

THE ART OF BALLS



**AN ALTERNATIVE APPROACH
TO POOL BILLIARDS**

PART 2: STACCATO EXERCISES OR THE BB SYSTEM



STACCATO NOTES

Remember **staccato notes** are the most basic notes there are. Each note should stand for themselves.

Also recall the three volumes: **piano**, **mezzo** and **forte** and what they feel like.

You played **piano staccato** from one diamond distance.

You played **mezzo staccato** from two diamonds distance.

You played **forte staccato** from three diamonds distance.

That's all you need to recall for this volume.



STACCATO WITH ANGLES

**In this volume we're going to play
staccato with angles.**

**That's what people usually call
stun shots.**

**And you guessed right, we're
going to build a reference
system.**

**Playing quarter, half, full, doubles
and more.**

**But this time
we're going to
change the cue
ball position in
order to achieve
the desired result.**

BALLS BACK

I call this system the **balls back (bb)** system.

That's because we're defining the position of the cue ball in terms of balls back in relation to a straight shot.

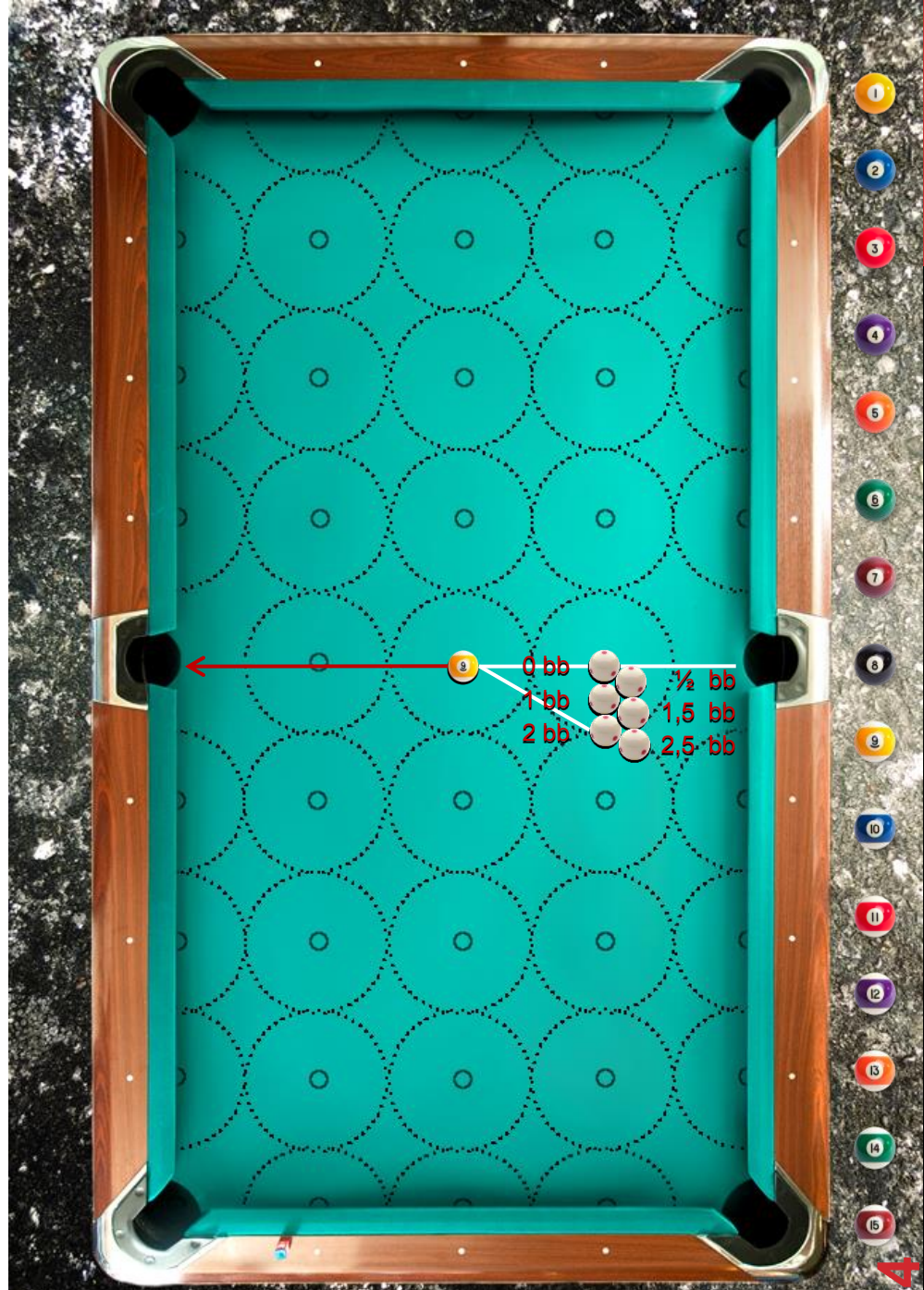
And we're going to measure balls back always from **one diamond** distance.

Obviously, a straight in ball is zero balls back (0 bb).

A ball that touches the straight in line only with its outer edge is half a ball back ($1/2$ bb).

A ball that lies touching with 0 bb is 1 bb.

And so on (look at the picture).



WHAT IT DOES

Why do I even use this system.

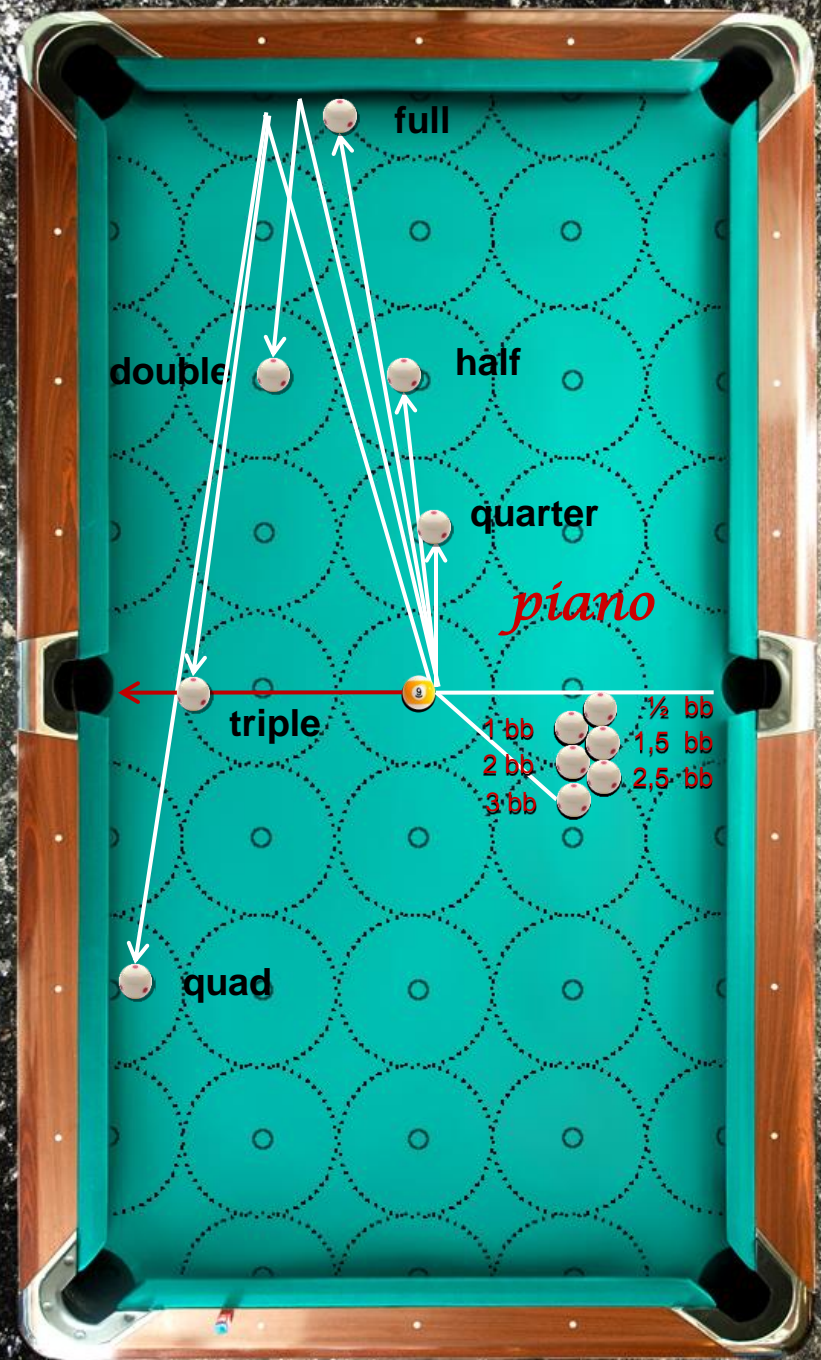
It is easy to visualize on the table.

You can easily estimate one or two balls back with the help of your cue stick.

It does interesting things. When played with level cue, center ball and **piano** volume:

- $\frac{1}{2}$ bb plays a **quarter** note.
- 1 bb plays a **half** note.
- 1,5 bb plays a **full** note.
- 2 bb plays a **double**.
- 2,5 bb plays a **triple**.
- 3 bb plays a **quad(ruple)**.

Know this and you never have to blindly guess your stun shot lengths again.



QUADRUPLE?!

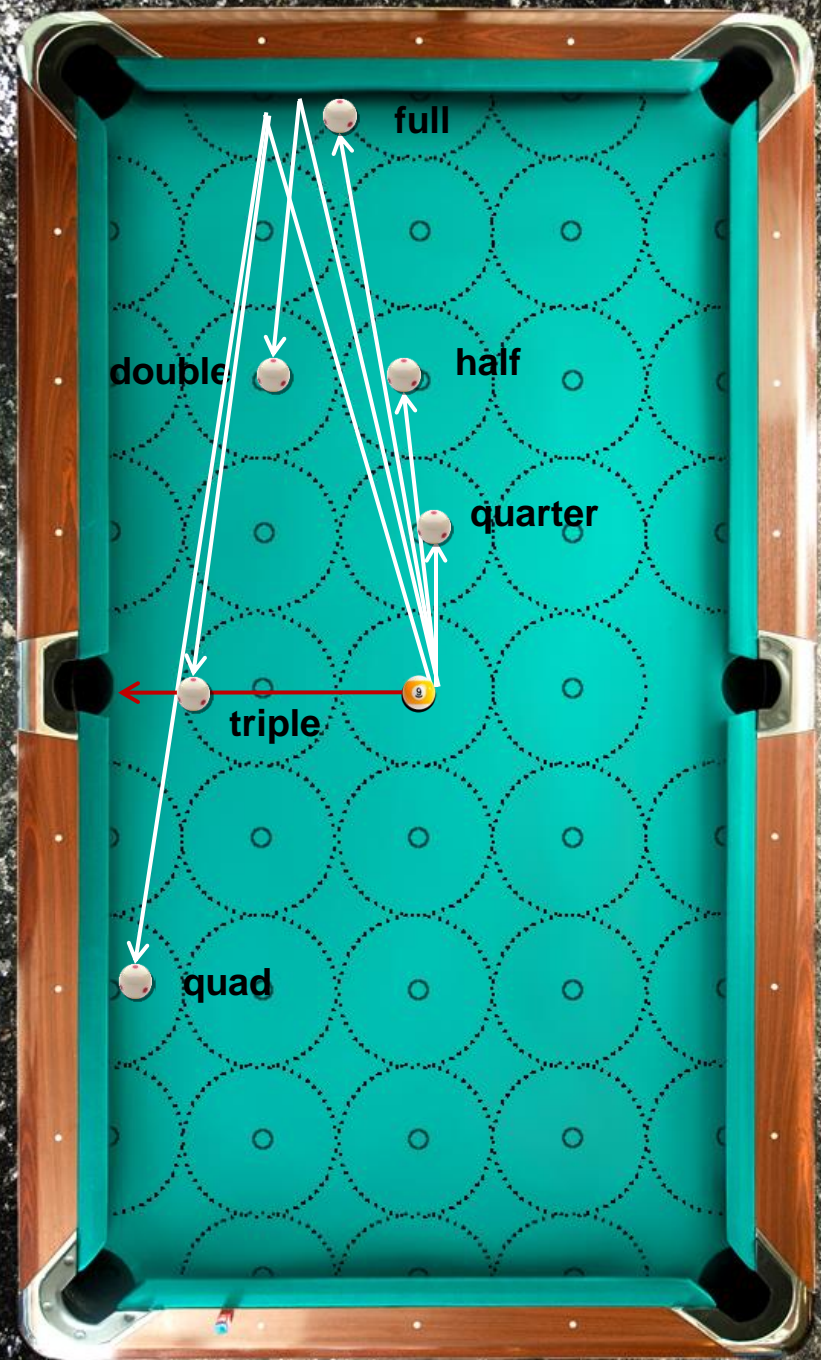
Remember, the lengths out of the cushion are **cut in halves**.

So a when a **full note** reaches the cushion from center table:

- A **double** travels only **2D** out instead of half a table.
- A **triple** travels only **4D** out instead of a full table.
- A **quad** travels only **6D** out instead of one and a half tables.

For smartasses:

Yes, that depends on the speed of the cushion. Even the cloth. Some fast cushions or cloths swallow a bit less, so the shots come up long. I guess we can live with that.



AT MEZZO VOLUME

The system also works at mezzo volume. But of course, the balls back are less. But how much less?

We simply slide up one half step!

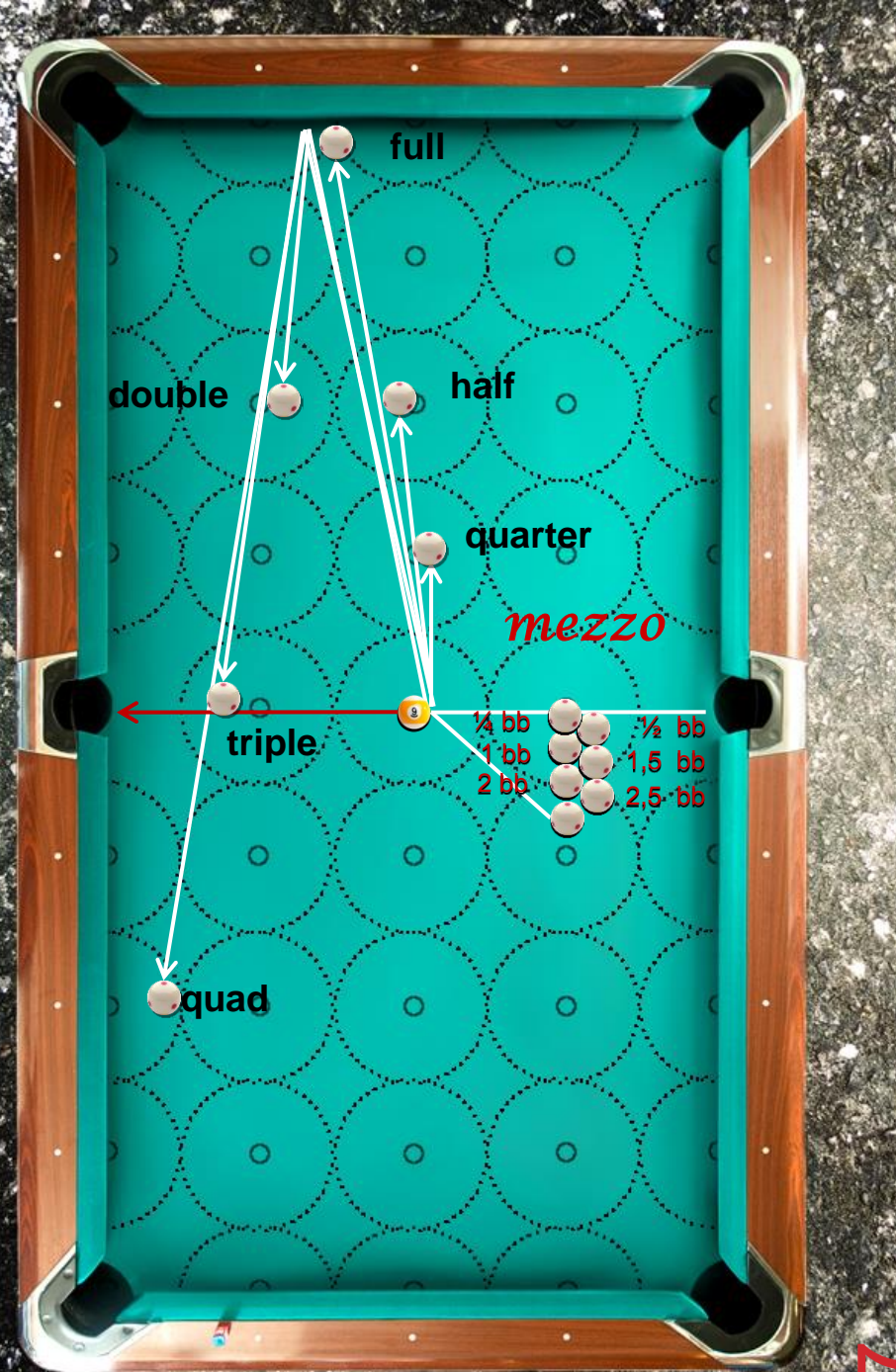
And $\frac{1}{2}$ bb becomes $\frac{1}{4}$ bb.

So when played with level cue, center ball and **mezzo volume**:

- $\frac{1}{4}$ bb plays a **quarter** note.
- $\frac{1}{2}$ bb plays a **half** note.
- 1 bb plays a **full** note.
- 1,5 bb plays a **double**.
- 2 bb plays a **triple**.
- 2,5 bb plays a **quad**.

Memorize:

$\frac{1}{2}$ bb plays a half note at mezzo volume. All mean.



AT FORTE VOLUME

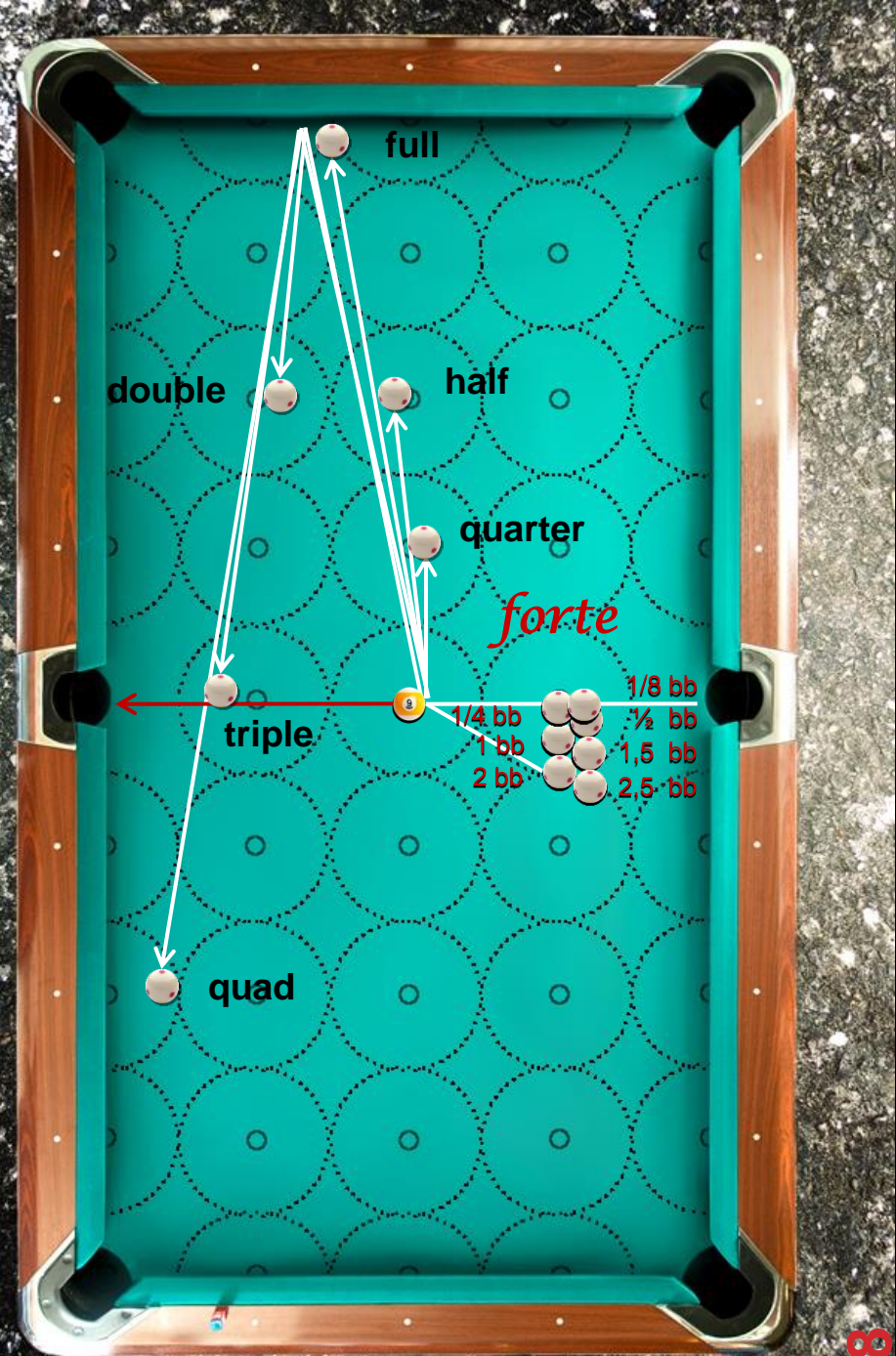
Things get even more crowded at forte volume.

So when played with level cue, center ball and forte volume:

- $\frac{1}{8}$ bb plays a **quarter** note.
- $\frac{1}{4}$ bb plays a **half** note.
- $\frac{1}{2}$ bb plays a **full** note.
- 1 bb plays a **double**.
- 1,5 bb plays a **triple**.
- 2 bb plays a **quad**.

Okaie, 1/8, 1/4 and 1/2 are quite a bit more difficult to judge and the shot needs to be clean.

But show me any other system that gives you a better estimate of how far the cue ball will travel at such high volumes!



IN REALITY THINGS ARE DIFFERENT

OF COURSE

IN REALITY

You will maybe find yourself **half a ball back**.

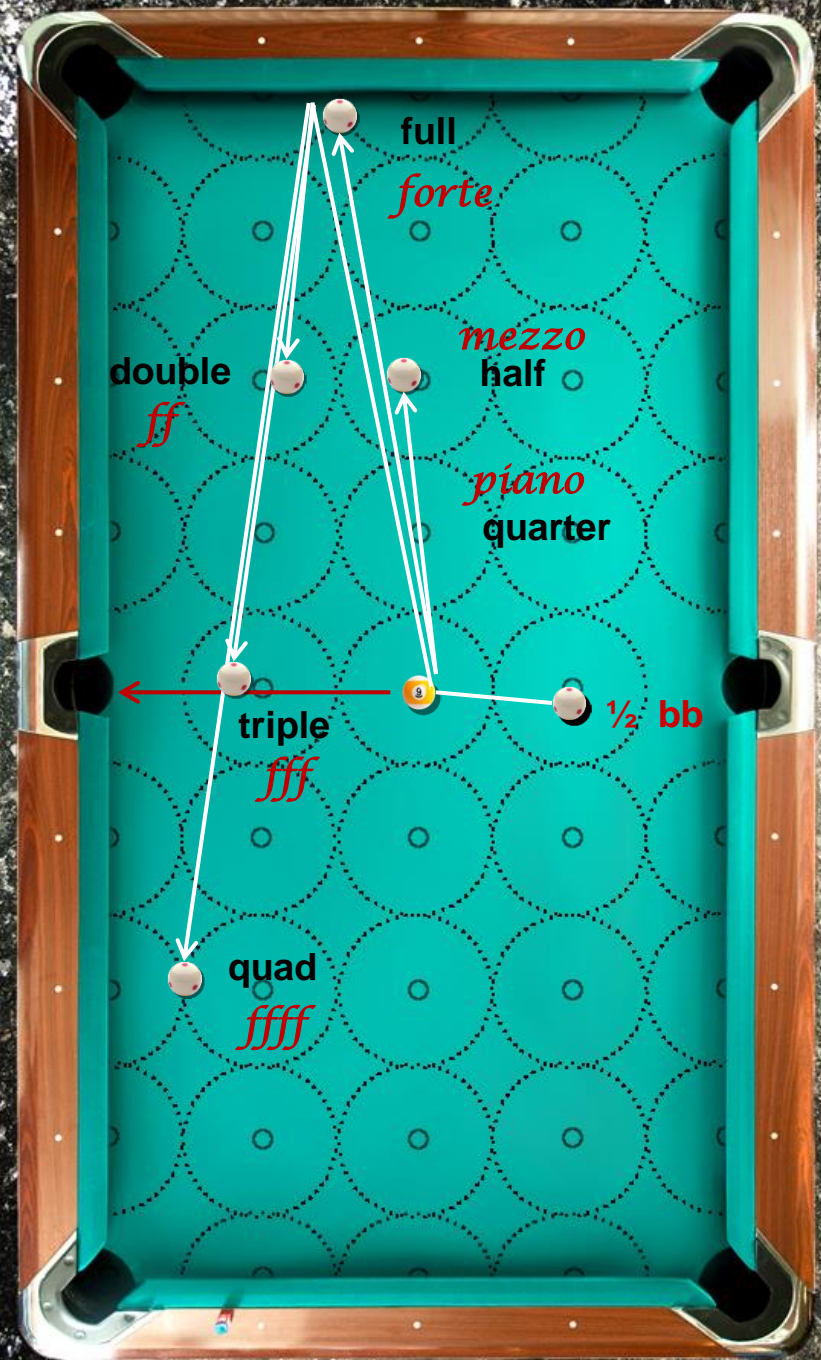
So you do the thing in reverse.

So from half a ball back:

- **Piano** plays a **quarter** note.
- **Mezzo** plays a **half** note.
- **Forte** plays a **full** note.
- **Fortissimo** plays a **double**.
- **Forte-Fortissimo** plays a **triple**.
- **Only madness** plays a **quad**.

This gives you an impression on **how far can you get** at all.

It also tells you at which distance you can expect a **reasonably precise** cue ball placement. Not much precision beyond a **full note**.



OR MAYBE

You will maybe find yourself **one ball back**.

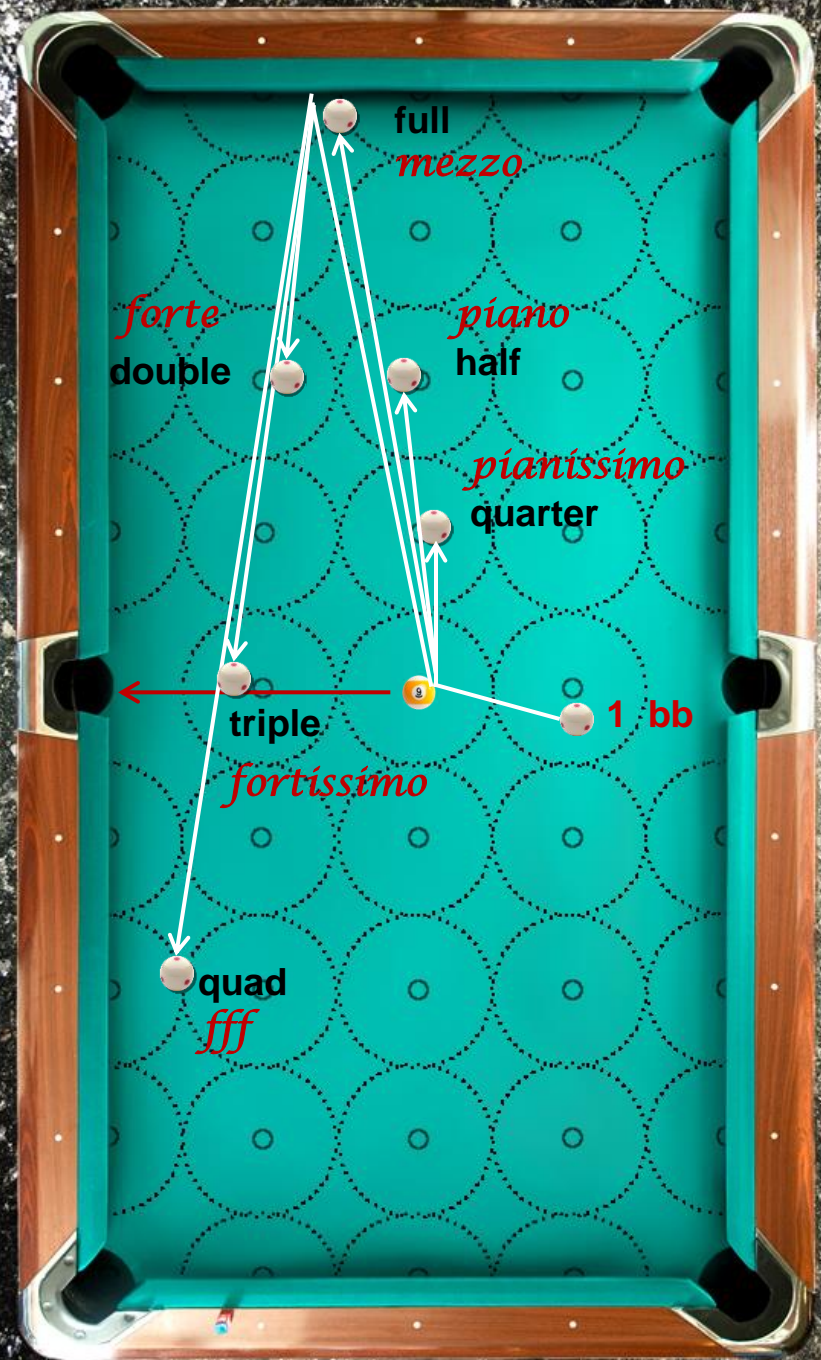
That makes some things easier.

So from one ball back:

- **Pianissimo** plays a **quarter** note.
- **Piano** plays a **half** note.
- **Mezzo** plays a **full** note.
- **Forte** plays a **double**.
- **Fortissimo** plays a **triple**.
- **Forte-Fortissimo** plays a **quad**.

The triple is very available from one ball back, even the quad..

It also tells you at which distance you can expect a reasonably precise cue ball placement. Not much precision between double and triple.

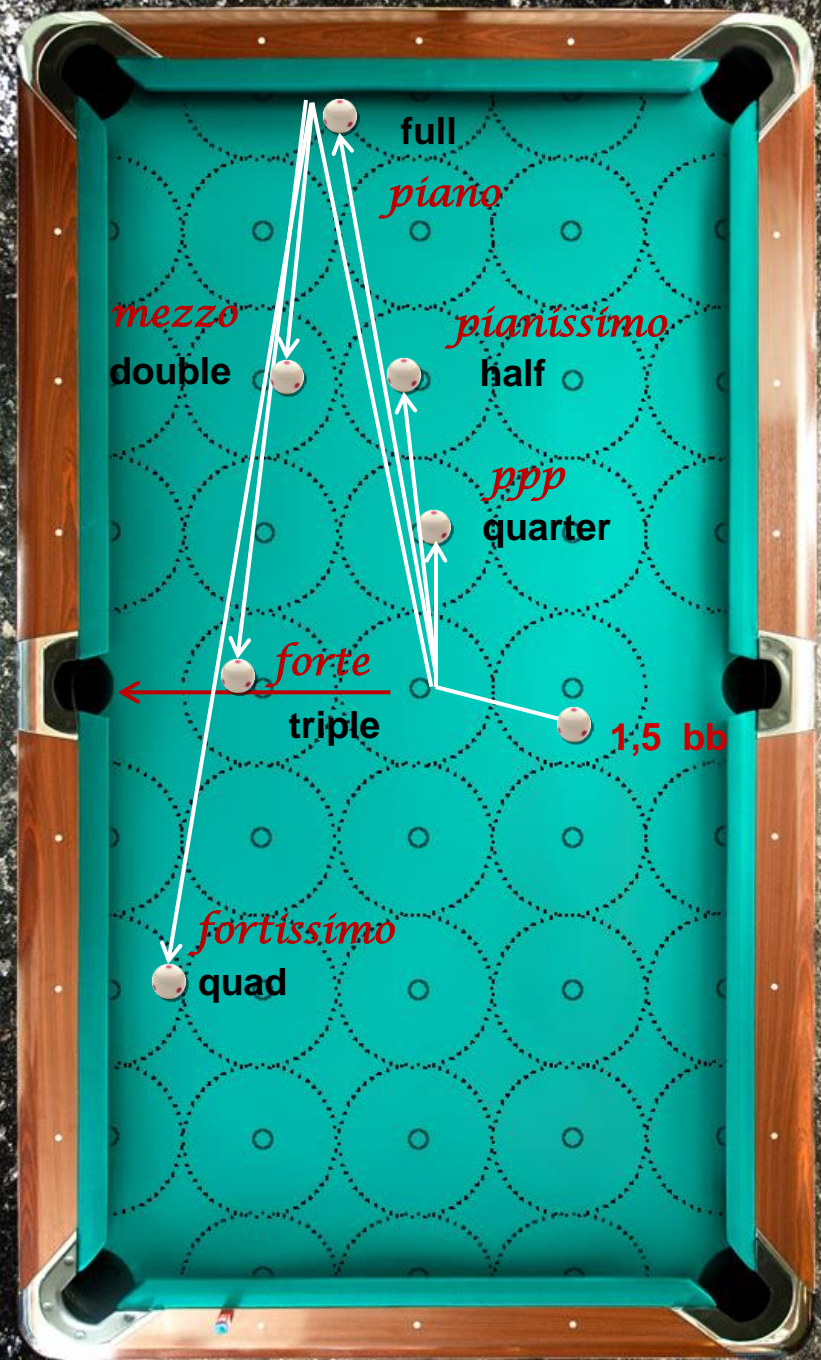


EVEN FURTHER BACK

1,5 balls back things start to get trickier again.

From 1,5 balls back:

- **Babying it** plays a **quarter** note (can you even pot it?)
- **Pianissimo** plays a **half** note.
- **Piano** plays a **full** note.
- **Mezzo** plays a **double**.
- **Forte** produces a **triple**.
- **Fortissimo** produces a **quad**.



YOU GET THE IDEA

I THINK

REMEMBER

**Half a ball back
plays half a note
at mezzo speed.**

SWING LOW

But what if I need a different cue ball path, for example draw the cue ball back half a diamond at the short rail?

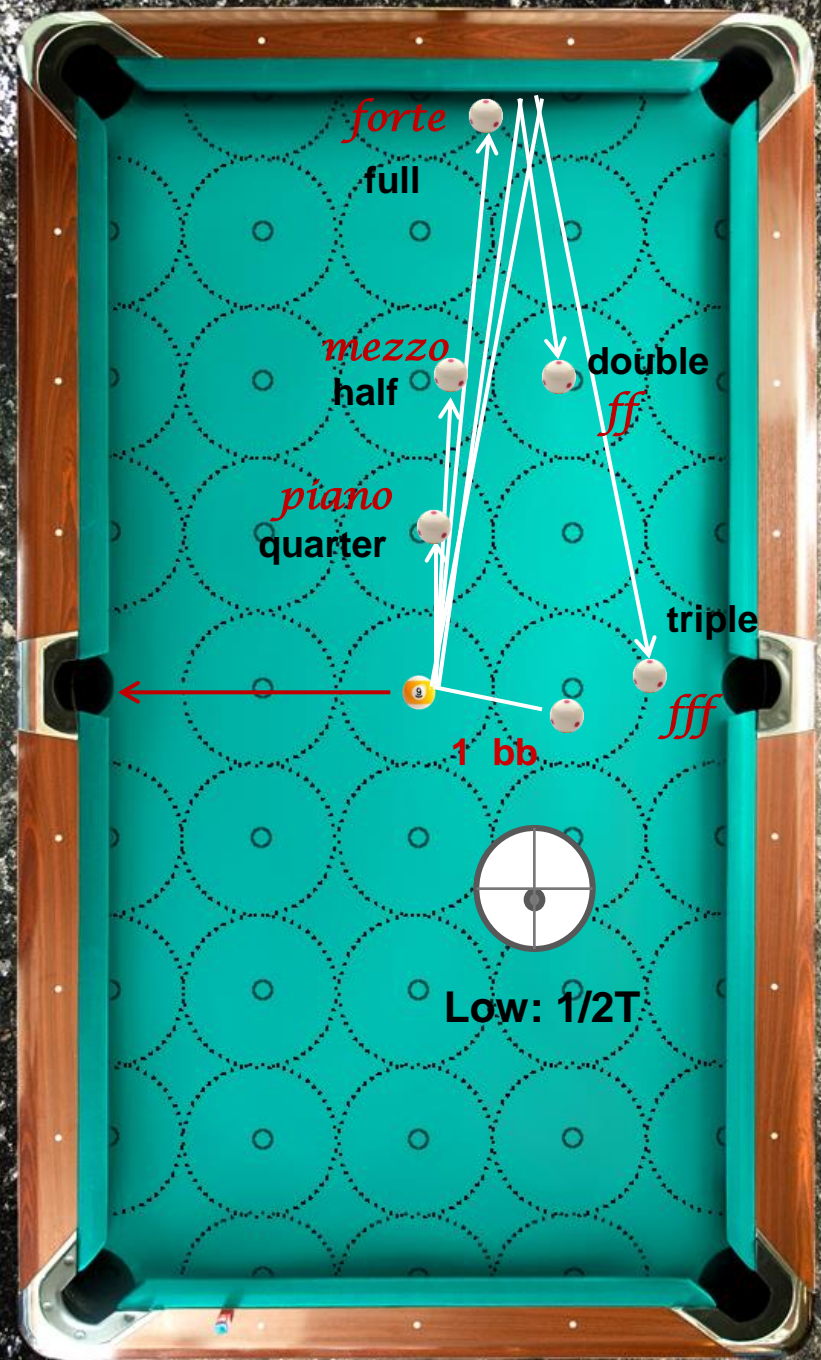
Even then, the system can be used!

The trick: Half a tip low makes the ball come up one step short.

So from one ball back with half a tip low:

- **Piano** plays a **quarter** note.
- **Mezzo** plays a **half** note.
- **Forte** plays a **full** note.
- **Fortissimo** plays a **double**.
- **Forte-Fortissimo** plays a **triple**.
- **Only madness** plays a **quad**.

Note the **angle widens** a bit out from the cushion because of the cut induced spin.



YES.

Playing one tip low plays even two lengths short.

Playing half a tip high plays one length long.

So you have to remember the scale of note lengths:

- **Eighth**
- **Quarter**
- **Half**
- **Full**
- **Double**
- **Triple**
- **Quad**

With half a tip high or low you move up or down one step on the scale.

Accidental low is bad on these shots.

A level cue with dead center ball rule.

HIGHS AND LOWS

Forget about volumes and notes for a moment.

Is there a **predictable system** to estimate where the cue ball will end up **on the small cushion** when you apply high or low?

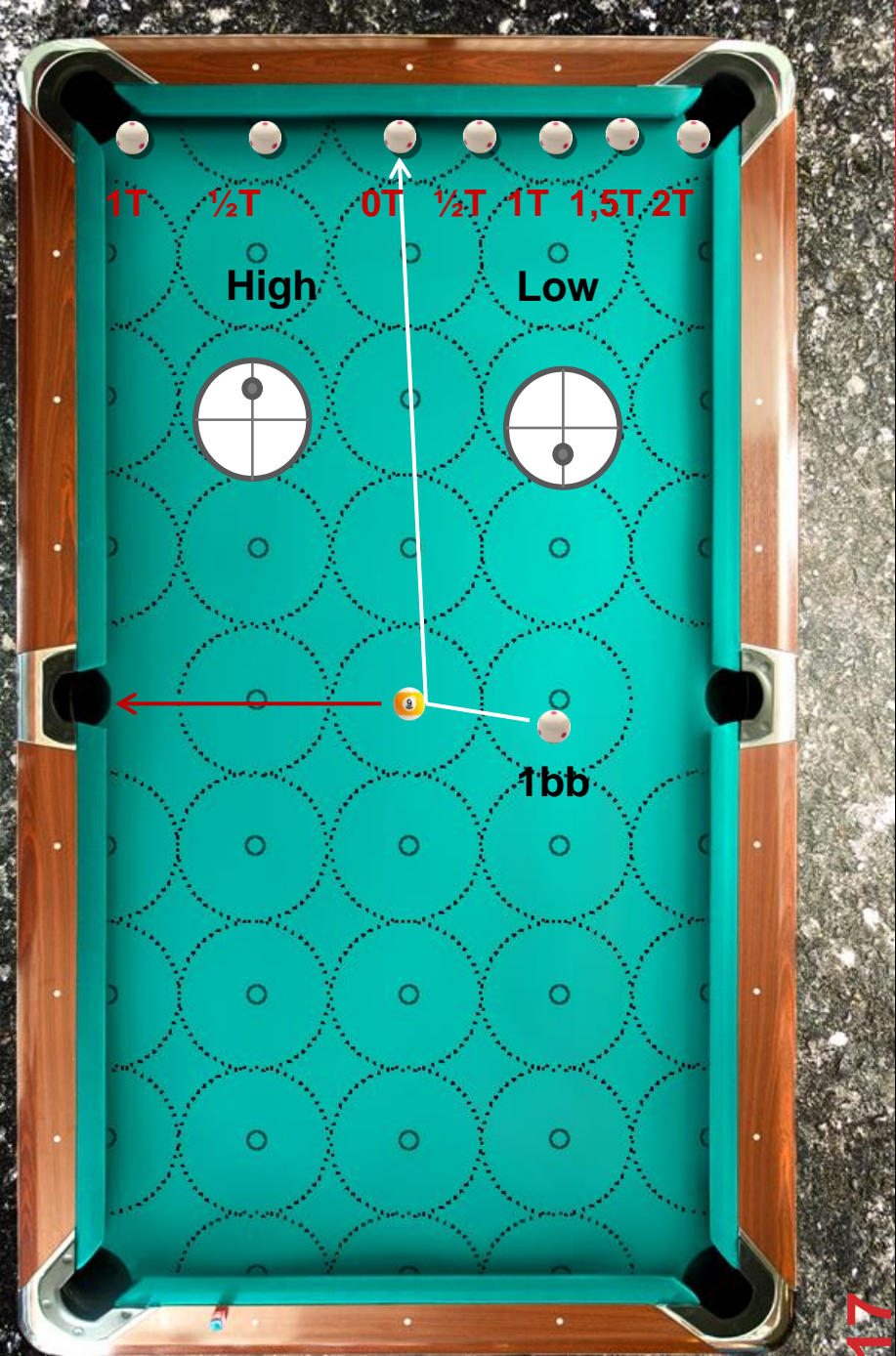
Yes, there is!

On a mezzo staccato note:

- **Half a tip high** follows 1D on half a table.
- **One tip high** follows 2D on half a table.
- **One tip low** bends back 1D on half a table.
- **Two tips low** bend back 2D on half a table

So following only needs half of drawing.

Those need to be at least mezzo speed **staccato shots** (not full blown draw shots.)



QUALITY DRAWS

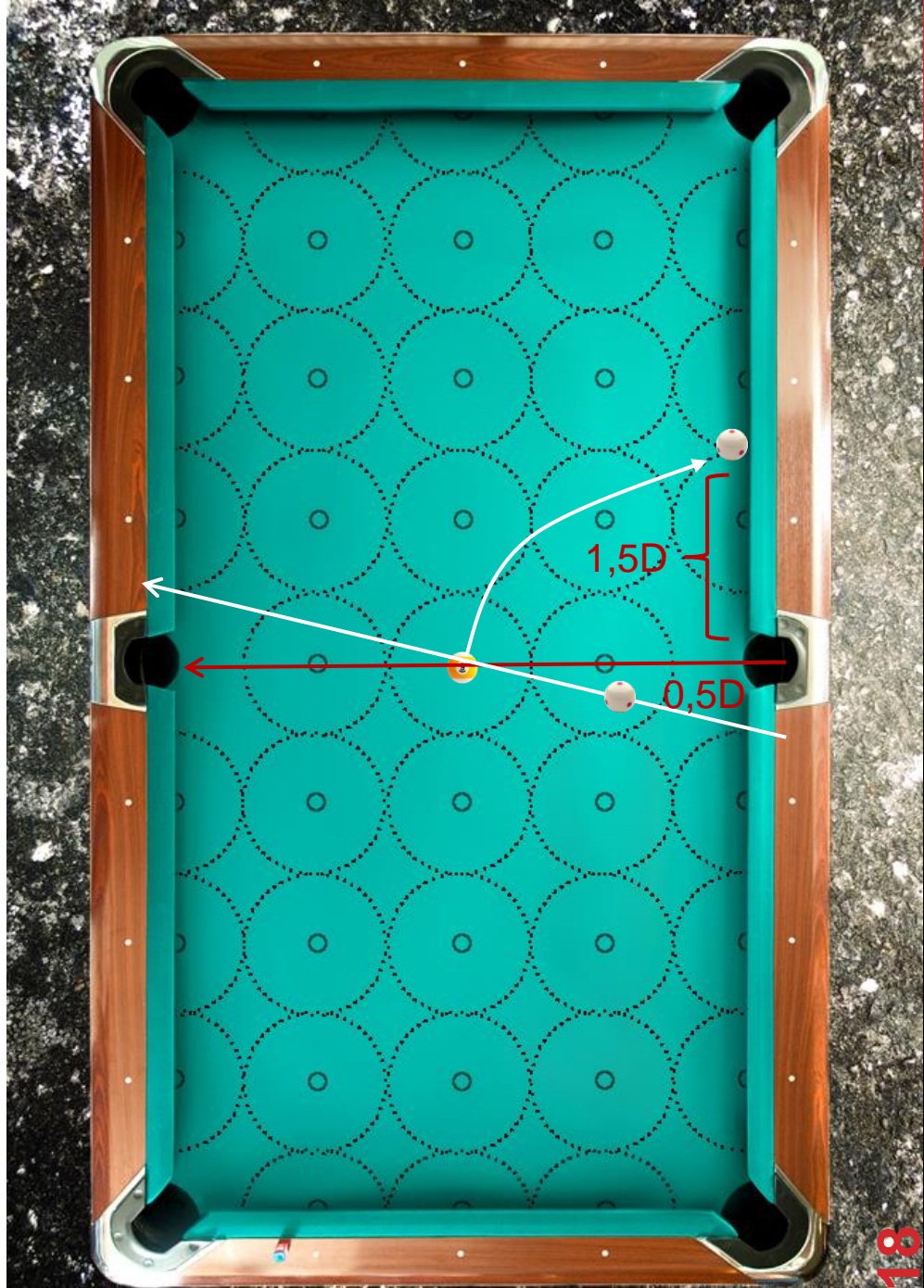
So let's talk about **real draws and follows** for a bit.

From a **good quality maximum draw shot** (piano volume) you can expect to get three times the angle of the angle you go into the ball.

So if you like in this example have half a diamond angle in, a good quality draw will reach 1,5 diamonds on the opposite cushion.

Remember you need only a piano half note to reach the cushion even when straight in.

It is worth practicing this particular good quality draw shot and remember what it feels like.



QUALITY FOLLOWS

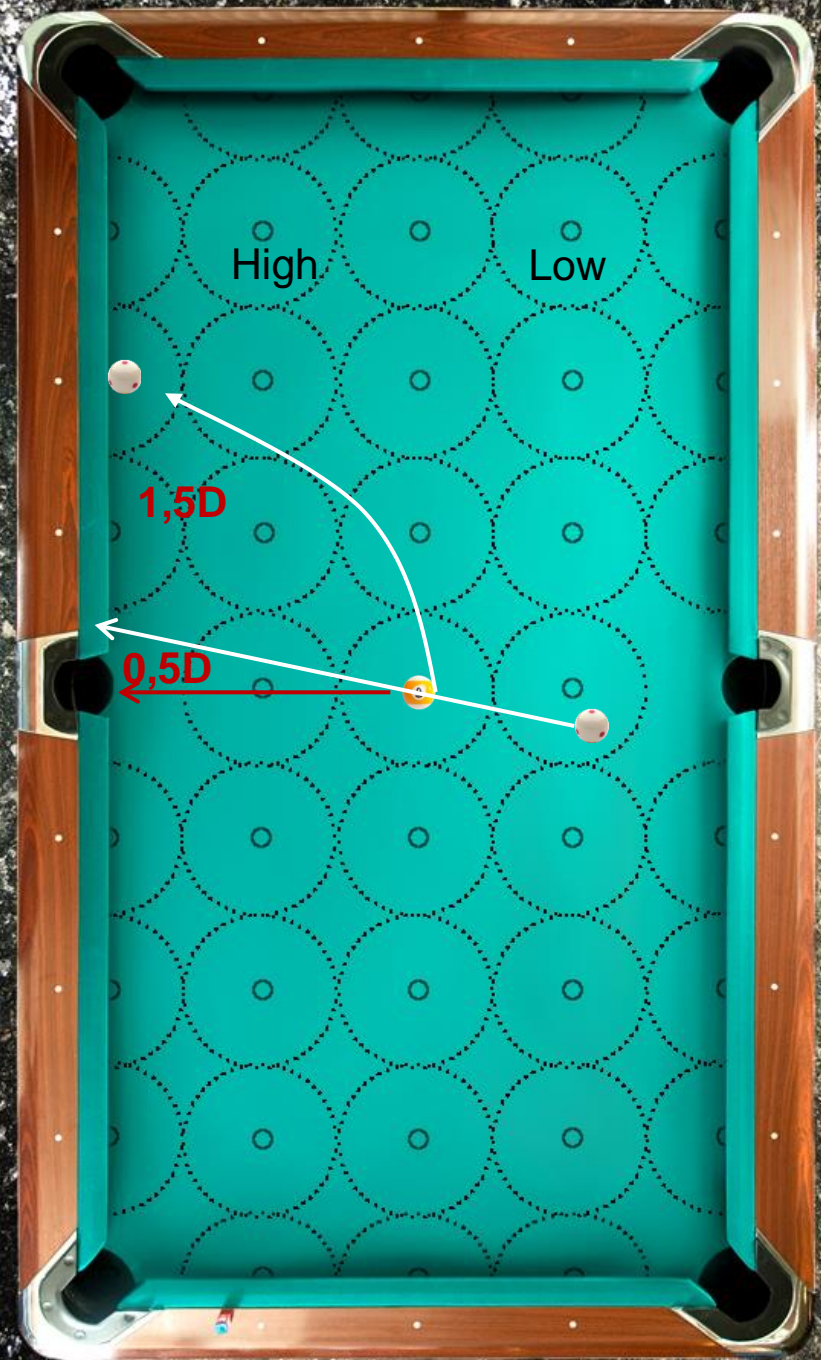
And you probably guessed it:

Good quality maximum follows do just the same.

Played at piano speed max.

If you play them any louder, they will **travel along the tangent** path for way too long to reach that position.

Good quality draws or follows only travel **the bare minimum** along the tangent, unless you intentionally force them to.



ENOUGH FOR PART II

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