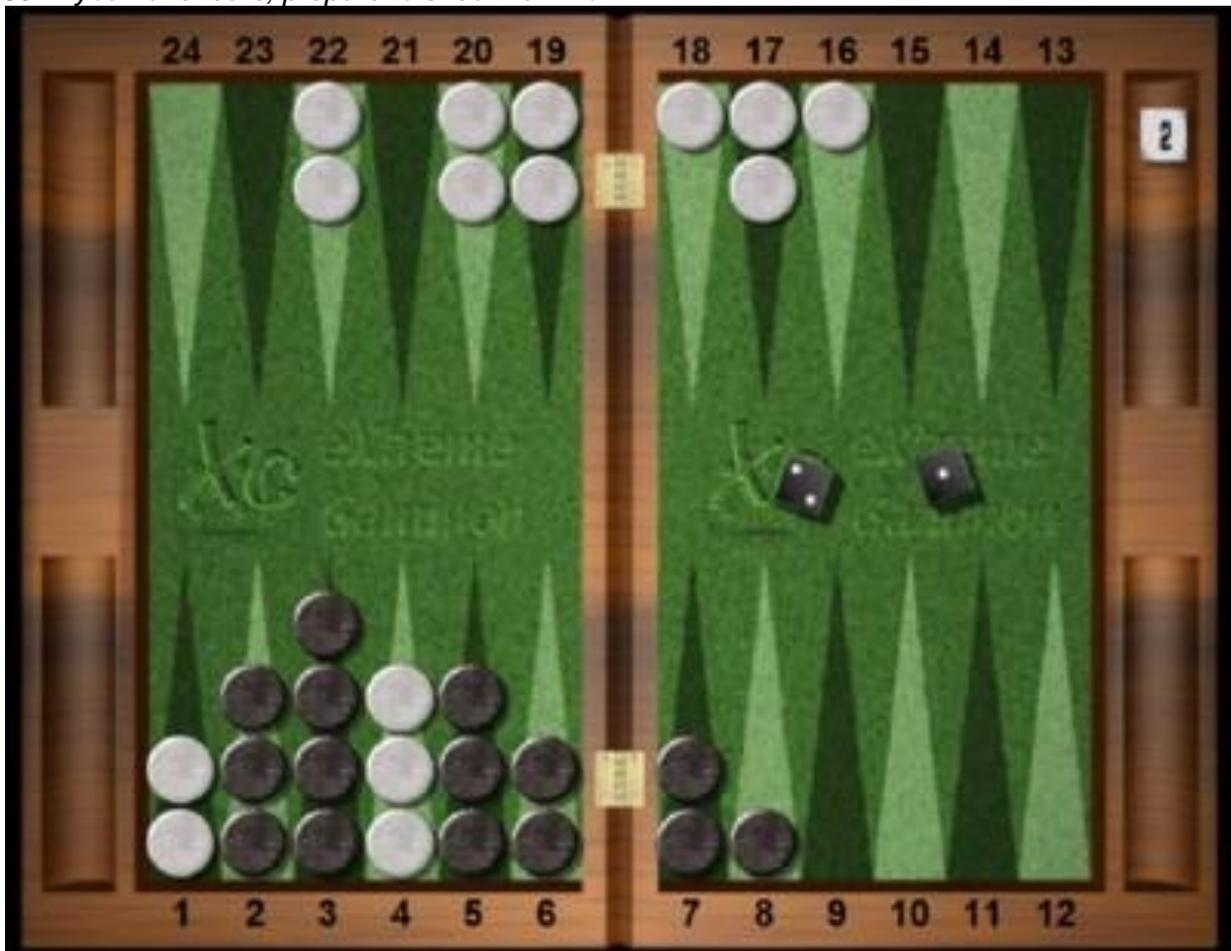
places a new builder for the barpoint or 4pt. Note that, as White has made her 5pt, any running with Black's backmen will likely need sixes. The home board 4pt point that a black 10pt builder targets also requires sixes. Further, many of the rolls that make Black's barpoint use sixes. That is a lot of sixes. In general, from the point of view of the stages of development in the opening, there is point-making, running, hitting, dancing, and anchoring. In most games someone naturally anchors and this game is likely to be no exception. White has made her 5pt and therefore Black has more incentive to move his backmen forward before White strengthens and it becomes truly dangerous. If Black did not own his 5pt, then splitting 24/21 would already start to look dangerous, but his powerful 5pt diffuses some of the danger of the split. Again, play 24/21 13/8.

88. *O! For a muse of fire, that would ascend the brightest heaven of invention.*



Black chose to enter then continue to the barpoint, B/18. Perhaps it's hard to see why this play is wrong, but wrong it is. Black is behind in the race. Black has the better board and a good block although stripped; it would be a great block if only White would break her anchor. Besides an anchor on her 18pt, White has a blot in her home, and is stripped on Black's side of the board. The best play has Black enter and anchor on his 24pt and then break his 9pt to start the 3pt and thus keep Black's home board growing. What if White hits the new black blot? Deuces are duplicated, so Black would be delighted to have the chance to overwhelm any white blots on his side of the board. Shooting at White's home blot would be a bonus.

89. *If you have tears, prepare to shed them now.*



The bearin against a backgame is always challenging. Robertie stated that each combination of backgame points induced a weakness in the structure of the home board that could aptly be described as geological fault lines where certain cracks could appear. This is an astute observation. Often keeping the high points even in checker number leads to a better structure for Black. But there is no aesthetic answer like a magic theorem to get an instant solution. Usually Black needs put on his work clothes, get his hands dirty, and count how many future rolls leave a blot (or blots). Since White's timing is excellent, Black need not consider whether to delay but give more blotting numbers later. It's all about the here and now. Just count the immediate rolls. In thirty-six dice rolls the move 8/6 3/2 gives White a double shot at six blotting numbers; the move 8/5 also leaves only six blotting numbers. Rolls 65s and 53s are common to both plays but the uneven play exchanges two doubles (55s and 44s) for safety with the 64s

roll. How to decide now? Answer: Ease of cleanup if the blot is missed. The uneven structure will leave an interior blot with the 55s roll, which may be harder to clear. The even structure leaves no interior blot. Play 8/5. It's the closest Black can get to buying earthquake insurance.

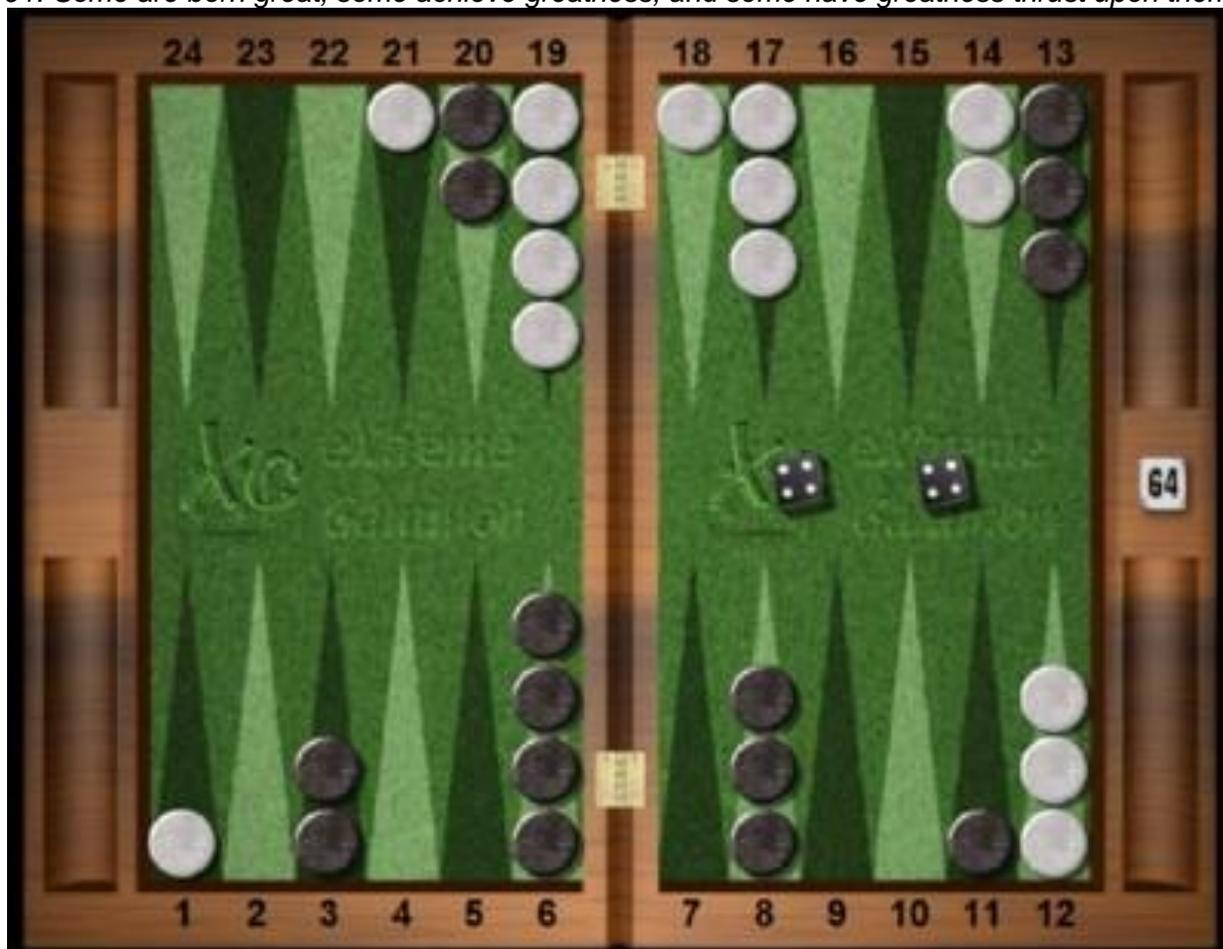
90. *Suit the action to the word, the word to the action.*



White has a speed board, seven checkers off, and a straggler trapped on the bar. It's going to be close, although Black finally has the indisputable lead in this game --- and the cube. Only the play 7/6 5/o is not a blunder. Surprised? This position needs analysis, probably a hand rollout to see what is going on.

Black needs to bear off as many checkers as possible before he breaks his board. The correct play leaves spares on the 3pt and 6pt. In fact, if Black's next roll is 21, he should bear off the 3pt spare and leave the horrific formation of sole spare on the 6pt! Why? Because if Black is forced to blot from behind, and White immediately enters, it is not particularly relevant whether White enters with a hit. She should win the race no matter if she hits or not.

91. *Some are born great, some achieve greatness, and some have greatness thrust upon them.*

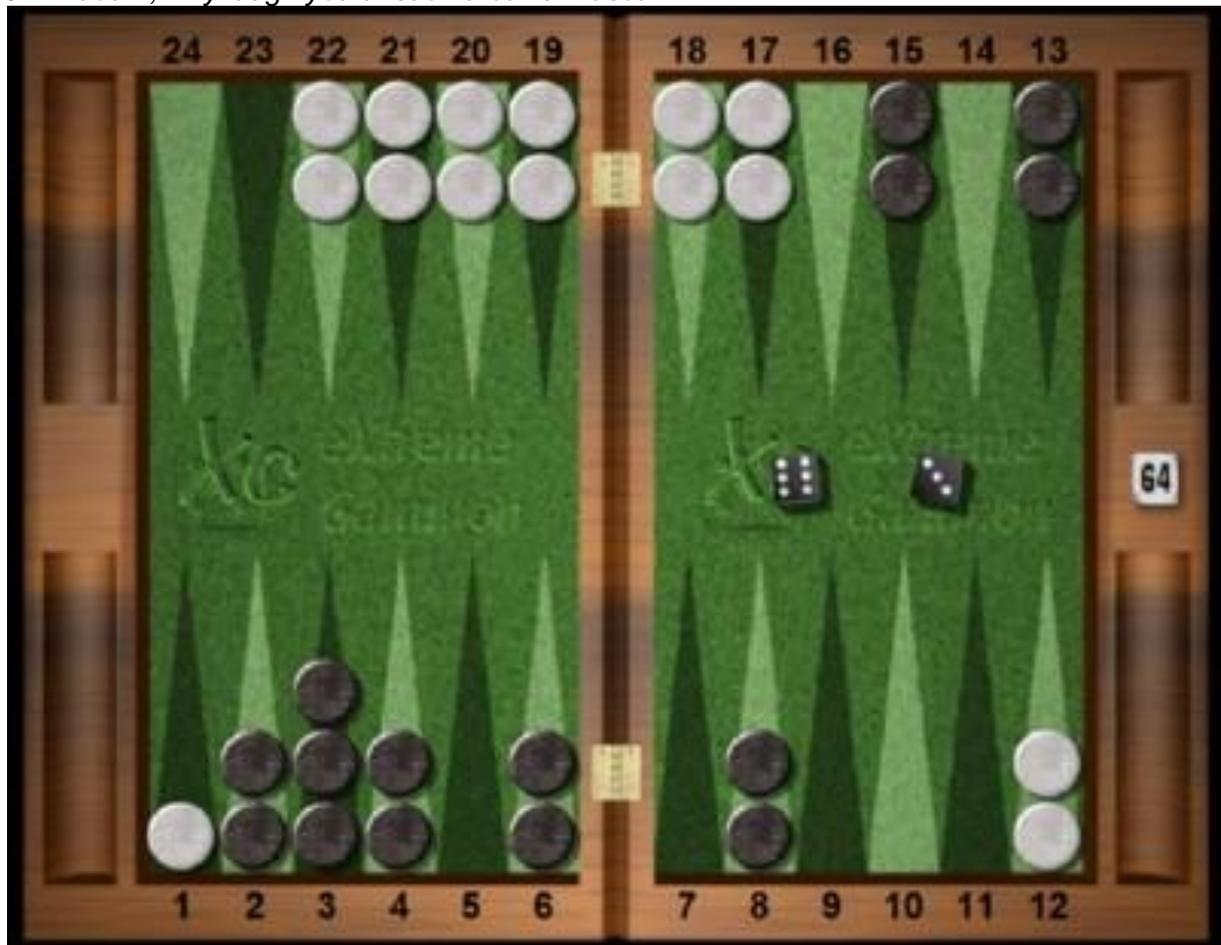


With this roll Black takes a small lead in the race. He has a slightly better board and can increase his board strength with 8/4(2), threatening White's straggler using the weapons of home board points and outfield coverage. Black chose to make a further home point with 6/2(2), but this play has some serious drawbacks. It's true that both black outfield blots are susceptible to fly shots during White's escape attempt with her backman. Retaining Black's golden point anchor seems a good counter-measure. As far as it goes, this is good thinking on Black's part. And yet, White currently has no new home board points, a blot on her 4pt which will persist if White hits a fly shot, and another outfield blot on her 7pt for extra return hits by Black. If only white fly shots are a concern, perhaps Black's anchor is too strong a defence for the amount of worrying.

When the white single checker is scrambling home, there are other game plans that let Black protect himself from fly shots: such as, control the

outfield completely and build a connected black position to maintain outfield control for as long as White threatens to run. Here is a perfect example of that situation. Black should play 20/16(2) 8/4(2) and flood the outfield in a compact connected manner, using Black's increased chances of return hits if White is lucky enough to put her straggler in motion by a fly shot.

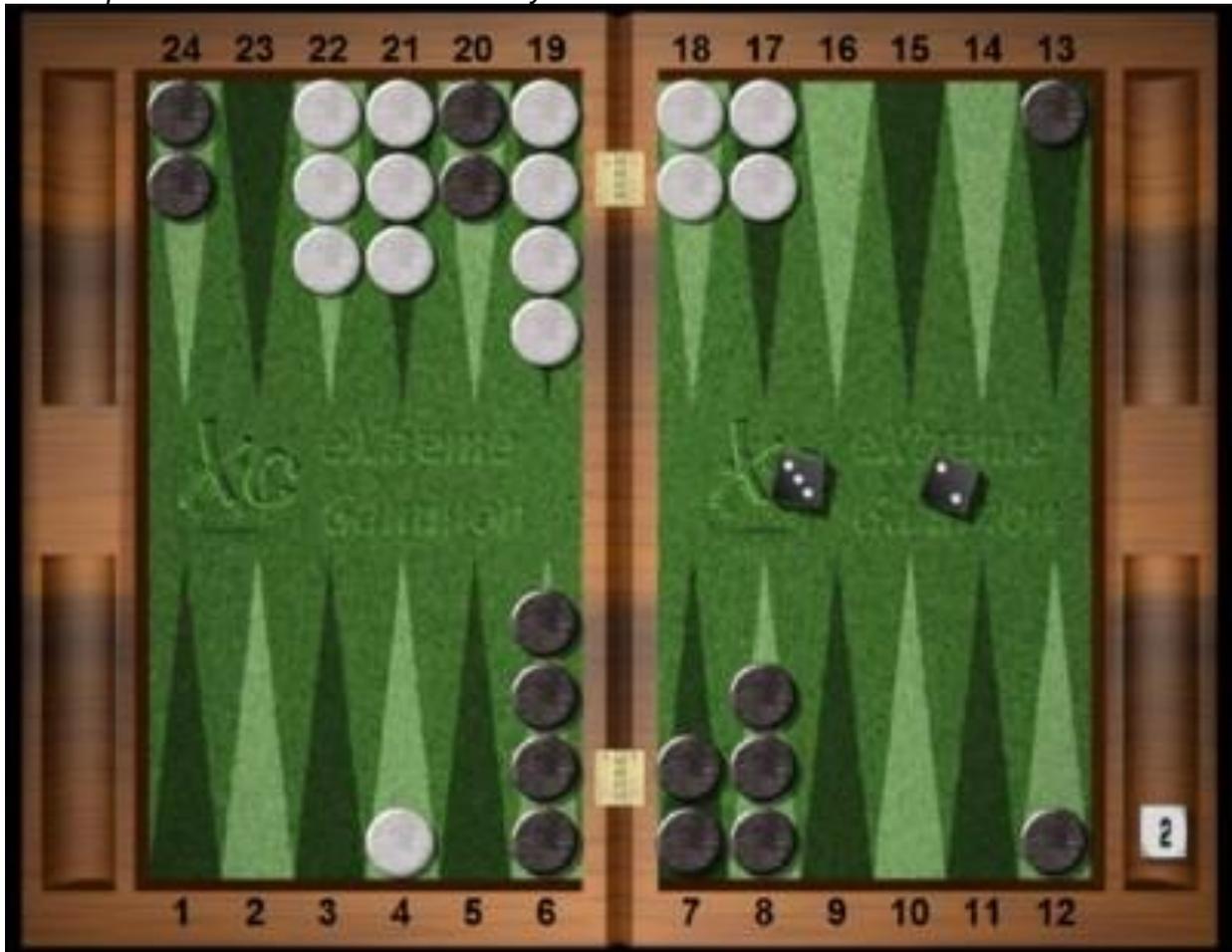
92. *Madam, why laugh you at such a barren rascal?*



White has a prime --- the full Monty --- so Black really doesn't want to be hit. Black chose to break the midpoint with 13/4 trying to minimize the shots offered to White. Breaking the midpoint leaves thirteen shots (don't forget 66s and 44s), whereas breaking the 15pt leaves, well, thirteen shots!
 Lesson #1: Do the shot count. If missed, which blot is easier to safety?
 The roll 11s fails to safety the broken 13pt and the roll 33s the 15pt.
 Lesson #2: Do the shot count.

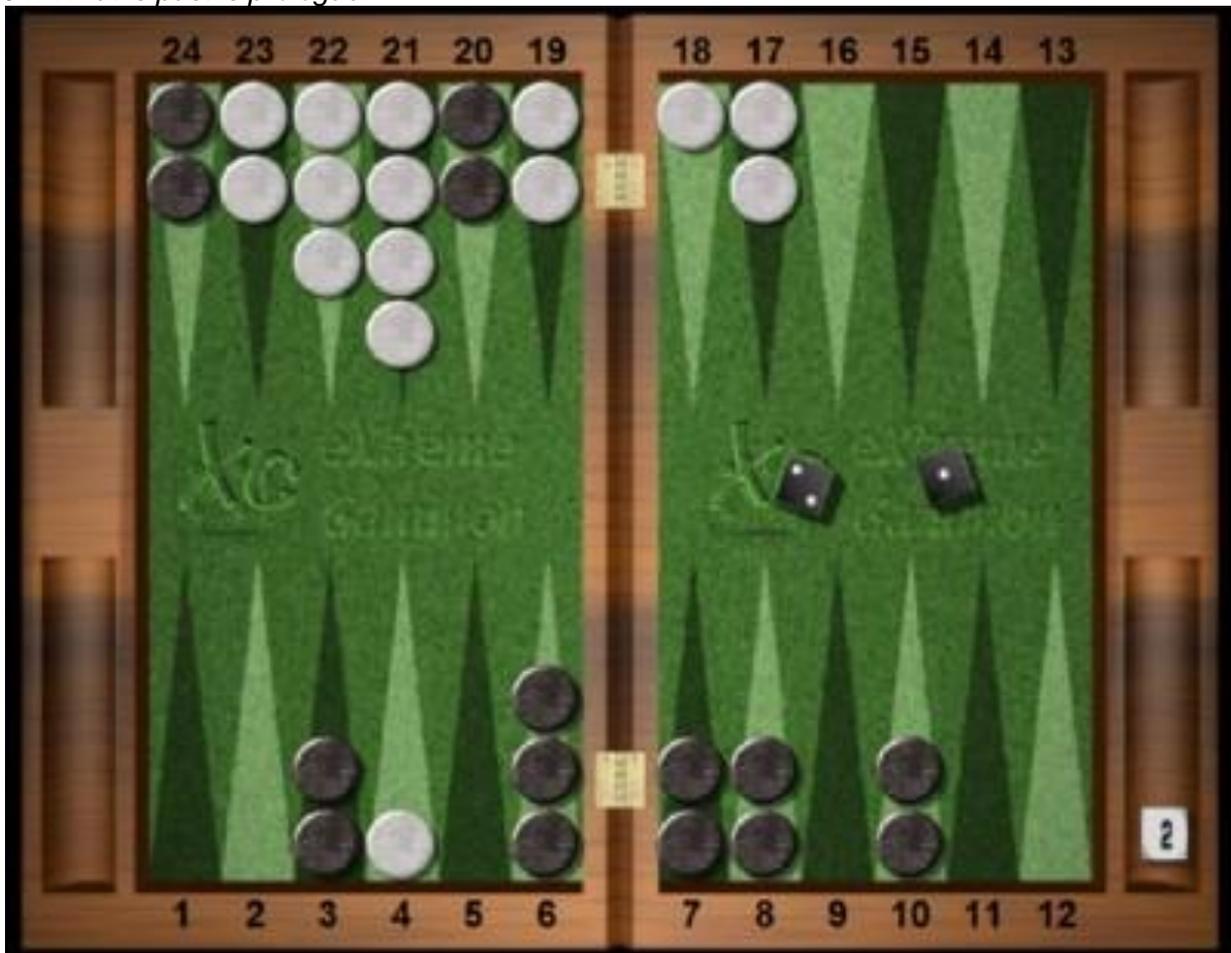
Now here is the real distinction in this situation. The builder on the 4pt from the broken midpoint is working on the white blot. The builder on the 6pt from breaking the 15pt is working on the white blot *and* on the black 5pt. This makes a huge difference when the 5pt is then made, because all subsequent hits of white blots become winners and the task of running the white backman (or backmen) is suddenly far more difficult. Lesson #3: Look for important reasons beyond the shot count.

93. *Our peace shall stand as firm as rocky mountains.*



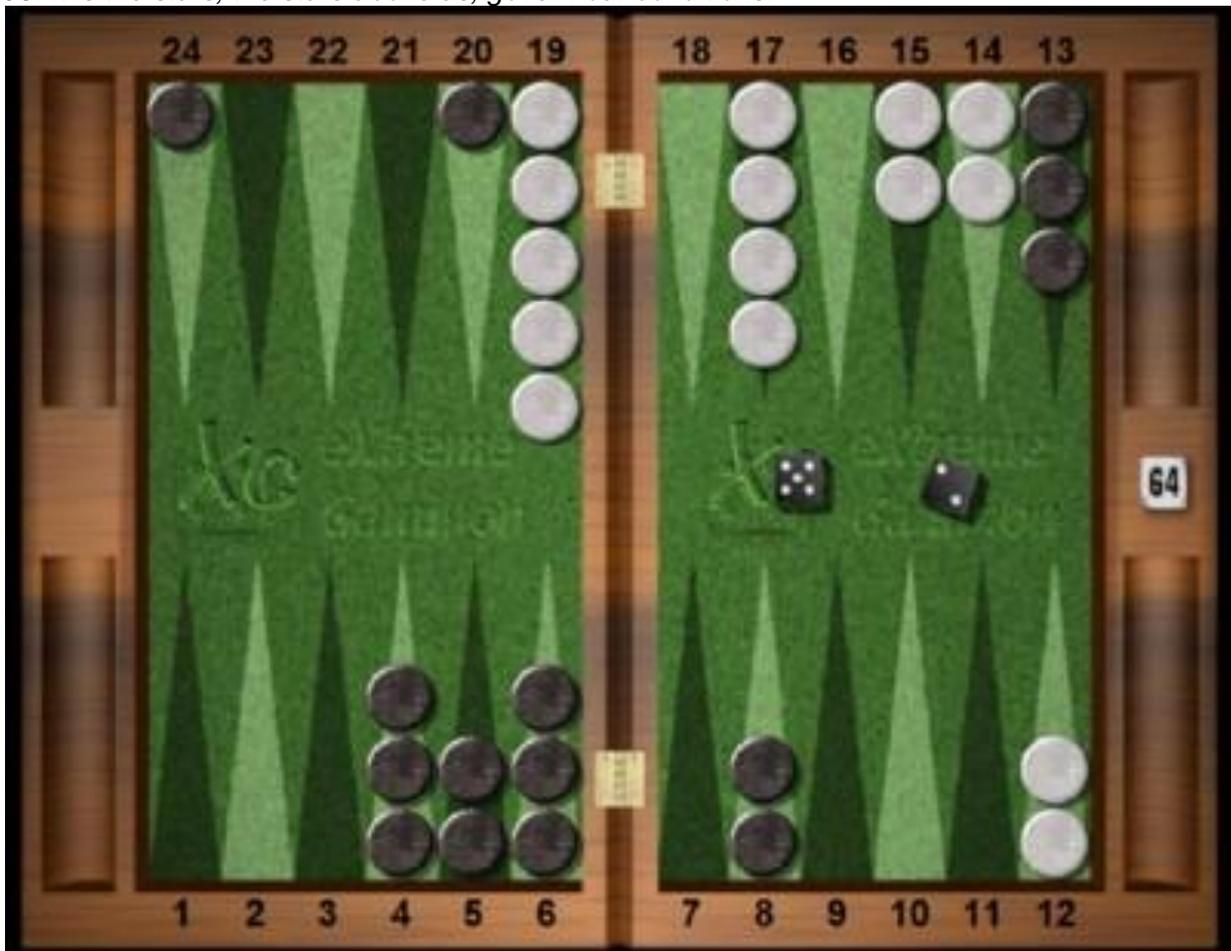
Although White has a big racing lead, that doesn't mean Black's only available game plan is to await White's bearoff and hit a late blot. Black's outfield outposts are already gone, so his timing is insufficient to adopt exclusively the late-hit game plan. The 20pt anchor, and not his inflexible 24pt anchor, is his chief asset. Black should attack the white blot with 7/4* 6/4, because then the black 20pt anchor will become useful as an escape valve. The blocking play of making the 10pt will not work because, in a prime-versus-prime battle, Black needs his prime closer to home, thereby supplying those extra rolls that would cause White to break her blockade. After making the 10pt, most white fives skip out past Black's blockade. With a solid anchor and some home builders, Black's best game plan is an immediate attack on the lone white blot.

94. *What is past is prologue.*



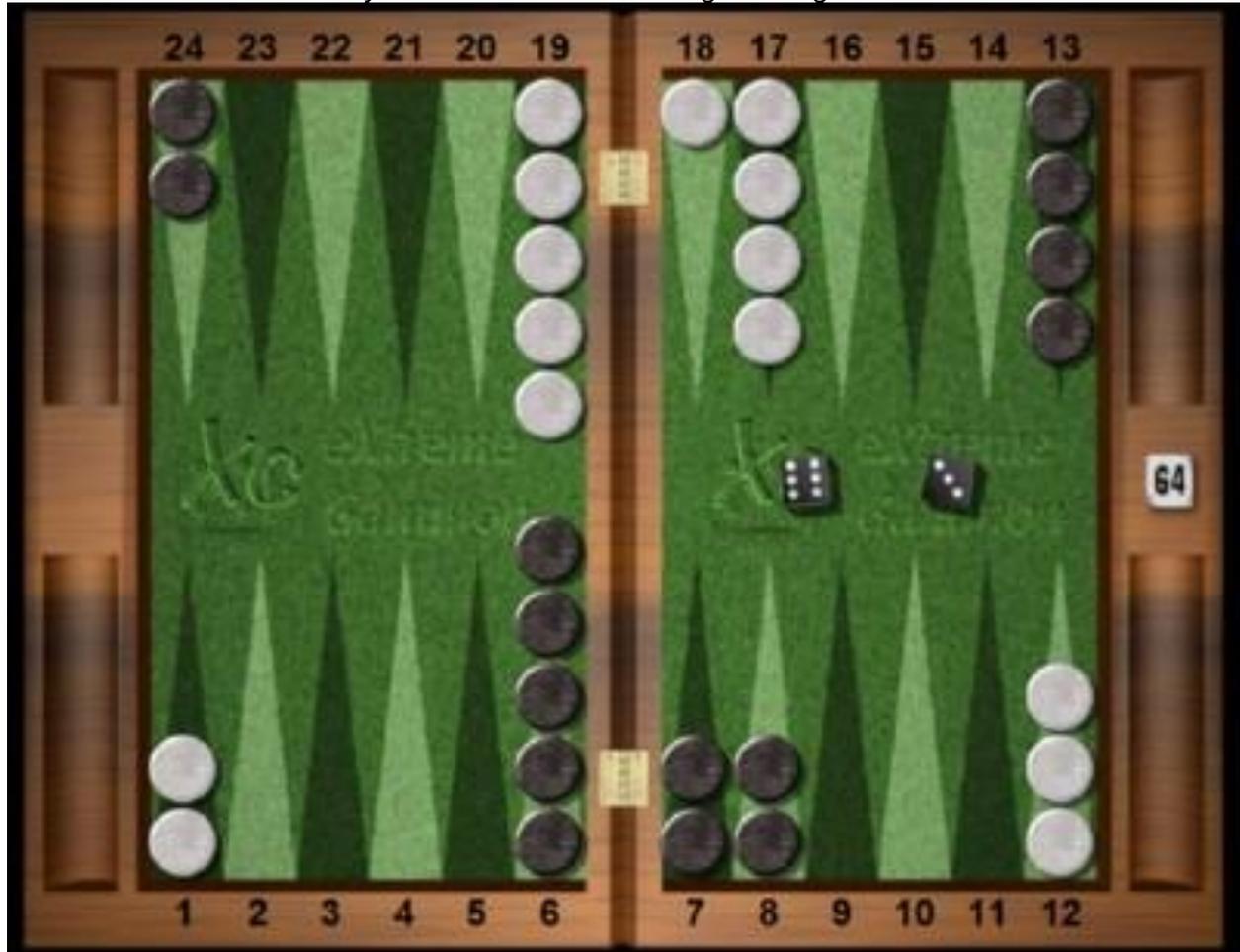
Black will need some luck to win this prime-versus-prime battle. Note that White's 8pt and 6pt are stripped and her 7pt blot is incapacitated by rolls of sixes. Black chose to pick and pass on the white straggler. Except for the escaping 65s roll, all entering rolls of sixes will crack White's 8pt. However, now is the crisis point in this game, and Black therefore should be trying to send as many blots back as possible. Thus 20/18* 6/5 fits the bill. Notice too that the same entering sixes still crack White's 8pt, and no rolls escape both stragglers. Slotting the golden point lets Black roll his prime closer to home when White misses, and may allow a remake of Black's 20pt and later recirculation if White hits.

95. *It is the stars, the stars above us, govern our conditions.*



White has escaped her backmen but as yet has built no new home board points. Black has the better board. The race is about equal. Black's split checker on his 20pt faces an avalanche of white builders, hence White is presently in command of this game. Black could run this checker to safety on the midpoint. However, to use his home board to its full advantage, Black needs to recapture a white checker. The 20pt target blot is too dangerous, but an 18pt target blot may not be. When White hits Black's outside blot, she produces far fewer improvements to her home board than when she hits the inside blot. Furthermore, barring perfecta doubles, the outfield attacks on the barpoint blot by White don't diminish any of Black's return fly shots from the bar, whereas White's pointing on her 5pt certainly would. Black must take a deep breath then play 20/18 13/8 and batten down the hatches for a stormy but perhaps agreeable onslaught.

96. *When we are born we cry that we are come to this great stage of fools.*



This opening sequence 61.65.63 is worthy of study. Of course Black will hit, but where (and why) to play the three? The reasonable candidates are: keep going, bring down a builder, move both backmen.

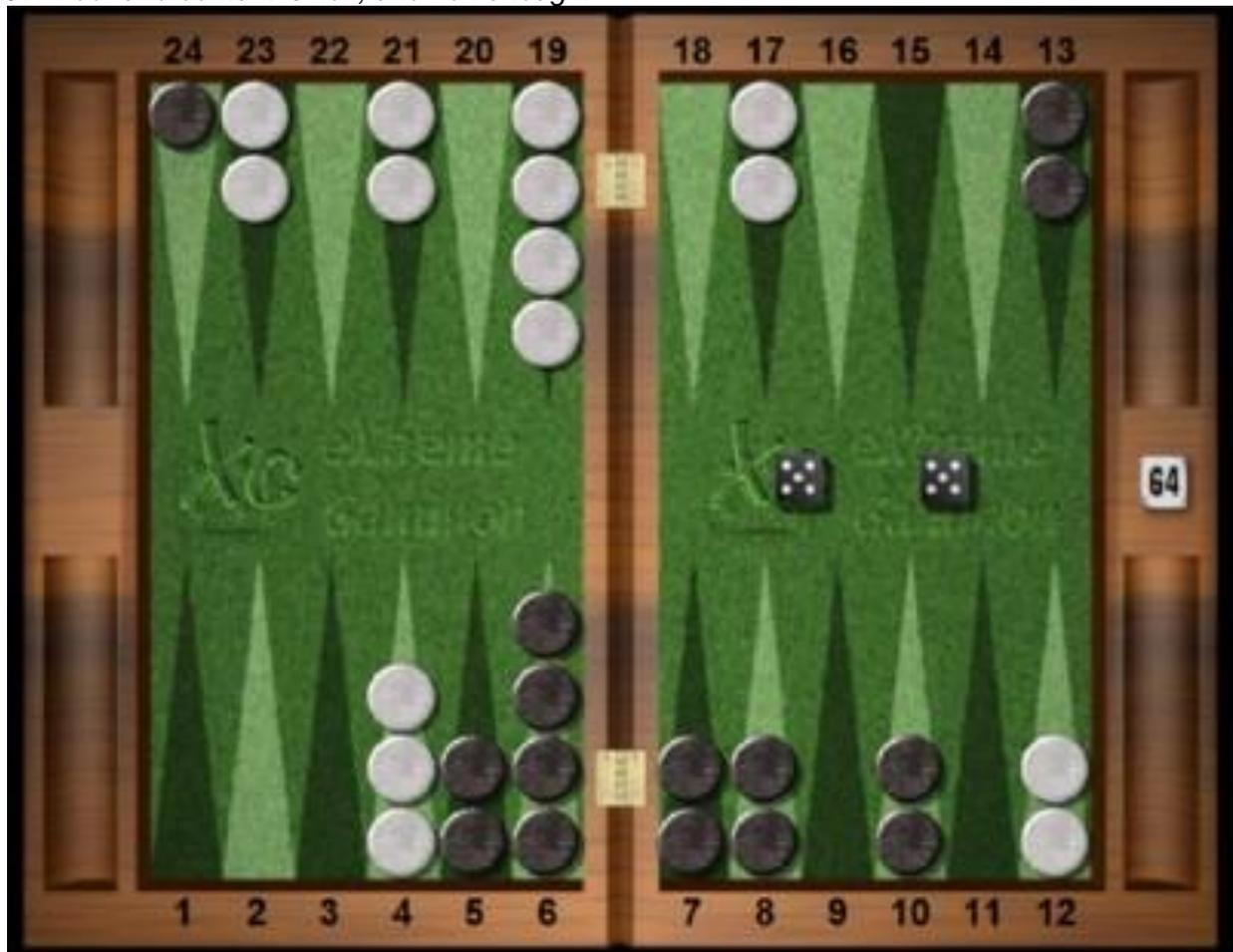
Moving both backmen plans to button up either on the barpoint anchor or in White's outfield. Not many rolls do so, only threes and 52s. Further, a 21pt blot sets up a target for loose hits by White and her opening 65s roll forced an extra builder to her 8pt. White would like to hit.

Adding a builder from the midpoint to Black's 10pt seems natural, but what exactly is under construction? Black's opening roll was 61 and making the barpoint strips the initial 8pt spare, thus only the 6pt stack is efficiently working with the new 10pt builder. That's not many extra rolls which improve: ignoring doubles (they play well anyway), the rolls are 62s, 51s, 41s. The weakness in an initial barpoint is a common opening theme.

The hit and run play of 24/18*/15 plants a builder for points in Black's outfield. With the initial spare gone from his 8pt and a stack on his 6pt, Black's ideal prime is committed to span the 4pt to 9pt (and less ideally span the 5pt to 10pt). Note that the new 15pt checker bears on both these rear points, along with the batch of midpoint spares. White could try to make a good anchor in the next roll or two, so the danger of Black's 15pt blot being hit is reduced. Since both the 15pt play and the 10pt play aim partly at Black's outfield points, the value of the 10pt play is diminished upon comparison with the 15pt checker play.

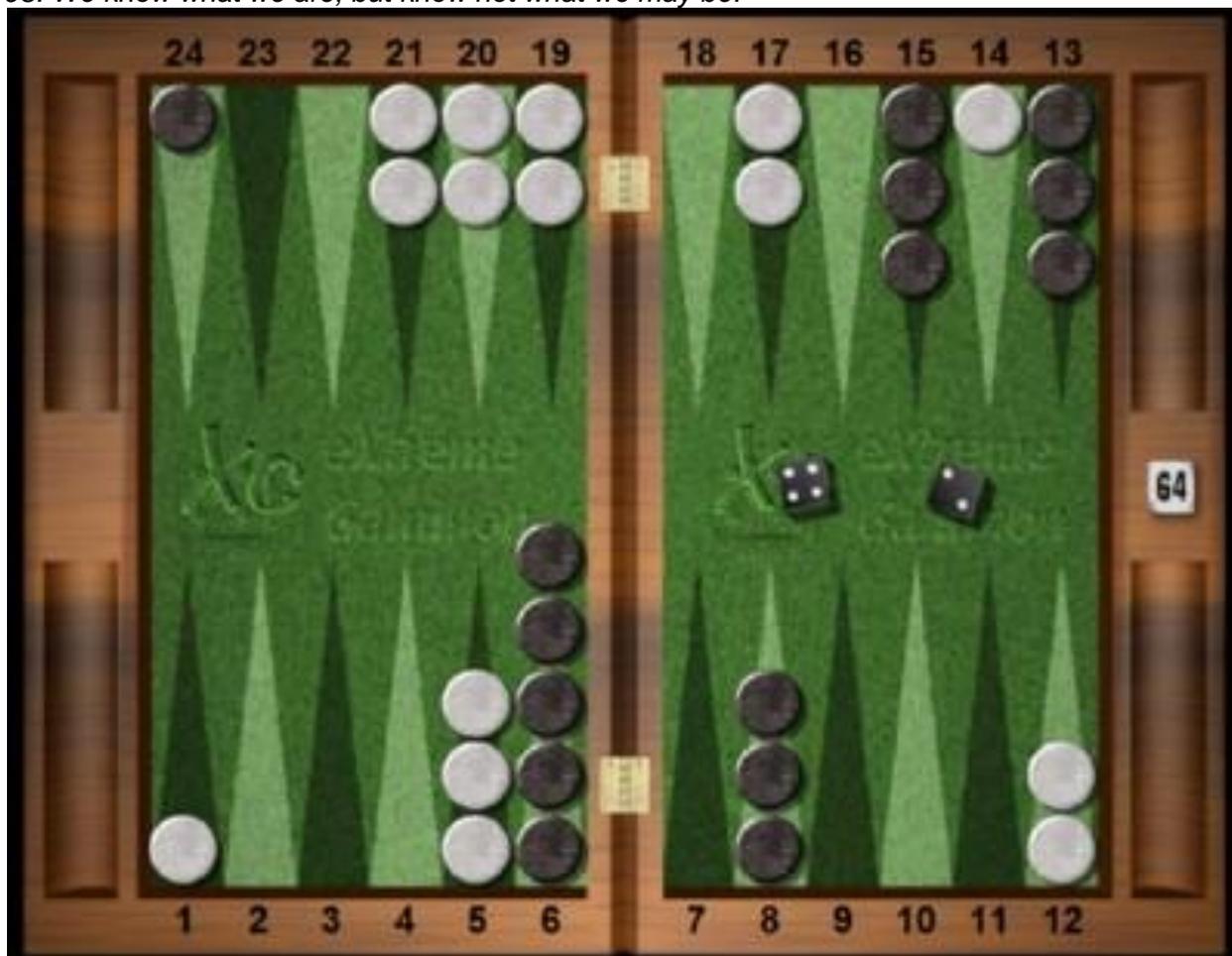
Best is 24/18*/15. The same reasoning applies to rolls of 62s and 64s. The moral of this story is: If the opening strips a key blocking point such as the 8pt, immediately visualize where the ideal prime must be and try to position future builders accordingly.

97. *Poor and content is rich, and rich enough.*



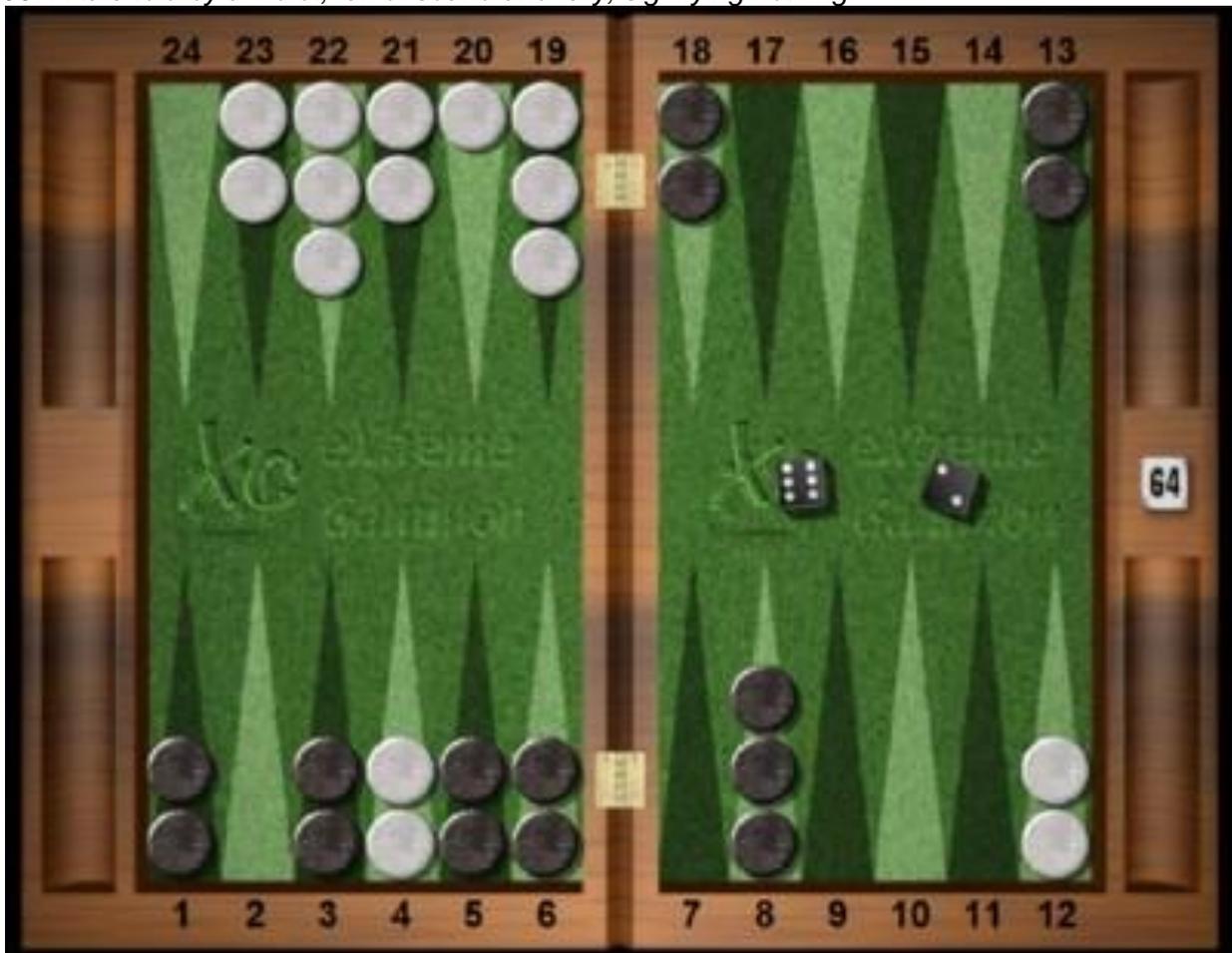
Earlier problems have discussed this same concept. Certain opening rolls have Buddha natures. Often these persist long into the middle game. The roll 55s has a crisp natural expression in making the 3pt from the midpoint. Searching for alternatives is always good, but it takes a strong argument to override a natural path. Here 13/3(2) is simply the cleanest and the best move. Often, in an admirable attempt to squeeze every last drop of advantage out of a play, Black performs contortions with the checkers, advancing this and running that in the hope that all of this orchestration will simultaneously pay off. Of course it's wise to try to squeeze the most profit from each move, but usually when a common alternative has a natural path, it's best to play the natural move. This realization is yet another benefit of studying openings.

98. *We know what we are, but know not what we may be.*



Here is another example of a natural path in opening rolls. Black could well make the 11pt (indeed, that's what he chose) since blocking a golden point anchor requires the 11pt. However, Black's initial 6pt stack remains frozen in time, sitting in meditation like a stone-faced Buddha. White is encamped on the golden point anchor with a spare, intending to stay and hang curtains. Therefore, what exactly is Black to do with those three builders on the 6pt? The answer is to carry on regardless with making the 4pt and maybe the 3pt, expressing the nature of stacked checkers --- to develop. White has the better board anyway so Black has some house maintenance to do. Play 8/4 6/4. The same reasoning applies to the roll 53s, although probably with fewer mixed metaphors.

99. *A tale told by an idiot, full of sound and fury, signifying nothing.*



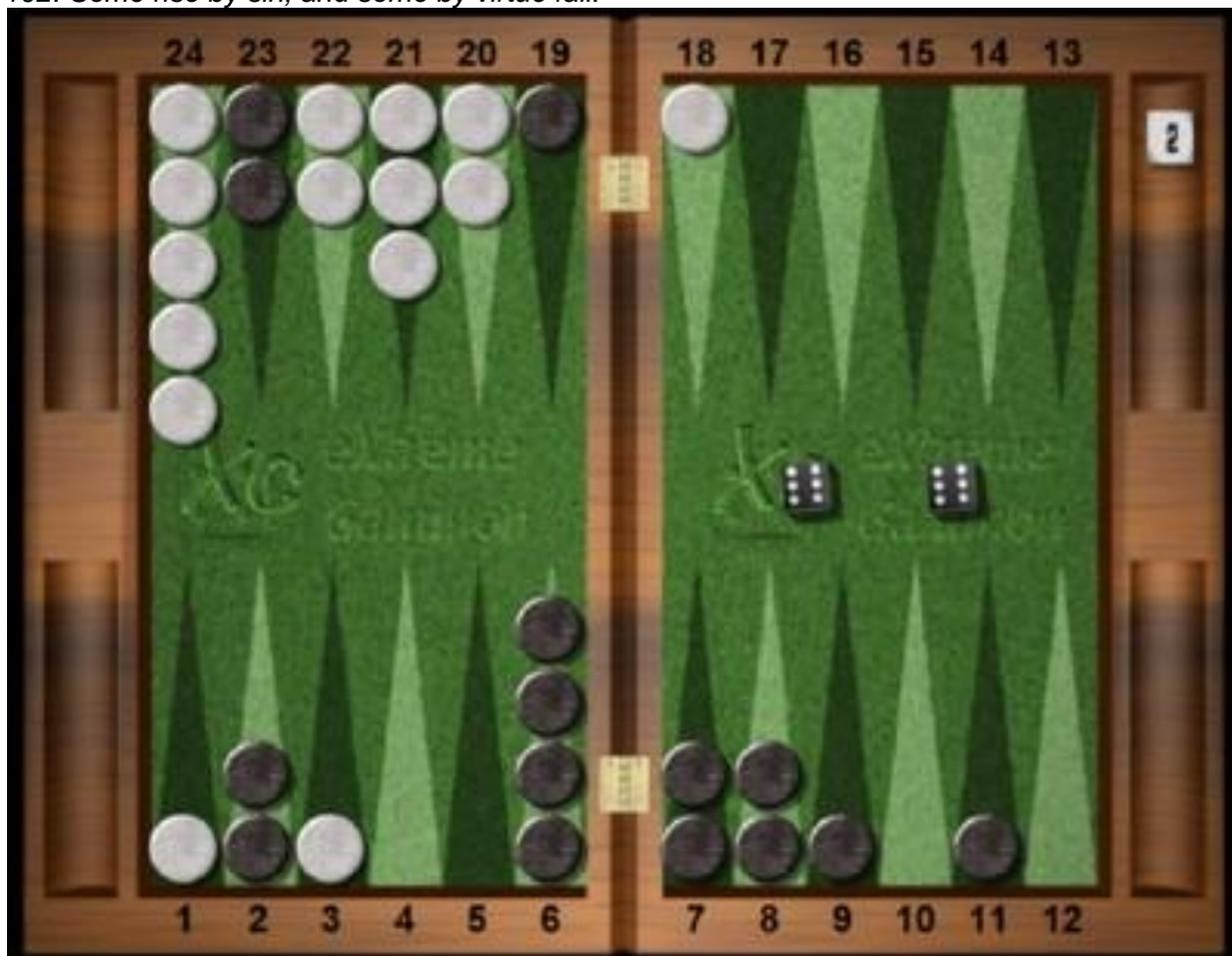
Black chose to dismantle his home board which is a dastardly deed he shouldn't even joke about, let alone admit. The best play is 13/5 which maintains key assets, duplicates ones, and acknowledges that White is stripped outside of her home board. Breaking Black's home board ignores White's problems in this position. It's never a good idea to ignore your opponent's situation. Of course Black is not happy to leave his midpoint blot but, when White cannot hit, Black still has a realistic plan of how to win this game. Breaking the home board jettisons any realism from this plan. When forced to compromise, try to choose the bargain that preserves a chance to win if White should roll unlucky as well as provides some protection when White rolls good dice.

100. *It will have blood, they say; blood will have blood.*



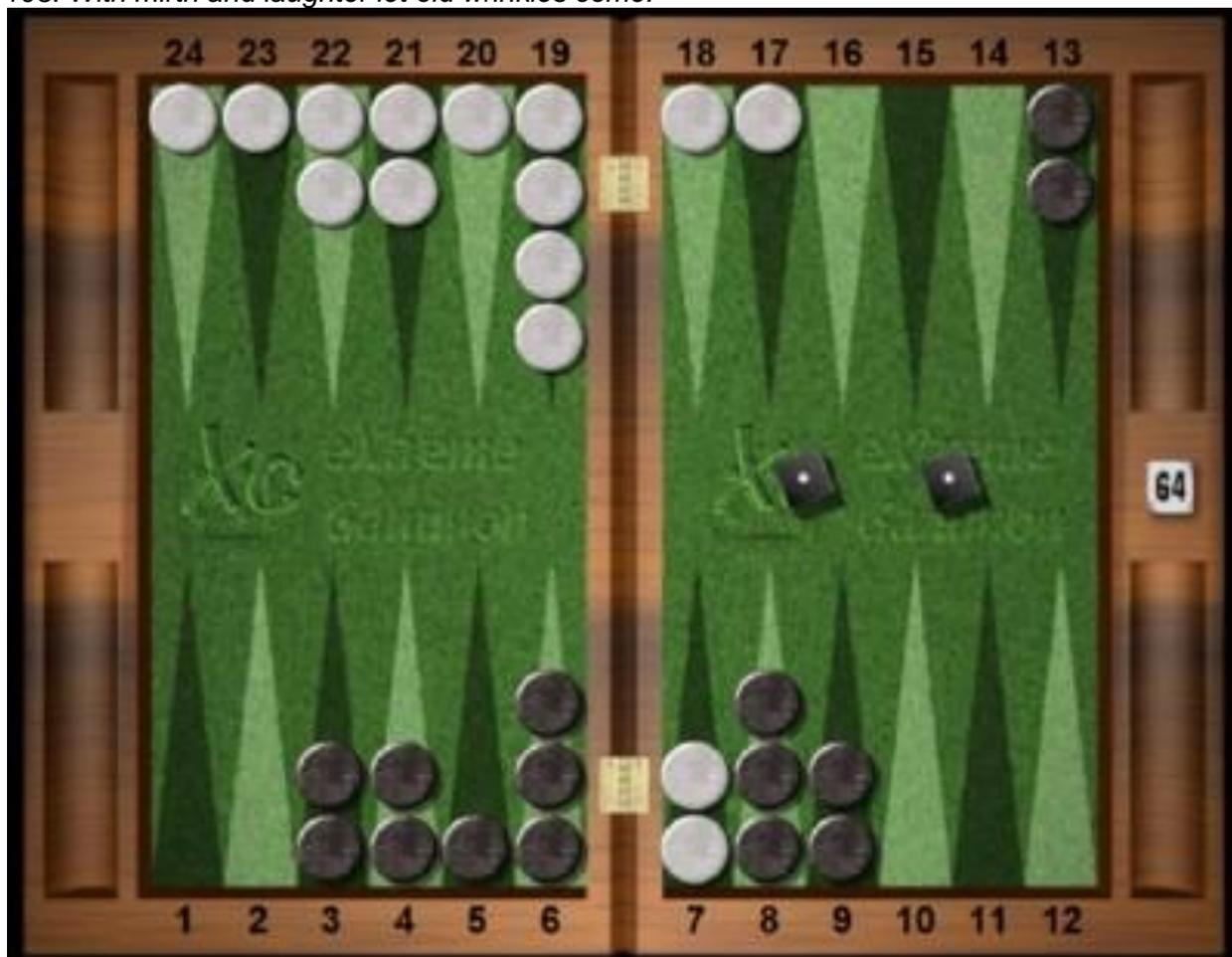
White has a monster home board. Although the 5pt is the best point on which to hit a white blot after Black enters, it also gives White twenty-one rolls as return hits of Black's home blot, in addition to a few that hit loose on the black 23pt blot. Also, Black has only two spares to cover his home blot. Hitting instead on the 10pt blot is a poorer point and leaves a new midpoint blot. The balanced play is B/23 6/3*, leaving fewer shots and more covers while keeping the midpoint intact. Black has been doubled. Strategically Black's best play shows more discretion and tries to keep the game under some control at a crucial time when things could easily go very bad for him. Since Black owns the cube, he has already paid to finish the game. Black hopes for a series of useful rolls that eventually turn the situation around for him. Given White's home board, any useless rolls that dance on the bar during a white blitz are not what Black had in mind.

102. *Some rise by sin, and some by virtue fall.*



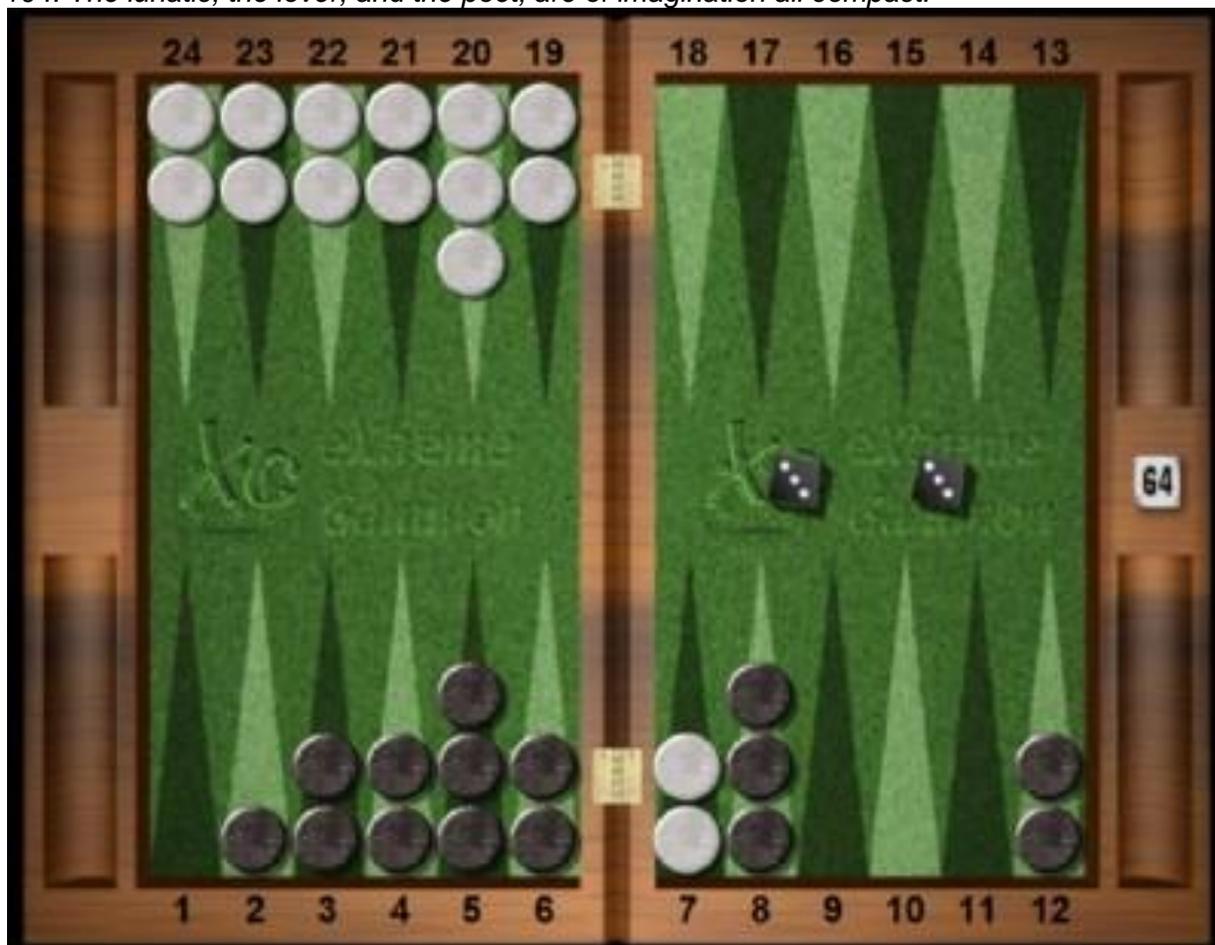
Black has patiently waited to put his game into forward gear and then into overdrive. Now is the moment to attack full out. It starts with a point on the 1pt blot. Hit loose on the 3pt blot, but most important of all: replenish the builders by advancing to the midpoint. Without the 19/13 part of the play, there are exactly two-and-one-half home points to be made in the closeout and exactly five spares to do so. That's cutting it too close. There's a real chance White will soon return hit from the bar and then Black's blitz could stall without reinforcement. Advance that builder now with 19/13 $9/3^*$ $7/1^*(2)$. Don't worry about its vulnerability as White has two checkers on the bar. Remember, the knockout punch is always the last punch thrown. Sometimes it's only a question of having enough punches to throw.

103. *With mirth and laughter let old wrinkles come.*



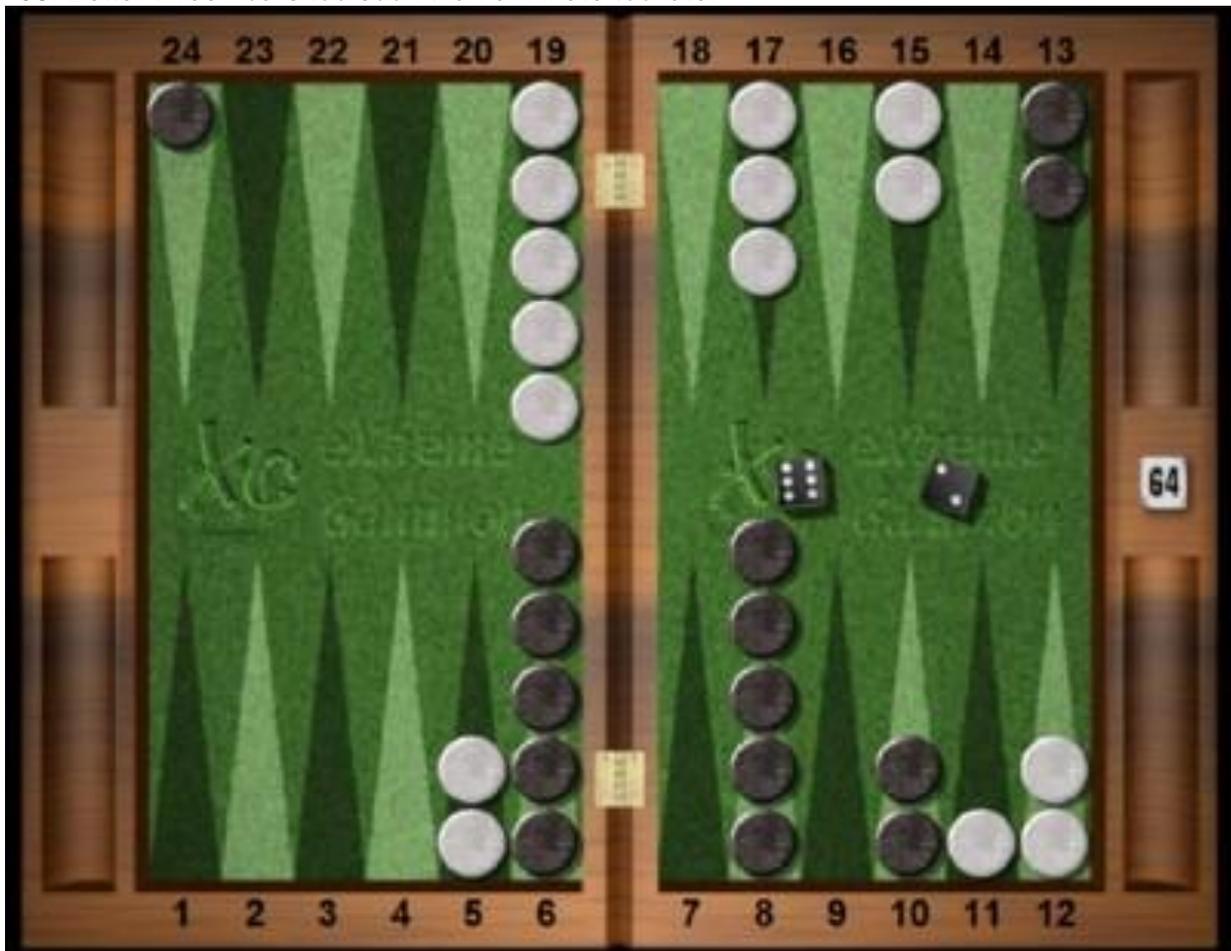
Behind by one roll in a holding game battle, Black should not advance his midpoint. Any other reasonable play is fine. The bots prefer 6/5 4/2 3/2 by a tiny margin. Since White has blots in her home board, Black can create temporary blots in his home board as each side still has some timing. The idea here is the difference between holding points that are five pips away as compared to those that are six pips away. If Black advances his last paired checkers to the 12pt, then after White rolls 63s or 64s the lone white runner will be under attack by only one black point, as the other checker on White's anchor will have skipped to her outfield with the six. If Black keeps his checkers on the 13pt, both dice numbers on the two rolls of sixes by White (plus perhaps 65s) are needed to skip past with only one checker and thus will leave triple shots on the last white runner pinned to her 18pt, a small detail but possibly a vital difference.

104. *The lunatic, the lover, and the poet, are of imagination all compact.*



It is the moment of truth in this holding game and it looks like White will break first. Don't make it easier for her by advancing Black's 12pt block or by weakening Black's board. Let it be White who moves her anchor or crunches her board. Then the game will tip in Black's favour. Move the 8pt spare to cover the 2pt and shift the 4pt to the 1pt with 8/2 4/1(2). Some purists might say that Black should keep his blockade contiguous. Note Black has access to the cube, so purity may not make much difference. After hitting a white blot, Black only needs to keep White dancing for a roll or two since Black will soon be deconstructing his home board during the bearoff. Although significant for bearoff speed and perhaps as a phantom 4pt game, the gap on the 4pt is not the determining factor here. Timing and shot potential are now the determining factors.

105. *Better three hours too soon than a minute too late.*



Black leads in the race but it would take a hit white blot to promote the race to his chief game plan. White's high anchor has stalled Black's blocking progress and embarrassed his stacked points. How can Black win this game? Only the race seems plausible. Strange as the structure becomes, the best move hits the white blot and advances the backman, creating the unenviable situation of three runners. It's a big gamble but what other game plan makes sense? Play 24/18 13/11*. One observation in favour of the hit and run is that White is stripped points on her 20pt, 13pt, and 10pt. Another consideration is that White's return ones and sixes are duplicated. The obvious play of making the 4pt is a small blunder; hand rollouts may illuminate the exact reason, although a running start to a white break of her anchor clearly plays a role in her racing game plan and in any explanation.

When the race is close enough that both sides would view it as their chief game plan *if only* they could hit now, then hit the offered blot. One

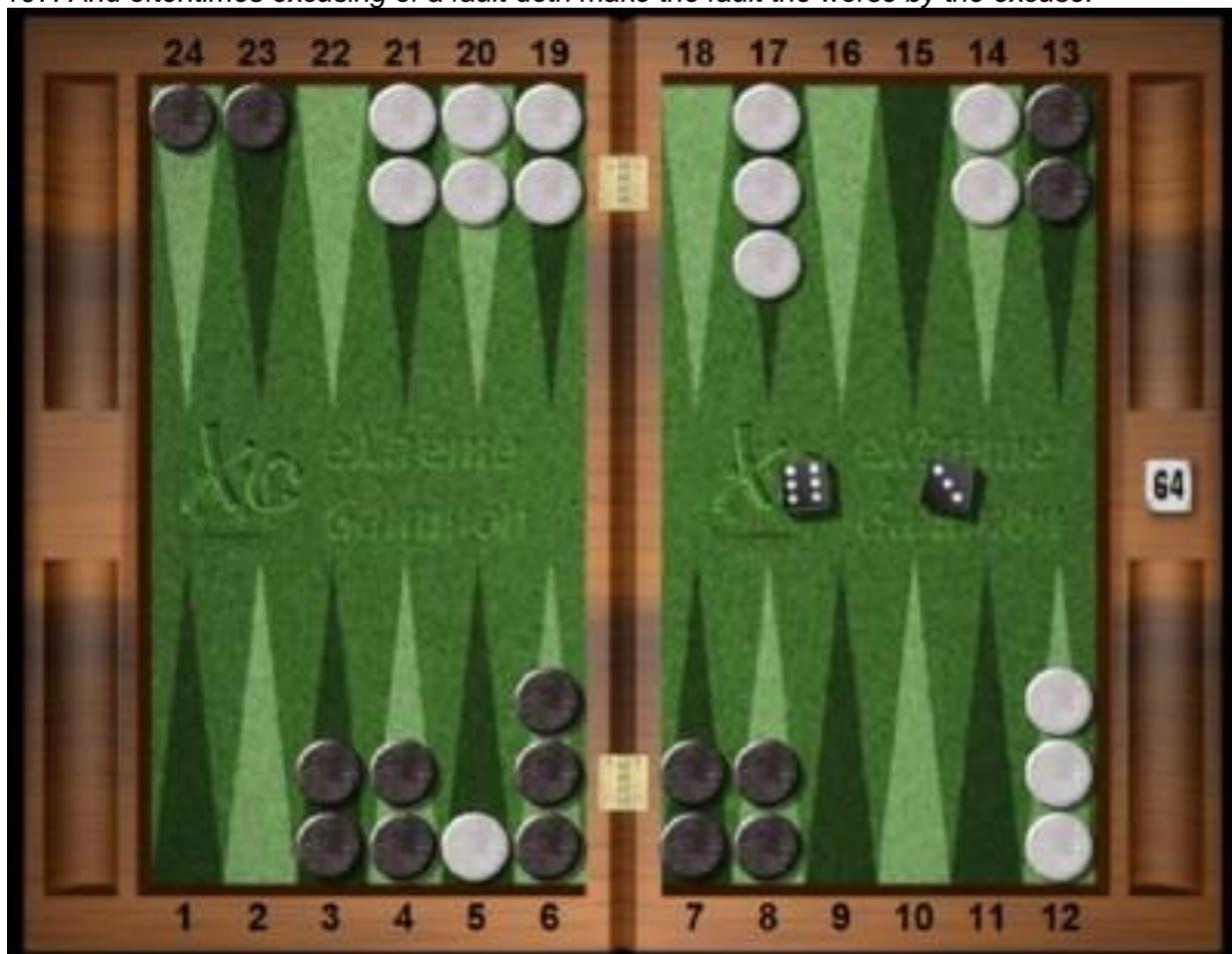
cannot go far wrong by applying this aphorism. Yet again backgammon is seen as primarily a racing game. And besides, hitting can be fun.

106. *By that sin fell the angels.*



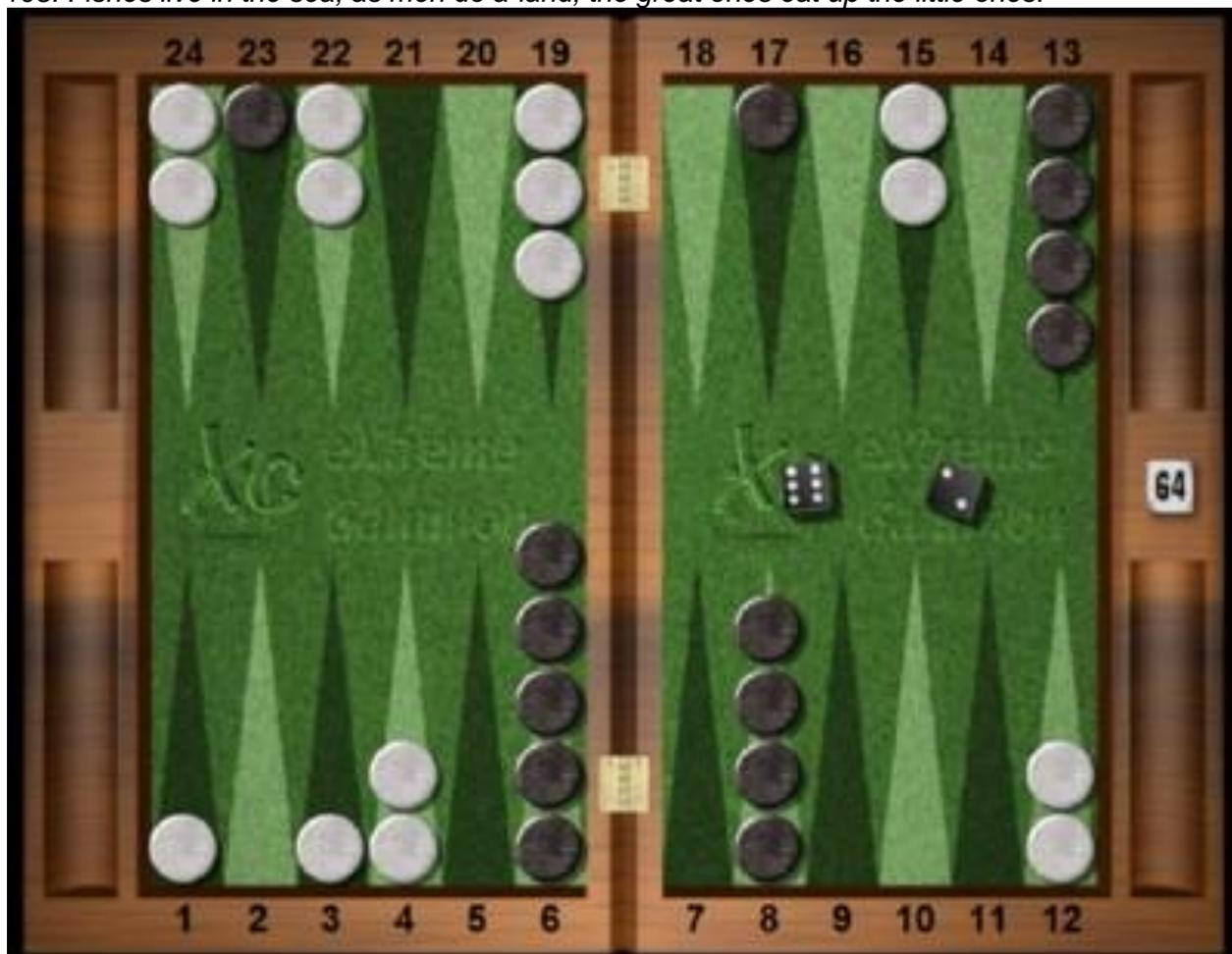
With seven backmen between them, there is still plenty of play left in this game. Try to maintain “pure play” when the game is far from over. White has broken her midpoint, so Black should view holding his midpoint as a key asset since it maintains connection and covers his outfield. Further, with two white anchors, Black has a serious stack on his 6pt, and hence slotting the 5pt is a double-edged move with considerable upside if it works. Note that White needs the same numbers to hit a black blot on the 16pt. Black has the best anchor on the 20pt and, if his 16pt blot is not hit, White will soon scoot by the black anchor, leaving Black to dominate the entire outfield. Play 21/16 6/5.

107. And oftentimes excusing of a fault doth make the fault the worse by the excuse.



It's an even race. White has a slightly better home board but Black has a slightly better blockade. If Black runs a backman into White's outfield, her many builders will attack with enthusiasm. To pre-empt this outfield attack and perhaps to propel Black's blockade towards a winning position, Black can hit loose on his 5pt. The play therefore is 24/18 8/5*, and if it works Black will gain the upper hand in this game. White's position is less stripped than Black's, and sometimes the antidote for a black stripped position is to attack and hit loose. When it works Black can move forward with better builder structure. Notice also the play has considerable volatility and, with White currently ahead in this game, will make it more difficult for White to achieve an efficient initial cube.

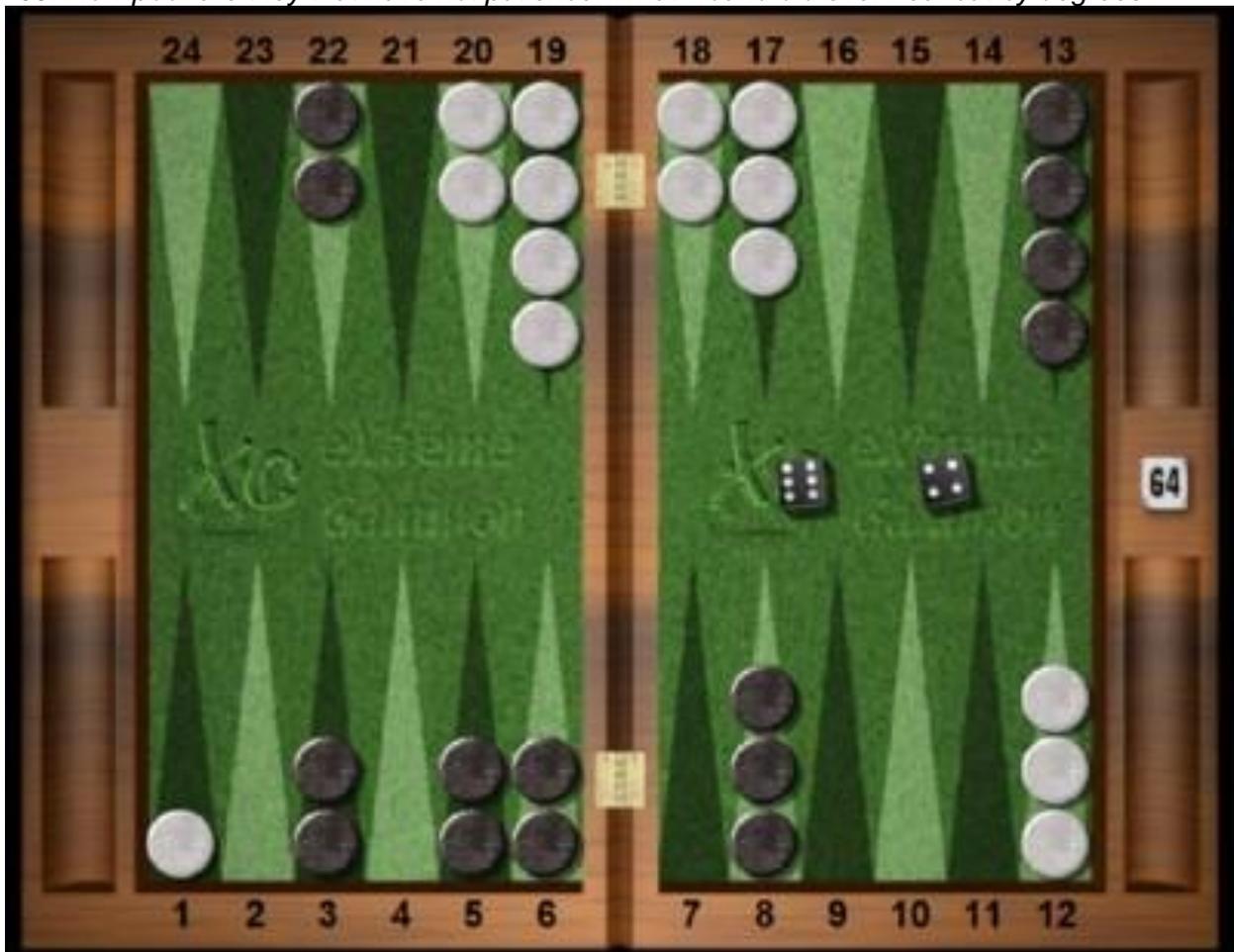
108. *Fishes live in the sea, as men do a-land; the great ones eat up the little ones.*



Black has a small racing lead, but has not improved his structure since the start of the game. White has a failed blitz with a better home board and a high anchor surrounded by a coterie of blots. This problem illustrates a small but recurrent error when Black's best game plan is to win from a small racing advantage. Where should Black leave his blot? There are three possibilities. The first possibility is nowhere, by making the 17pt and adding to the 6pt stack. The second possibility is ahead, by making the 17pt and starting the 11pt. The third possibility is behind, by making the 11pt. When White's outfield is stripped, Black often considers which stripped point White would least like to break and then leaves the blot there as bait. It's a good idea, but doesn't apply here because none of the blot choices come under direct attack. In these situations Black should leave his lone blot at the back of his army. Why? The reasons are connectivity and efficiency. If Black plays the 11pt blot move, the position looks

connected now, but what happens if Black does not make the 11pt or any other outfield point in the next few rolls? Black's 17pt will then start to become disconnected until marooned. Also, if Black leaves his blot on the 23pt, then his high double rolls play very efficiently, springing his straggler into the heart of Black's connected army. Finally, if his blot is hit, Black will lose the least number of pips in a game that already has a razor-thin racing lead. In this problem, and by quite a large margin, it is best to play 17/11 13/11.

109. How poor are they that have not patience! What wound did ever heal but by degrees?

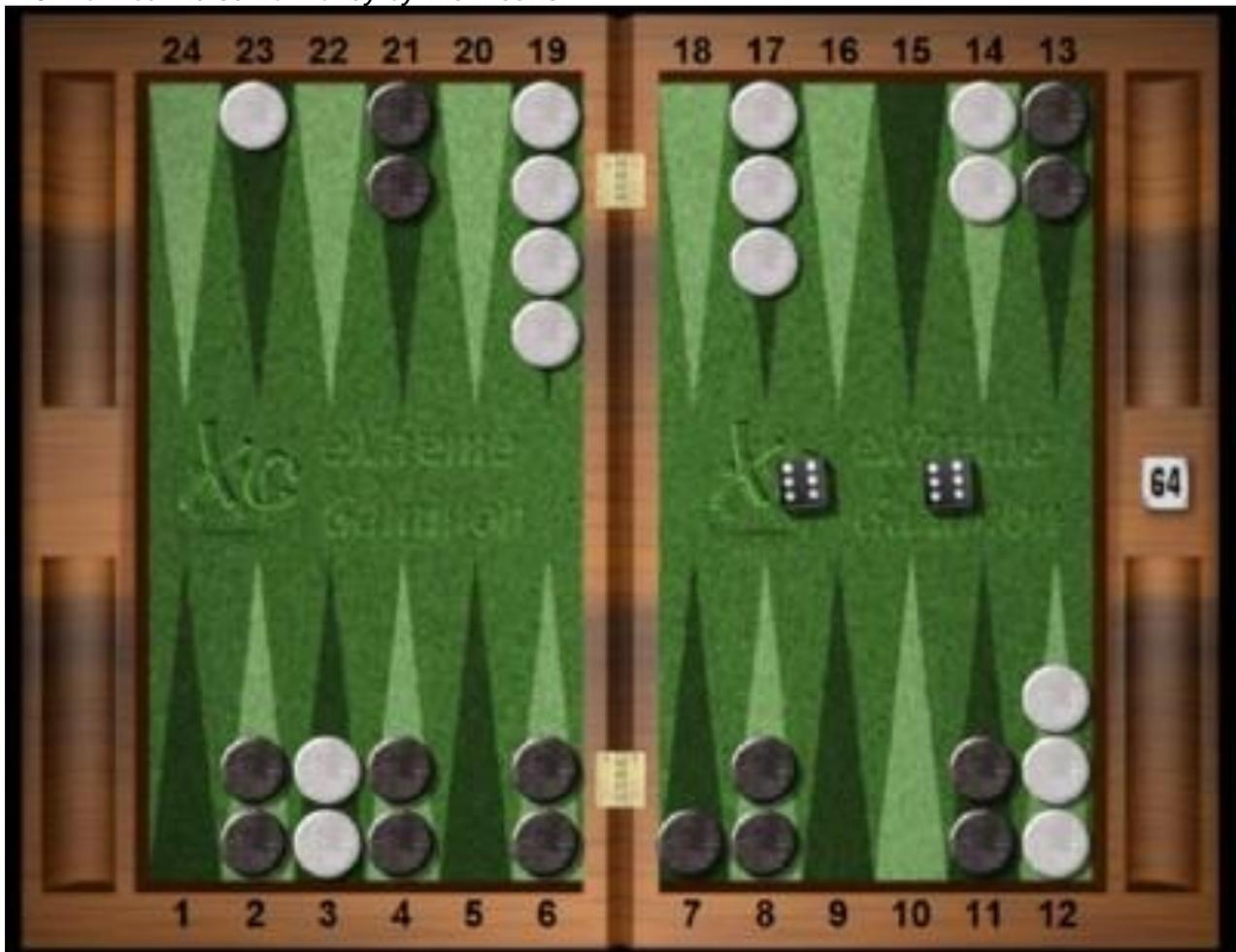


Although the equity difference between the reasonable plays is small in this position, the correct move shows a strategic idea that strikes to the heart of setting a winning game plan. How is Black going to win this game?

Although White does not yet have a double, Black is slowly drifting into a lost cause, which also means that White will soon have an efficient initial double. White has a small racing lead and good structure. White has fewer backmen but Black has a 22pt anchor as compensation. If Black can return this situation to balance by making a counter prime, he will have created a game plan that could succeed. Now --- this very roll --- Black needs to sew up his barpoint and to do that he must instantly slot it and maximize coverage. Play 13/9 13/7 and bet against being hit. The bet is not as unfavourable as the number of shots indicate because, if Black doesn't slot and White runs and is missed, then Black has lost anyway.

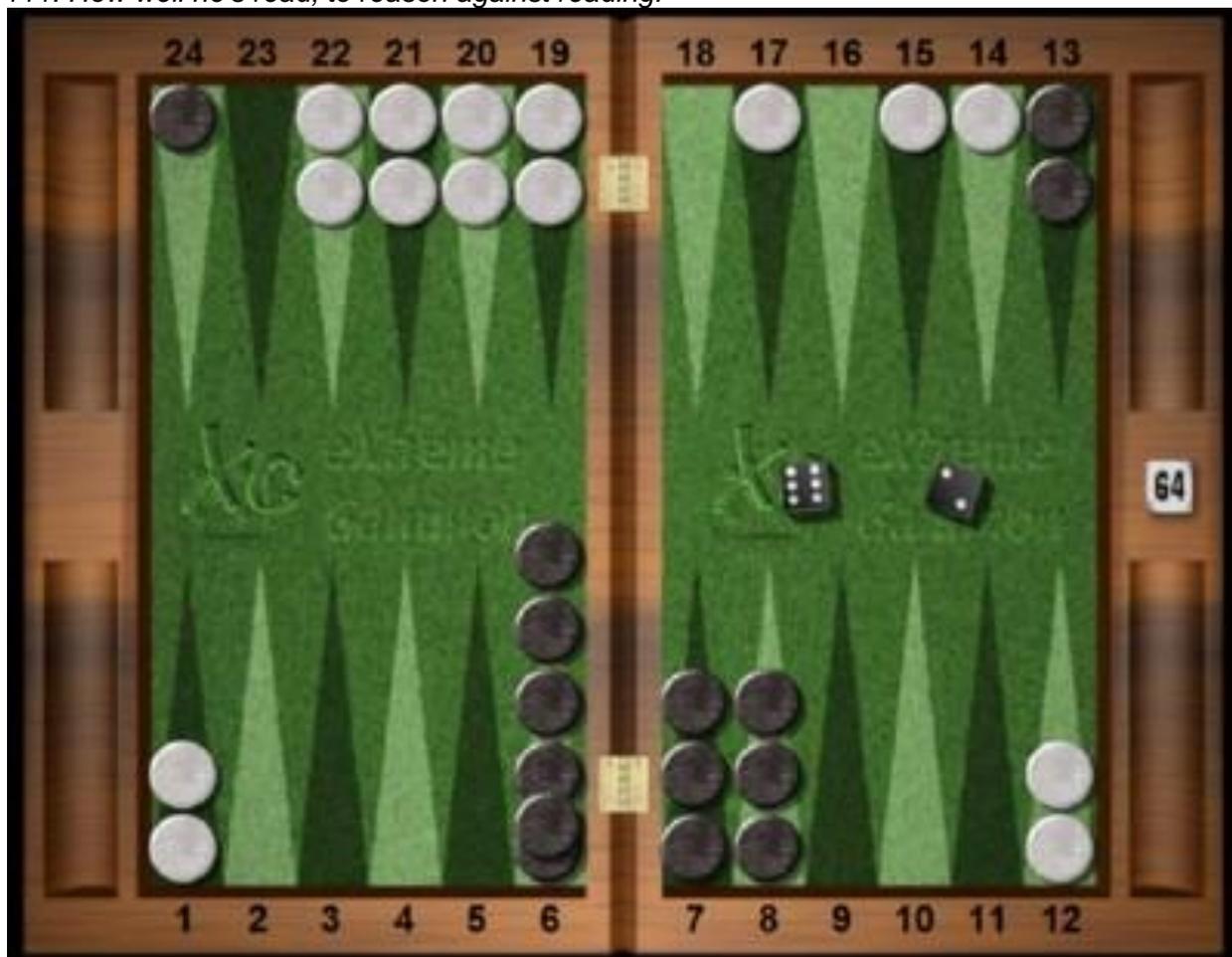
Thus some of White's sixes are winners regardless, which makes Black's slotted barpoint effectively safer according to his way of thinking.

110. *For I can raise no money by vile means.*



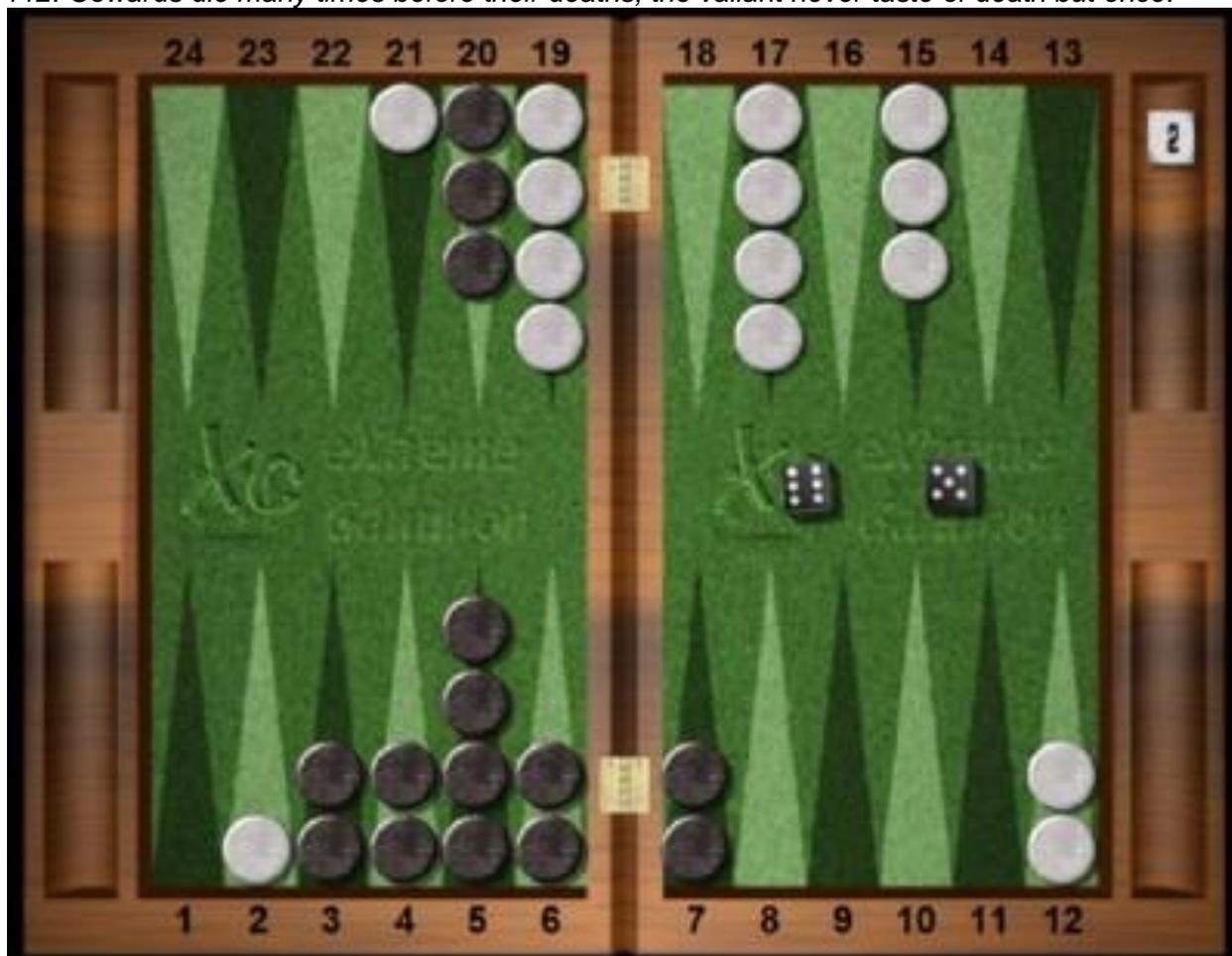
Black already has a lead in the race and this roll vaults him well ahead. He might be tempted to cover his blot by advancing his midpoint, but that leaves both weaker connectivity with his 15pt anchor and some stripped outfield points. Better to move the freight with his backmen to 21/9(2) and gamble now against White rolling a four. In most variations Black can cash the game with the cube and, in those where White hits, Black can re-enter, possibly hitting her home blot and likely crushing her split runners. The apparent weakness of leaving Black's barpoint slotted is mostly a mirage. Black is strong in all departments here and therefore should be making moves that will soon claim victory with the cube rather than dawdle with a longer term structural advantage.

111. How well he's read, to reason against reading!



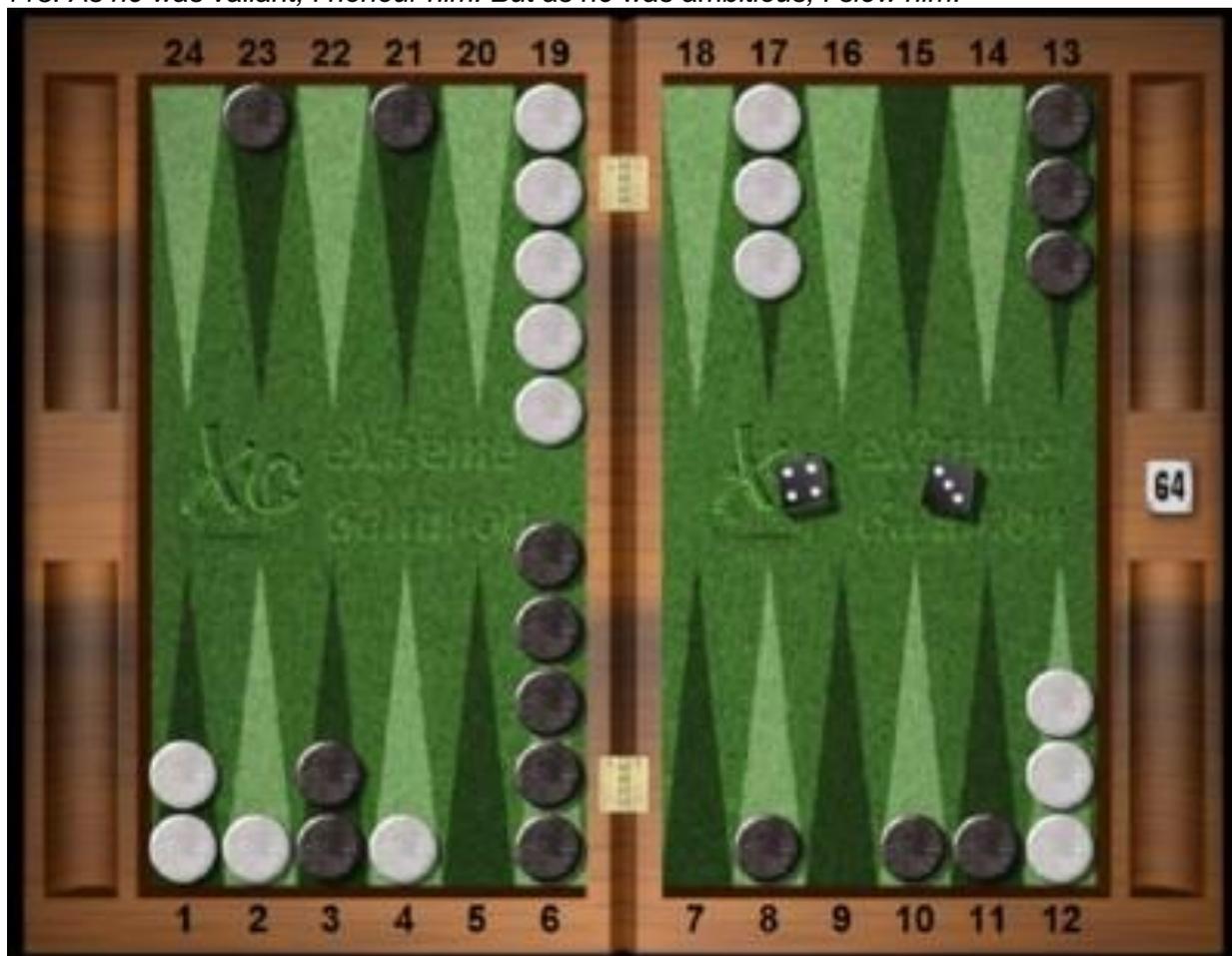
Here is a problem with a stark contrast in choices. Abandoning the midpoint maroons Black's straggler. Running the straggler offers a triple shot into a massive 4-point white board. Both unappetizing choices are takes if cubed, but the reckless run is significantly better than the wait-and-see attitude. Why? Tough to say exactly, but White will often make her barpoint when Black doesn't run, and then the game is over anyway if the cube is still available to White. So the shot count of 27-hits should really be compared against the number of rolls that make White's bar (15) and not compared against zero. This means that the *extra* risk is 12 hits --- about the same as *one* new direct shot. Perhaps this is the argument in favour of running now with 24/16 --- it's now or never!

112. *Cowards die many times before their deaths; the valiant never taste of death but once.*



Several misconceptions appear here. Running with 20/9 has nothing whatsoever to do with containing White's backman because every white six that escapes either hits this black blot or skips over it. Also there are no black builders to make the 8pt thus what immediate function does the 9pt checker serve? Furthermore, right now Black's board is far stronger, but White is poised to make her board rapidly. Black cannot give White a free hand to do so. Black must take action now by temporarily breaking his prime from the rear and hitting loose on the 2pt while covering the outfield with 20/14 in case White does escape as well as creating a builder to remake the barpoint. In addition White's deuce hit of Black's outfield blot duplicates her cover of her home blot and her entry from the bar. In summary, any other move would be a blunder. The cube has been turned so Black is paid off when he wins a gammon. Play 20/14 7/2*.

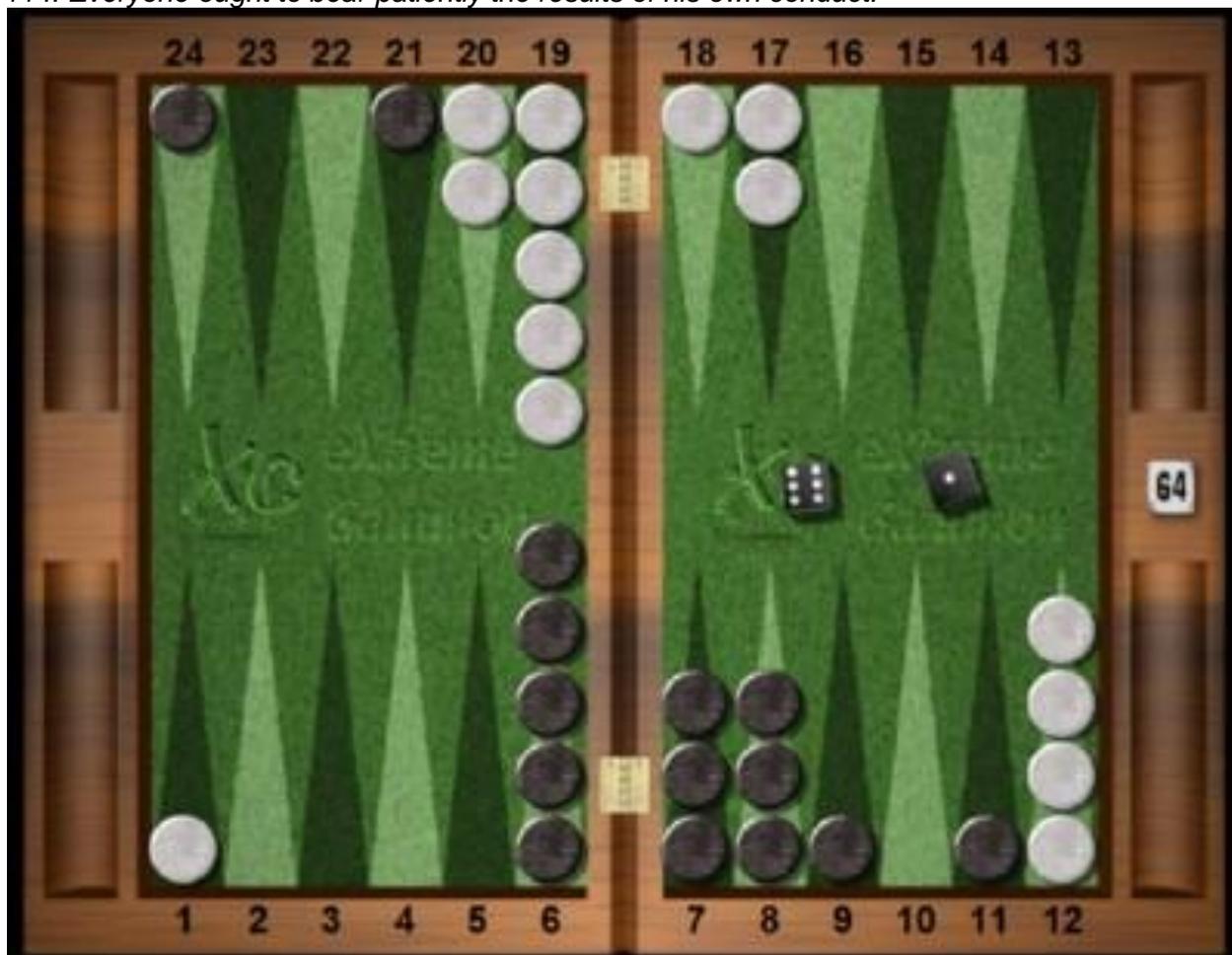
113. *As he was valiant, I honour him. But as he was ambitious, I slew him.*



Black has a big racing lead in a blot hitting contest and, with this 43s roll, there seems to be a pause in the action. Black's inclination is to secure his barpoint which tries to hem most of White's backmen in. This seems a natural enough choice. The game, however, is still in its infancy and if White has freedom of movement, she can quickly equalize the structure by making an advanced anchor on her 21pt or her 20pt (a total of 23 rolls). When White anchors, Black's blocking barpoint loses most of its blocking power and all that is left is a racing lead and a chance to make his own high anchor. Despite an unnatural feeling of hitting loose in his home, Black needs to go for a knockout punch here by playing 8/4*. There are many return hits for White, but to gain a lasting advantage Black must be willing to trade part of his racing lead for permanent assets. Completing the move with 13/10 makes safe the 10pt from immediate return shots and increases the builders when Black's loose hit succeeds.

The lesson here is that blot-hitting contests usually result in racing leads, but to turn this racing lead into victory requires a morphing of part of the racing lead into structure and assets. Remember, with so many hit white checkers being sent back, the opening of this game has hardly begun.

114. *Everyone ought to bear patiently the results of his own conduct.*



Black's golden point is an interesting possibility, but his backmen are disconnected from his forward position and the race would only be close. When White controls the outfield, makes her bar, and has fewer runners than Black in an even race, then White has the better game plan. So the hit 24/18* is the right choice. It creates one game plan --- the race --- in which Black might prevail. In actual play Black made this hit. However, the play of the lowly ace caused him to blunder. Here is a short list of the options: move the 6pt, 7pt, 8pt, 9pt, 11pt, or 24pt. Black has no home board, which suggests keeping builders by not touching his 9pt blot. On the other hand, White has several fly shots from the bar and will undoubtedly hit Black's runners loose if required. This observation votes strongly for reducing the number of exposed black blots. The 6/5 slot is thus eliminated because of too many return hits. The 11/10 play increases shots without much improvement in builders, thus eliminated. Black's

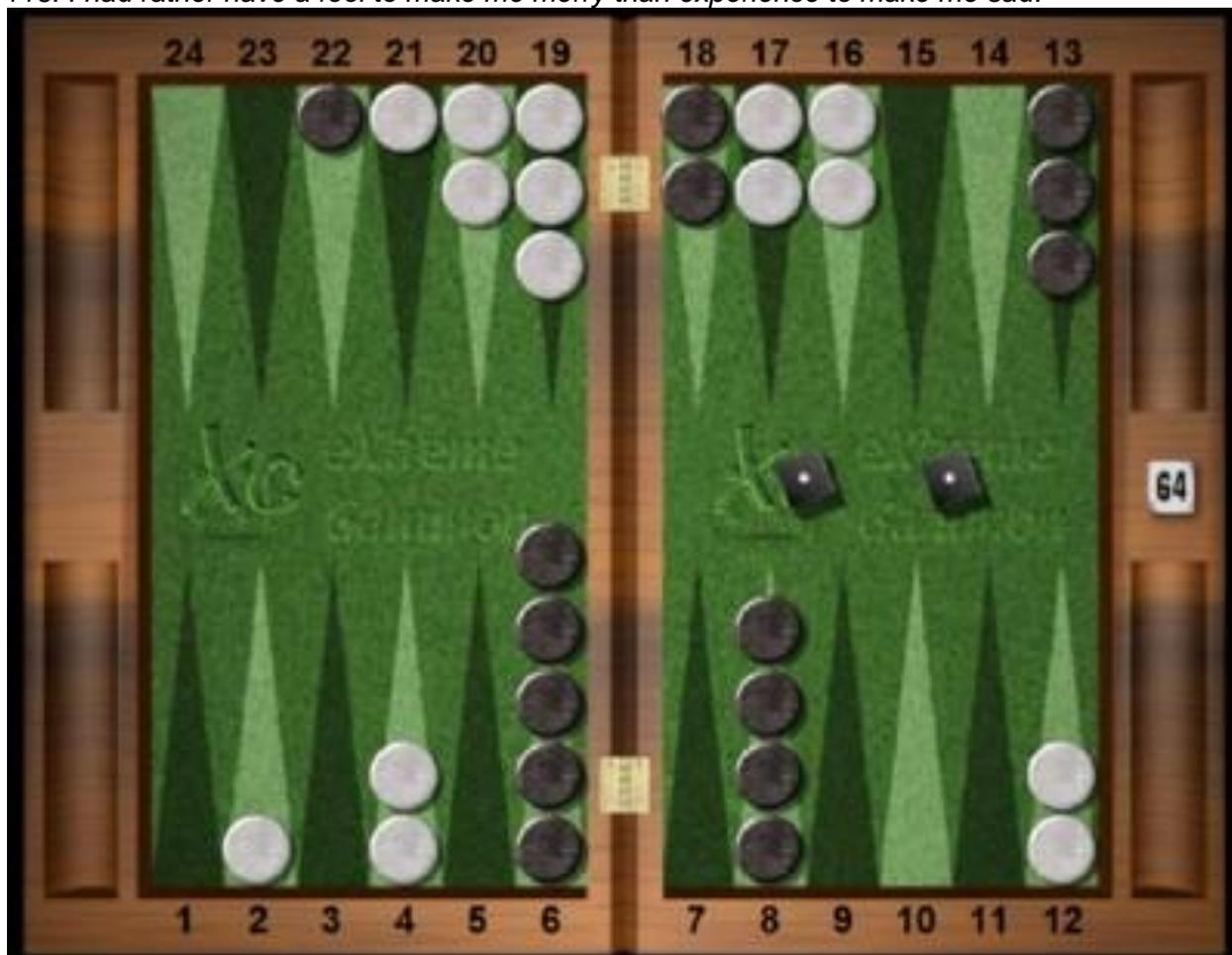
stacked 6pt makes 8/7 better than 7/6. Advancing the back runner does nothing. To recap, now the only two reasonable choices are 9/8 or 8/7.

Both plays have their reasons: as always, it's a matter of priorities. Black is not strong enough yet to risk the extra blot. If Black rolls well, he could improve his forward position, but perhaps Black needs to button up his backmen as they will soon feel White's rabid counterattack. Since dealing with the black runners is more important right now than dealing with his blockade, then free fly shots should not be offered. The best play 24/18* 9/8 allows Black to focus on the top priority without distraction.

parlay of missed white return hits, the move B/22 21/17* is obviously better than Black's actual play, as now a white ace rarely does damage.

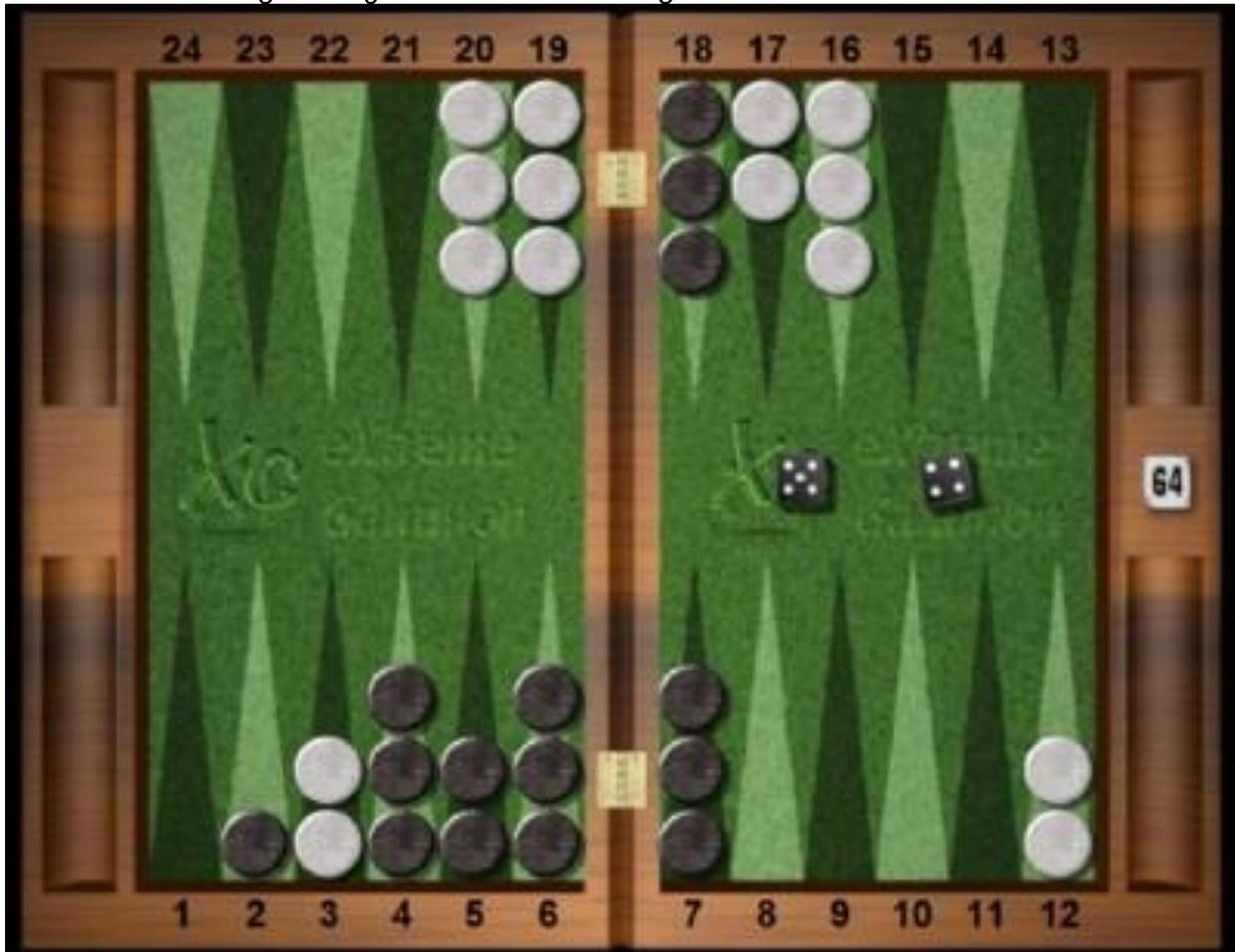
Here is the main lesson. White owns the outfield, White has a better board, both sides have numerous blots, and the race has hardly left the opening gate. If Black doesn't make an anchor now he is completely at the mercy of White's strength in the outfield and in her home board. Should White anchor, what area of the board would Black control? None, if he hits. Thus Black must make and hold the 21pt anchor. The same analysis strongly suggests that Black cannot afford to offer free blots as targets for White's three backmen. Hence the correct play for Black is to spurn all hits. He should anchor and lift the direct blot with the play B/21 9/6. Now Black can await developments with safety and a racing lead.

116. *I had rather have a fool to make me merry than experience to make me sad.*



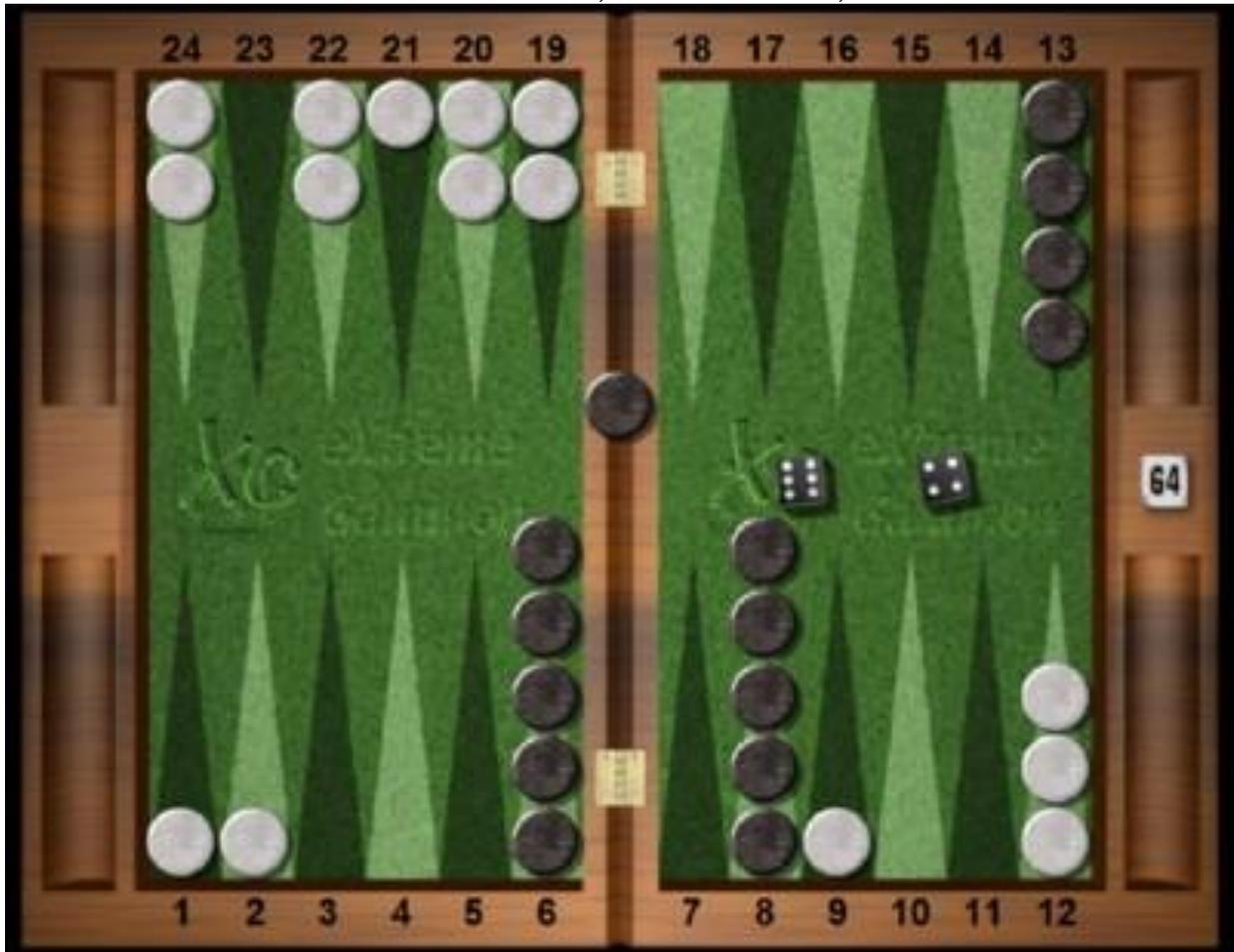
This 11s roll has three reasonable choices, all of which make Black's golden point. The least aggressive choice makes Black's barpoint. The other two plays hit the white home blot. If Black decides to hit, White will have four checkers back and any black blots exposed in his outfield have few places to hide from return hits. Even after Black's hitting play, White's home board is equally strong. Black chose to slot his barpoint, but this is too dangerous with four white back checkers. Besides, if the risky slot succeeds, the best Black can do at this moment is create a 4-prime that White's 4pt anchor has already partially halted. It is better to move the final ace to the golden point, an unorthodox shift of a builder that captures the priorities of this situation. Play 22/21* 6/5(3).

117. *There is nothing either good or bad but thinking makes it so.*



Here is a technical point, but one often ignored. If Black must leave a blot ahead of a stripped white point, Black wants 1) the point to be vital to White's game plan and 2) the point to be in range of black checkers for a return hit. Black played 18/9, which certainly tempts White to break her vital anchor to hit but there are no direct black return hits on White's fleeing blot. A better balance of the two conditions is the correct play 18/13 6/2 covering, which tempts the white midpoint and allows Black's anchor to return hit with fives. This idea comes up often and is important in those outfield situations where an exchange of hits is likely soon. There is hitting, and then there is return-hitting: It's best to leave yourself with both options.

118. *There is a tide in the affairs of men which, taken at the flood, leads on to fortune.*

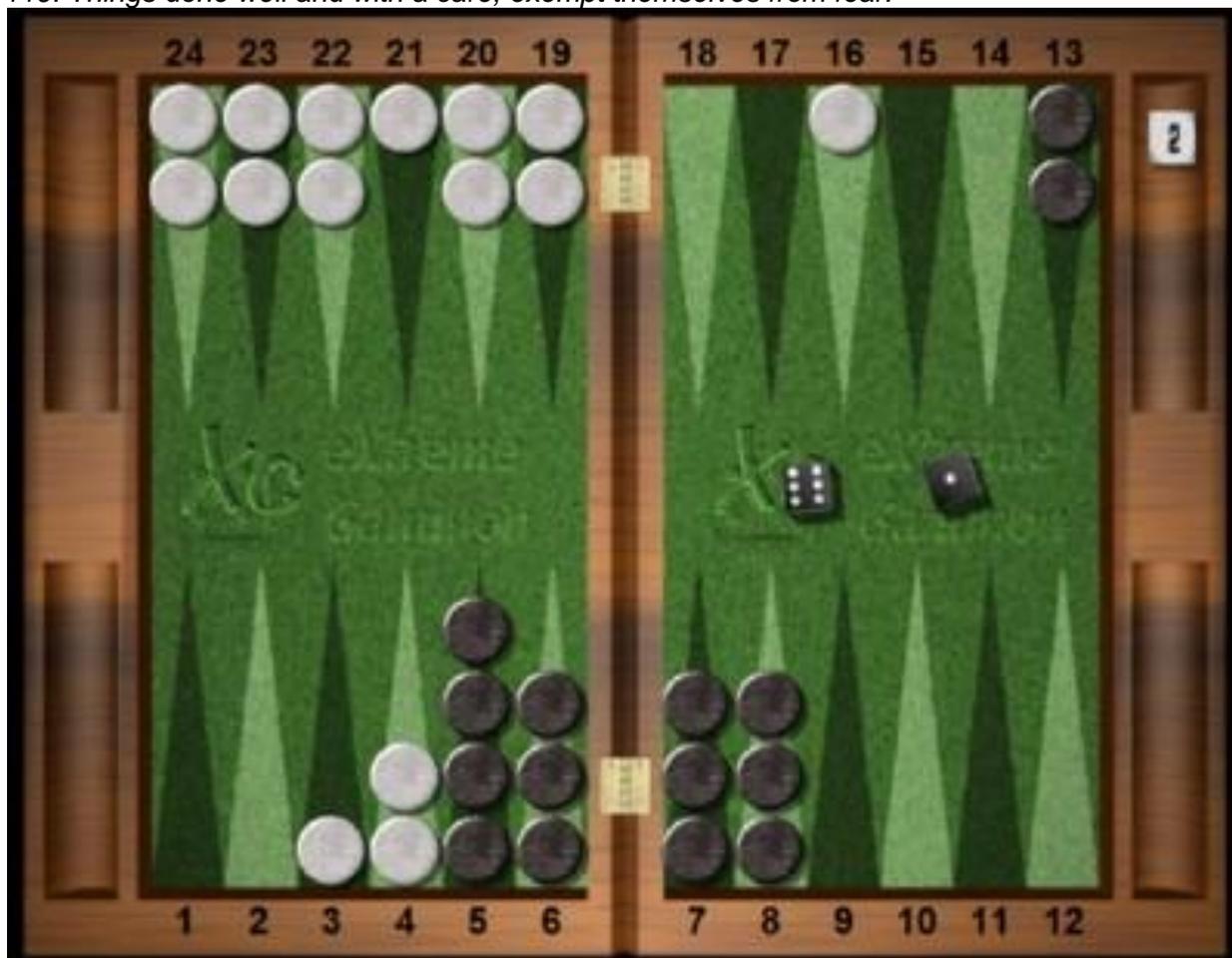


Here's a tough one. White's home board is quadruple that of Black's, so why would Black even consider leaving a second blot? But let's run the numbers. Hitting twice with B/21* 8/2* has White missing on 24 return shots. White has only 16 return misses if Black chooses to play B/21*/15. This is a bit of a surprise, yet hitting twice often can serve as a defensive measure. Surprising too, but here the twin hit loses fewer gammons, although the point is moot because the cube is unturned.

Having said all that, the best reason for the twin hit has little to do with shot counts. Ask yourself: How can Black possibly win this game? Any winning game plan requires Black to create several points in the home board and in the outfield. Hitting a single white blot just does not give enough momentum for Black to make several points; with some luck the twin hit could change the flow of this game. And if not, Black will simply drop a cube as gammons don't yet count. It's another example of how

increasing volatility can improve the trailer's advantage. When Black's aggression backfires, eventually White will cash with the cube, but she may be far beyond the loss of her market.

119. *Things done well and with a care, exempt themselves from fear.*



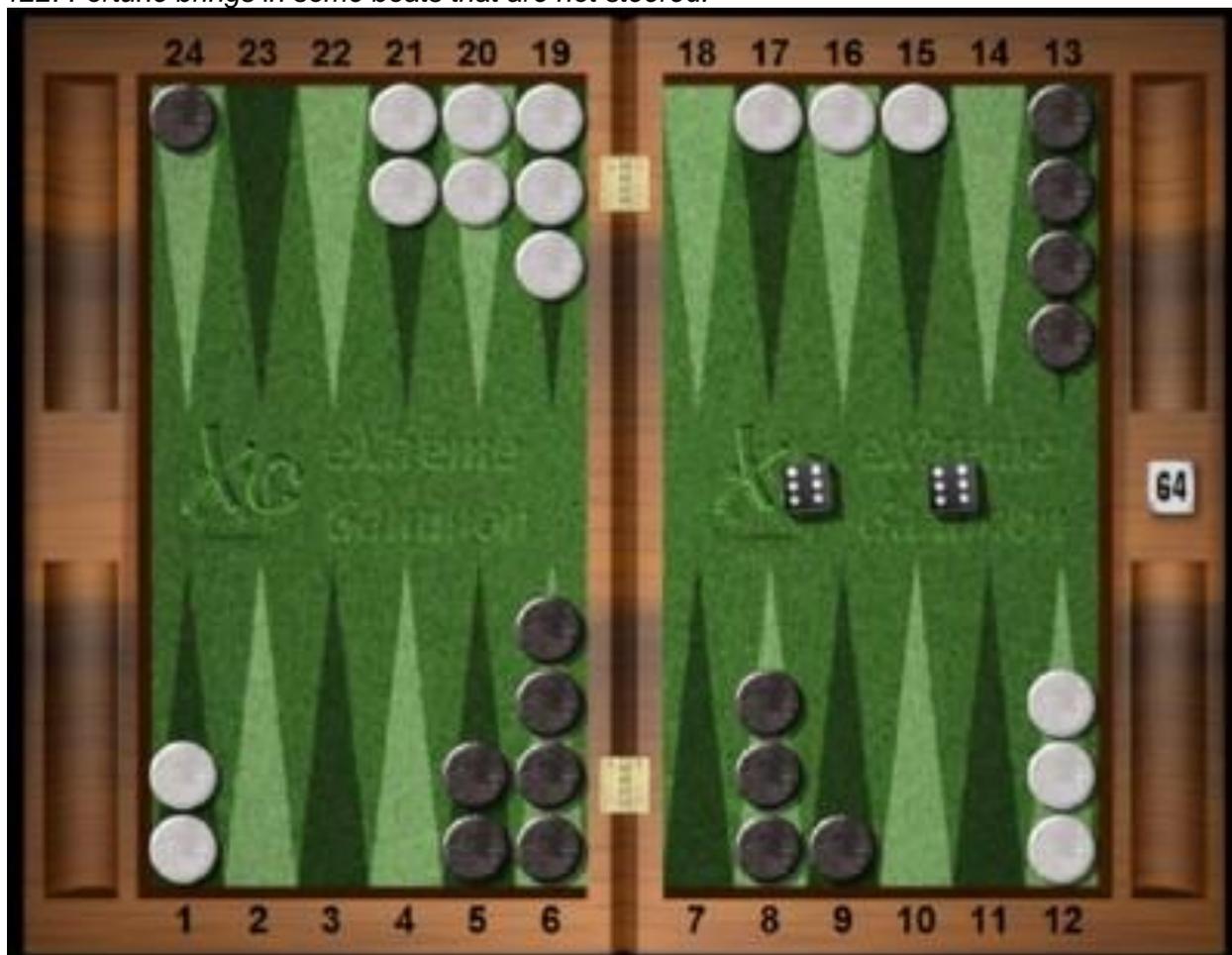
Here is a tactical theme seen before. White's board is near its peak and Black has no desire for a fight. Black just wants to coast home peacefully, but note that the race is too close for him to chalk up a victory yet. Black certainly has a structural lead. He does not want to give free swings for White to turn the game around with a single roll. White owns the cube, but high volatility makes it difficult to construct an efficient redouble. Thus Black must not break the midpoint yet, holding it to retard White's forward motion in a close race, and to remove stray fly shots whereby White jolts the game abruptly in her favour. Any sensible burying move is acceptable: 8/1 for example.

Now what are Black's immediate needs? Black wants to run his one backman to safety soon, which mostly likely will require a five. Thus the attacking builder on his 8pt (after making his 4pt) is duplicating the immediate use of this five with Black's own runner.

As another example, let's move White's blot back to the 23pt, thus blocking the direct escape. Then Black's play is still the golden point, but the difference is smaller. In a third example, anchor the white checkers on her 24pt and the black play is still the golden point but with a razor thin difference.

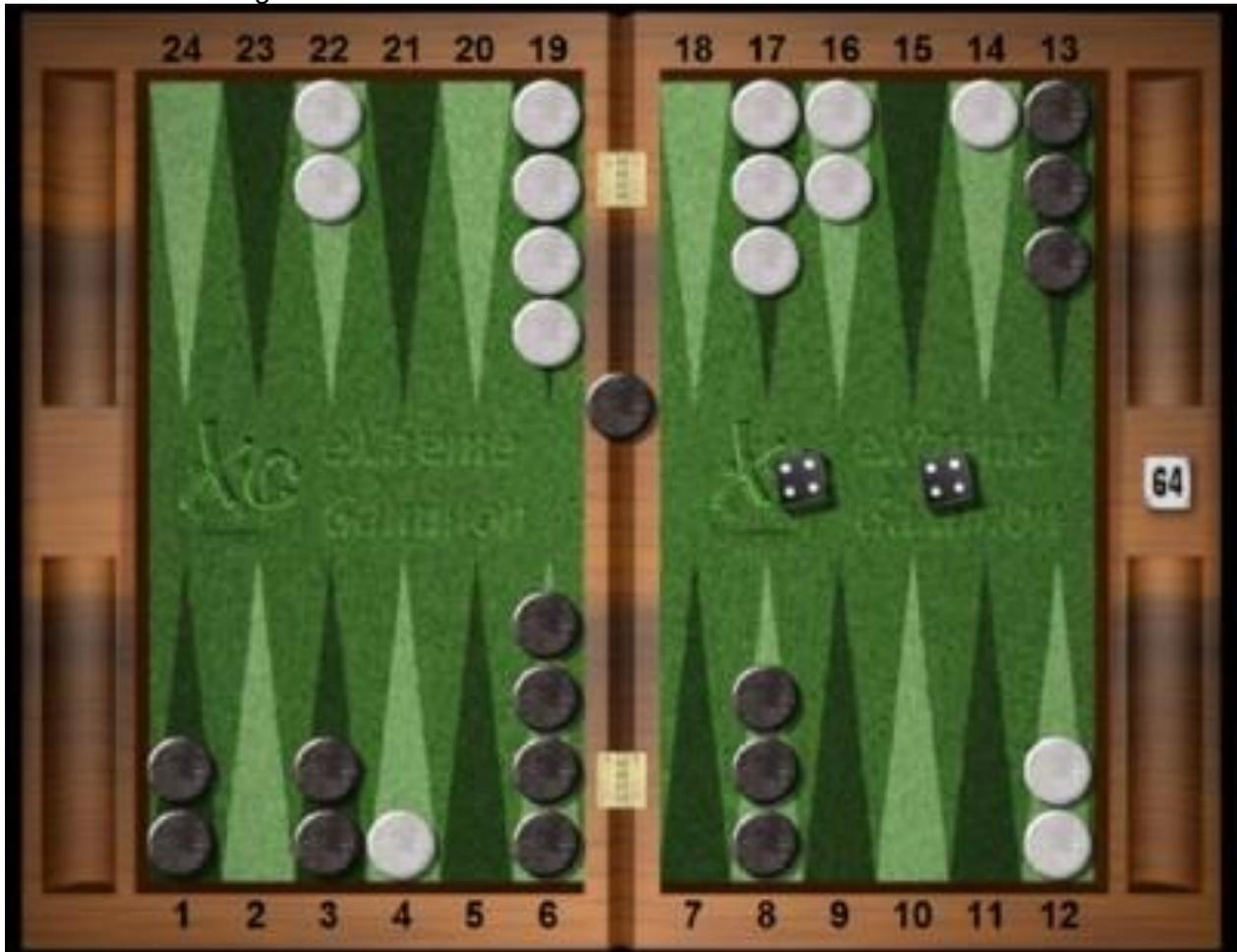
Play 8/5 7/5. They don't call it the golden point for nothing.

122. *Fortune brings in some boats that are not steered.*



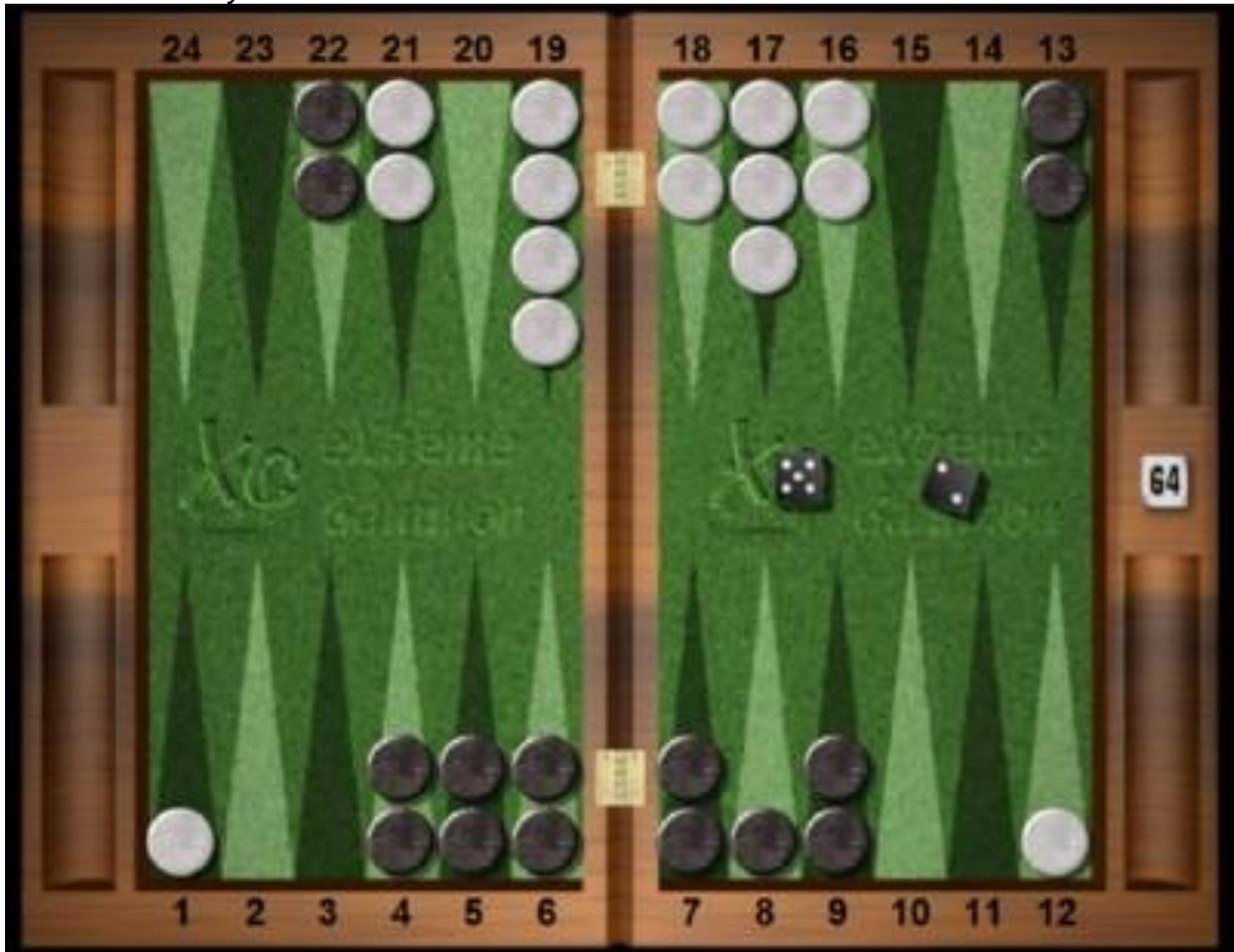
The two vacant points between Black's 2pt and 5pt when Black plays 13/7(2) 8/2(2) leave too much wiggle room for White to escape, especially considering Black has two outfield blots lingering for White to hit on her way out. Black should clear the midpoint wholesale with 13/7(4), admittedly marooning his lone straggler on the 24pt, but keeping his blockade rolling smoothly ahead. Other than moral support to his straggler, what is the purpose of Black holding the midpoint anyway? White has an extra builder on her midpoint so Black won't be squeezing into existence a white midpoint blot anytime soon. After clearing the midpoint, if the game becomes prime-versus-prime, White will have two backmen whereas Black will have only one --- a tangible advantage. Then Black's tight connected prime will shine.

123. An overflow of good converts to bad.



Black tried to squeeze too much out of this blitzing position by leaving three blots around the board with the play B/21 13/9 8/4*(2). This problem illustrates an important concept dubbed *non-commitment* by Robertie in his excellent book *Modern Backgammon*. Black does not need to gamble his entire game on a blitz, especially when the alternate racing plan is just as likely to work. Also, the cube is unturned, and thus the extra gammons from the blitz are not yet activated. Why risk the downside of a blitz yet? Better to play a balanced game, B/21 8/4*(3), without committing to a blitz, then offer the cube and, depending on White's roll, either cash the game or go for the gammon next roll. The Jacoby rule changes checker play in subtle ways, speeding up the aggression in some games, slowing it down in other games, all in response to the relative improvement between single games and gammons. Here it tempers the zeal for launching a blitz.

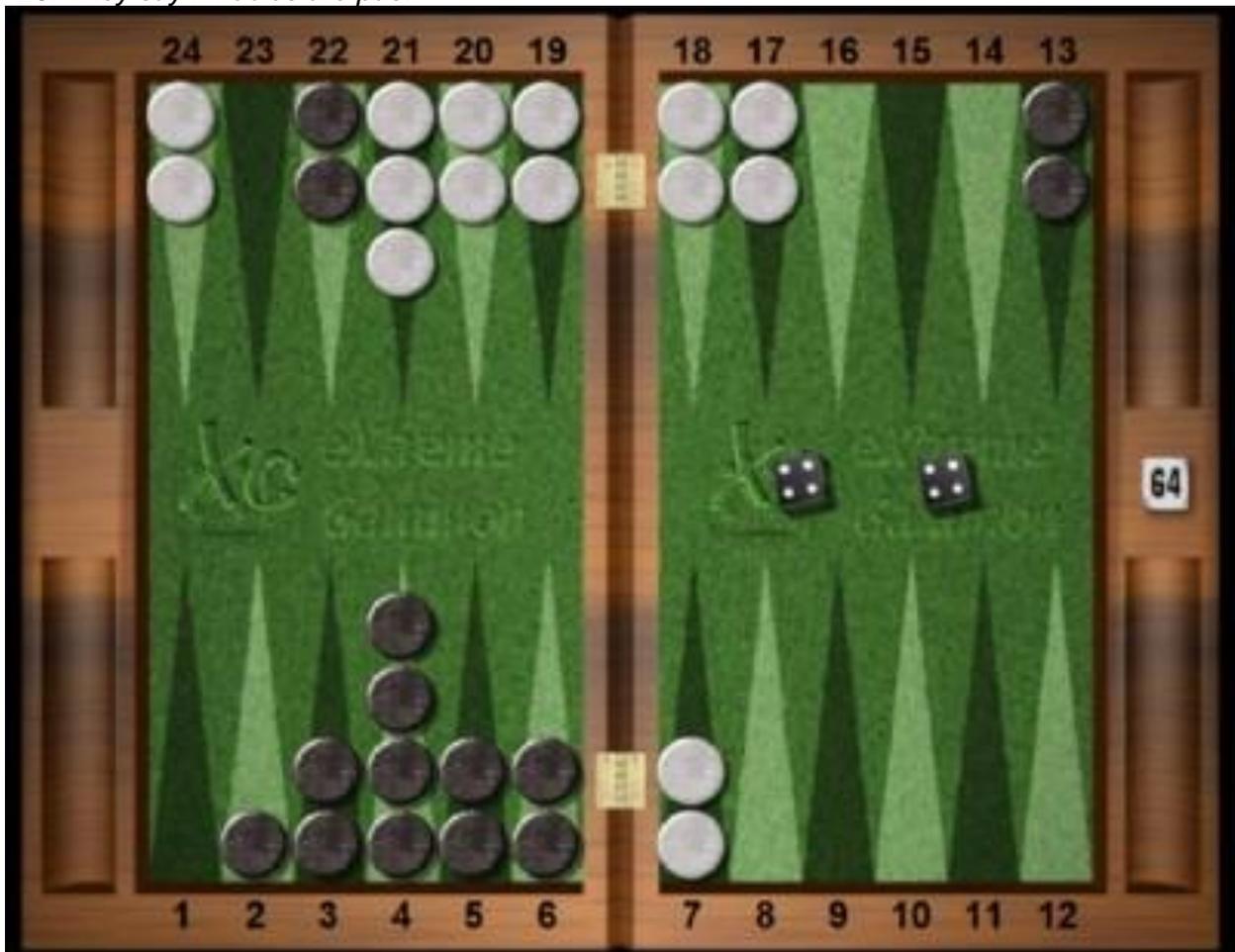
124. *There's many a man has more hair than wit.*



Some days it doesn't pay to gnaw your way through the dice cups (sorry Mr. Wright). Black has made his third consecutive blunder here and *still has a hefty lead in this game!* Hmmm, why is the cube unturned? That makes four blunders. So Black should remember this episode when he feels like complaining about his bad luck.

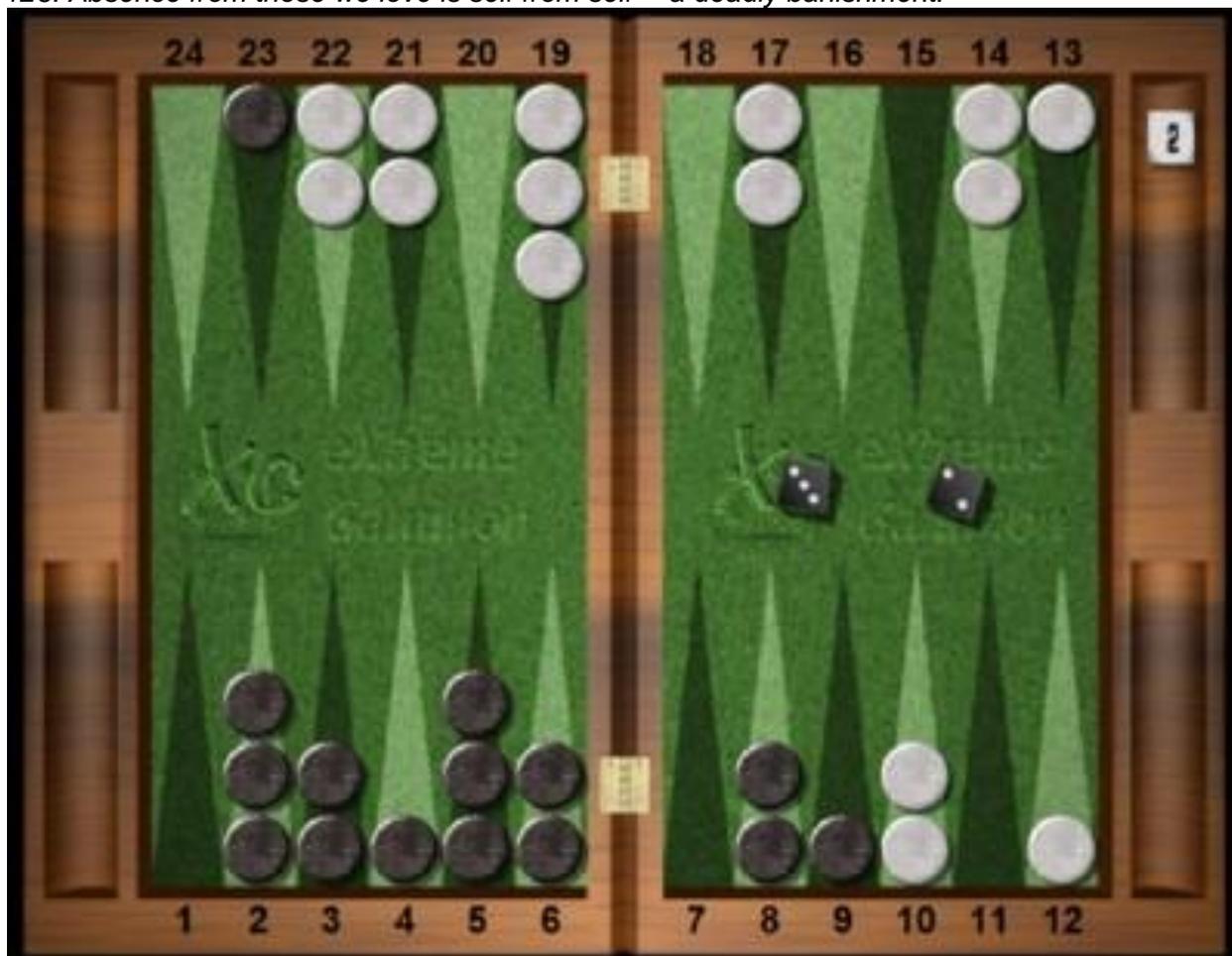
The correct move is to make the full prime and split off the anchor with 22/20 13/8 which enables a backman to run. Sure White will start hitting the three black blots, but for White it's out-timed if you do, and out-primed if you don't. White currently leads in the race, so if Black just keeps scrambling, he should still win this game. Such is the power of the full prime, as long as Black keeps his back checkers moving forward in a sincere effort to escape.

125. *They say miracles are past.*



Would you consider this to be a good roll for Black? The more you look at it, the worse it appears. But Black still has two game plans that might work. First, the race is close, so running with miracle high doubles could perhaps win. Second, White is stripped in a holding game so, if Black maintains contact, White could be forced off the anchor with some rolls. Not moving Black's midpoint destroys Black's home board too much. Bringing the midpoint home relinquishes the game plan of hitting a broken white anchor. Something in between is needed and that something is 13/9(2) 6/2(2), which leaves no home blots to misbehave and avoids the ace point that wastes racing potential and perhaps blocking potential. When both sides are stripped, a temporizing play is often the best and occasionally the only viable move.

126. *Absence from those we love is self from self -- a deadly banishment.*



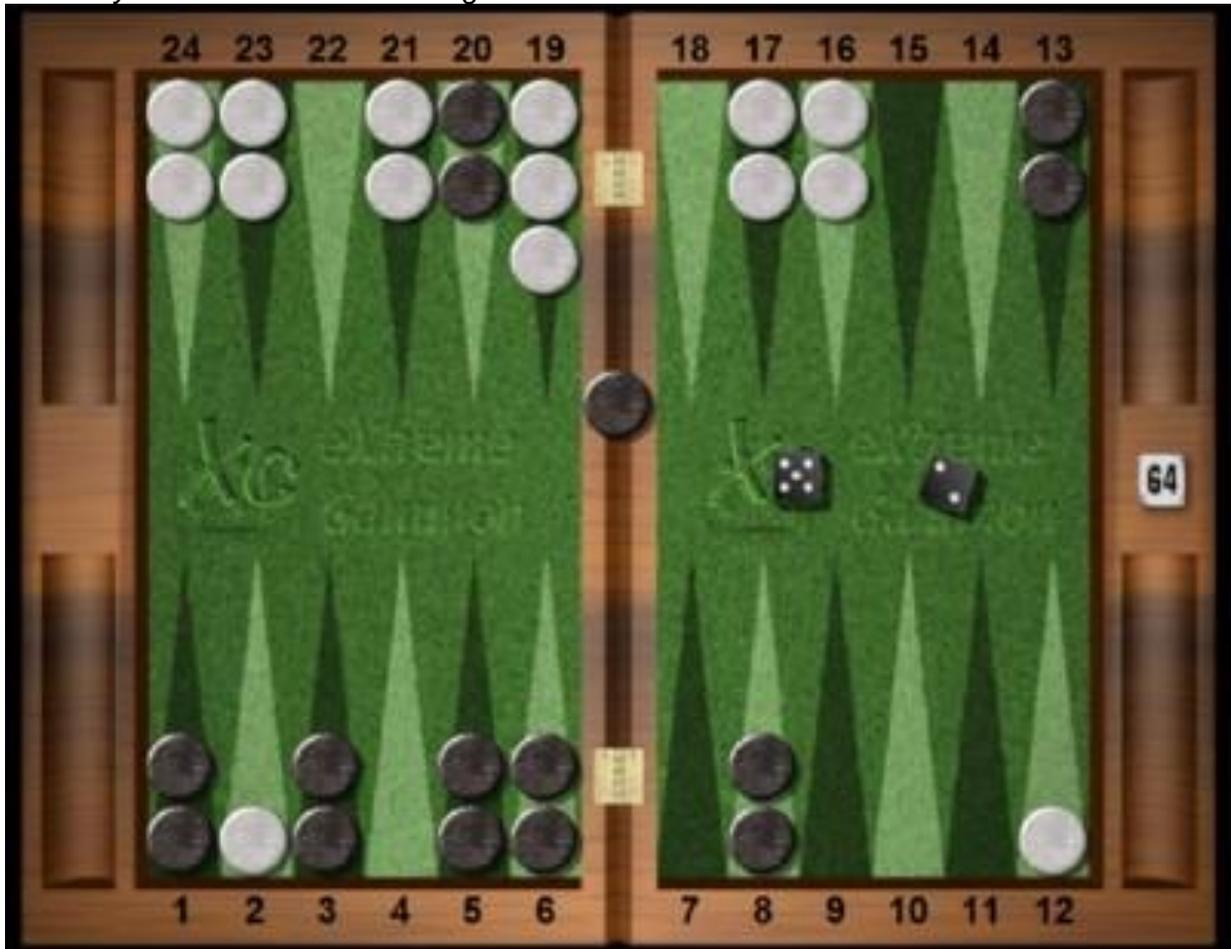
Black's chief problem is getting young Bart home for an easy bearoff victory. Despite coming under the gun, all moves which don't include 23/20 are blunders. It's true that White has a rich source of outfield builders so young Bart will come under immediate attack. In this position the key observation is that White does not need to hit the black blot to win this game. White only needs to make her barpoint and then her golden point, which primes Black. As White owns the cube, the barpoint may even be enough to win. White has plenty of builders to do so right now.

Conclusion: waiting to vault White's blockade is not a real option. Moving his straggler forward invites attack, but holding back is not a safer alternative for Black. Play 23/20 8/6.

This problem illustrates a common misunderstanding in the comparison of risk. When doing nothing is dangerous, it's only the *extra* chances from a provocative move that enter the assessment of the relative

risk. Of course, this is always true but humans find it easier to perceive the total risk. When there is little cost to waiting, this total risk is essentially the incremental risk. But when a passive play is inherently dangerous, the overall situation is treacherous, and the risk must be partitioned mentally into that part above and beyond the passive risk. This is trickier to do accurately. With sloppy play and inattention we often don't even attempt to make this assessment and our game suffers as a result.

127. *I say there is no darkness but ignorance.*



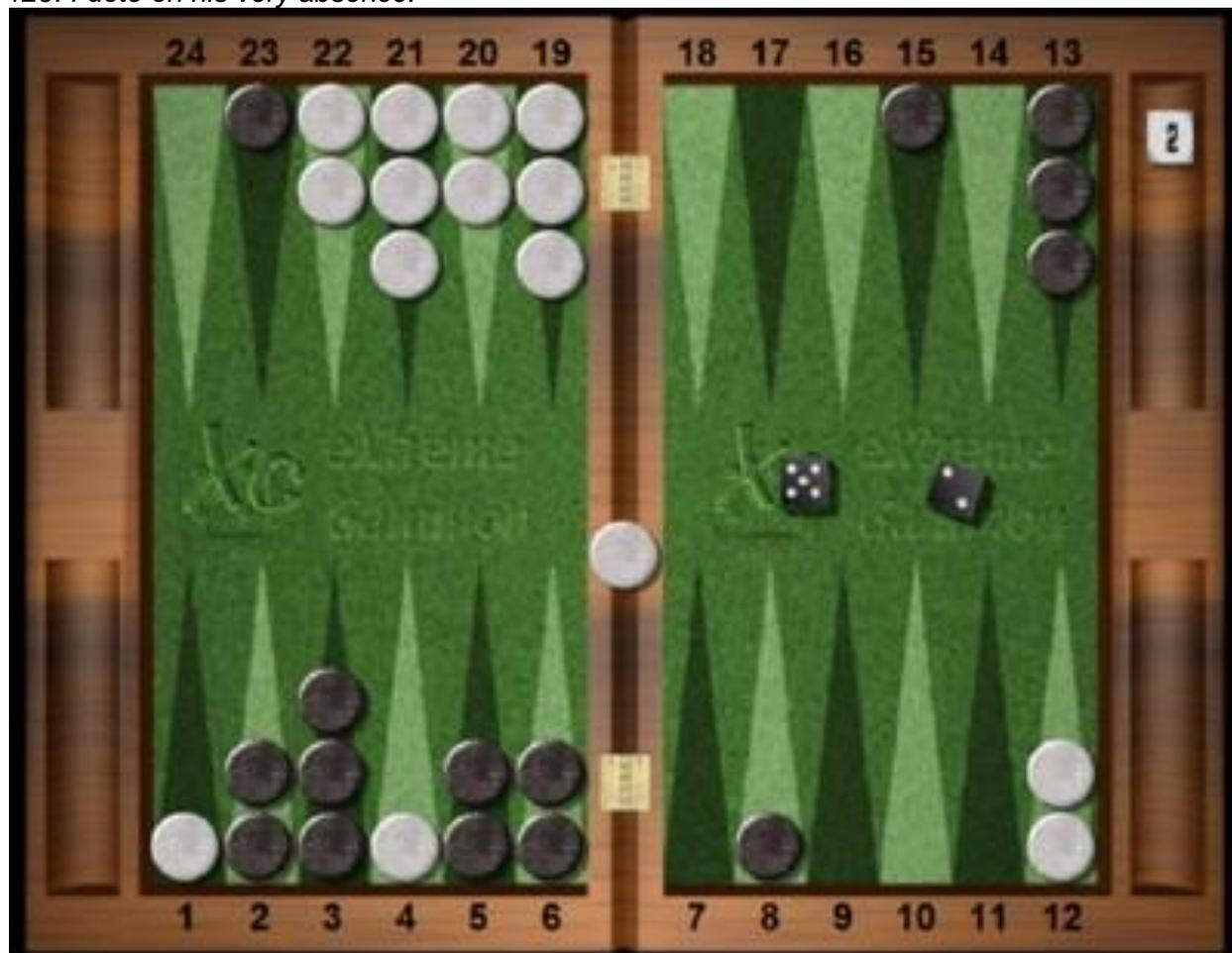
Dismantling a valuable point such as the 8pt or the midpoint is far worse than getting hit again by starting the 18pt with B/18. To put this into perspective, because of the black anchor on the 20pt, getting hit on the 18pt is about the same as dancing on this particular roll. Dancing is often preferable to dismantling a vital point. The interplay of timing and primes is built on this observation. Offering a triple shot inhabits nobody's comfort zone and therefore finding the courage to choose such risky plays is not easy in backgammon. All players have felt the torments of indecision that Hamlet endured. It's an occupational hazard in this beguiling game. The only lasting advice is: focus on winning game plans and preserve assets whenever possible.

128. *I wasted time, and now doth time waste me.*



Black entered on his 24pt hitting the white blot but sealing in his backman behind White's full prime. Slotting the golden point causes the construction of Black's counter prime to come to a dead halt if White hits upon re-entry. If Black knew that White would enter on her 20pt without hitting or pointing, Black would be happy to allow her new back checker to skip past Black's outfield. Even with only one trapped white checker, Black is very much in the game if he makes his golden point naturally and hence the full prime. A white return hit of the slotted black 5pt is to Black's game plan what a fall into icy water is to the human body: a shock so severe as to stop the cognitive system instantly. Stay off the ice. Play B/24* 12/7 and pray against White's fives. Black owns the cube and has therefore paid to see the game through to its glacial conclusion.

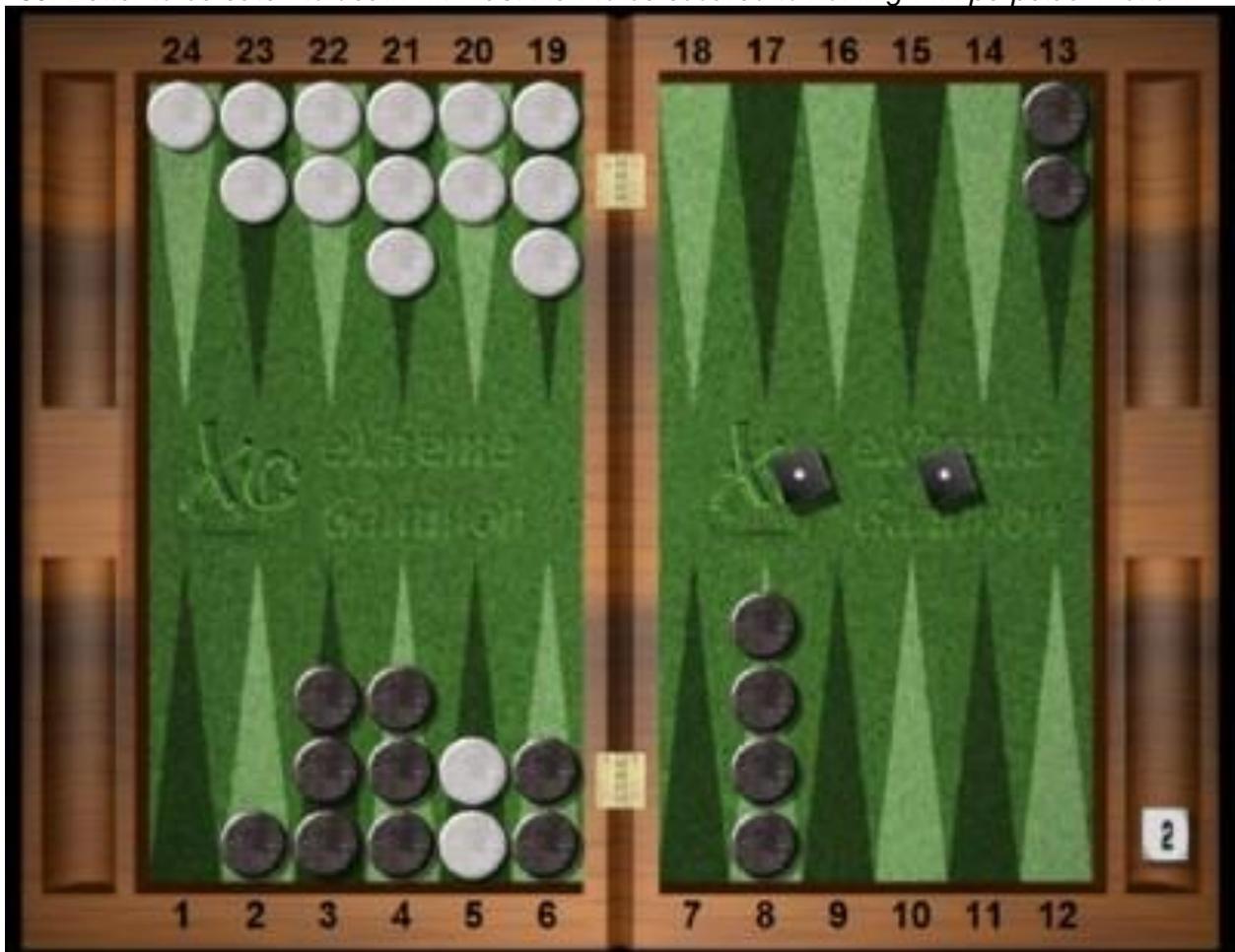
129. *I dote on his very absence.*



The play 15/8 is correct. Nearly equal to it is a play that escorts the backman to 23/18. But then Black chose the wrong deuce.

With White on the bar, after 23/18 it is better to safety the outfield blot 8/6 thereby training more builders on *both* white backmen. Duplication plays no part in this choice. The 15pt blot can either wait for rescue, or button up with the advancing 18pt blot. Since Black's 4pt is open and may soon become a white anchor, Black's game plan teeters between attack and race. When running with multiple blots, it is often best to have these blots on the same side of the board so that they can button up temporarily when partway home. In addition, if the leading blot is hit, the trailing blot might counter hit or even offer a landing post after a lucky roll from the bar. Once Black runs the backman, the black 8pt blot doesn't play any role in this camaraderie, which provides another excuse to move it home now.

130. *Better to be eaten to death with rust than to be scoured to nothing with perpetual motion.*

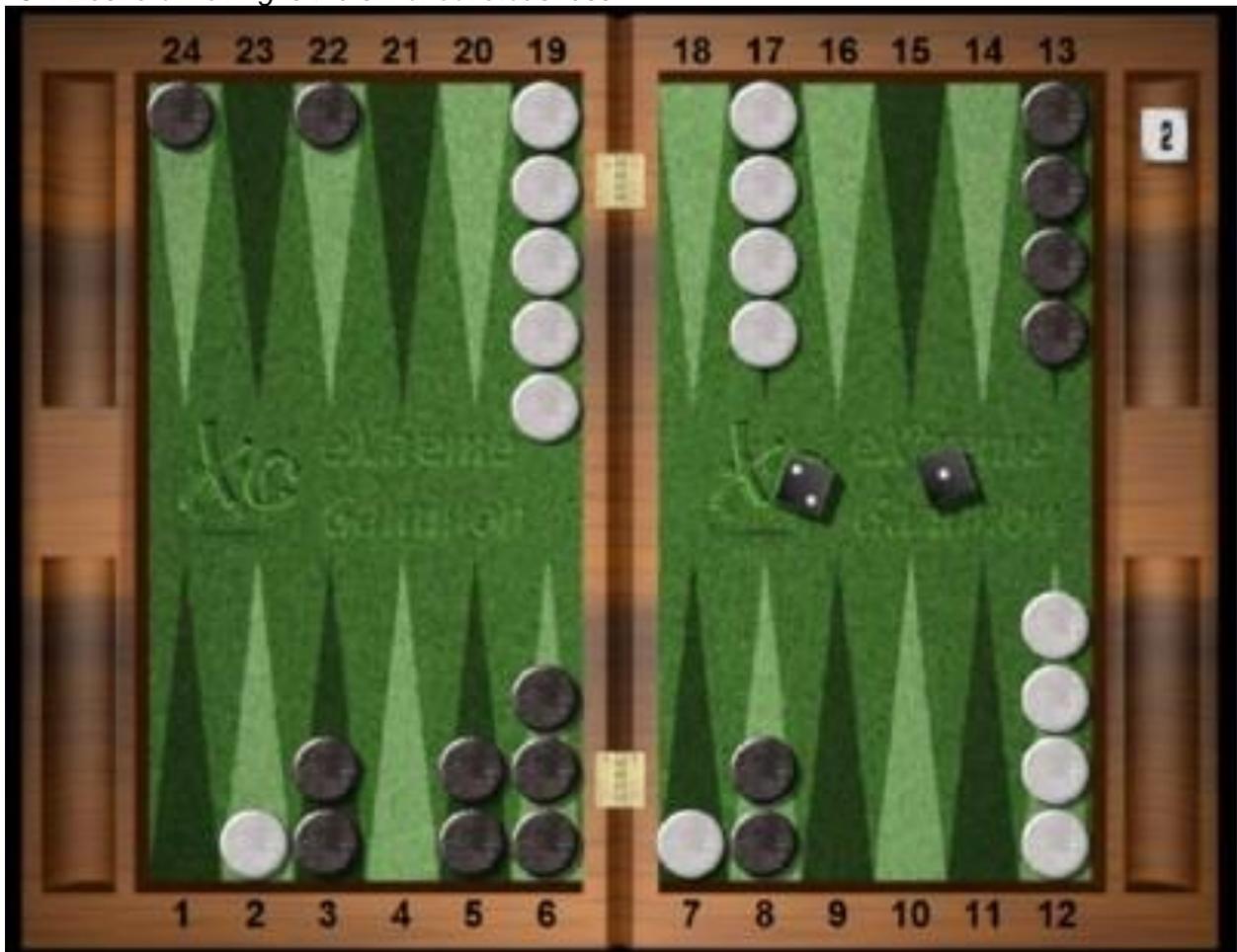


The race is close and Black has just rolled a low number. White has nearly closed her house but must play all sixes by breaking her anchor. The moment of crisis has arrived. The three viewpoints are: make the 7pt and 12pt; block sixes by making the 11pt; make the 7pt and cover the 2pt. Black chose the first play, which improves his builders and blocks on his barpoint but actually weakens his outfield control by turning White's rolls of 62s and 44s into good dice. The 11pt is the kind of play Black makes when trying to bust White's home board and possibly create awkward root numbers for the white anchor. Here White has time to play smaller dice in her home, so the 11pt block is not entirely effective, although it does create two builders for the 5pt.

The key to this problem is the word "crisis". Does Black really want a home blot lurking around if he has been lucky enough to break White's

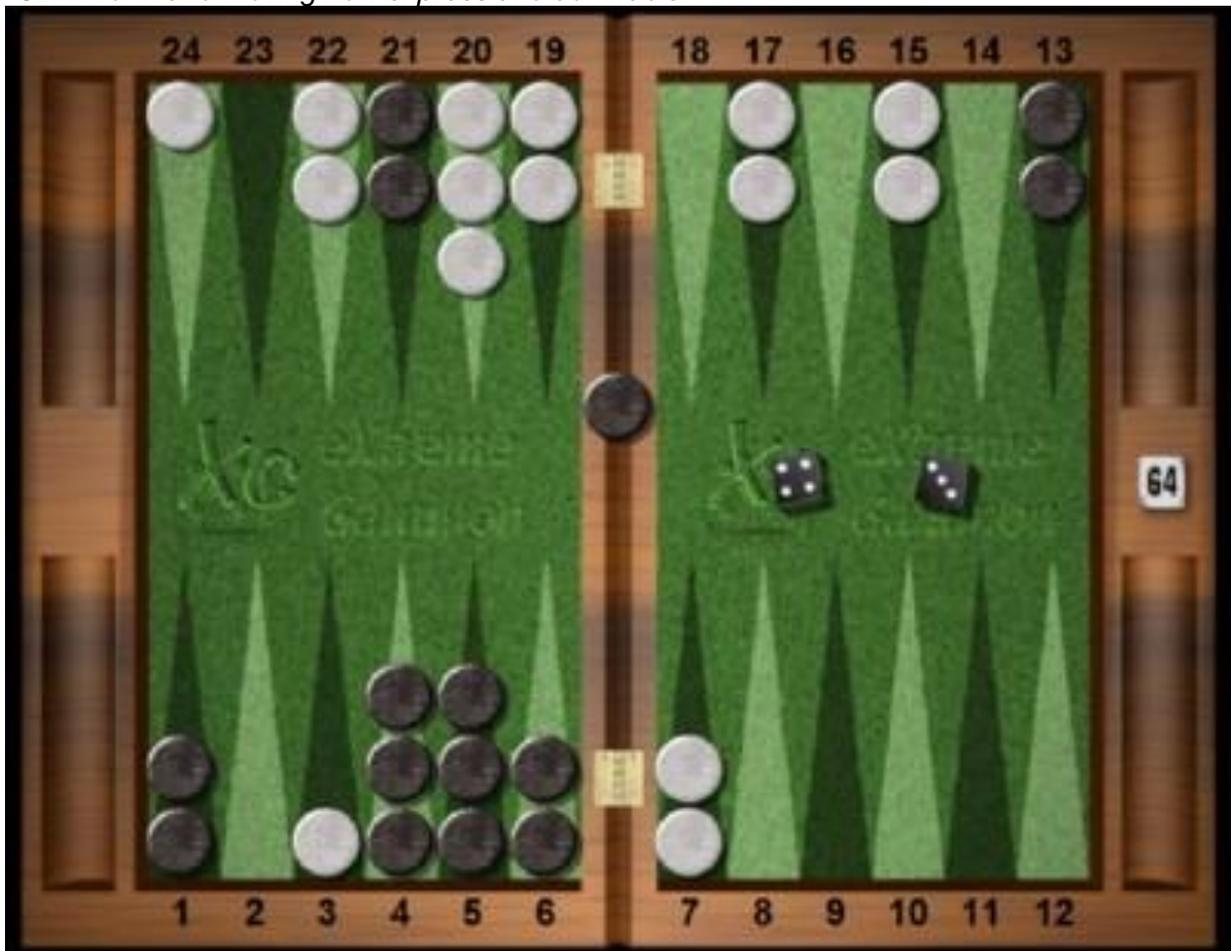
anchor and then hit a new white blot? No! Given that the midpoint is a better outpost than the 12pt, simply cover the 2pt. Best play is 8/7(2) 4/2.

131. *Desire of having is the sin of covetousness.*



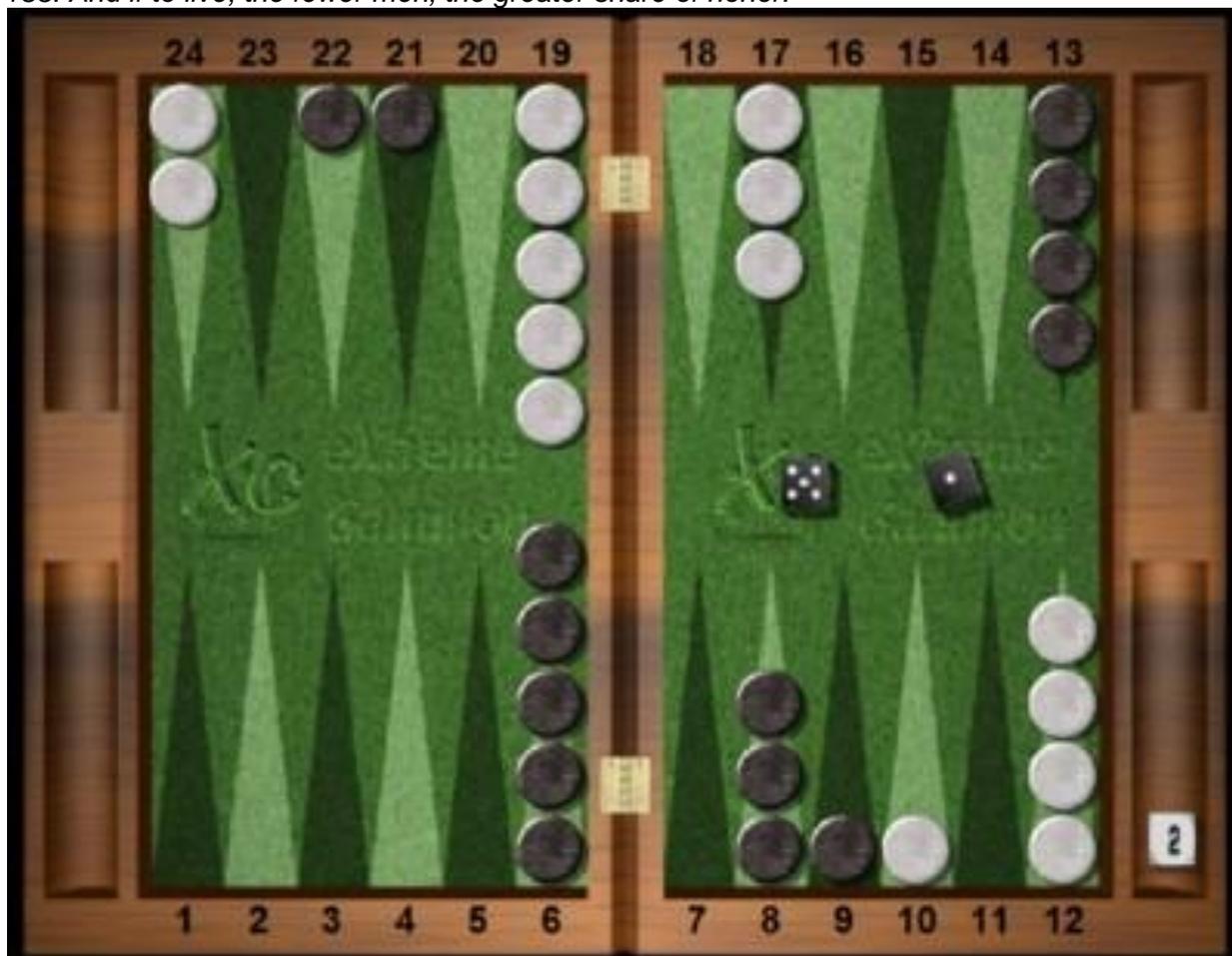
Certainly Black is going to hit the white blot 8/7* on the barpoint. Since Black may be launching a blitz, he longs for the comfort of an anchor. Black chose 24/22. But White's checker on her 23pt has both new black blots in direct range and, as such, Black's countdown to his blitz launch can be stalled if White hits back. Furthermore a successful black blitz will aim at deep home board points and therefore any new builder from the midpoint that makes the barpoint is demoted in importance. In other words, a builder on the barpoint is fine, but making the barpoint is no longer an urgent priority. Only if White makes the 23pt anchor will Black revert to a blocking game and then change his priority to remake the 8pt and 7pt. The best play now is 8/7*/5. If the blitz gets launched, then making the barpoint becomes superfluous.

132. *In form and moving how express and admirable.*



Black agonized over the choice of B/18 because of the double shot. However, with the exception of one back runner each, both White and Black's positions are already stripped. Therefore the next few rolls for Black are likely to be about running this same checker. Will White be less likely to hit Black's runner any time soon? Not with the runner on her 22pt and the builder on her 5pt, she won't be less likely. White would have threes and ones to hit now, yet threes and ones are the dice that fail to advance White's back checker. Thus if White hits now, there may be plenty of immediate return shots from the bar for Black. Since Black must run the third back checker sometime, why not now? Play B/18. Indecision, when mixed with objective thinking, can often lead to the correct answer, but the agonizing remains.

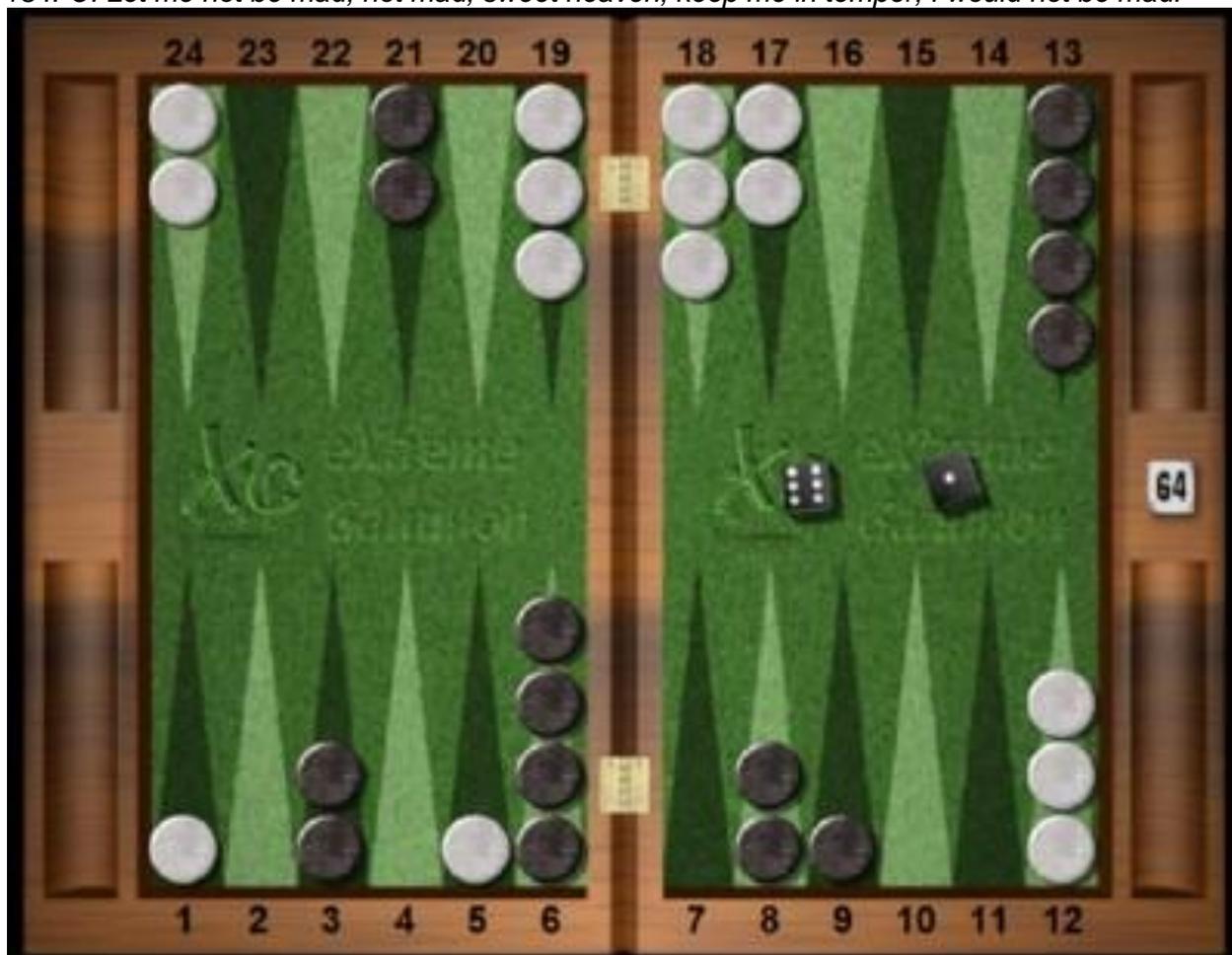
133. *And if to live, the fewer men, the greater share of honor.*



Black considered making the anchor, but the need to recapture a white checker clouded his reasoning. White has a big lead in the race, but her position is awkward. And awkward can be dangerous since, depending on her roll, White may have attacking plays up her sleeve.

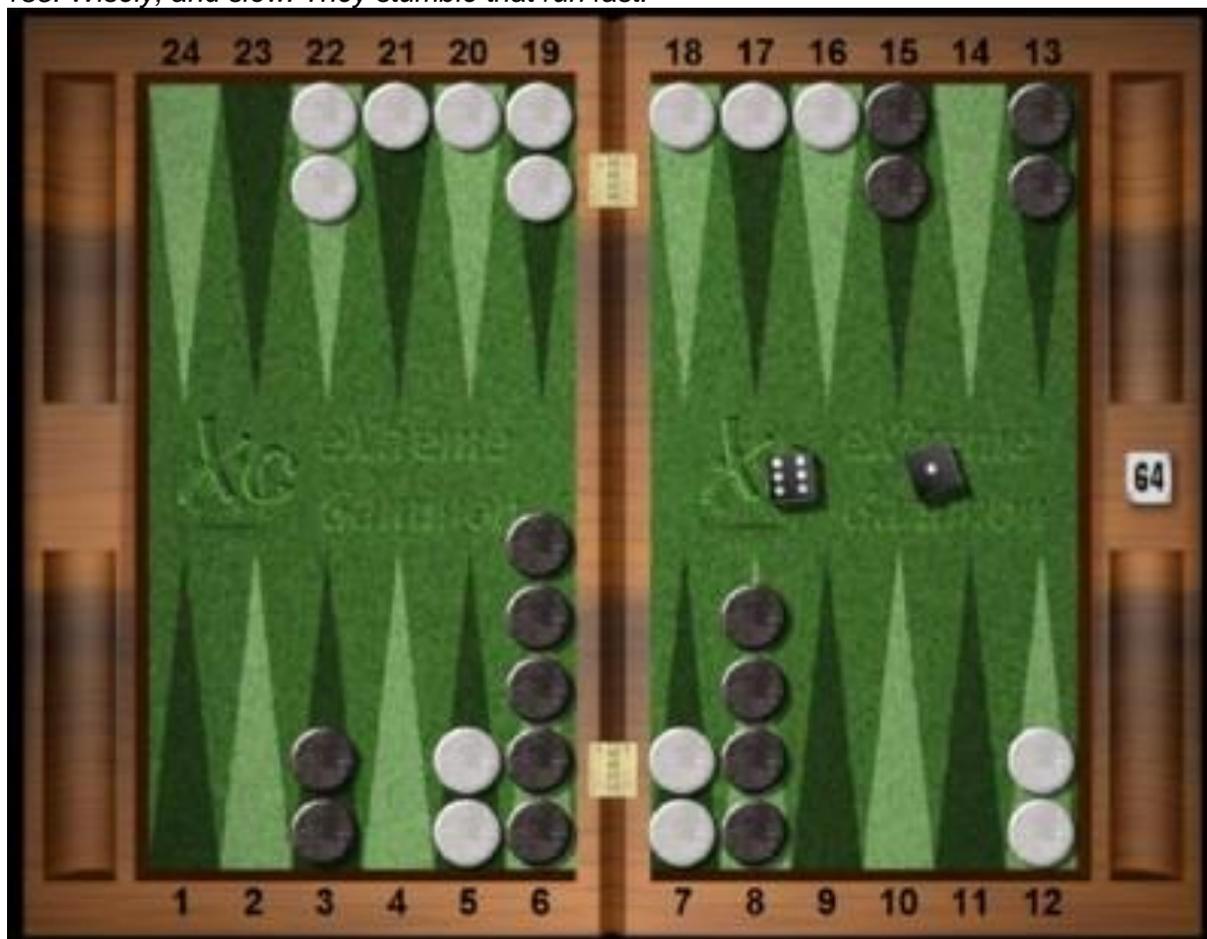
What is the advantage of pairing up the 21pt anchor? Longevity is the chief payoff. Black has been doubled. Thus the last thing Black wants is to get blitzed quickly and lose a gammon. The game is still in the early stages. Offering an immediate knockout punch to White fritters away the possibility of a drawn-out slugfest and a later hit blot. A longer game tends to favour Black, because Black owns the cube and White has made her inflexible 1pt guff. Also, Black cannot yet contain a new white backman, thus he must build his board rapidly with free slots, starting now with the 4pt. Best play is 22/21 9/4.

134. *O! Let me not be mad, not mad, sweet heaven; keep me in temper; I would not be mad!*



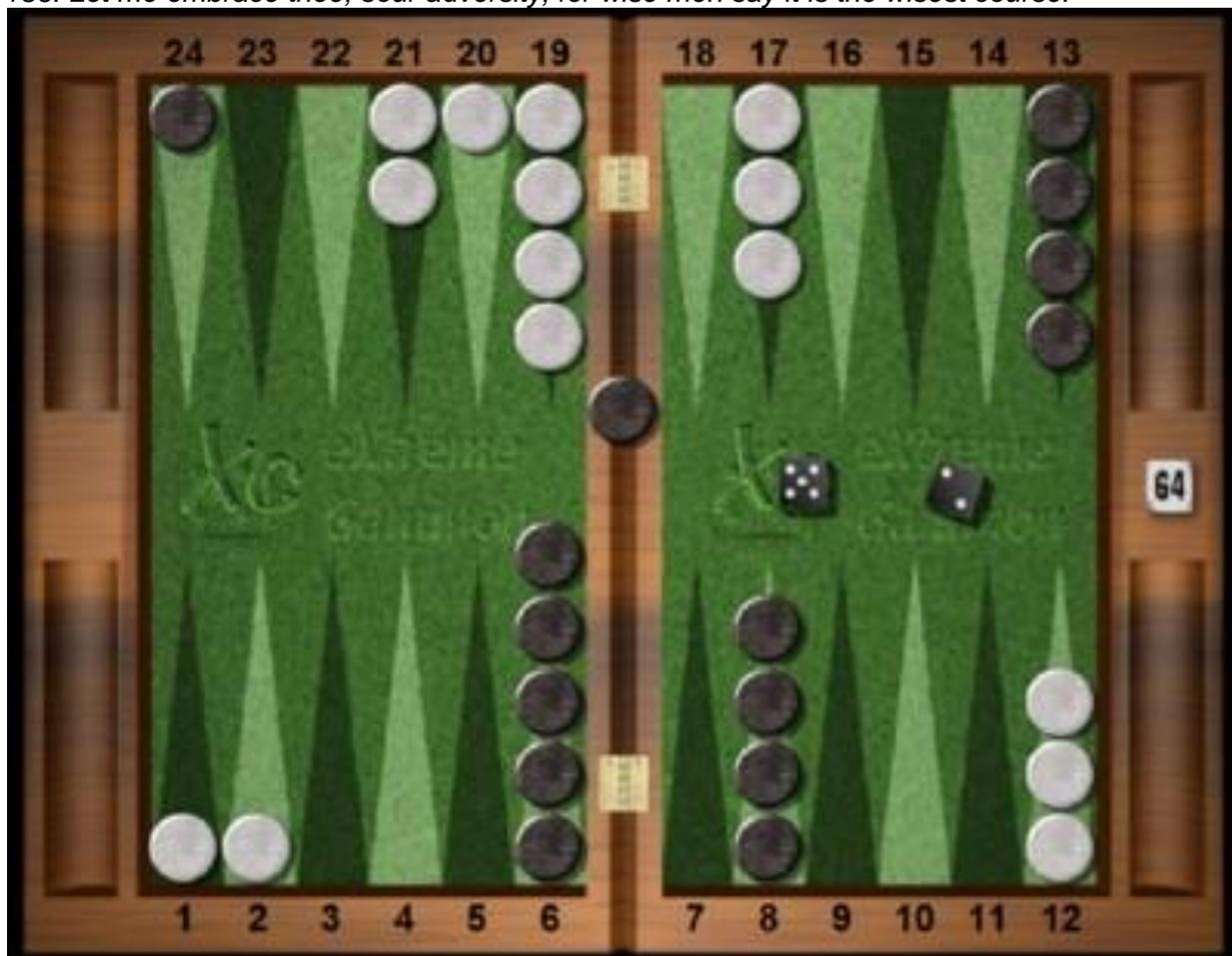
Magriel's bold play versus safe play criteria suggest that Black should hit loose on the golden point --- and so he should while bringing down another builder from the midpoint, 13/7 6/5*. This play scatters three blots as builders into the priming and attacking zone. If Black survives White's next roll he could be on his way to a full-scale blitz. Therefore Black should ask himself whether White will drop the cube if Black survives. Even when White dances, the cube is still a take, so there is no incentive to hold back on the slot of his barpoint. On the other hand, if several of White's replies were cube drops, then Black might question whether his additional exposed builder was worth the risk. In this position, however, there is no need to call off the dogs just yet.

135. *Wisely, and slow. They stumble that run fast.*



Black first considers whether he should make a run for it by breaking his 15pt and landing on his 8pt, except White is a favourite to hit his trailing blot. Black has a healthy lead in the race and White has home blots, so at first blush running looks sensible. But look carefully at White's structure. She may have home blots but she also has a spectacular array of builders. If Black hiccups on the bar, even for a moment, White could roll up a blitz faster than quicksilver on plate glass. Look again at White's structure. Every white point on Black's side of the board is stripped. White can make a stronger home board soon, but just as soon she may be forced to break a point that Black aims to attack. Black should play safely and passively by burying a checker on his ace point with 8/1. The play of making the deuce point by opening a blot on his 3pt is not better than 8/1 because his stacked 8pt votes in favour of Black's future prime extending from the 3pt to the 8pt inclusive. The deuce point cannot be part of the same prime.

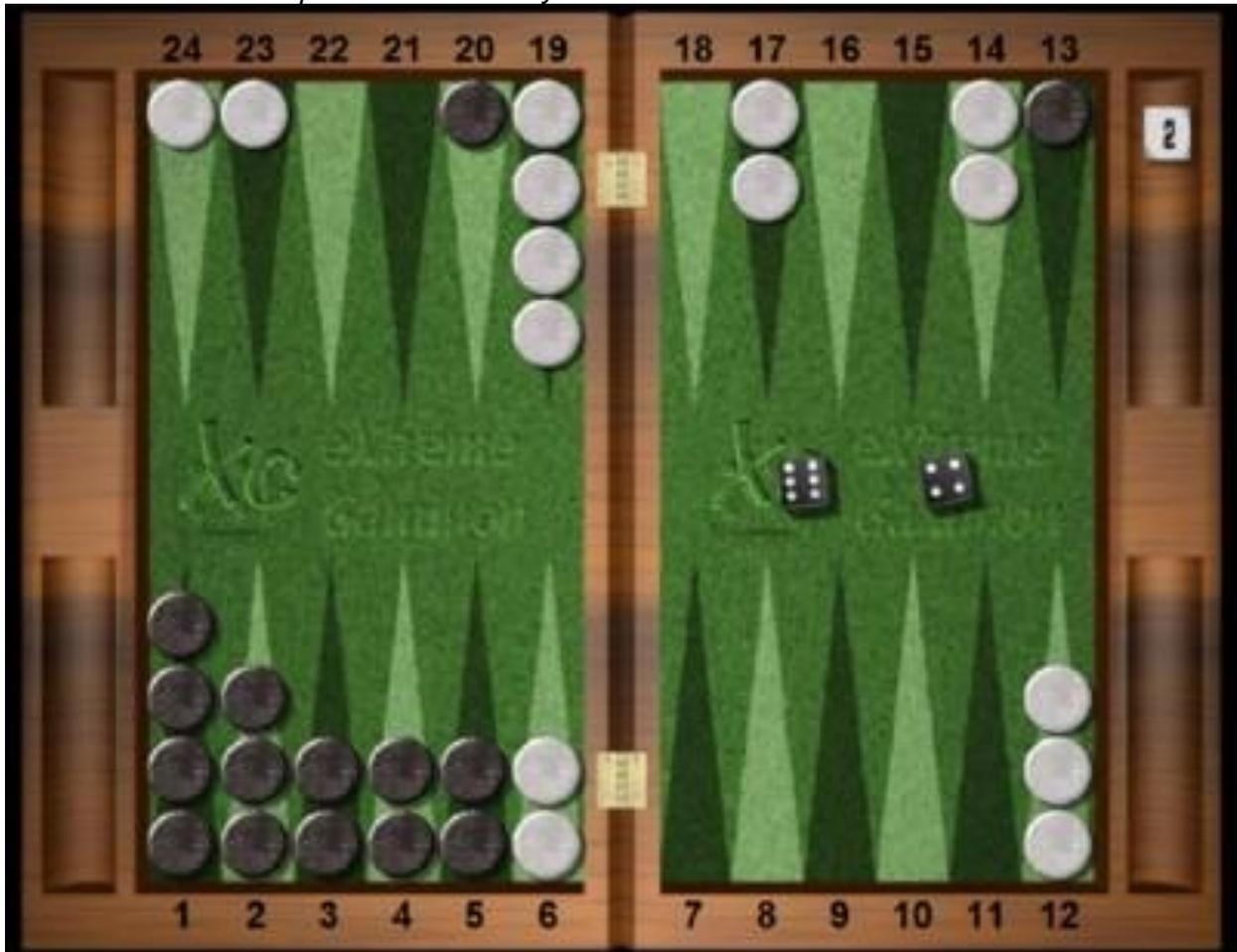
136. *Let me embrace thee, sour adversity, for wise men say it is the wisest course.*



Here is a simple standard opening position that nevertheless conceals some insights. Of course Black will hit the white blot from the bar. Where should Black play the deuce? If Black stops on the 20pt, his blot is harder to hit than continuing to the 18pt (sixes with combinations) and ultimately could lead to a better anchor than a barpoint anchor. In general, sixes are often awkward when played from the bar, although here White has options. Black could also bring a builder to the 11pt and try to strengthen his home board. Black has an extra spare on his midpoint available for this play, but his position would be too loose with three blots. Since she has three split backmen (bar, 24pt, 23pt), White is likely to arrive at an anchor before Black has a chance to build effective home board points. If so, then why would Black choose to be saddled with an extra blot on the 11pt? All in all the best play is B/20* 24/22 by a small margin. It keeps tighter connection

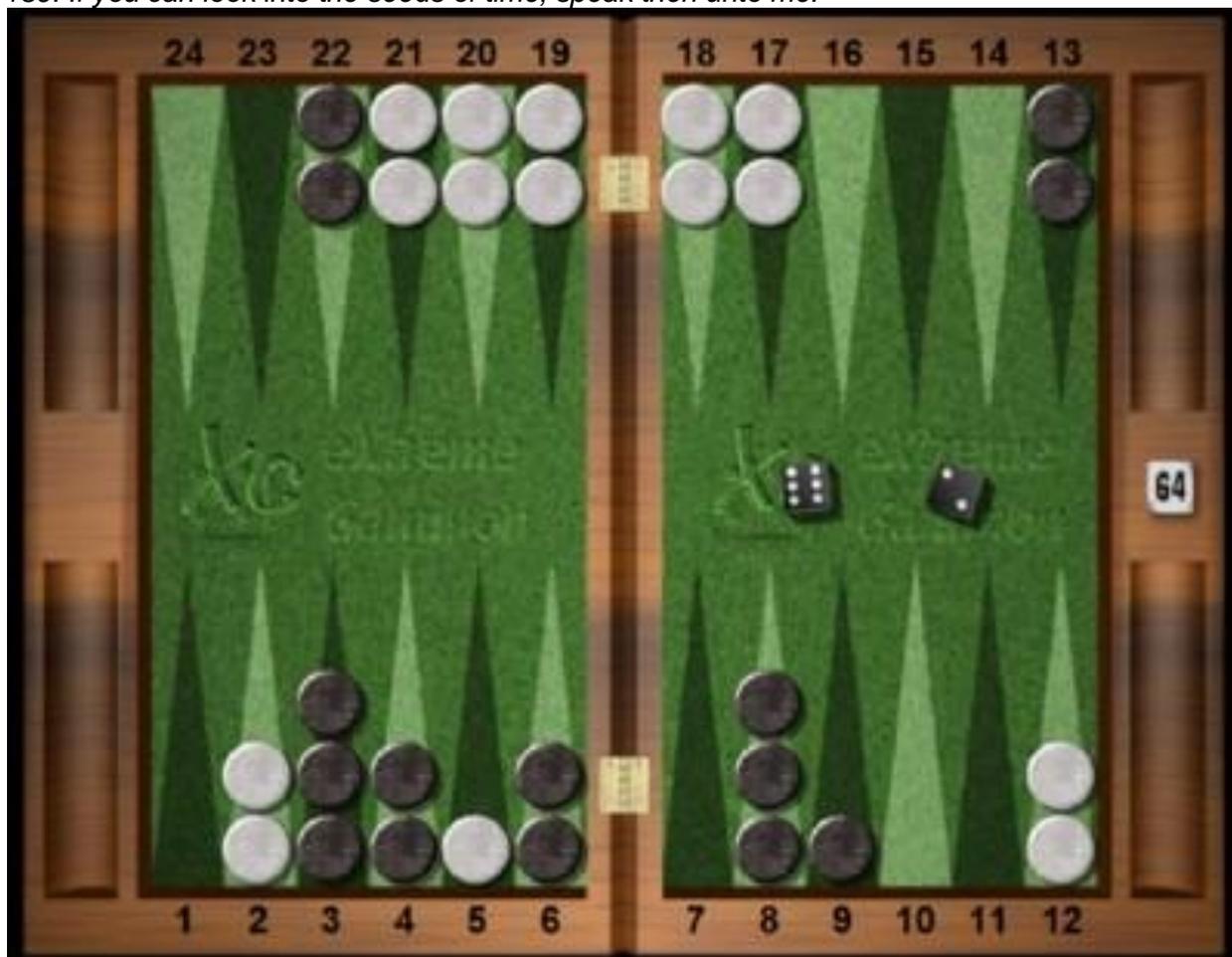
between the backmen and it better supports a racing game plan which, with fewer checkers back, currently favours Black as his best bet.

137. *I am not bound to please thee with my answer.*



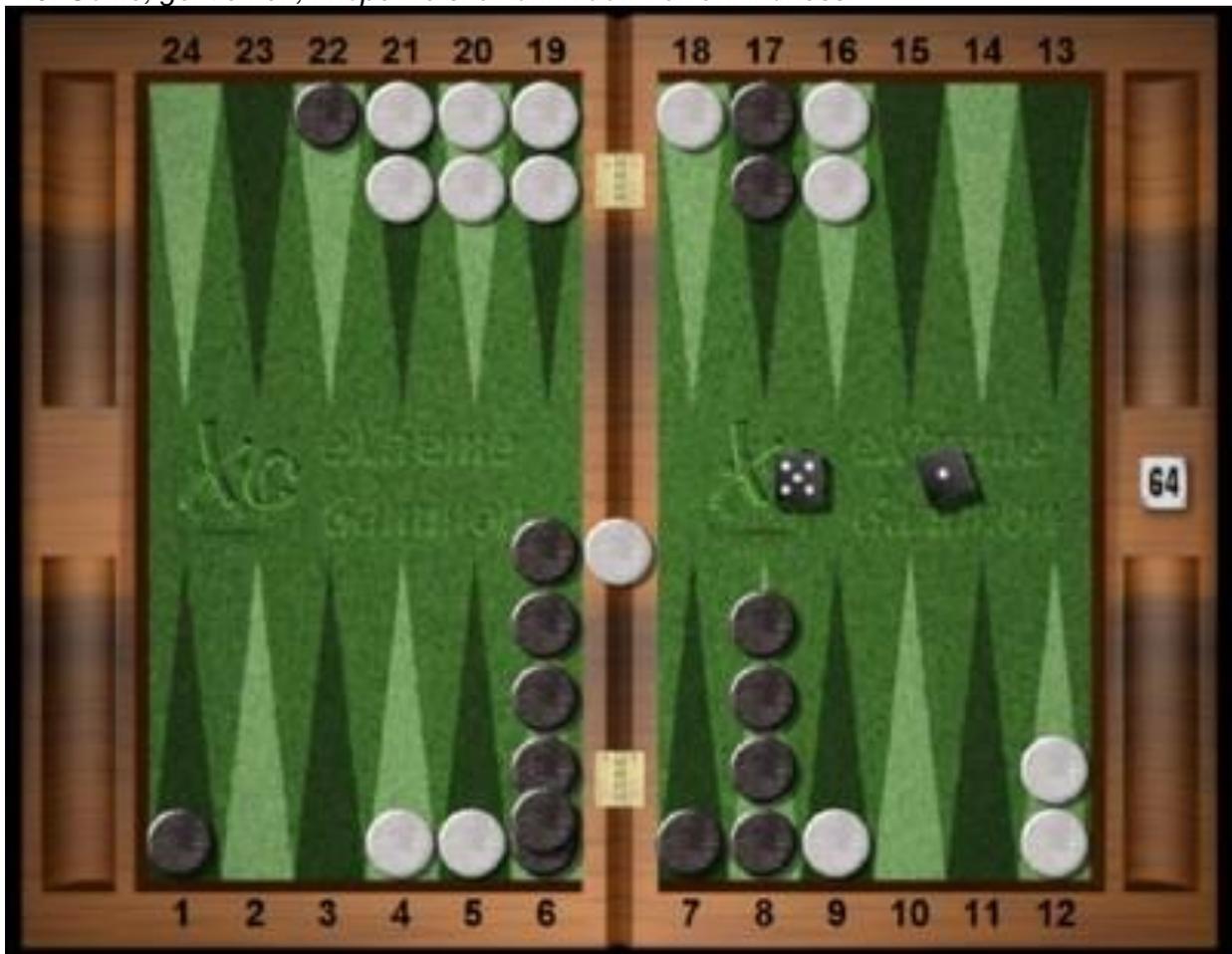
The disparity between Black's board and White's board is dramatic. Black chose to run a single checker to safety on his 3pt, thereby leaving only one straggler. This choice, however, was short sighted. A principle worth applying in this case is to offer a forward blot at the 10pt as bait with the play 20/10. Any return hit by Black from the 13pt after a white hit of the black 10pt blot is likely to be decisive. If White does not hit anywhere then Black can often button up his two runners, or save one and advance the other to minimize White's shots. With White's board so weak, a black checker on the bar threatens White's two home blots. A hand rollout might be a good idea to burn this principle into the reluctant brain.

139. *If you can look into the seeds of time, speak then unto me.*



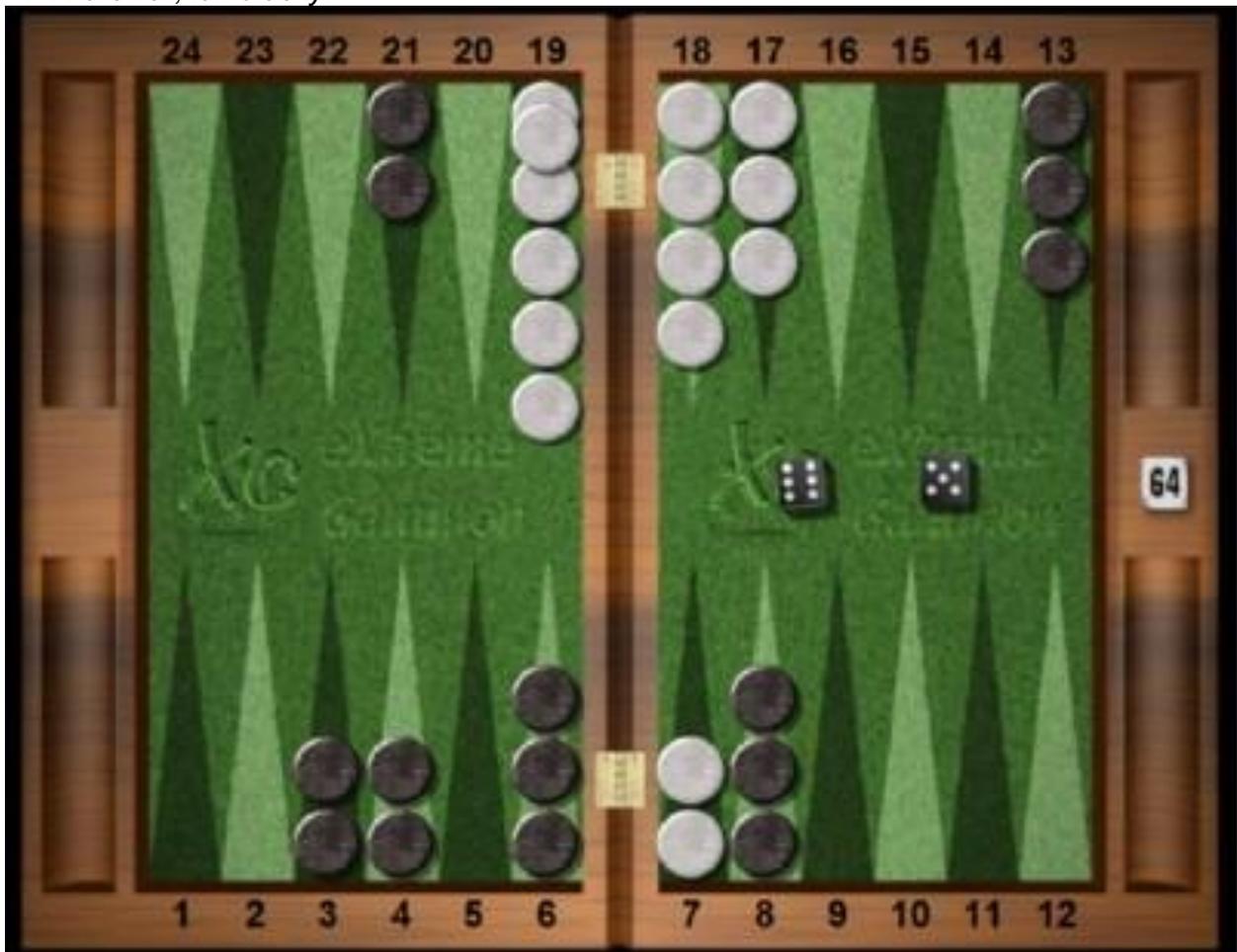
Here is an interesting position. Making the 7pt has merit but the price is high; a black midpoint blot coupled with a possible golden anchor for White means that a prime-versus-prime game plan favours White. White's timing is better; White's prime is better; hence White's game plan is better. Instead, running off the anchor and stopping will duplicate White's hitting fours as well as create another builder on the 6pt for a black attack. In prime-versus-prime situations, running off an anchor can sometimes be the antidote for bad timing. It takes courage to make the correct play 22/16 8/6 because White's blockade is so strong. But where does White stand if she does not hit? Something will have to give in her position, and either her midpoint or her blot would move. Then Black will have chances.

140. *Come, gentlemen, I hope we shall drink down all unkindness.*



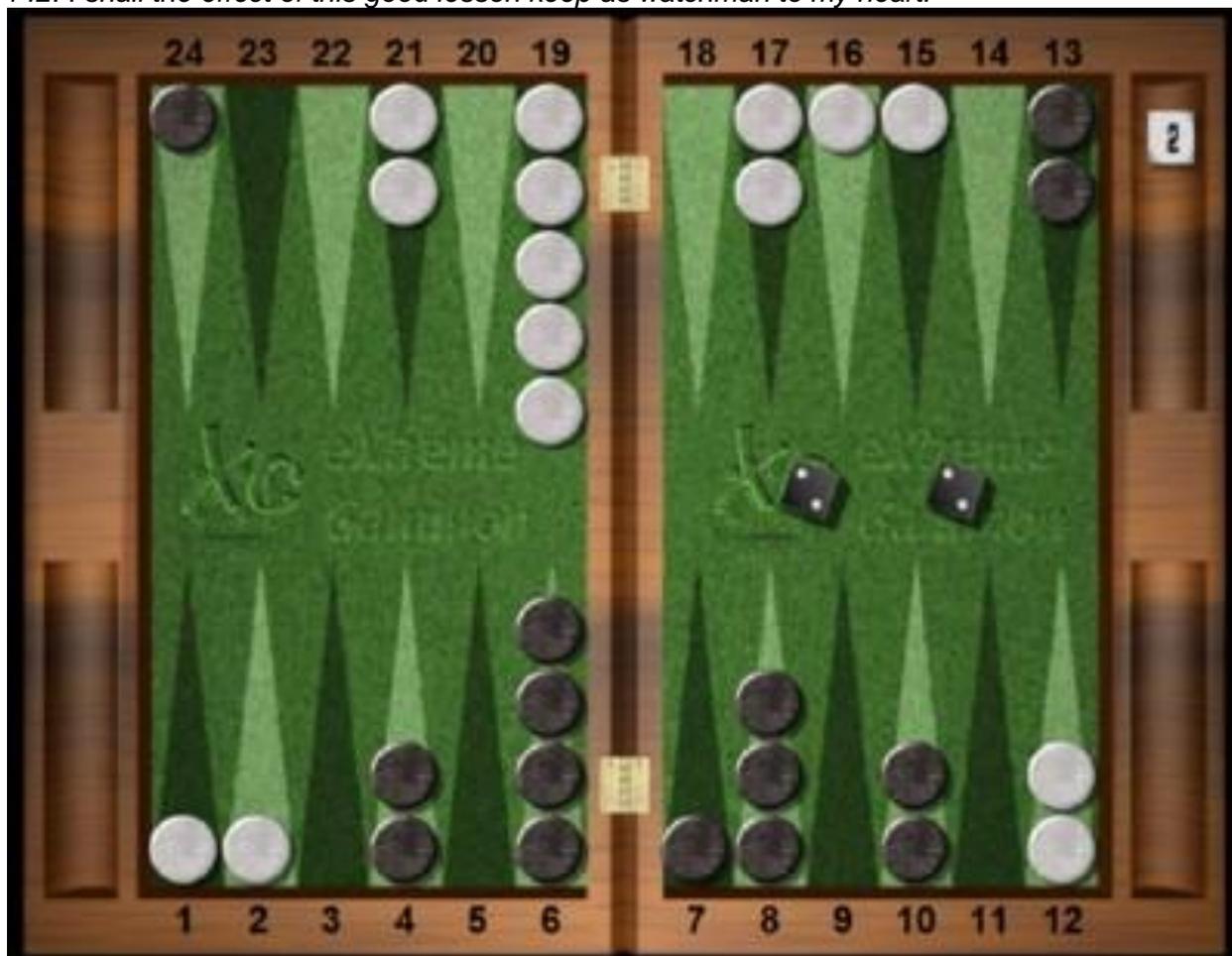
It's a heck of a mess for both sides with blots everywhere. White has a threatening board, her one indisputable major asset. Black has: nothing? Black does have a racing lead in what will prove to be a long game, but this racing lead can evaporate very quickly. One game plan that might work for Black is the blitz, although slotting into White's 3-point board is not appealing. Cover both of Black's blots? Safety Black's runner and bar point? Or make the "big" play and put a second white checker on the bar by hitting loose on the golden point and covering the 1pt blot, thereby unstacking? Almost none of Magriel's safe-versus-bold conditions apply here, but Black's position is so disjointed that a miracle is needed now. Hit loose on a second white blot with the play 6/1 6/5* then hope and cover and hope.

141. Farewell, fair cruelty.



This is a good problem to understand. The correct play is 21/16 21/15, an early leap from an anchor and its subsequent risks. What is strange about this run is that Black is losing the race although, if his blots are missed, the race becomes close again. If the leap works, Black controls the outfield and White is marooned on her 18pt anchor and must resort to praying for doubles. If Black is hit, he can usually enter and hit back because White will have broken her anchor. Black's stronger home board will then start to shine. Running both checkers from the anchor helps with the 'hitting back' part, adding a few shots to the count but also giving momentum to Black's outfield attack. Leaving one backman just sets up an easy target for a diversionary white counterattack.

142. *I shall the effect of this good lesson keep as watchman to my heart.*



There are several good choices for this roll. Hitting on the 16pt is the worst sensible choice. White already has more checkers back. Pointing on the 2pt blot is considerably better, although Black's home board would have gaps. However, step back and look at the overall situation. Both White and Black have a parallel strategy and parallel structure. Both are building prime-versus-prime positions on split backmen. This roll of 22s allows Black to make the bar and aim maximum builders at the empty golden point. Given the parallel strategy, this is a perfect roll. Black even leads in the race, and if his lone straggler then escapes, it threatens a racing strategy as well as blocking and attacking game plans. Play 13/11 13/7, although this play is admittedly in a dead heat with pointing on the 2pt.

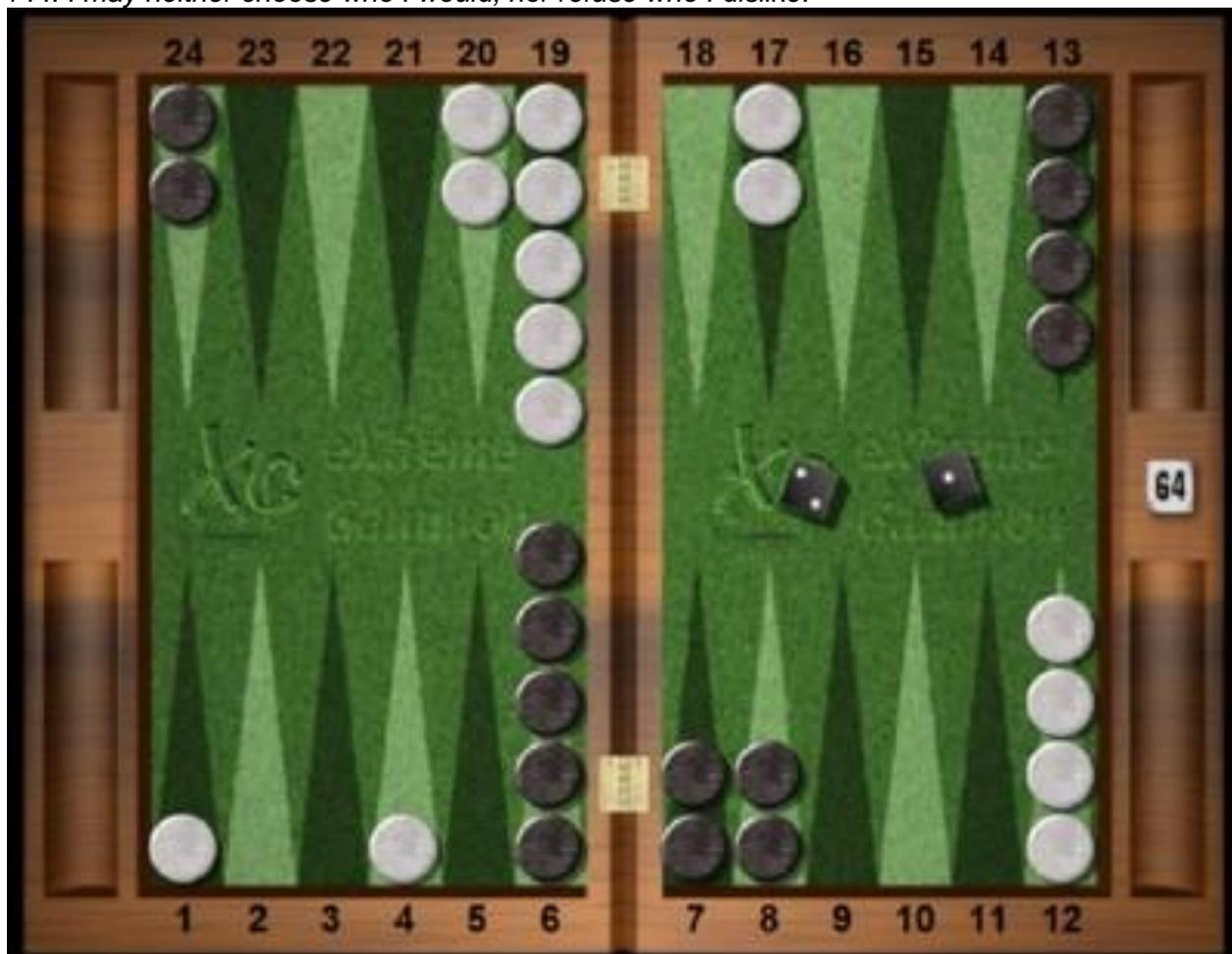
143. *He is winding the watch of his wit; by and by it will strike.*



Where to place a blot when trying to obtain a forward anchor? This is a major theme in backgammon which always repays study. Here is a position with several possibilities, and perhaps is a good candidate for hand rollouts. Black trails in the race. White's points and builders on her side of the board are necessarily spread out because she holds her deuce point. Black has a similar but a better connected blockade on his side of the board. Black has three checkers back; White only the one. Priming could work as a game plan for Black, but he does not want to be hit in his own outfield, mostly because his midpoint is stripped without yet owning a forward anchor. Black desperately needs that anchor. Since White's blocking structure now has gaping holes in her home board, Black would prefer his blot was hit *outside* of the white home board --- a brash concept considering the spares on the white midpoint and the made 11pt. That way Black will have better chances to make a forward anchor from the bar or, if

missed, make the barpoint anchor amidst the white checkers. Play 20/18
6/5.

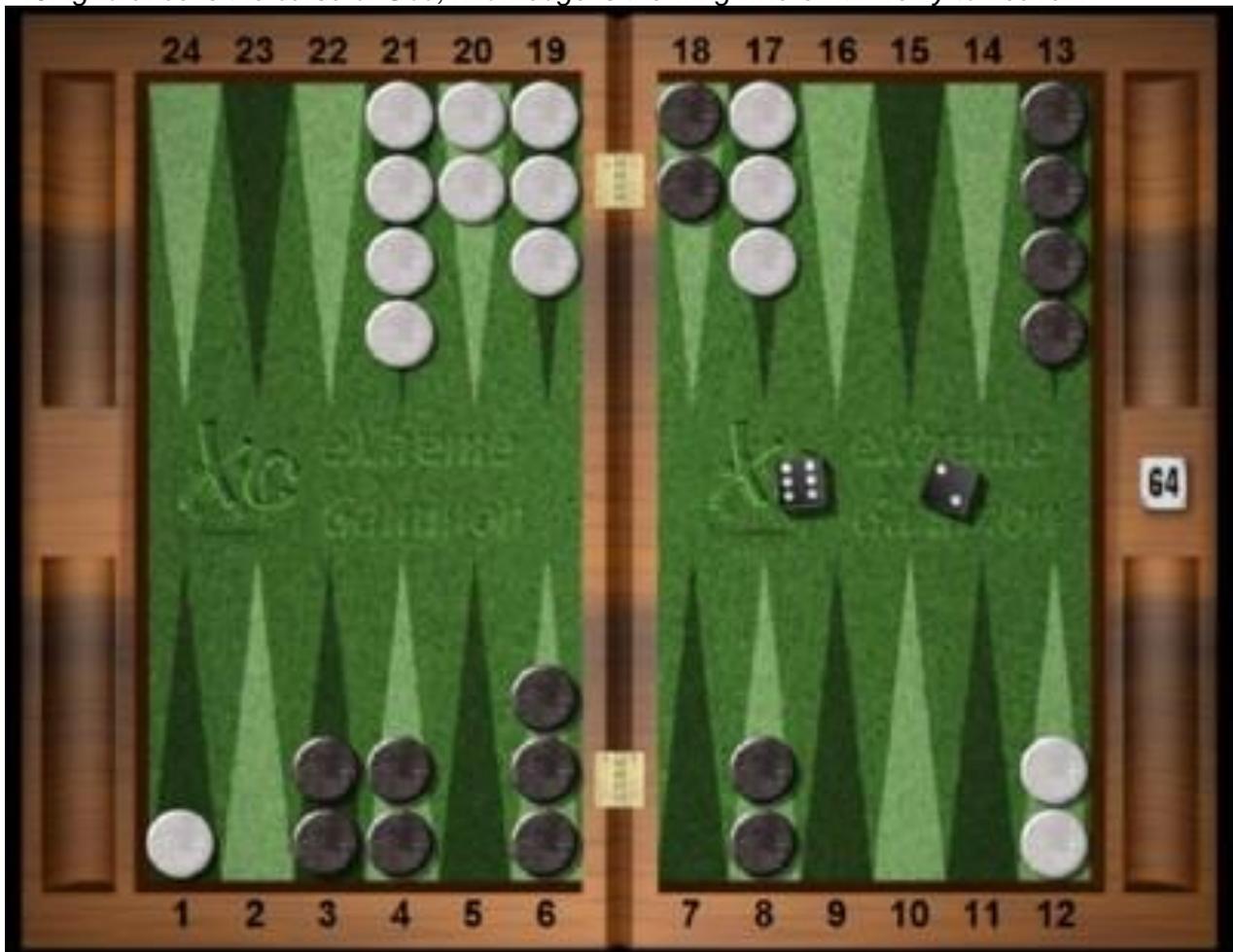
144. *I may neither choose who I would, nor refuse who I dislike.*



With her golden point White has the better board although the black 7pt is some compensation. White also has a small lead in the race and her split backmen may have a chance to make a high anchor. Should Black hit loose on this blot? Although White's golden point is a serious deterrent, Black's stacked 6pt screams out for a hit with the play 24/23 6/4*. It is better than the play 6/4*/3 because Black needs a high anchor and the protected split goes partway to it. By contrast, Black could get busy immediately at making a better anchor by advancing both backmen with 24/23 24/22, which trumps 24/21 because of the duplication of white threes. Even the shuffle from the 7pt to the 5pt with 7/5 6/5 is playable, unstacking the 6pt. Although the shuffle leaves a double shot on his 7pt blot, it allows a remake of the barpoint if missed. Note that the one play not advised is the standard opening of 24/23 13/11 primarily because the black position is weaker than the opening position. Once White's position

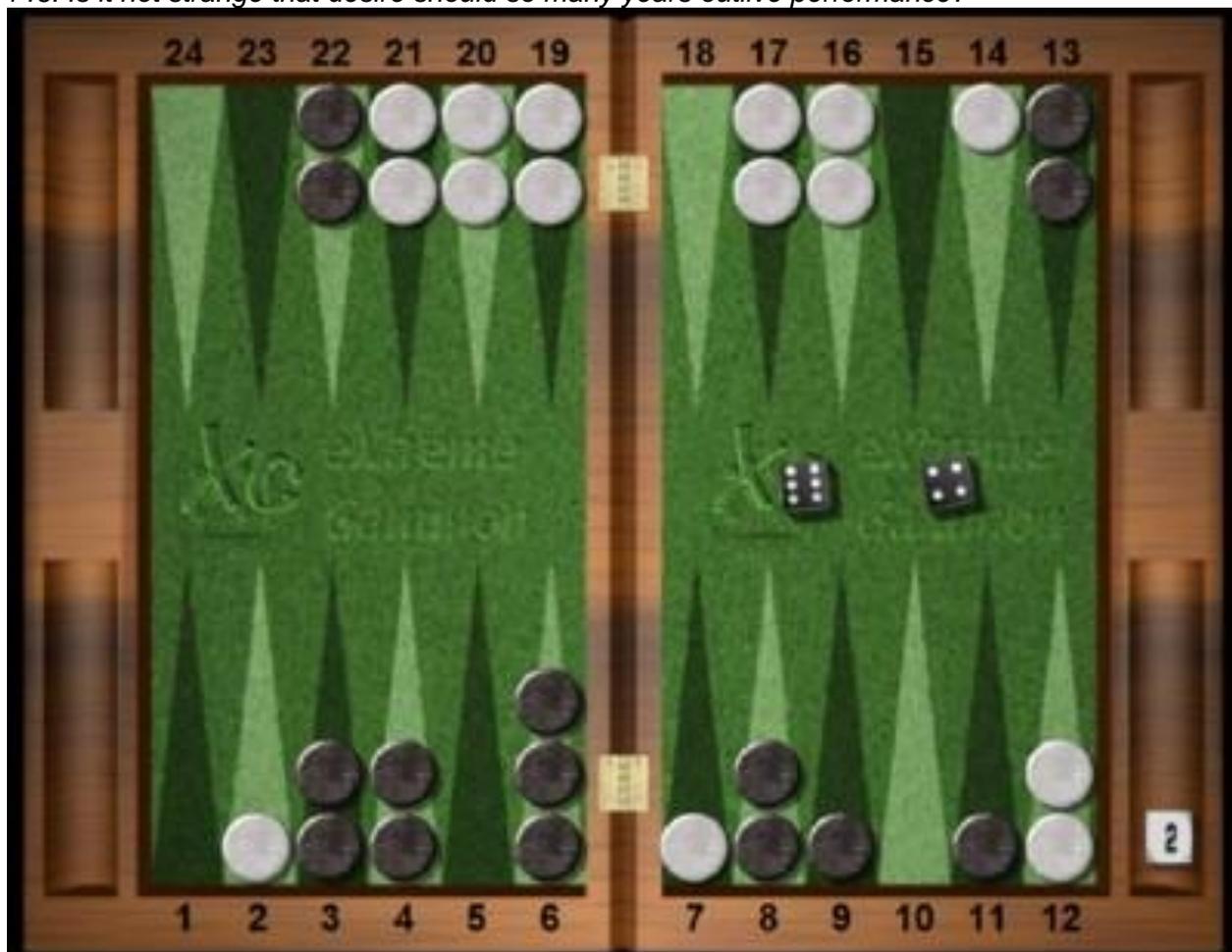
becomes stronger than Black's position, then Black should rarely volunteer blots on both sides of the board without White dancing on the bar. In summary, there are three good answers to this problem, but 24/23 6/4* gets the nod by a whisker.

145. *Ignorance is the curse of God; knowledge is the wing wherewith we fly to heaven.*



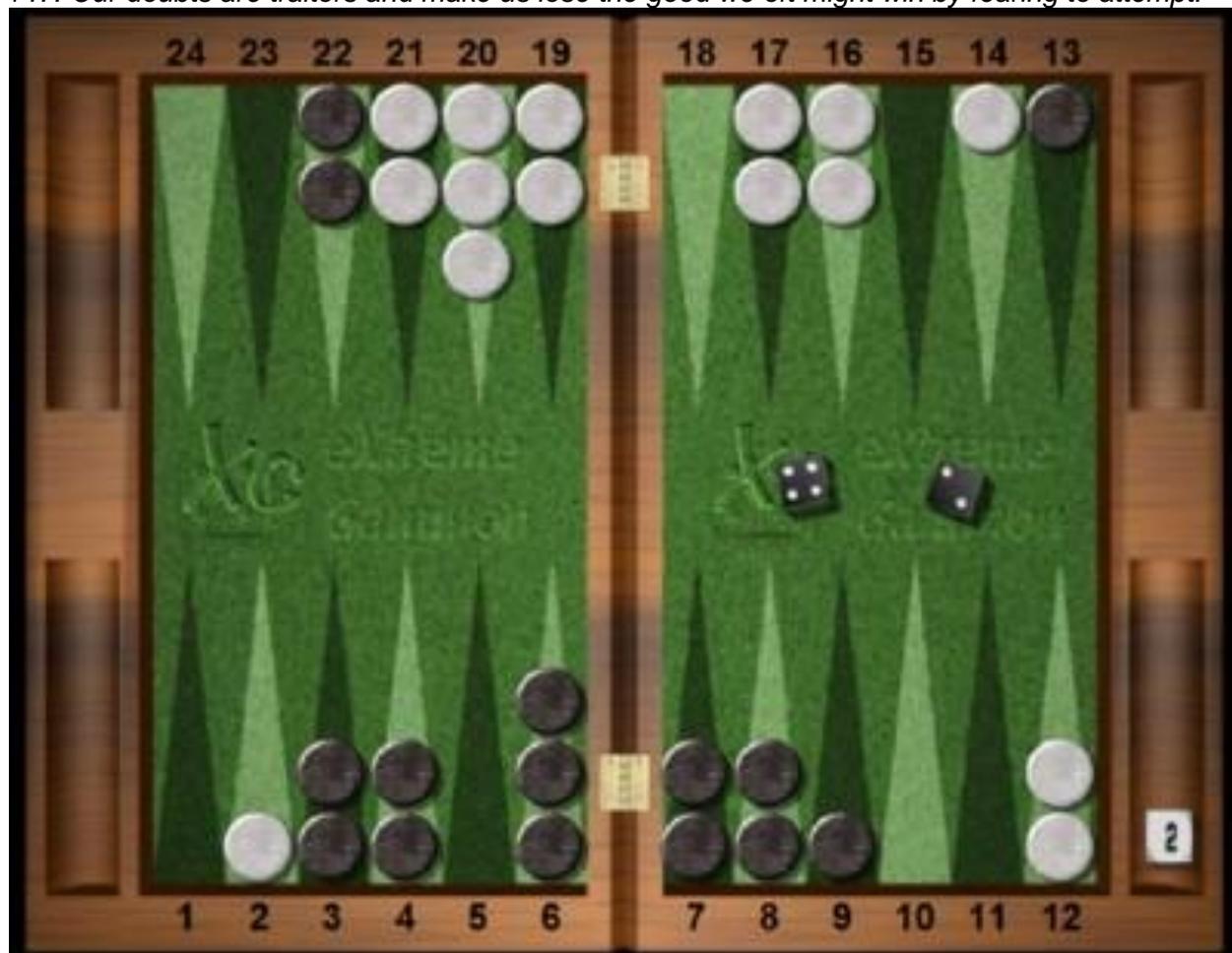
Here is a case where slotting the barpoint is better than slotting the golden point. White is stripped on her midpoint and has a small lead in the race. Her lone backman therefore needs to run soon. If Black slots his 5pt and then makes it, his home board will be excellent for any hit of the white blot but it will hardly stop White from running in the next two or three rolls. Slotting the black 7pt and covering does inhibit White's escape on her second and subsequent rolls. Admittedly, Black's home board is not as deadly if a white blot is hit, but a made barpoint produces more hitting chances in the near term. Furthermore, the extra builder on the 11pt ensures better coverage of the slotted 7pt, especially when compared to the slotted 5pt. Play 13/11 13/7.

146. *Is it not strange that desire should so many years outlive performance?*



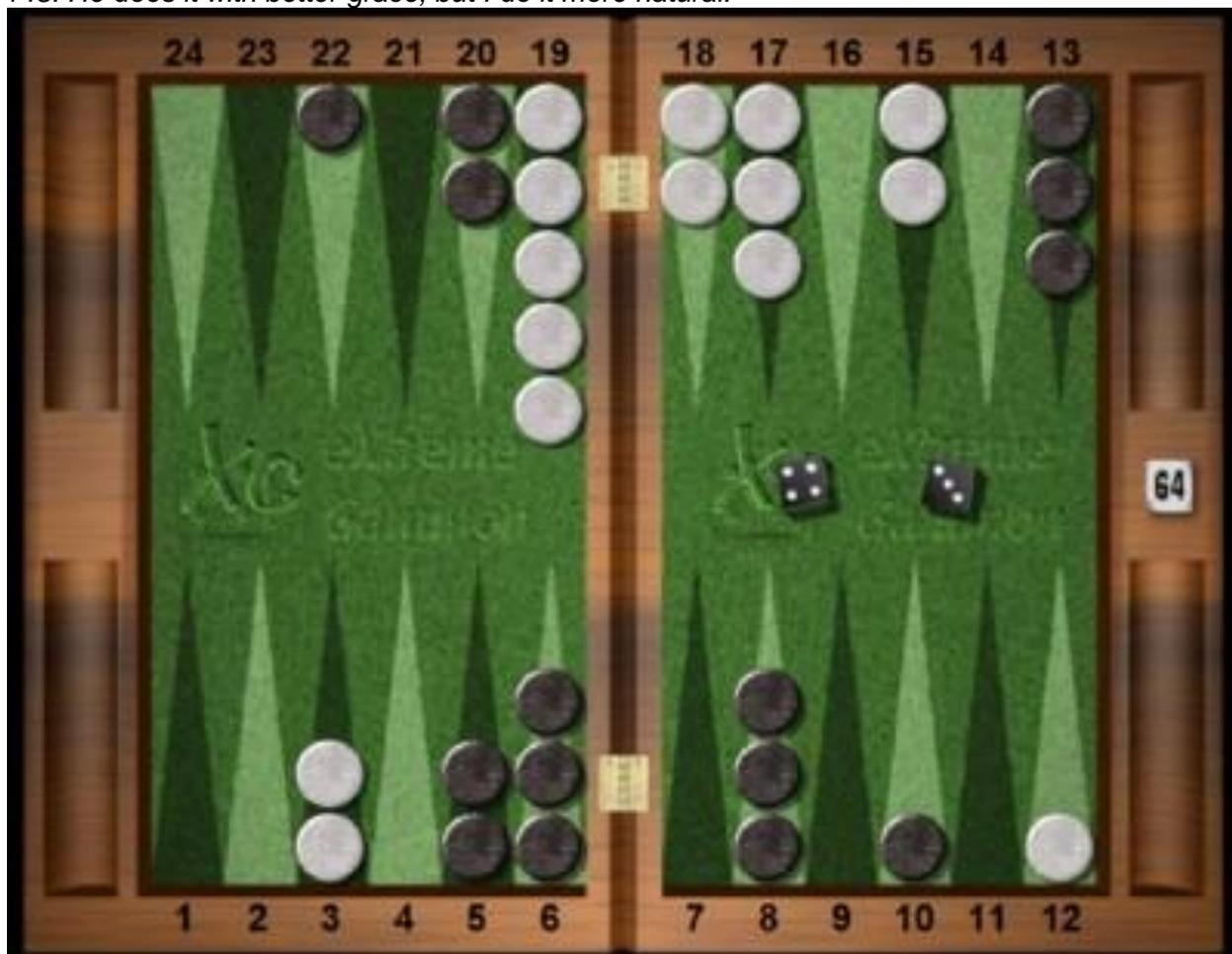
All reasonable choices involve hitting a white blot or two. The barpoint hit and cover looks natural, but breaking the midpoint and leaving a blot there severs connection with Black's anchor and permits seven return hits by White from the bar. White could also anchor. Pointing on the deuce removes the immediate anchor possibility for White and keeps both the midpoint intact and the connection with the anchor strong, but it surrenders fifteen fly shots -- a large enough number of indirect threats that Black should immediately consider loose hits in his home as an alternative. Black may need more time to release his anchor and a successful twin hit often grants more time. Consequently, consider the two moves that create a twin hit --- $13/7^* 6/2^*$ and $11/7^* 8/2^*$. All of the disadvantages of breaking the midpoint still apply and hence the play $11/7^* 8/2^*$ is best even if it leaves twelve return shots. As a backup Black owns the cube and has an anchor.

147. *Our doubts are traitors and make us lose the good we oft might win by fearing to attempt.*



Suppose Black plays 13/7. Imagine that White immediately rolls 53s or 63s and runs. At this stage what would Black's winning chances be in the game? They would not be good. This problem illustrates yet again that there is a difference between 1) playing to win and 2) playing not to lose. Black should slot the 5pt now and use his other blot to provide maximal cover with the play 13/11 9/5. As compared to the quieter play of 13/7 this move greatly increases volatility. True, things go badly if White hits the black blot but, if she misses, Black can often make the full prime, or failing that can cover and hit loose at the front edge of his prime. Then he will have some control over the game and, since Black owns the cube, he can wait until the optimal moment to use it.

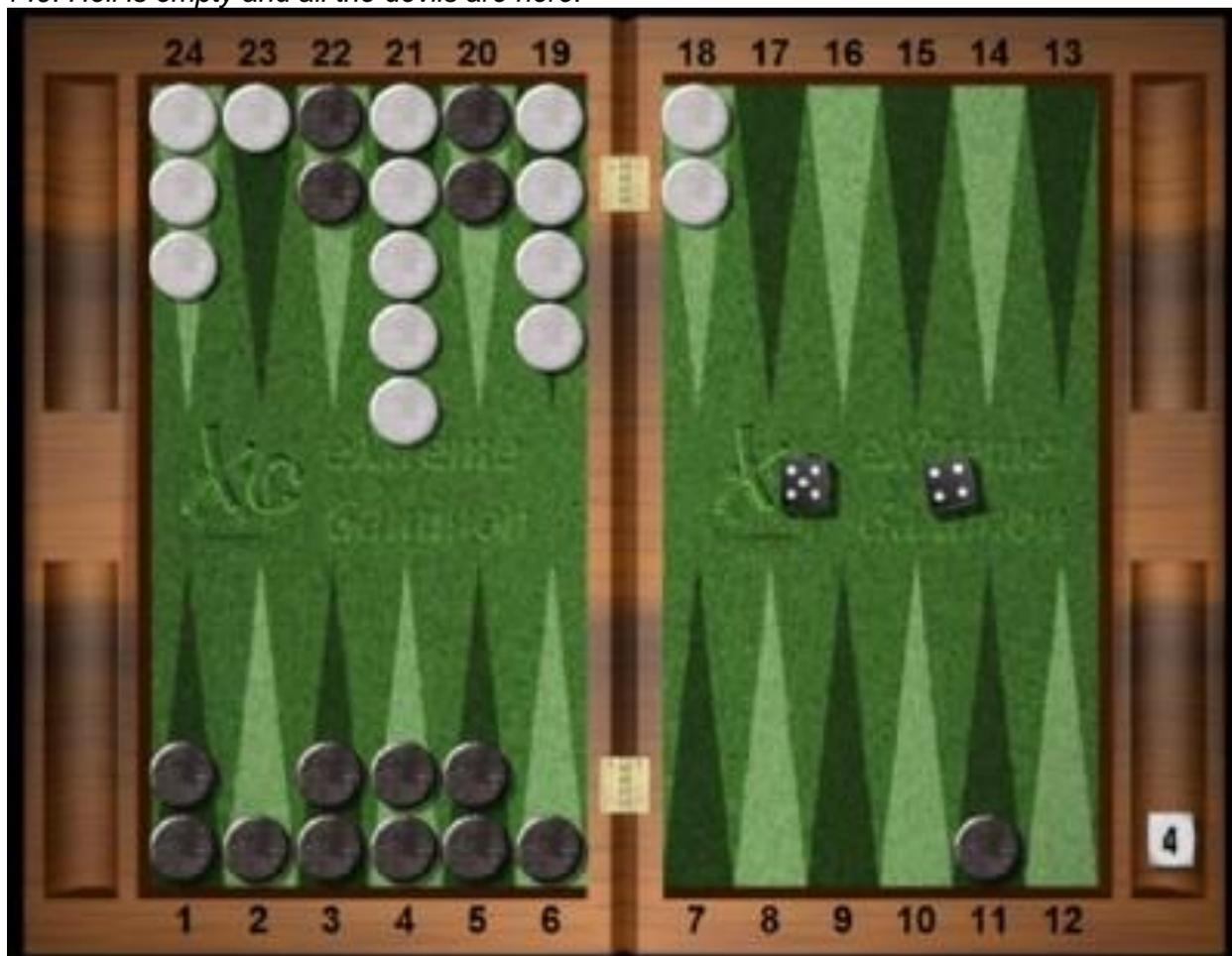
148. *He does it with better grace, but I do it more natural.*



White has a small lead in the race but has ceded outfield control to Black. Both players have effective partial primes. Black's prime extends to his 5pt, thereby giving him a somewhat better home board. Black has one more backman. This looks to be a long game and the golden point, a better anchor, and outfield control mean that Black has better than even chances. Where to play this dull 43s roll? Black would have liked better dice --- a one, a six, a deuce, plus a few combinations to extend his blockade --- but a dull roll is all he was granted. Black made the dull play of 13/6. It's not so much that this play does anything horribly wrong. It is more a matter that it doesn't do anything at all. Given Magriel's safe versus bold play criteria, Black should slot his 4pt and cover his 10pt. If the gamble succeeds, Black can improve his home board strength to good advantage during the next few rolls in this long game. If hit, Black has an easy entry and, since he is already trailing in the race, Black can count on

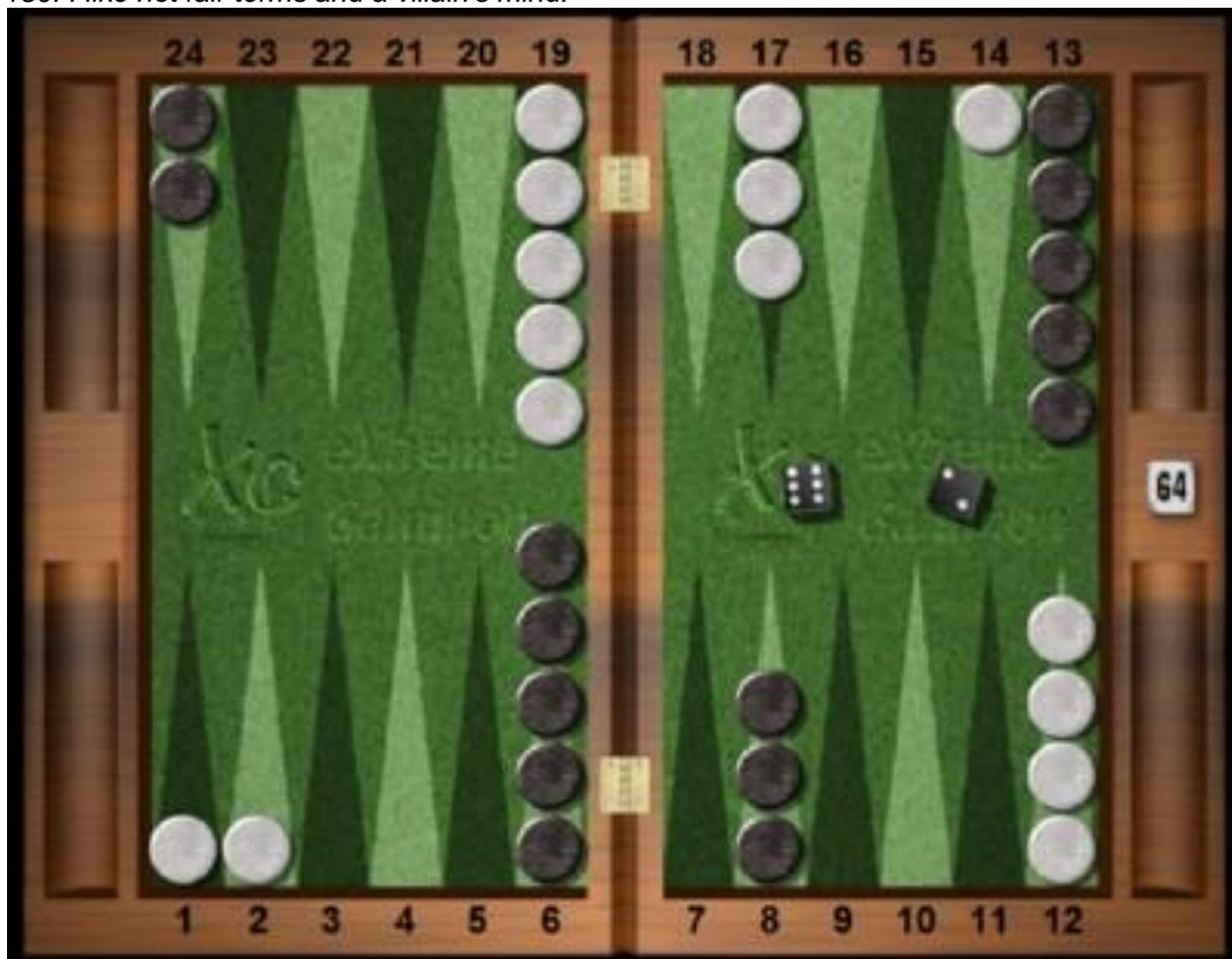
his positional assets to squeeze White into eventually offering concessions. Or, if Black gets lucky dice, he could immediately hit back. Play 13/10 8/4.

149. *Hell is empty and all the devils are here.*



Black still has not been able to jar any white checkers free and, sadly, cannot be sure of even a single shot to turn this game around. Covering the deuce point seems natural, but perhaps it is time for Black to hedge his bets by trying to save the gammon. Breaking the 20pt anchor coupled with covering the 6pt achieves a stronger board, provides two crossovers, and wastes no pips in the home board --- a good deal, and all for the low price of a few extra options for White. This TV offer won't last long; but wait, if Black orders now, a free white blot on her 2pt will be thrown in at no extra charge. Have those credit cards ready, fellow shoppers, because we can't do this all day. Play 20/16 11/6 and nearly 3% of White's gammon wins are shaved off the price.

150. *I like not fair terms and a villain's mind.*



This position is one of the main reasons to study the opening. In a chouette the captain, an average player, began to make the move 24/16. A team member stopped him, and the captain explained that the extra builder on White's 11pt made starting the 18pt unappealing. This is true. It is less appealing. But that doesn't make it wrong. Then the team member asked the captain which play he would make with 62s at the very first roll of the game. The captain replied: 24/18 13/11. I agree, said the team member, and the run to the 16pt is not quite as good on the first roll. Therefore, if the current run to the 16pt is correct, it would be *more* correct as an opening play, since the extra builder would be absent. After all, the main downside of any running play is getting hit. The captain, still an average player, was silent for a moment then picked up his dice. Oh well. You can't win them all, which is probably the reason that most chouettes require a cube turn before any advice can be offered.

La malattia del gioco

(*the disease of the game*)

A bar needs a blot

A checker needs a roll

A gambler needs the action

To pacify in his soul

A builder needs a point

A sniper longs to shoot

A runner needs a gauntlet

To guide him on his route

Anchors need true patience

A gammon wants a cube

Fair dice yearn to travel

Around a hollow tube

A bearoff needs a bathtub

An entry covets hope

A backgame needs a hangman

With abundant hanks of rope

Timing needs the future

Though blitzes want the past

Prime to prime needs subtlety

To make a victory last

A chouette claims a box

A tourney demands a boss

Addicts need a triple game

To offset that big loss

An outfield craves control
A home board needs to crunch
A twin hit begs attention
Then makes dinner out of lunch
The pip count pines for races
The market fears what's lost
One man's smoky fly-shot life
Will never know the cost
A prisoner needs a prime
A young blitz needs a dance
Lady Luck wants another fool
Someone to romance

--- *Baron Gossett Euler PhD*

Appendix: Setup of board positions for eXtremeGammon using XGIDs

1. XGID=----BbD-B--BeC-----d-bb-AA:0:0:1:55:0:0:3:0:10
2. XGID=-aa-B-C-C--BbCaa-d-e----B-:0:0:1:42:0:0:3:0:10
3. XGID=-aB-CBBB-B--b---bc-c-bbB--:1:-1:1:51:0:0:3:0:10
4. XGID=-a----E-C-a-dDA--bbcb--B--:0:0:1:62:0:0:3:0:10
5. XGID=----aAD-B--abC--cc-eC-A-A-:0:0:1:21:0:0:3:0:10
6. XGID=-a-B-B-B--abB-Acb-dCAbA-A:0:0:1:55:0:0:3:0:10
7. XGID=----a-E-CB--dD---cbe----A-:0:0:1:53:0:0:3:0:10
8. XGID=---bCBC-B---bC---c-d-dAA--:0:0:1:33:0:0:3:0:10
9. XGID=---BCbC-----acC---d-cbB--AA:0:0:1:54:0:0:3:0:10
10. XGID=-b---BD-CA--cC---c-c-bb-B-:0:0:1:64:0:0:3:0:10
11. XGID=-a---BD-C---cC-a-d-db--AB-:0:0:1:52:0:0:3:0:10
12. XGID=-aaaBBBAB---bB-A-cdc-BA---:1:-1:1:42:0:0:3:0:10
13. XGID=-a--BBC-B-bA-B-B-bacbb-bA-:1:-1:1:64:0:0:3:0:10
14. XGID=-aBb--C-CAA-dC---bbbbA-A--:0:0:1:52:0:0:3:0:10
15. XGID=-a---bEaCB--aB---bbdb-B--A:0:0:1:41:0:0:3:0:10
16. XGID=-CbCD-B-----a---cbbbab-:1:1:1:31:0:0:3:0:10
17. XGID=-a---BDBC---bB--acce----AA:0:0:1:53:0:0:3:0:10
18. XGID=-ba---EaCA--cB-A-c-cbA--B-:0:0:1:66:0:0:3:0:10
19. XGID=-cB-BaEB----c--A-c-cbA--B-:0:0:1:52:0:0:3:0:10
20. XGID=-a-a-CD-C---bD-b-b-bcA-b--:0:0:1:51:0:0:3:0:10
21. XGID=-a-BBBBB---bC---dacb-bB--:0:0:1:63:0:0:3:0:10
22. XGID=aa-BCBBCB-----bb-cbbbA--:1:-1:1:41:0:0:3:0:10
23. XGID=---aaCD-Ca--AA--abcdb--B-A:0:0:1:21:0:0:3:0:10
24. XGID=-BCBB-B-----AA-cb-cBc-:1:1:1:66:0:0:3:0:10
25. XGID=-a---BFbB----DAb---bbbb-b-:0:0:1:53:0:0:3:0:10
26. XGID=-a---BD-B---dD--bc-e---AB-:0:0:1:63:0:0:3:0:10
27. XGID=---ABBCAB---dB---b-cAbAbb-:1:1:1:65:0:0:3:0:10
28. XGID=---bBBC-BBA--B---bccb-c-A-:0:0:1:61:0:0:3:0:10
29. XGID=-B-BBDAAA-----bBaacb-cab-:0:0:1:55:0:0:3:0:10
30. XGID=---a-aD-CAB-dB---c-d-Bb--A:0:0:1:41:0:0:3:0:10
31. XGID=-aa-AC-C-B-dB---c-bbCb-A-:0:0:1:53:0:0:3:0:10
32. XGID=a--B-AB-B---cBa--cabbCbBA-:0:0:1:65:0:0:3:0:10
33. XGID=aaBBBBBBA----dC---b-cb--b-A:1:1:1:33:0:0:3:0:10
34. XGID=-a--AaE-C---dDa--c-da---B-:0:0:1:31:0:0:3:0:10
35. XGID=-b--B-E-B---dD---c-db---B-:0:0:1:32:0:0:3:0:10
36. XGID=-a--C-DaC-A-bB--bc-ccB----:0:0:1:65:0:0:3:0:10
37. XGID=-----bEBB---dD-A-c-db-A---:0:0:1:51:0:0:3:0:10
38. XGID=-Ca-aDBC--abB--a--bcbb--A:1:-1:1:52:0:0:3:0:10

39. XGID=-AC--bCBC--a-Ba-b--bcb-b-A:2:1:1:61:0:0:3:0:10
40. XGID=-ACAaBB-B----Ba-cb-ccbB---:0:0:1:51:0:0:3:0:10
41. XGID=-ECCB-----a-abccBcb-:1:1:1:44:0:0:3:0:10
42. XGID=---aB-DaC----Da--a-bcbbBb-:1:1:1:44:0:0:3:0:10
43. XGID=-aB-bCC-B----C---c-bcbbB--:0:0:1:65:0:0:3:0:10
44. XGID=---B-CCC--a-cBa--cbe--A-A-:0:0:1:32:0:0:3:0:10
45. XGID=-a-bBCC-C---bB---bBd-ca---:1:-1:1:42:0:0:3:0:10
46. XGID=-BBaBBB-A---B--bcbcc-B-a-:1:1:1:61:0:0:3:0:10
47. XGID=-b--B-DaDA--dC-a-A-cbb----:0:0:1:51:0:0:3:0:10
48. XGID=aCBCC-D----b-----ccbbb---:1:1:1:33:0:0:3:0:10
49. XGID=-----bEC----cD-b-b-bCbb---:0:0:1:44:0:0:3:0:10
50. XGID=-AaBBB-C----A-cbbbdBB--a-:0:0:1:62:0:0:3:0:10
51. XGID=-aaBACC----Aa---bbdbbC-B-:1:1:1:55:0:0:3:0:10
52. XGID=-A--AD-A---eE--abbcB---bA:0:0:1:43:0:0:3:0:10
53. XGID=-BBbDD-----a-C-bbcbba---:1:-1:1:62:0:0:3:0:10
54. XGID=-a--BCD-BA---A-b-bbbB-bbb-:0:0:1:53:0:0:3:0:10
55. XGID=-B-bBBC-A--AcB--ab-dc---B-:0:0:1:43:0:0:3:0:10
56. XGID=-a-B--DaC---dD-a-c-bc-A-A-:0:0:1:41:0:0:3:0:10
57. XGID=-BA-BDAC-b-----Bc-abacc--:1:1:1:33:0:0:3:0:10
58. XGID=-AaB-D-C-A-dB----bbbb-bB-:1:1:1:63:0:0:3:0:10
59. XGID=aEDBB---A-----b--cbbAcb-:1:1:1:21:0:0:3:0:10
60. XGID=-a-BaBCAB---cC--a--cbb-bAA:0:0:1:43:0:0:3:0:10
61. XGID=-a-a-BC-C-A-bE--bbbd----aA:0:0:1:52:0:0:3:0:10
62. XGID=-a--C-DCB---aBc--aabbbb--A:0:0:1:22:0:0:3:0:10
63. XGID=----bBD-B--BcDa--b-dc---A-:0:0:1:62:0:0:3:0:10
64. XGID=-b--b-EBB--abD-A-c-da----A:0:0:1:42:0:0:3:0:10
65. XGID=-cb-bBEBBAAAA----caca-----:1:-1:1:22:0:0:3:0:10
66. XGID=-BabC-CAD--a-----bbcbBAA--:1:1:1:11:0:0:3:0:10
67. XGID=----CBCBAaA-----AAeA:1:1:1:43:0:0:3:0:10
68. XGID=-aa---E-C-A-eC---bae-A--AA:0:0:1:22:0:0:3:0:10
69. XGID=-b---BD-BB--dC---d-eB-----:1:-1:1:63:0:0:3:0:10
70. XGID=-b----EDC---cB--a--c-bb-bA:0:0:1:52:0:0:3:0:10
71. XGID=-aaB-BD-C-AAa---aabbd--bbB-:0:0:1:54:0:0:3:0:10
72. XGID=-b---AD-C--AdD---cacb---B-:0:0:1:44:0:0:3:0:10
73. XGID=---a-CCbBB--dC---b-ccA--A-:0:0:1:51:0:0:3:0:10
74. XGID=-aBCBCB-----c-bdeC-:1:1:1:33:0:0:3:0:10
75. XGID=----aBCCD---aa-a-c-bb-BbbA:0:0:1:33:0:0:3:0:10
76. XGID=---aB-C-C--b-F---cbd-Ac---:1:1:1:51:0:0:3:0:10
77. XGID=-aBBBCBA----A---bbbbBcab-:2:-1:1:31:0:0:3:0:10
78. XGID=aB-cABBBB--AbB---b-cb-b-A-:1:-1:1:54:0:0:3:0:10

79. XGID=aa-B-BC-B---bD-b-c-d-b-AA-:0:0:1:33:0:0:3:0:10
80. XGID=aaBB-BC-----bD-b-c-d-b-AA-:0:0:1:65:0:0:3:0:10
81. XGID=-BAbCBC-----cA---bbdBb--A-:1:-1:1:62:0:0:3:0:10
82. XGID=----bBDAC----C-b-bbcbBb---:0:0:1:33:0:0:3:0:10
83. XGID=----CbC-B-B-eC-B-a-b-bba--:0:0:1:54:0:0:3:0:10
84. XGID=-a----F-F--Cb-----ccbb-b--:1:1:1:51:0:0:3:0:10
85. XGID=---BAbD-E-B--A-----ccca-:1:1:1:51:0:0:3:0:10
86. XGID=----AaE-CB--bBBabb-c-b-b--:0:0:1:33:0:0:3:0:10
87. XGID=-b---BD-B---eE---b-db---B-:0:0:1:53:0:0:3:0:10
88. XGID=----BBCbBB--bB---d-d-ab-AA:0:0:1:61:0:0:3:0:10
89. XGID=-bCDcCBBA-----ababb-b---:1:-1:1:21:0:0:3:0:10
90. XGID=aBBCBCBA-----g-:1:1:1:51:0:0:3:0:10
91. XGID=-a-B--D-C--AcCb--cadBa----:0:0:1:44:0:0:3:0:10
92. XGID=-aBCB-B-B---bB-B-bbbbbbb---:0:0:1:63:0:0:3:0:10
93. XGID=----a-DBC---AA---bbdBcc-B-:1:1:1:32:0:0:3:0:10
94. XGID=---Ba-CBB-B-----babBdcbB-:1:1:1:21:0:0:3:0:10
95. XGID=----CBC-B---bCbb-d-eA---A-:0:0:1:52:0:0:3:0:10
96. XGID=-b----EBB---cD---dae---B-:0:0:1:63:0:0:3:0:10
97. XGID=----cBDBB-B-bB---b-d-b-bA-:0:0:1:55:0:0:3:0:10
98. XGID=-a---cE-C---bCaC-b-bbb--A-:0:0:1:42:0:0:3:0:10
99. XGID=-B-BbBB-C---bB----Bcabcb--:0:0:1:62:0:0:3:0:10
100. XGID=----a-aDCC-a-bB---bBbbbb--A:1:1:1:32:0:0:3:0:10
101. XGID=-aBBC-BB----cB---bBbbbc---:1:-1:1:31:0:0:3:0:10
102. XGID=-aBa--DBBA-A-----aAbcbBe-:1:-1:1:66:0:0:3:0:10
103. XGID=---BBACbCB---B---aadabbaa-:0:0:1:11:0:0:3:0:10
104. XGID=--ABBCBbC---B-----bcbbbb-:0:0:1:33:0:0:3:0:10
105. XGID=-----bE-E-BabB-b-c-e---A-:0:0:1:62:0:0:3:0:10
106. XGID=-BBbb-DB-----Bbb-badBA----:0:0:1:51:0:0:3:0:10
107. XGID=---BBaCBB---cBb--c-bbb-AA-:0:0:1:63:0:0:3:0:10
108. XGID=-a-ab-E-D---bD-b-A-c--bAb-:0:0:1:62:0:0:3:0:10
109. XGID=-a-B-BB-C---cD---cbdb-B---:0:0:1:64:0:0:3:0:10
110. XGID=--BbB-BAB--BcBb--c-d-B-a--:0:0:1:66:0:0:3:0:10
111. XGID=-b----FCC---bBaa-a-bbbb-A-:0:0:1:62:0:0:3:0:10
112. XGID=---aBBDBB----b--c-d-dCa----:1:-1:1:65:0:0:3:0:10
113. XGID=-baBa-E-A-AAcC---c-e-A-A--:0:0:1:43:0:0:3:0:10
114. XGID=-a----ECCA-Ad----baebA--A-:0:0:1:61:0:0:3:0:10
115. XGID=-a-aa-EDBA-Ad----aadbA---A:0:0:1:43:0:0:3:0:10
116. XGID=---a-b-E-D---bC--bbBcbaA---:0:0:1:11:0:0:3:0:10
117. XGID=---AbCBCC----b---cbCcc-----:0:0:1:54:0:0:3:0:10
118. XGID=-aa---E-Ea--cD-----bbab-bA:0:0:1:64:0:0:3:0:10

119. XGID=---abDCCC---B--a--bbabbb-:1:-1:1:61:0:0:3:0:10
120. XGID=-a-a--ECC---cC---c-e-b-A--:0:0:1:32:0:0:3:0:10
121. XGID=---a-BaDCC---Bc--b-d-b-bA-:0:0:1:55:0:0:3:0:10
122. XGID=-b---BD-CA--cD-aaa-cbb--A-:0:0:1:66:0:0:3:0:10
123. XGID=-B-Ba-D-C---bCa-bc-d--b--A:0:0:1:44:0:0:3:0:10
124. XGID=-a--BBBBAB--aB--bcb-d-bB---:0:0:1:52:0:0:3:0:10
125. XGID=---ABDBBb-----B---bbbbcB-b-:0:0:1:44:0:0:3:0:10
126. XGID=---CBACB-BAb-aab--b-c-bbA--:1:-1:1:32:0:0:3:0:10
127. XGID=-BaB-BB-B---aB--bb-cBb-bbA:0:0:1:52:0:0:3:0:10
128. XGID=-aBBB-BBB-A-A--a--bbbbbbA:1:1:1:51:0:0:3:0:10
129. XGID=aaBCaBB-A---bC-A---cbcbA--:1:-1:1:52:0:0:3:0:10
130. XGID=---ACCbB-D----B-----c-bcbba-:1:1:1:11:0:0:3:0:10
131. XGID=---aB-BCaB---dD---d-e--A-A-:1:-1:1:21:0:0:3:0:10
132. XGID=-B-aCCBb-----B-b-b-bcBb-aA:0:0:1:43:0:0:3:0:10
133. XGID=-----E-CAa-dD---c-e-AA-b-:1:1:1:51:0:0:3:0:10
134. XGID=-a-B-aD-BA--cD---bcc-B--b-:0:0:1:61:0:0:3:0:10
135. XGID=---B-bEbD---bB-Baaabaab---:0:0:1:61:0:0:3:0:10
136. XGID=-aa---E-D---cD---c-dab--AA:0:0:1:52:0:0:3:0:10
137. XGID=-DCBBBb-----cAb--b-dA--aa-:1:-1:1:64:0:0:3:0:10
138. XGID=---b-C-D-C---cCa--b-dba--AA:0:0:1:33:0:0:3:0:10
139. XGID=---bCBaB-CA--bB---bbbbbbB---:0:0:1:62:0:0:3:0:10
140. XGID=aA--aaFADa--b---bBabbbA---:0:0:1:51:0:0:3:0:10
141. XGID=---BB-CbC---C---cdf-B---:0:0:1:65:0:0:3:0:10
142. XGID=-aa-B-DAC-B-bB-aab-e-b--A-:1:-1:1:22:0:0:3:0:10
143. XGID=-a---BD-B-B-dBb--b-dA--bB-:0:0:1:21:0:0:3:0:10
144. XGID=-a--a-EBB---dD---b-eb---B-:0:0:1:21:0:0:3:0:10
145. XGID=-a-BB-C-B---bD---cBcbd----:0:0:1:62:0:0:3:0:10
146. XGID=---aBB-CaBA-AbBa-bb-bbbB---:1:1:1:64:0:0:3:0:10
147. XGID=---aBB-CBBA--bAa-bb-bcbB---:1:1:1:42:0:0:3:0:10
148. XGID=---b-BC-C-A-aC-b-cbeB-A---:0:0:1:43:0:0:3:0:10
149. XGID=-BABBBBA----A-----bdBeBac-:2:1:1:54:0:0:3:0:10
150. XGID=-aa---E-C---dEa--c-e----B-:0:0:1:62:0:0:3:0:10