## THE

ART OF

## BALLS

AN ALTERNATIVE APPROACH TO POOL BILLIARDS

PART 6: PERFECT POSITION

## LET'S PLAY POOL TETRIS ...



## DEMO LEVEL

We're developping patterns on the table now. Tetris like.

The patterns most of the time consists of two circles. One is the starting point of your cue ball. The other one is the end point of your cue ball.
Then there's a type of shot that will get you there. Of course that shot will only work for the more or less ideal setting. Sometimes even small deviations will make the position impossible.
But at the end of every section we can draw conclusions which are quite hepful.
However those shots are decent references. And if you can play all the reference shots described here to position with more than 75 percent sucess rate, you're a damned good player and I don't want to gamble you.
We'll start with a couple of easy ones to get you used to the notation and thinking in those bubble patterns.


## DEMO LEVEL

To get you into it, let's repeat one of the basic shots. A mezzo staccato, mezzo being played from 2 circles distance.


## DEMO LEVEL

For the straight ins, we use Quarter, Mezzo and Half to indicate the length, omitting the „note".

Don't mix up two things:
„Half Note" meaning a ball running the length of two adjacent circles.
„Half Ball" meaning a cut angle of 30 degrees (rifle aiming the center of the cue ball to the edge of the object ball).
Whenever things are not obvious, I'll add Note (for the length) or Ball (for the cut).
The same goes for Quarter and Three Quart.


## DEMO LEVEL

## And a mezzo half.



## DEMO LEVEL

Two across-circles make 1.5 distance each, so the distance $C B \rightarrow O B$ is three circles in this example. That's forte distance.

You want to draw back a quarter and a half.

For the Quarter you'd aim 2 tips low and play with forte volume.

So for this draw you aim a hair lower, at 2.25 tips and execute the forte draw to make it in your target circle.


## HALF BALL ROLLS



## HALF BALL ROLL

We'll discuss rolls for Half Balls and Quarter Balls. That should give you good anchors. The rest is a little bit left, right or in between these situations.

But know these standards by heart.
This is our Pianissimo standard situation.
The cue ball will get a tad right spin from the cut, so the position should be fairly easy.


## HALF BALL ROLL



## HALF BALL ROLL

The white route plays with natural roll.
To choose the black route you need 9:30h side spin.
You should be able to play both.
This position has been marked red, because it is an essential positionfor straight pool play.
Note that the umbrella opens as you play this shot harder.

The 9:30 counter needs quite some volume to make it to the center line.


## HALF BALL ROLL

This is an important position for straight pool. You really do not want to end up too close to the cushion or center table.

To go the direct route with 10 h counter spin you need to play forte. It is easy to underestimate the volume you need.
A natural roll won't bring you there since at that speed the angle widens and what you think may be your intuition will make you stick to the cushion.
So 1 h spin is necessary with only mezzo volume, but getting the volume right is essential here for good position.
So maybe going for the center field one below with natural roll may be a better option. But sometimes that option is not available ...


## HALF BALL ROLL

The spin counters out a little speed at the diamond.

What's taken away is approximately as much as it takes to roll from one circle to another.


## HALF BALL ROLL

It is easy to overshoot on the 2:30 route, so get the speed to reach the red circle down. It's an important position, but overshooting it makes a tough break ball.


## HALF BALL ROLL SUMMARY

So for a half ball roll you now know the shots for the following positions.

Of course there are other systems, for example remembering the "lines" with different spin. But as you see, for rolls the angles differ with volume.

In the heat of the battle you want to know how to get to defined positions from standard setups, and maybe adjust a bit because the situation is never pure standard.

That means once you ,see" your target position, it at once has to appear in your mind how the ball needs to be played.
Therefore I recommend memorizing this chart so the corresponding shot flares up in your mind.

So your intuitive adjustments are anchored on something.


## HALF BALL ROLL CONCLUSIONS

1. A half ball is ideal to position within the same half of the table, especially to the other side of that half. You can reach all major positions with little effort.
2. The same side of the table is pretty much dead for rolls (and even ugly for stuns).
3. The most effortless way to get to the other half of the table is the 2:30 route at mezzo or mezzoforte volume. All other paths require more volume, and that will have an impact on the resulting route, so you will run toward the corner pocket. If you plan to play for the other side of the table, better go for a quarter ball.
4. Anything with a cut angle fuller than a half ball is not a good ball to position within the half table with precision, or even trying to play from head to foot or vice versa.
5. If you play for a ten or nine on the spot, go with the mp 2:30 and play for left center circle or natural roll to right center circle. Those have the best tolerance, even if you overshoot.

Avoid 1:30 „running english" even if you feel tempted to, it leads to trouble. It's only good for center table.


## QUARTER BALL ROLLS



## QUARTER BALL ROLLS

Let's do the natural roll positions first.
There's nothing really available in the same half as the cue ball, since even pianissimo already comes out from the second cushion.
Everything softer is babying the cue ball and you have a hard time controlling the length.


## QUARTER BALL ROLLS

Now let's add one o'clock side spin to the shot.

That will make the ball longer, and the umbrella will close a bit.
Be careful with this shot. It is really easy to play this too long and scratch.


## QUARTER BALL ROLLS

So let's switch to running side at 1:30.
The umbrella closes even more. This path is safe and will not scratch.


## QUARTER

## BALL ROLLS

Let's add more spin and look at the 2:30 and 3:30 routes.

Note that the 3:30 is already played a bit below the center. Due to the thin cut for a quarter ball it is no stun or draw shot though. So the speeds for rolls still apply.
Practice that, you have to get used to the feel of it, it doesn't come up naturally in a game very often.
It's almost impossible to scratch in the middle as the angle opens out from the second cushion. It will be possible with a Slide though.


## QUARTER BALL ROLL CONCLUSIONS

1. Quarter balls are good to get to the opposite half of the table, especially on the same side.
2. The opposite side of the table is pretty much dead. On the same half of the table you need to baby the ball, even pp usually reaches the second rail. On the other half you need to counter out from the first rail and speed is not an easy guess for precise position.
3. It's easy to overshoot the 1:30 „running english" route and come up too close to the rail, since it's an ,,in between" volume, especially when playing for a nine or ten on the foot spot. The route's just not good for that.

However it is a good chance to get down to the first diamond and the fourth rail for a safety.
4. When playing for a ten on the other half of the table go with the natural roll piano or use the 3:30 route, but be careful not to overshoot.


## PUNCHES AND DRAWS



## HALF BALL SLIDE

Slides behave differently. One, you touch the first rail closer to the pocket because the cue ball travels down the tangent line.

Two, you have to play a lot harder, because the cue ball loses speed due to the friction of the punch. So for these shots, Punch speeds apply.
The pianissimo shot stops right at the first rail. The piano just leaves the second rail.

Length opens up a bit for the higher volumes because of the cut induced spin.
These positions are also available with 2:30 rolls. You will usually want to use the rolls since you have better control of the cue ball length there. But sometimes that route may be blocked...


## HALF BALL SLIDE

The 4:30 shots make one more circle available which is not available with roll.
(Well, you could try to go for some 3:30,,in between" shot, but ...)
If you compare this to the mezzopiano 2:30 roll you can see how much more speed you need once you start to side the cue ball (that was mp rolling speed compared to forte punches). Rolling speeds are slower to start with.
That's the reason for many balls that come up too short if you hit a tad firmer than intended when playing rolls. You start to get slide, that kills off a lot of speed. You need tremendously more volume once you get Slide to obtain the same length.

To reach the head spot is difficult when you have large corner pockets. Chances are you will hit the edge of the side rail and trickle off. Use the straight down roll with counter spin instead.
Don't play this too firm, there is a chance of scratching into the middle. In fact you can play this shot to go for something that is sitting in the middle pocket. Since you want length then, maybe even go for 4 o'clock side spin.
Beware: If you play these shots with 5 o'clock, you will probably scratch in the top right corner pocket since you get a Draw.


## THREE QUART DRAWS NO SPIN

Now when it comes to draws we'll really start to unfold the power of this system. As our first reference we use a Three Quarter cut into the rail.

Since the note lengths will all end up in the same place, if you pick the appropriate shot for the distance.

## Remember:

A piano Staccato is played piano speed with 0.5 tips low.

A mezzo Staccato with mezzo speed and 1 tip low.

A forte Staccato with forte speed and 1.5 tips low.
All of those three Staccatos will end up in the indicated position, come back $3 / 4$ of a circle and a half circle out form the rail.

All 3 quarters will end up half a circle above that.
The piano and mezzo full notes will even make it without touching the rail. Only the forte full note will come into the rail and back out.

Once you get the shots for the staccatos down for the three speeds, all this comes for free.

A piano double can even be played to reach the middle of the opposite table half.


## DRAWS

To get back out into the circles there's a simple trick: Add one tip left to all those shots.
This means for example: If you shoot a mezzo quarter, you usually shoot with one and a half tips low. Now pivot one tip over to 7:30.
If you shoot with two tips low, you pivot over to 7:00.
If you shoot with only one tip low, you pivot over toward 8:00, but don't hit as far outside as you usually would hit balls with 8 o'clock spin.

And finally, if you're supposed to play a shot with 2.5 tips low, you cannot add spin since you're already hitting the lowest spot in the ball and pivoting one tip over would make you miscue.
So the forte full here is not available. For a mezzo full you can try to use forte at 6:30, but it's a gamble. It's the far end of the system.
Adding speed in this case probably will not be a big help since more speed sends the ball further down the tangent line. In this case that means hitting the cushion at a larger angle, which means you won't get as much draw.

Now ... no more guessing these balls. For a three quarter cut you know what happens.


## NOW

No more guessing these balls. You now know where all of your standard balls will bring you:
Half a diamond out from the pocket at about $3 / 4$ of their usual length.

If you add a tip of running side you come back out one diamond.

For anything thicker than a quarter ball you simply won't back out that far. 90s will stick to the cushion.

## At least on my face there was a smile as I figured that out.

But what happens with half ball cuts, the thinnest limit of a draw?

## HALF BALL DRAWS

You may find this a bit strange at first, since it behaves counterintuitive.

The problem is with a half ball we don't really get much draw. We basically get Slide into the cushion.

But what then does the bottom spin do when it hits the cushion? It speeds the ball back out from the rail. Thus the angle between rail and ball changes. You will not get as much draw as the bottom spin drives the ball toward the opposite side rail.

Since our mezzo quarter has even more bottom spin than our piano quarter that effect is even more with the higher volumes. Additionally the higher volumes are being sent even straighter down the tangent line. But for a half ball there's not really any observable effect at this distance.

Except maybe from tighter cushion compression which also shortens the angle.

The forte full is as always played maximum low with fortissimo.

These positions are not quite as stable as the ones for a quarter ball. But still you can use them as some idealistic reference, since they're easy to remember.


## ANYTHIN IN BENWEEN .

... will end up between the position you know for Three Quart draws and these Half Ball positions, if you compare the same type shot, i.e. mezzo Quarter note Three Quart with mezzo Quarter note Half Ball.

So you should be able to figure out the Sixties on your own.

Now you know what just about any draw close to the rail does.

If they're further away from the
Not!

## I'm slowly running out of things I can teach you.

 rail, just use the regular angle times three rule.
## SOME MORE STANDARS.



## FOOT SPOT

Some 12 o'clock routes you should remember so you know how much spin to apply for position.
This circle is perfect for position.
In fact, it is THE zone to play an endless drill with this nine ball into that corner pocket.


## FOOT SPOT



## FOOT SPOT



## FOOT SPOT

Be careful not to overshoot this shot. And never use any spin on this.


## FOOT SPOT

## Scratch route.



## ACROSS

## Threequart shot.



## ACROSS

The half ball scratches.


## AND ALL THAT JAZZ ... PART VI

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