

How a Master Studies Backgammon

Part I: Dice Distribution - the Silent Storyteller

By Itzhak Solsky

One big revelation that always comes as a surprise the first time you run into it, is that you can actually study the game of backgammon.

Students of the game have varying levels of dedication. It is indeed a matter of approach, but in due course, a dedicated student starts achieving crushing results against pretty much any amateur.

If you do want to study, how do you go about it?

There are many ways. You can simply go over the games and reflect; other approaches involve consulting other players, reading books and articles, watching videos, participating in master-class events, taking private lessons etc. etc. etc.



Pretty as it is, with its cute little green arrows, this position has nothing to do with this article, but isn't it nice to look at some actual backgammon right on page 1?

Anyway, there are many ways to study, we're sure of that - but whenever I take on a student who is not a complete beginner, if he (or she) has meaningful improvement goals, I recommend that he use Extreme Gammon, which is nowadays the best and most advanced backgammon software in the market.

Throughout our course, a student learns specific tips and shortcuts on how to extract more knowledge and understanding from his use of the program.

As we'll see throughout this series, this largely concerns posing the right questions to the software, plus a bit of expertise in using it and of course, the patience and willingness to go deeper into a given position, and not just skim on quickly to the next one.

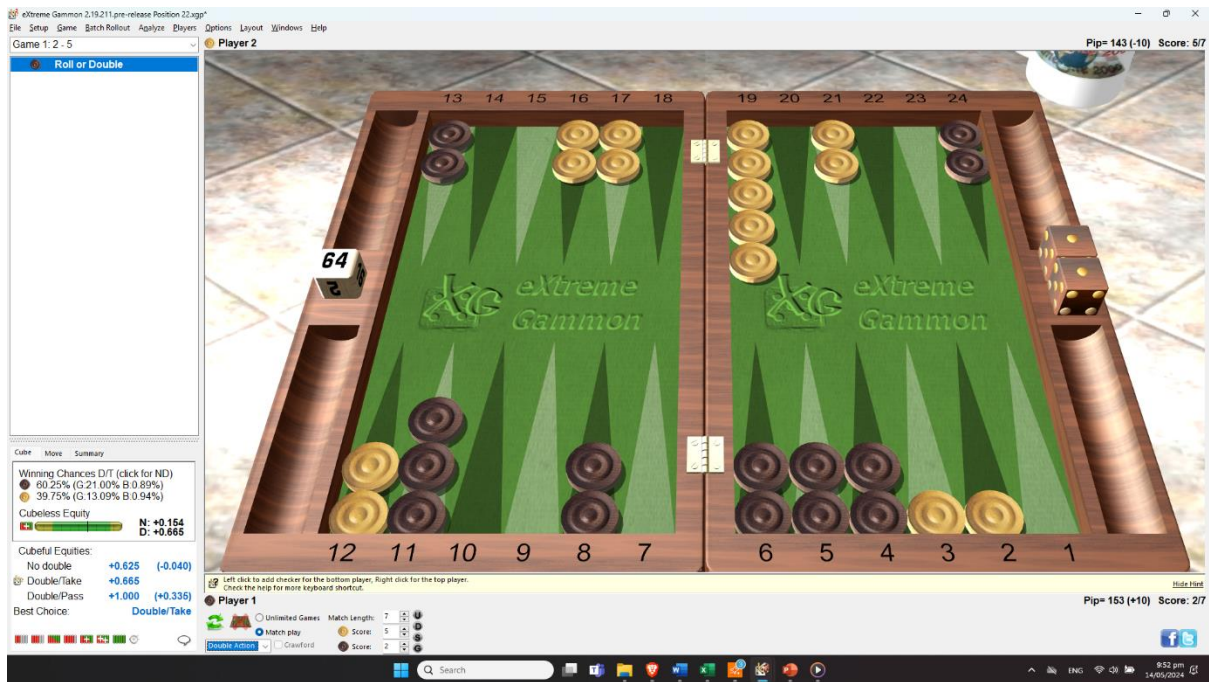
Humans and IT tools have each their strengths and weaknesses. Nobody "understands" backgammon better than the merciless machine, our electronic mercenary - but can we really speak of understanding when it comes to a non-living entity?

Of course not... but as it's so good in evaluating every future scenario, and as we have a "window into its soul" in the "dice distribution" function, which shows us the raw data underlying its decisions and judgments - it is up to us, like a good interrogator, to make the software speak to us. We should form certain questions in our mind and find ways of making the software answer them and improve our understanding.

So we open up "dice distribution" for a given position, roll up our sleeves and dive into the data with our questions in mind - whether it's a checker play decision (how good are the resulting positions for us? Which rolls mostly swing it?) or a doubling one (Where are the market losers? Why is this too good? Why was this a blunder?)

Dice Distribution can tell us many stories - but it's up to us to "connect the dots" and look for those bits of data which, taken together, will give us the scenario (or scenarios) that answer(s) our question(s).

Here is a case in point:



In this position, one from a friendly online match against GM Ido Levi, black is trailing 5 away – 2 away.

Ido is of course a very powerful and intuitive player who sees to the essence of positions in a flash – the fruit of many years of careful study. As I was considering my options, he wasted no time in informing me in no uncertain terms that I should cube this position.

This came as some surprise, in view of white’s own respectable front structure and 15 active checkers (even though there’s this pile on the 6–point) and with me still stuck on my 24–point.

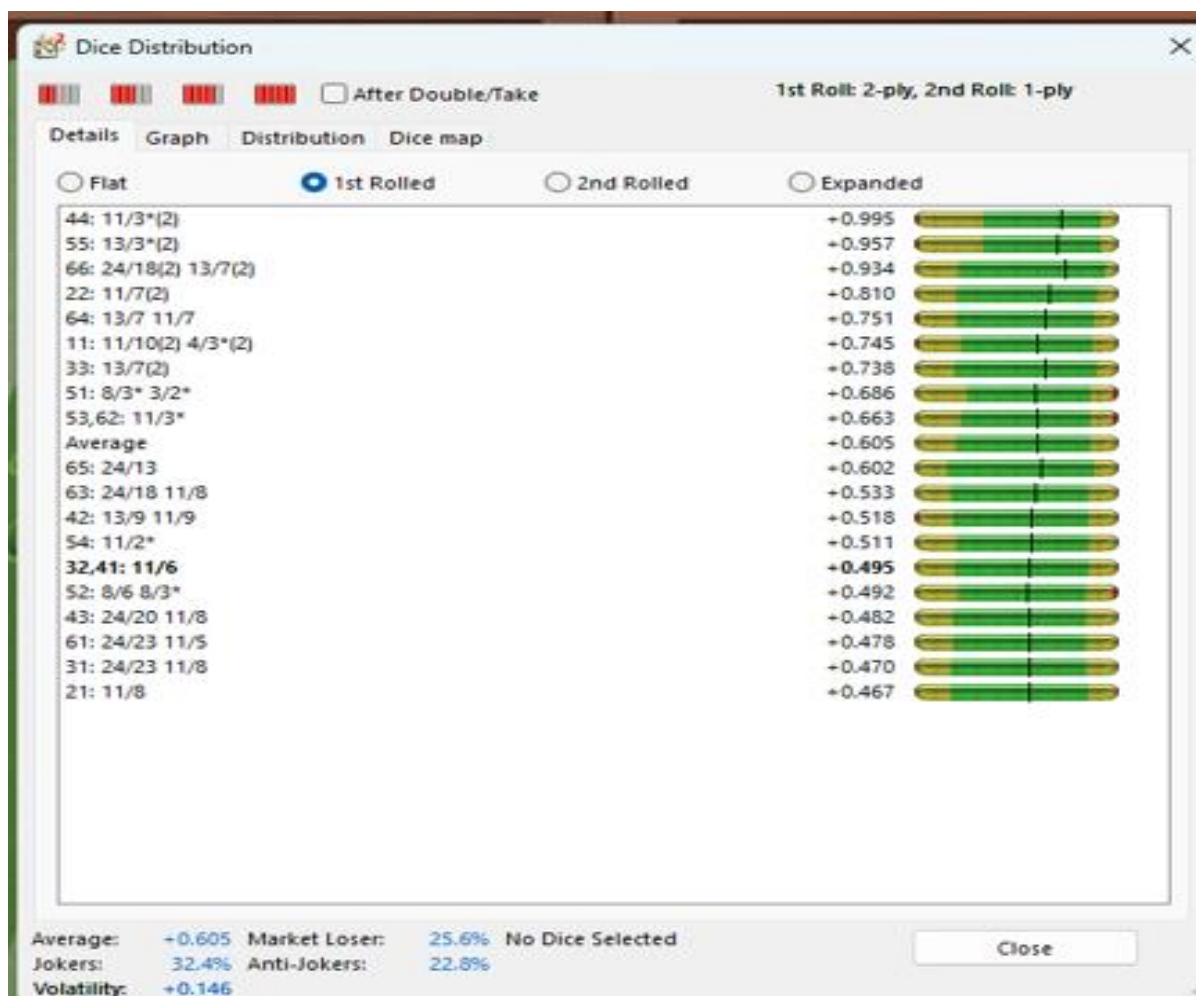
But score also plays a factor, and I could see that I had a certain level of threat. I would have certainly doubled had my spare checker been on my 6 rather than the 11...

But Ido was simply looking at my doubles rolls and indeed, all of them are close to deadly at this score, so he never doubted it.

Later, studying on my own, I was thinking about John O’Hagan’s law. I wondered to myself – don’t I need at least 25% market losers to double? What am I missing here?

Of course my market losers come earlier at this score – but I suppose that I still need 25% of them. Where are they?

In the next section of this article I will try to avoid getting TOO technical, but I can’t avoid a certain measure of this... check out this next image:



Of course it's inconvenient to view the position on one page and the analysis on another – but I recommend that you reproduce it all on your own copy of XG, then analyze the cube action for black at the XG+ (or ++) level and select “Dice Distribution” from the “Analyze” menu. You will get this first screen that tells you (below all the rolls, left of the “close” button) that sure enough, you do have the 25% market losers you were looking for.

You now say, yes, but where are they, other than the doubles rolls?

So you go deeper studying this, using the “Expanded” button on the upper part, which also gives you the opponent's reply rolls and best plays for each of your rolls next turn – and now you find that you tend to lose your market in various interesting scenarios – for example, when you make your own bar point while your opponent fails to meaningfully improve, or when you hit loose and he dances or even enters unconvincingly...

In other words, I do simply appreciate just how delicate his own position was in view of the score, and how quickly things can go irreparably bad (which is simply another way to say “enough market losers to cube”). While a world-class GM as I do can see this right away, other players can “climb up” to this level of understanding by using this above method.

Let's find a couple more examples. Here's one from a training match against the computer:



Here, of course, there is nothing special about the score, and had my straggler joined his brother on the midpoint and his hit checker became a spare on his 20-point, this position would have been a textbook double and take, especially as I also have my bar point (which helps me) and the race difference is not too large (which helps him).

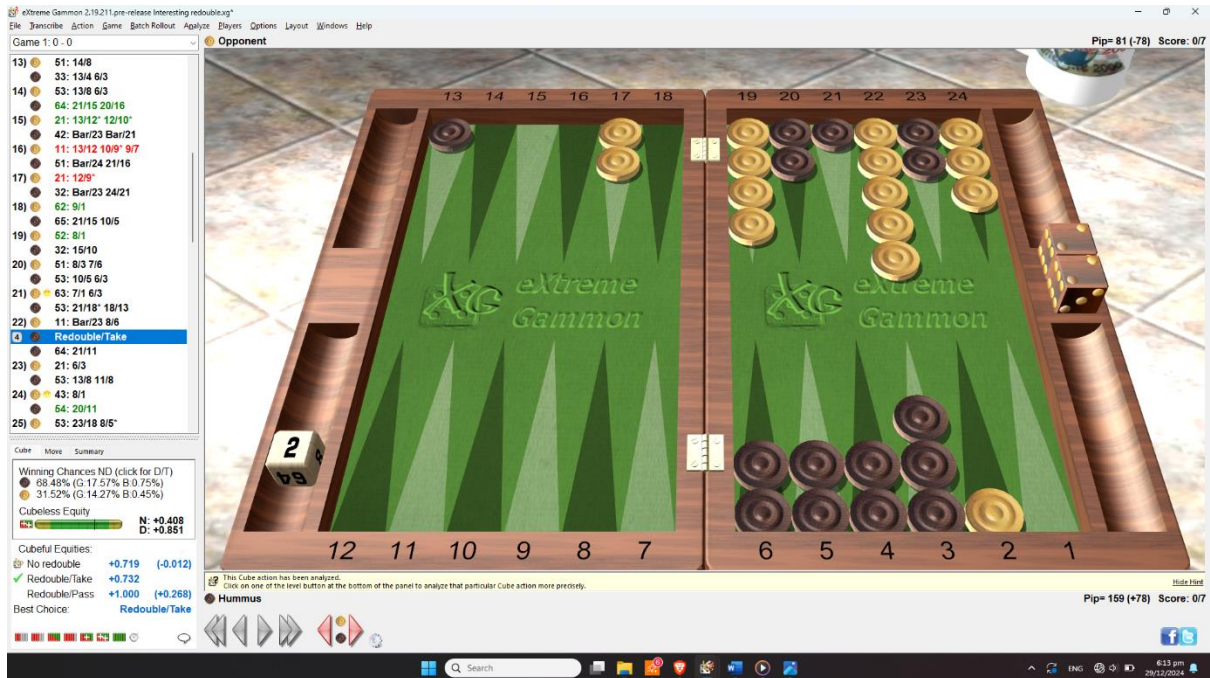
So I rolled double 2s, ran eight pips in the outfield while safetying (is this a word?) a checker, he duly entered on his own 5-point after rolling 53, and then I correctly doubled on the following turn...

But this borderline double that you see in the image rather surprised me, and I was posing this same exact question from the previous case: where are my market losers? Why should I double this? Can't I wait and see what happens, and simply double next turn if things go well?

Of course if I improve dramatically while he dances, I will lose my market. But it's not that likely... so what else is there?

And here, the careful examination of the future rolls gave me what I was missing – it turns out that thanks to my strong priming structure, after I improve (for example, by making the midpoint), it's a double and PASS if he enters in the deep points of my board. So we now have the amount of market losers necessary to double.

Let's take one last example:



Here, this being the first game of the match, the redouble to four (by black!) is far from obvious – and yet, it is quite accurate.

You look at this position and ask yourself – what’s the rush to redouble here? We’re not closing him out anytime soon... as a matter of fact, we still have no fewer than six checkers back!

And this is something to look for – sometimes a market loser is not so much about what WE are going to roll next, but what will happen when it’s the opponent’s turn, who will be really happy to roll a 5 or a 6 and escape... but what happens when she doesn’t? What happens when she rolls a 4 or an ace? Will she be able to take a recube at that point, with the entire Prussian army staring at her second blot (or worse... see what happens when she rolls a 31!)

So of course, it’s not that 25% of our rolls need to lose the market... we’re looking for 25% of the next-turn scenarios, or “parleys” – 25% of the positions resulting from the combination of my next roll and hers.

While I dedicated this article to cube action decisions, we can also use dice distribution for comparisons between competing checker plays on a given roll... which might be the subject of another article, another day.

Belgian Champion (2024), UBC contender (2023, 2024) and BMAB master Itzhak Solsky is a backgammon coach with the Backgammon Learning Center (www.backgammonlearningcenter.com), where you can learn backgammon through a systematic methodology conceived and arranged over many decades by such giants as Paul Magriel, Kit Woolsey, Phil Simborg, Mochy and others. Itzhak teaches in English, Hebrew, French, Spanish and Italian.