

THE ART OF BALLS

7

**AN ALTERNATIVE APPROACH
TO POOL BILLIARDS**

PART 7: BANKING



SEEING THE UNSEEN.

BANKING

YOUR CREDO

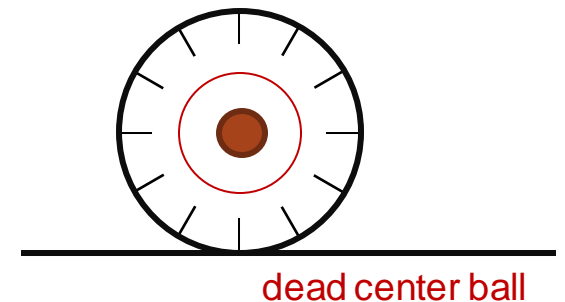
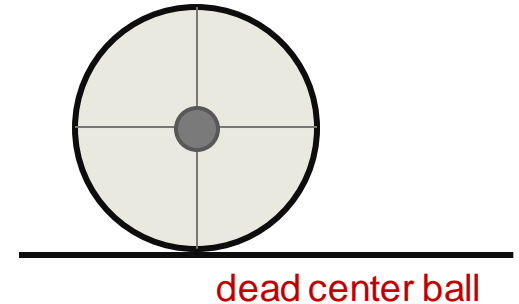
We will play every shot in this part as a **dead center ball** with **mezzo speed** with a **level cue**.

We will play it as a **Slide** unless indicated otherwise.

Why is that?

- Rolls don't transfer as much spin to the object ball as Slides do. So when banking with rolls, you need a completely different shot.
- Rolls don't throw the cue ball offline as much as Slides do. So when banking with rolls, you need a completely different shot.

There are a couple of occasions where we will use rolls or spin. Or at least look at what rolls do. Most shot will be played as a **dead center ball** with **mezzo speed** with a **level cue**.



TICKS & STEPS

In earlier parts we were talking about the chromatic scale of angles, you remember:

Straight In, Hair off, Ninety, Three-Quart (Sharp and Flat), Sixty, Half-Ball (Sharp and Flat), Forty, Quarter (Sharp and Flat), Ten Thin and Hair Thin.

We're going to use this extensively in this part. In fact, we need it so often, I want to introduce a new term to you: the „Tick“.

One tick means one 1/16 step, i.e. the smallest step we introduced in our pool scale.

1. If I say play a Half-Ball **one tick thinner**, you play a Half-Flat.
2. If I say play a Sixty **one tick thicker**, you play a Three-Quart Flat.
If I say play a Quarter one tick thicker, you play a Quart-Sharp.
3. If I say play a Quarter **three ticks thicker**, you play a Half-Flat.

If I however say „play a step thinner“ or „play a step thicker“, then I'm referring to one **minor step**, i.e. 2/16 or two ticks.

So a (minor) **step is two ticks**.

Since „Major steps“ are all Quarter steps, I'll not call them major steps but **quarters**.

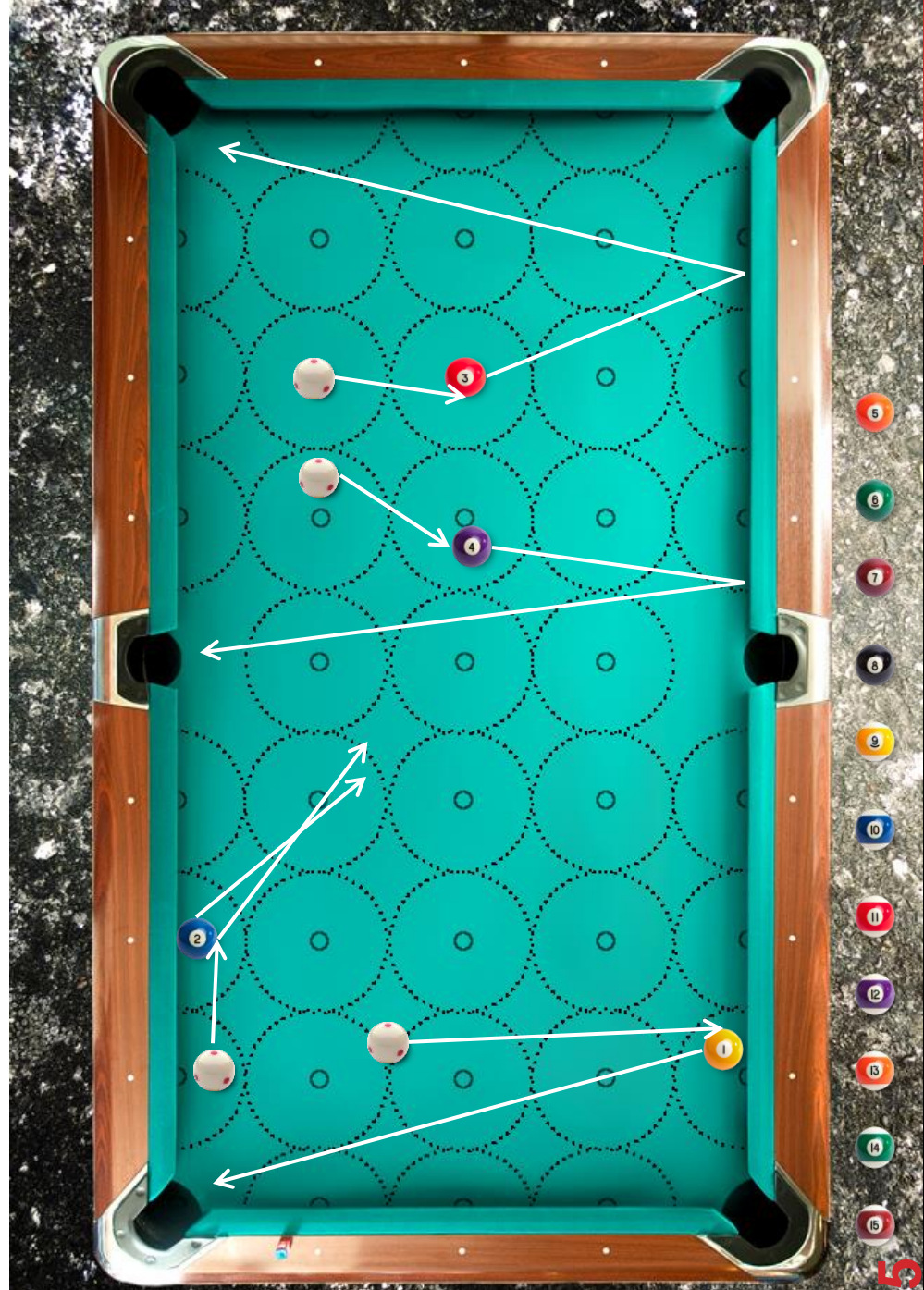
Okie?

4 DIFFERENT SITUATIONS

There are 3 different situations I want to discuss with you. Each will have its own, special solution to it.

1. Balls that are positioned close to the cushion and you hit them square on the head.
2. Balls that are positioned close to the cushion and you hit them across.
3. Regular or back cuts that are out in the field.
4. Forward cuts

And, of course there will be references for each of them.



IT'S HIP TO BE ...

SQUARE

SQUARE HALF-BALL

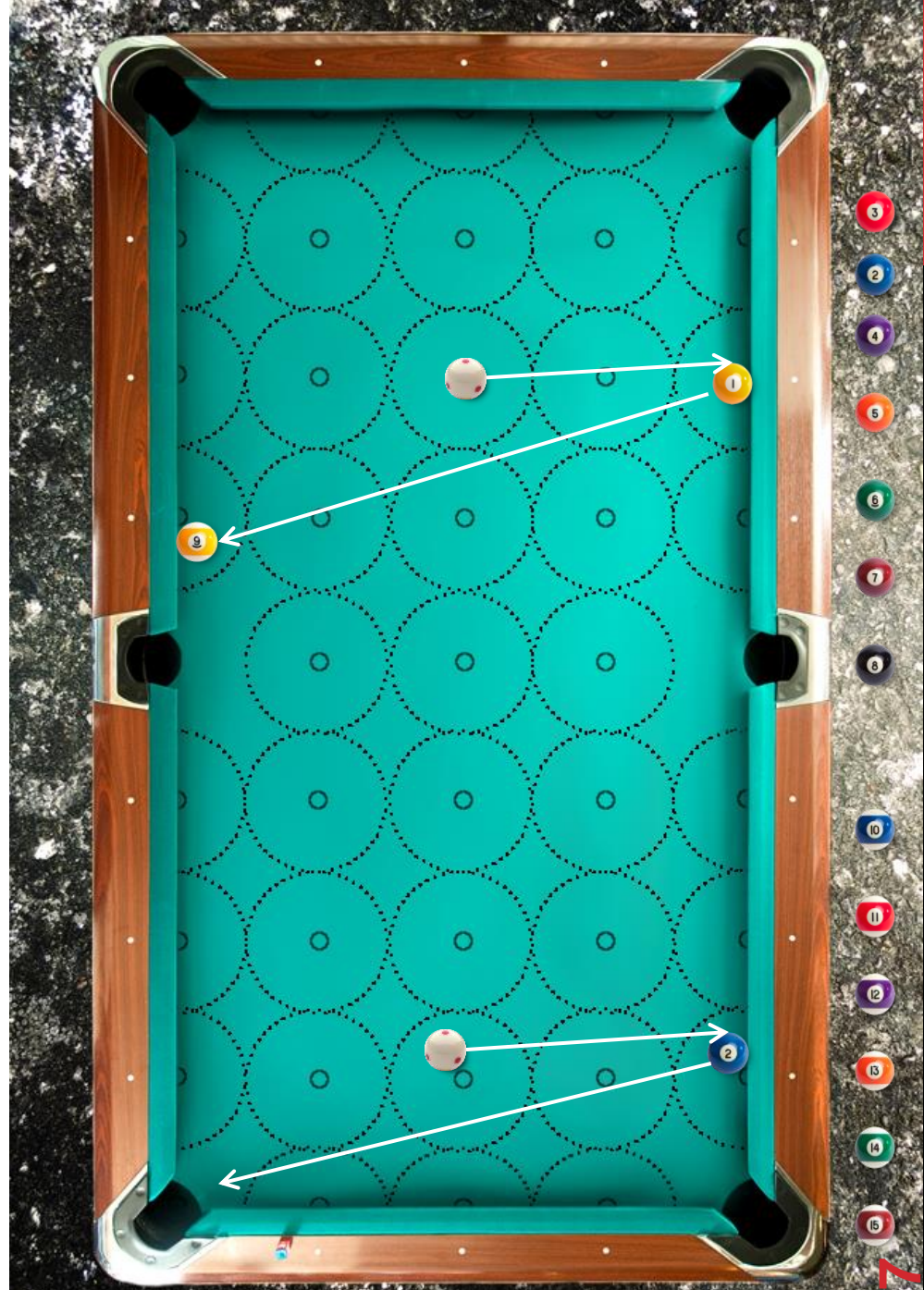
Let's start with our first and easiest reference. The square half ball. There's a ball touching the cushion, and the cue ball is perpendicular to it and the rail.

If you hit this ball as a half ball, then it will travel out and touch the opposite rail a bit more than a diamond to the left or right. You could calculate with about 1.2 diamonds.

It depends a bit on the speed of the cushion and how clean the balls are, but it is pretty stable.

Once you know this, missing this two ball becomes really difficult, unless you have tiny pockets. It won't go if it is lying at the first diamond, only if it is lying a bit above it.

You can take this reference during your warm-up exercise.



SQUARE HALF-BALL

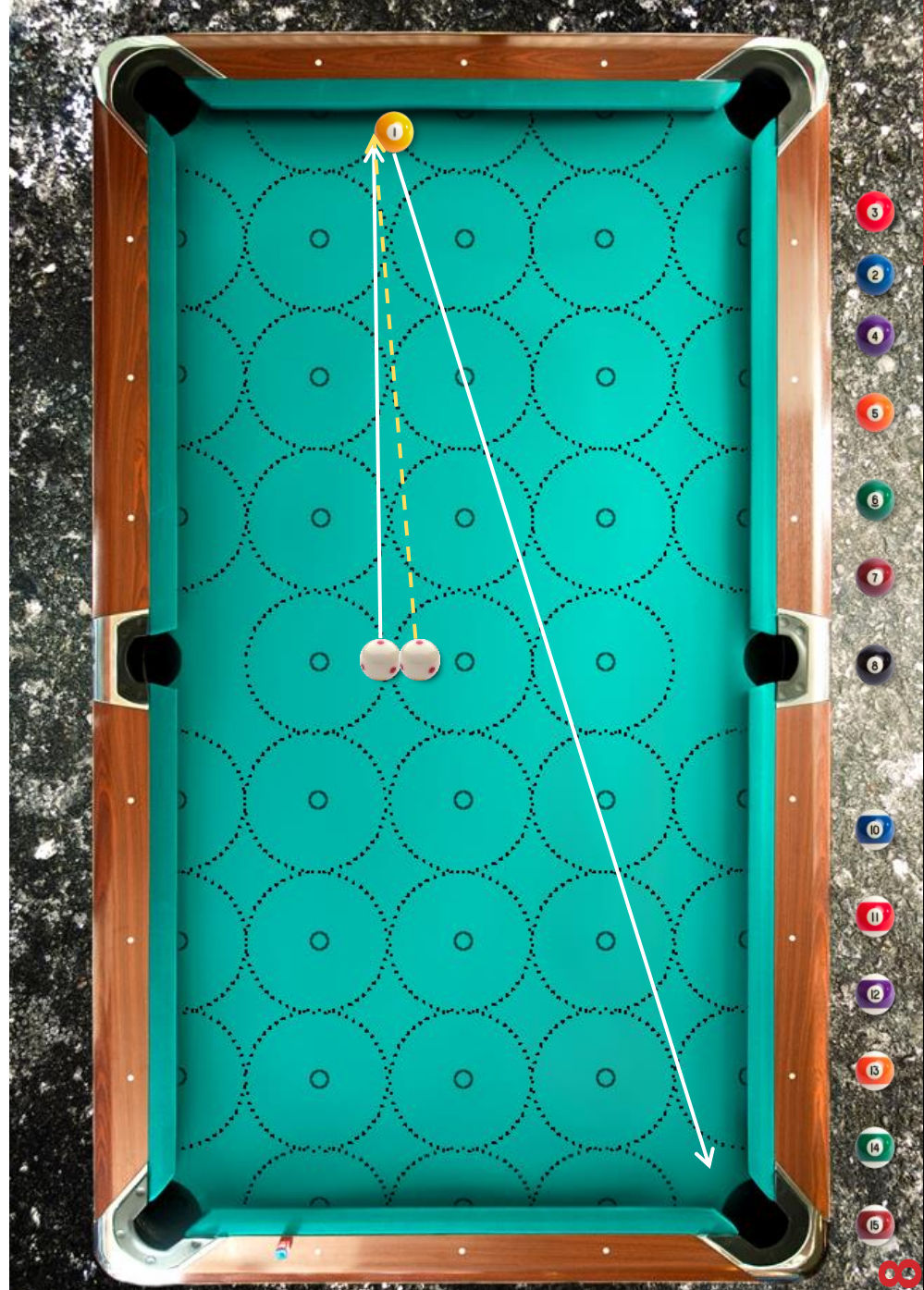
Of course, you can also play this the long way (look at the white cue ball path). But the shot is getting a bit more difficult.

The problem is:

Anything on the rail that you hit THICKER than a half ball, will double kiss.

And it is really difficult to play precise enough to avoid it when the cue ball has to travel far before hitting the one ball.

However, if the cue ball is taking the dashed path, you're safe (and that won't really do much to the resulting path of the one ball).



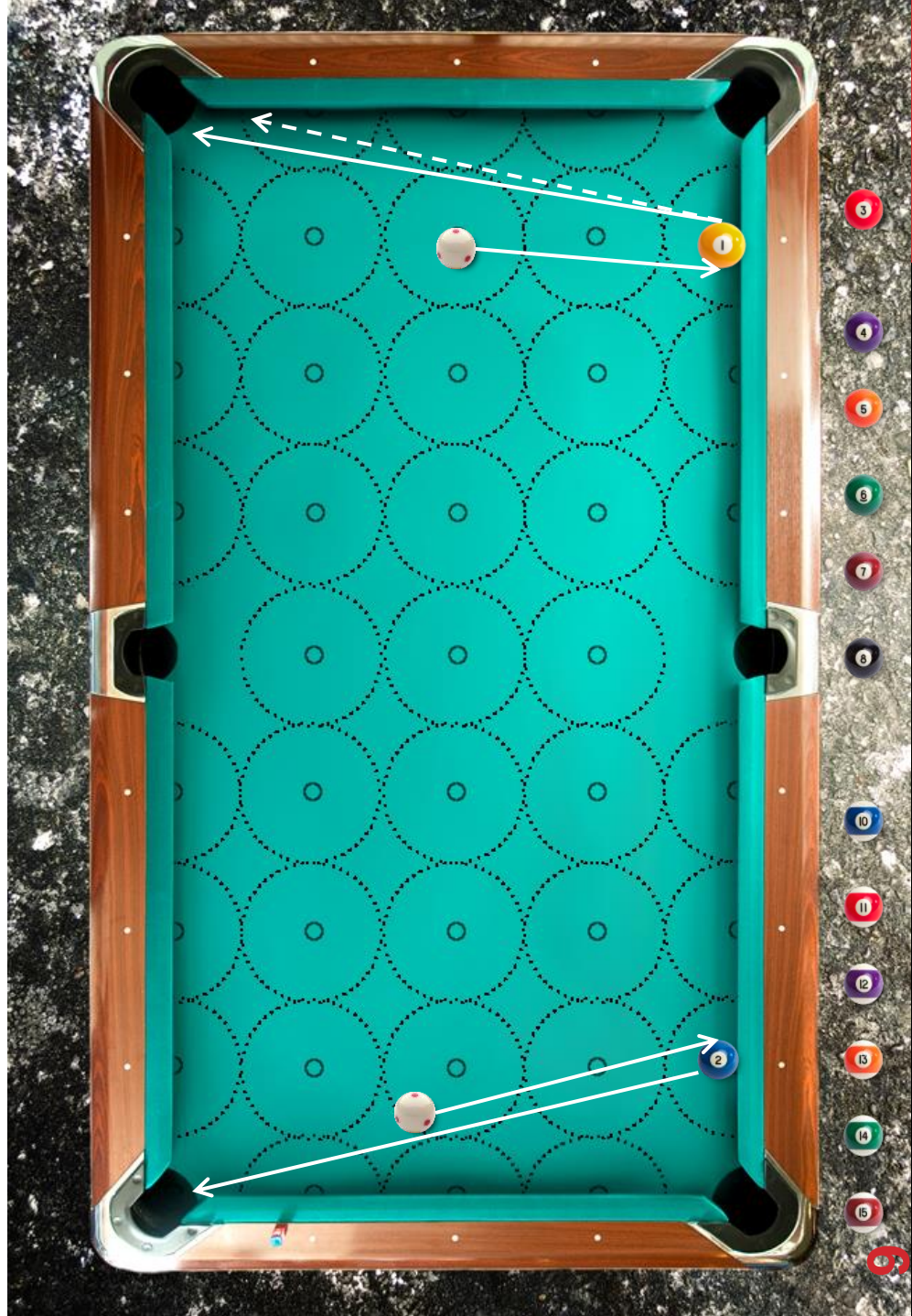
SQUARE HALF-BALL

Well, you can try to shoot this 1-ball on your table. As a half ball. Maybe it will work. Maybe your cushions are soft enough. But you will have to play it forte. Or fortissimo. Maybe add a tip of left spin. And pray to god you won't double kiss.

Chances are that you will go the dashed route and hit the top rail.

If you shoot the two ball as a mezzo half ball, you will be surprised, that it probably still goes. Taking the cue ball a little bit further back doesn't do much to this shot, since there are several effects at work which compensate each other.

At some point you will of course have to hit thinner.



SQUARE MANIA

Let's complete these references. You already know where the half ball will end up in the one-ball example on the right, namely a tad above the first diamond.

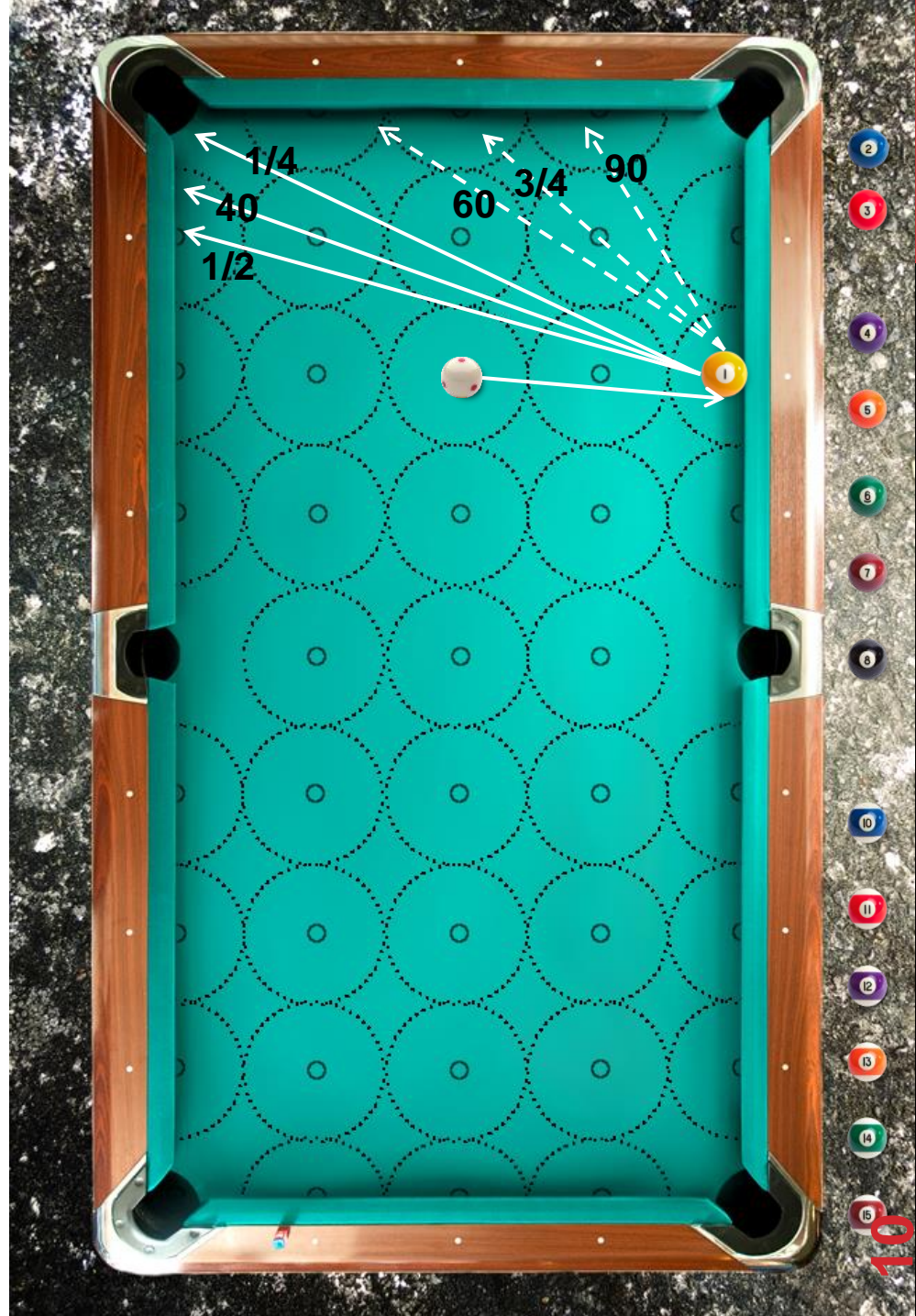
The 40-cut will hit the middle between the first diamond and the pocket. A quarter cut will travel toward the pocket. But beware, that quarter cut is not a stable route to pocket that ball. You need an ideal hit, and it is not too easy to reproduce. We'll get back to a better solution on the next slide.

Also note the Three-Quart double kiss route. It travels towards the center of the top rail. That's interesting in safety play, as the cue ball will travel down table.

If you hit one step thicker than Three-Quart, it will travel towards the first diamond on the right, and if you hit one step thinner, it will travel towards the first diamond on the left.

It is not feasible to try a thinner than quarter cut.

It is a good idea to memorize these paths.



SQUARE SPIN

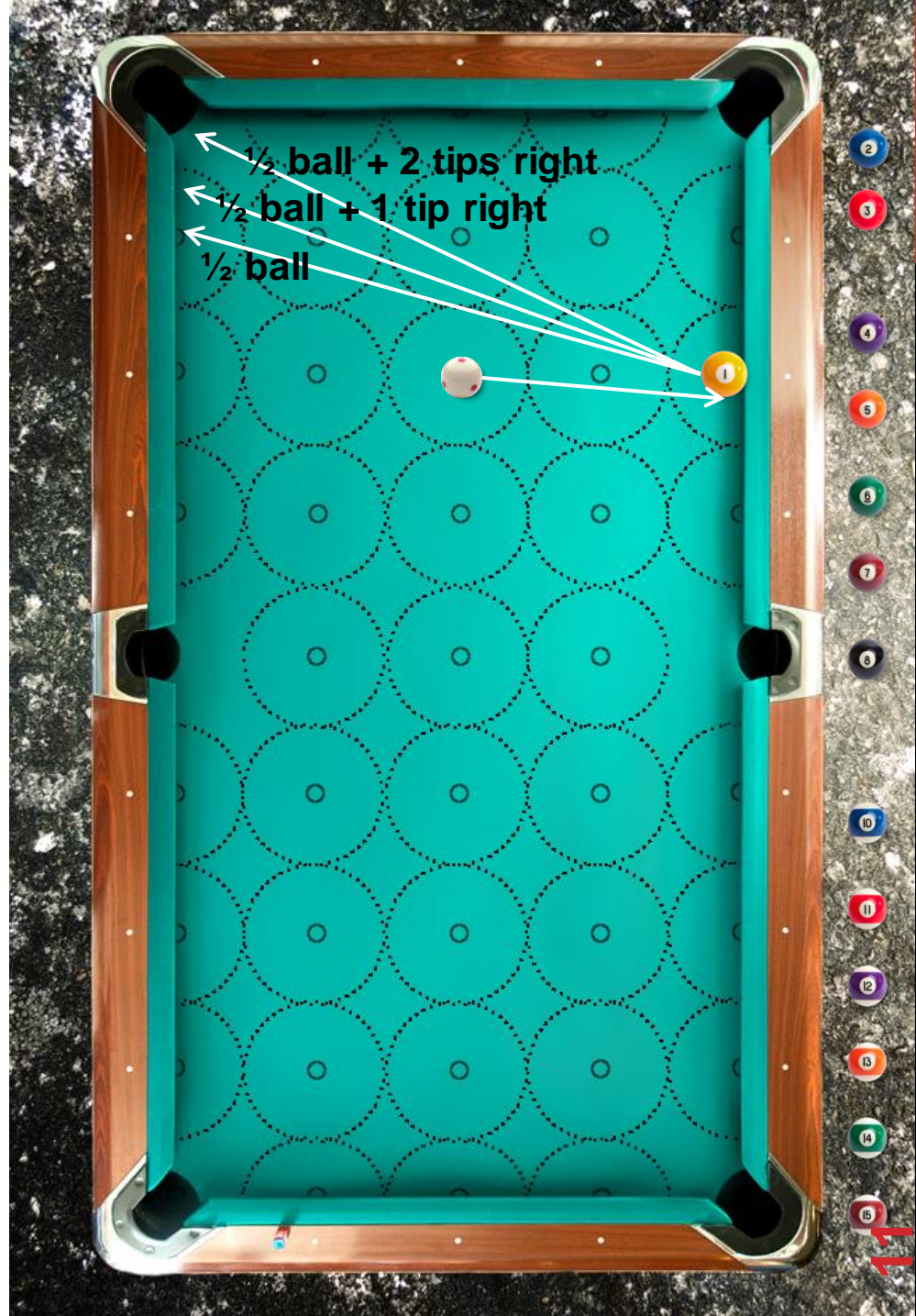
Of course, we can also apply spin to this ball. Since we are playing a slide, we apply spin by moving in tips left or right on the equator of the cue ball.

Since in this case we need a mixture of spin transfer and direction change into the cushion, we will not get as much directional change as we get when we're playing rail first.

One tip right will make the object ball deviate half a diamond across half the table.

Two tips right will make it come a full diamond long. That's what we want when tryin to pocket this ball into the corner.

This route is more stable than trying to pocket it via quarter ball, since the spin cancels out some of the effects that give us a headache with these balls.



INTERESTING

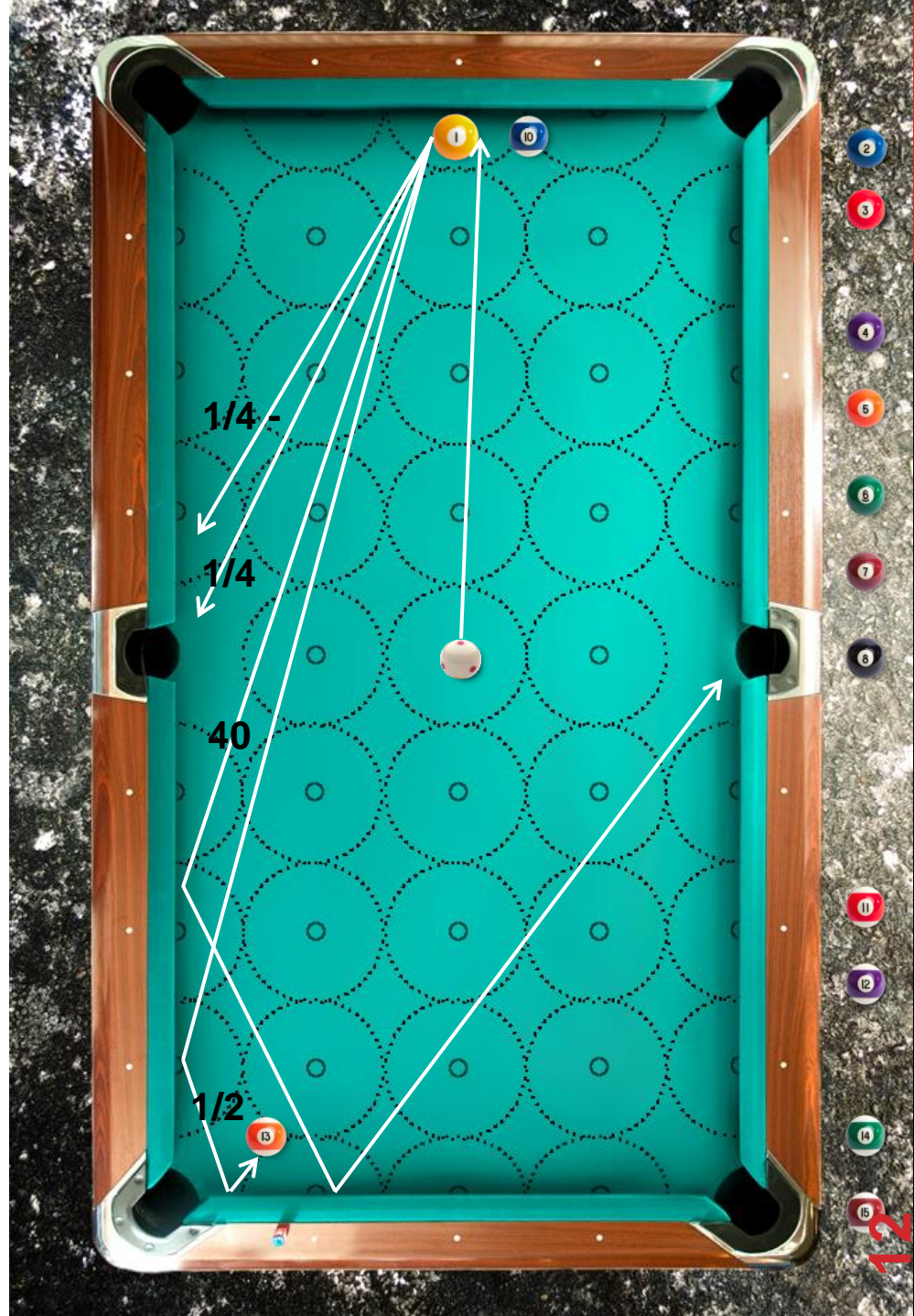
... to note are also these paths.

The quarter ball will travel toward the middle pocket (2D deviation on half a table). The Quarter-flat will reach the cushion and not scratch.

The Forty will go two rails on a path toward the middle pocket.

Since the cue ball will approximately do the same to the opposite side (if the 10-ball is not there), you can try this shot for a safety. Chances are, that both cue ball and object ball will end up high on the rail on opposite sides. Of course, the one could rattle and stay in front of the pocket.

The Half-Ball route also is interesting in safety play. But beware, the cue ball will also travel quite a bit. This one's particularly interesting when you can send the cue ball into other balls on the right, like the 10-ball, so it doesn't completely travel down table.



NO-NO

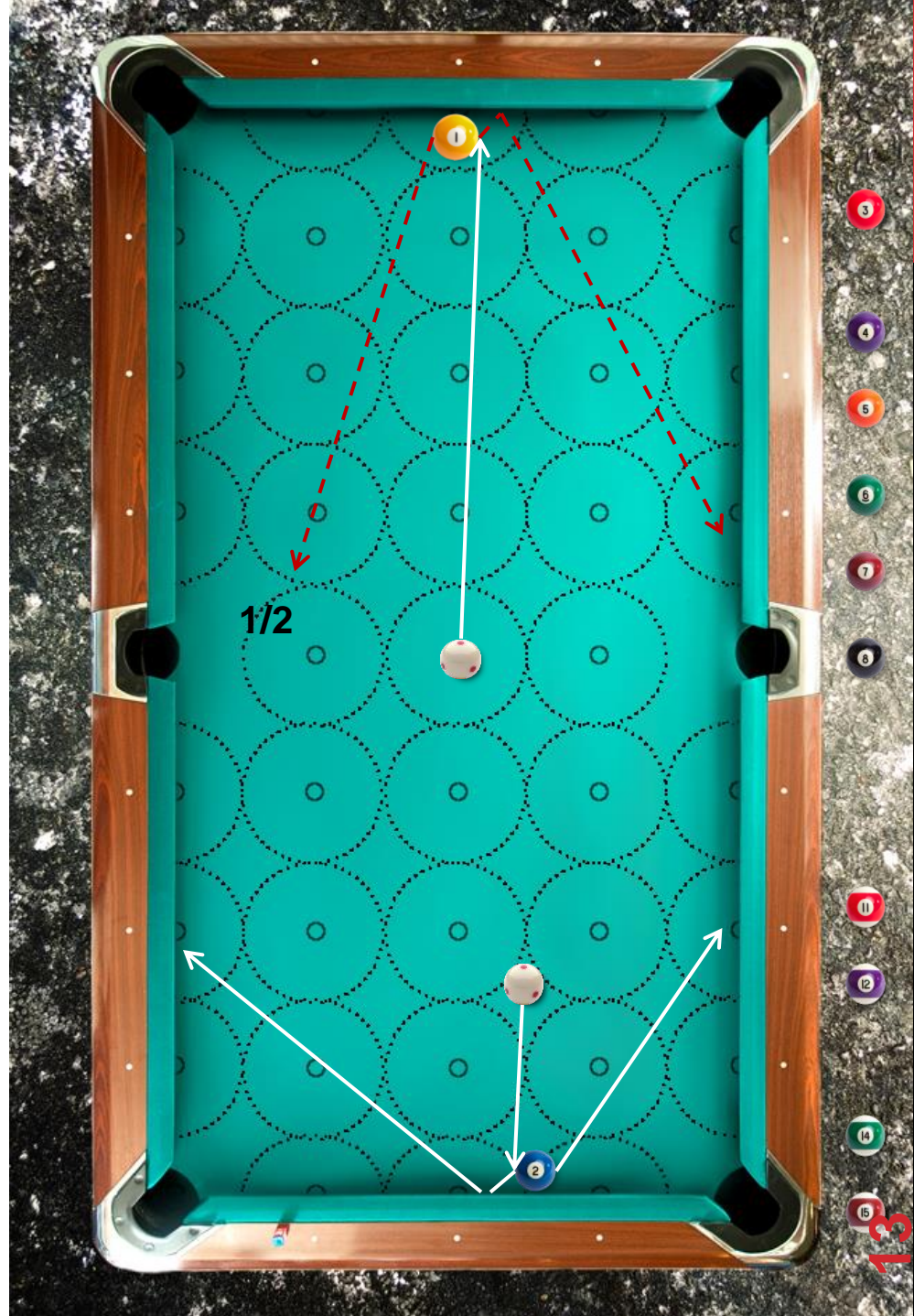
It is **not feasible** to try a „split“ for a safety to both sides of the long rails with this ball without any spin, considering the half ball route indicated in red.

This is doomed to fail, and you're probably leaving your opponent a shot at the center pocket.

Better try this when the two ball is slightly off center, and apply 1.5 tips of outside spin to the cue ball to help the positions. Still play a half ball to get approximately equal lengths for both cue ball and object ball (the spin will take care of the additional length because of the angle out from the cushion).

Or, of course, play it as a Three-Quart and use the double kiss, which would also be feasible in the one-ball example above.

People rarely do. I wonder why.

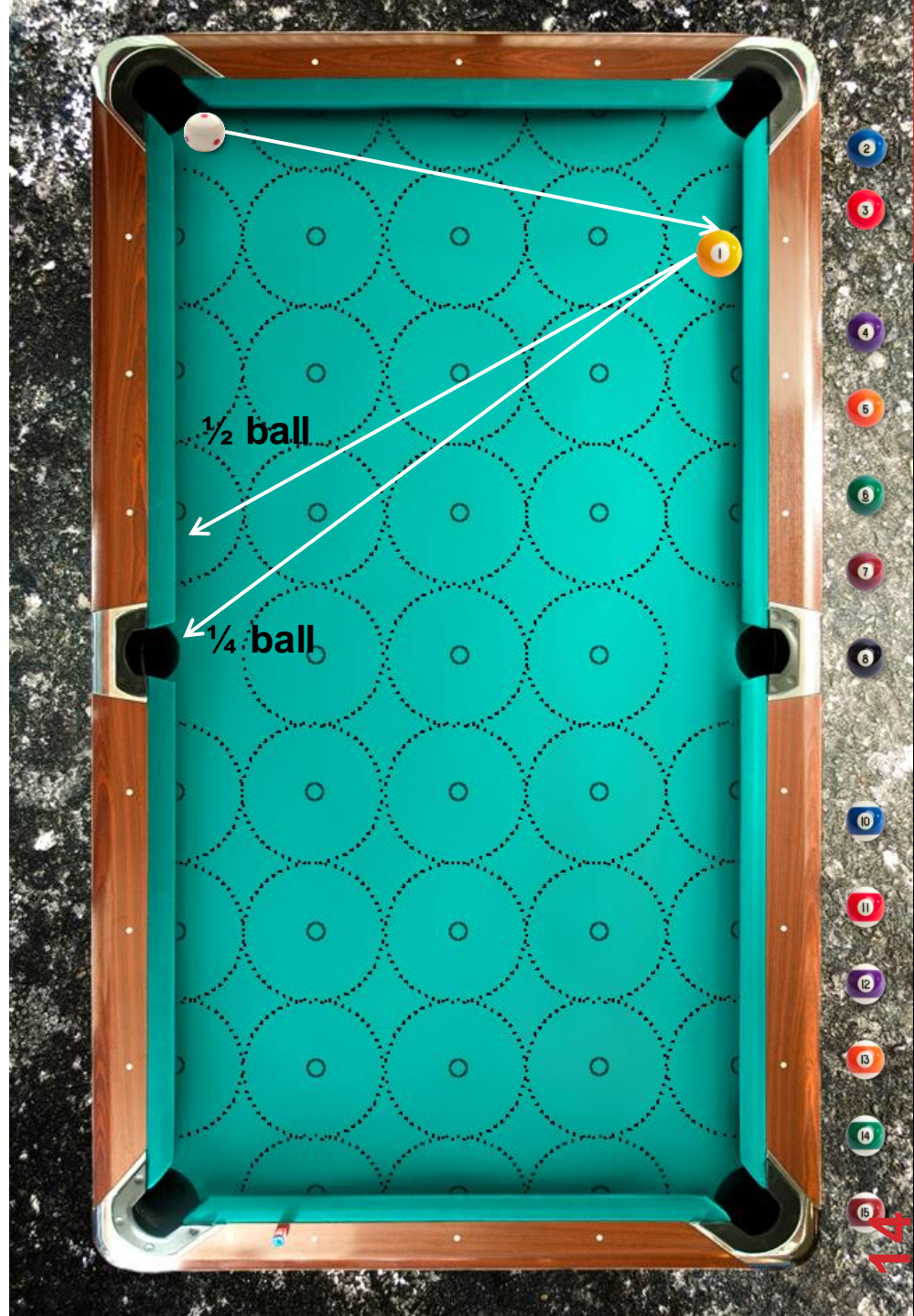


ONE LAST VARIATION

Let's do one last variation of this shot.

Of course you're not always perpendicular to the rail. You can approximately add the angle in to your angle out.

In our example to the right, the half ball will end up slightly above the third diamond, and the quarter ball has a chance to fall into the center pocket.



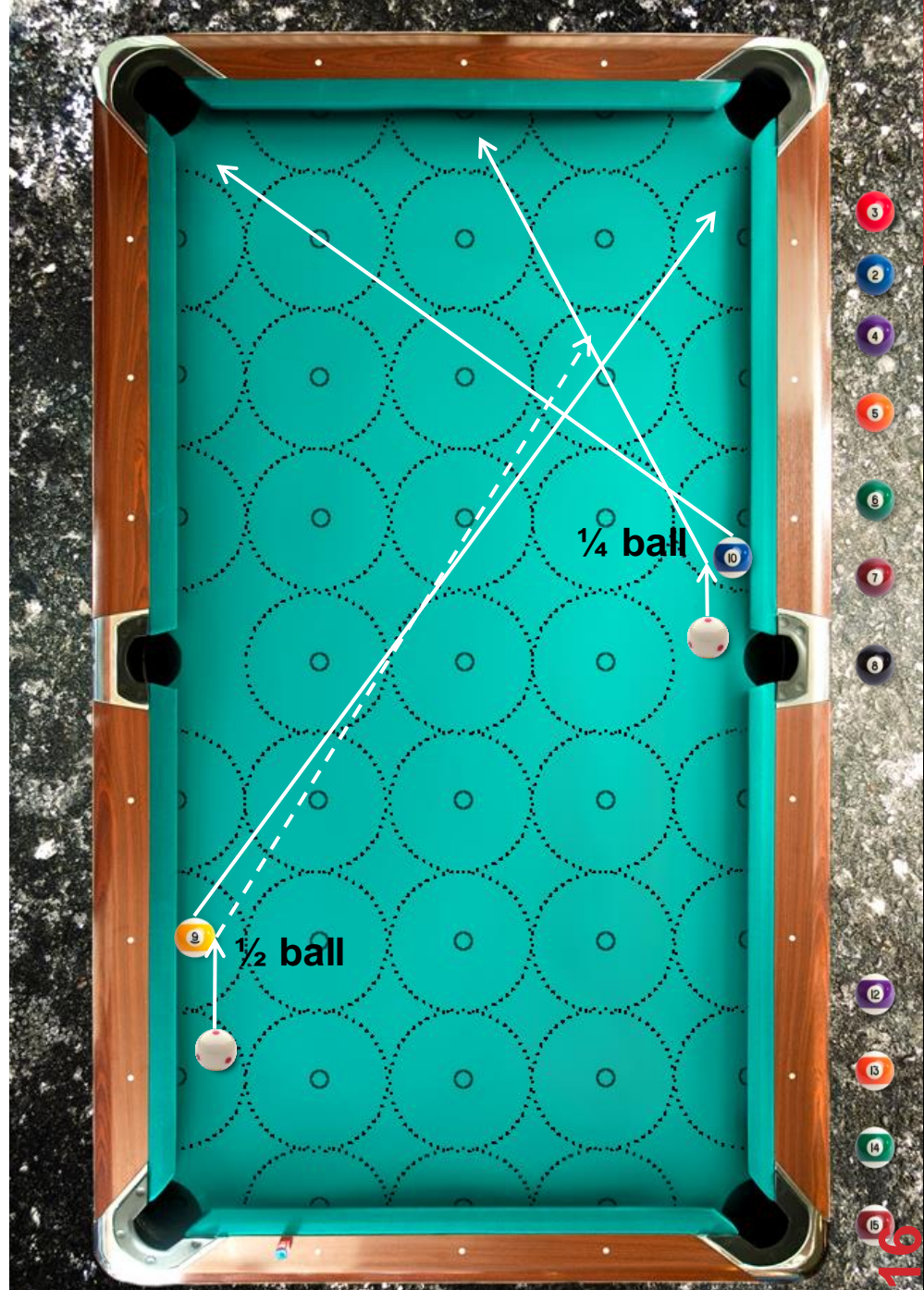
NOW LET'S SHOOT

ACROSS

ACROSS STANDARDS

The across half-ball, when played exactly along the rail, will travel down table 5-6 diamonds. In this case it has a chance to reach the pocket. However, the cue ball takes approximately the same route. I have rarely seen it carom into the object ball, but it may scratch.

The across Quarter-Ball, when played exactly along the rail, will travel down table a tad more than three diamonds. It depends a bit on the cloth, maybe 3.5 diamonds. So the 10-ball to the right has a chance to reach the pocket.

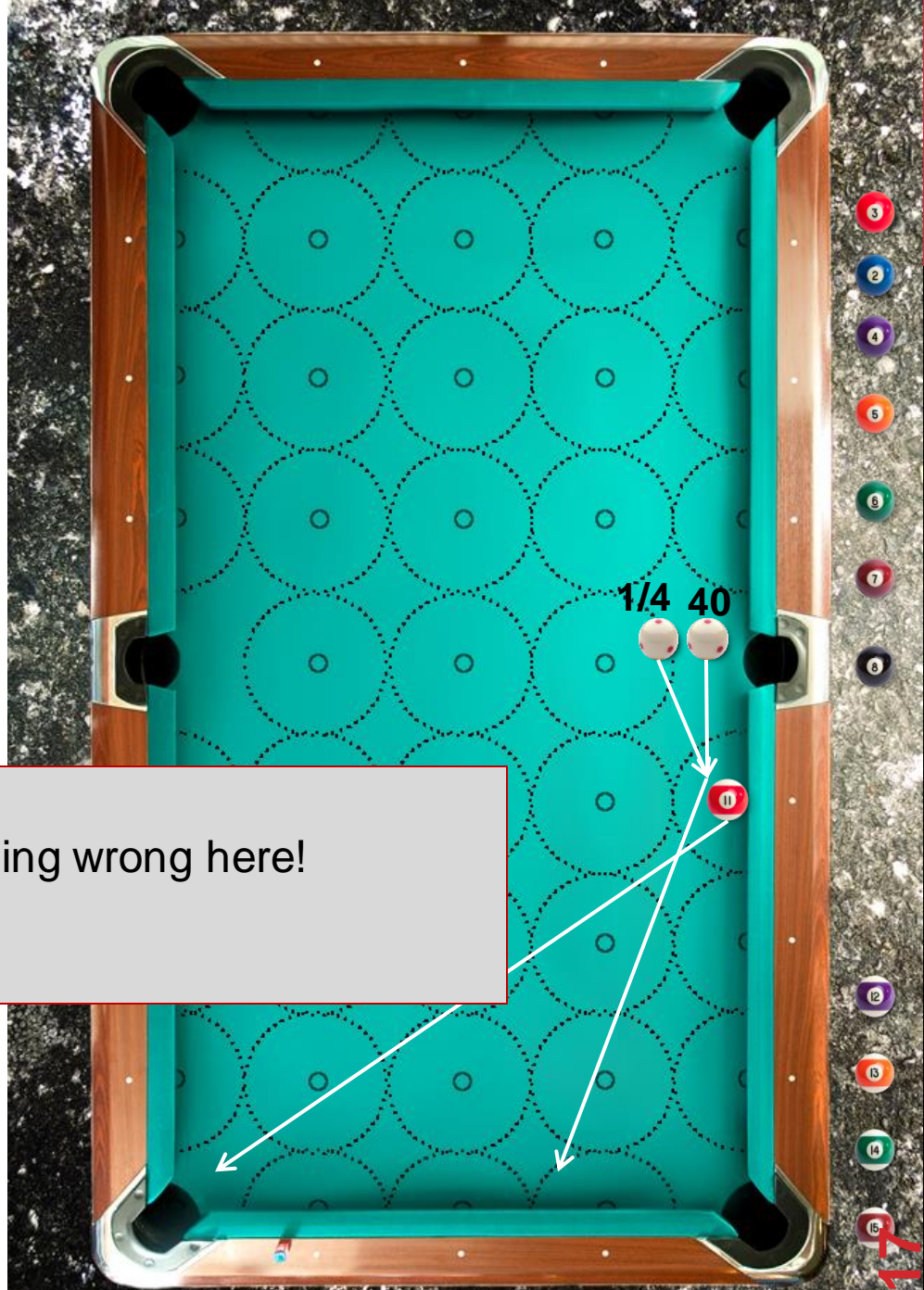


ACROSS VARIATIONS

If you're at the third diamond, like the 11-ball, you're probably going to need a Forty. But beware of double kisses.

However if you're half a diamond away from the rail and one diamond above (30 degrees to the long rail, or 0.5 on 1 diamond), then a quarter cut will do again.

Something wrong here!

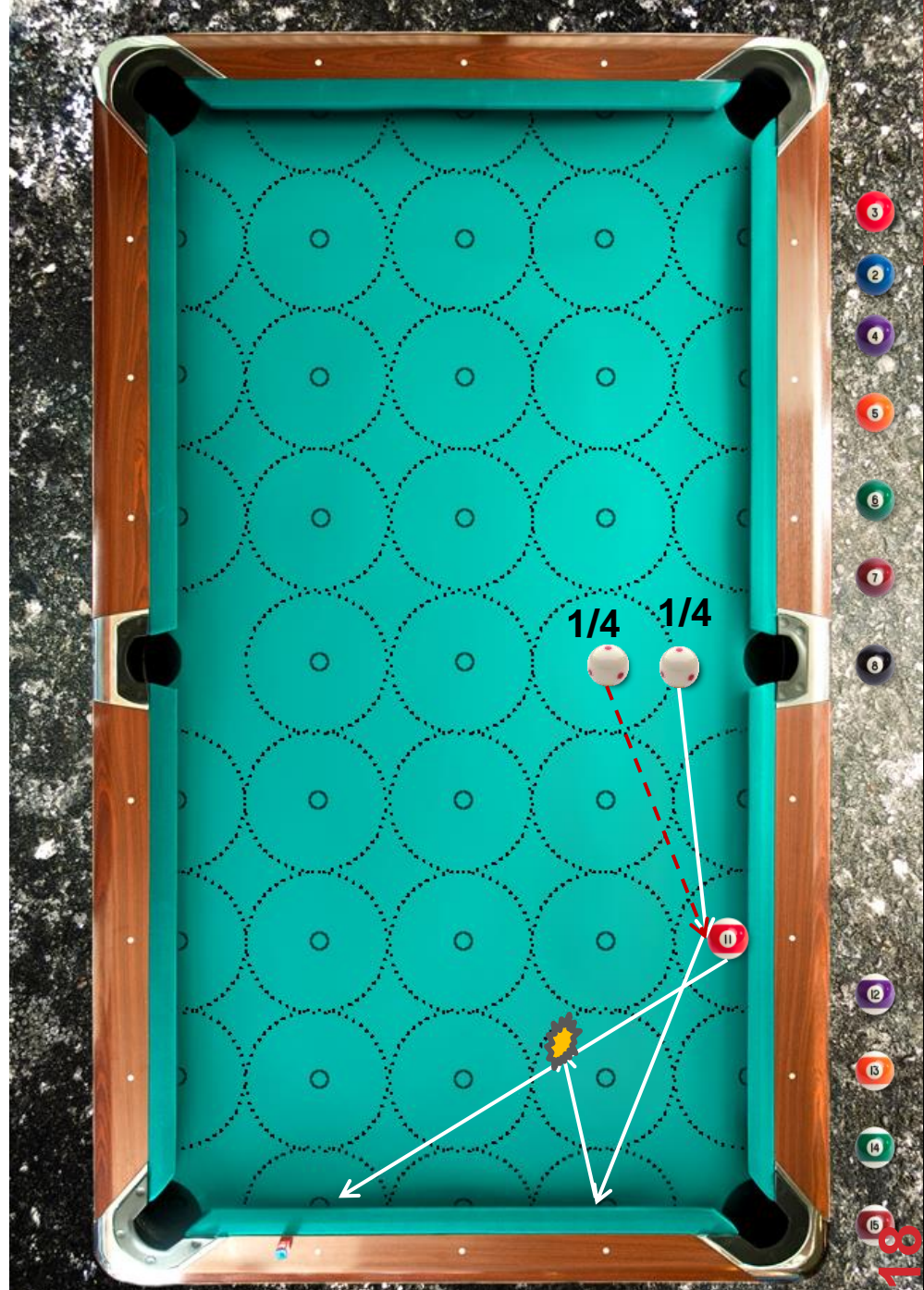


ACROSS QUARTERS

Beware if your object ball is at the second diamond.

The quarter ball with 30 degrees in (or one on two diamonds) will double kiss when it comes back from the rail. The chance is smaller when you're going 15 degrees in.

You can try to hit the cue ball half a tip below center to avoid this kiss.



A PROPOS DOUBLE KISSES

These half ball kiss-back routes are very handy. If you come in from two diamonds above and make a half ball hit, the cue ball will trickle down toward the first diamond and out.

If you do the same cut from three diamonds above, the cue ball will approximately travel back to where you played it out from.

And if you're playing it from 4 diamonds above the cue ball has a chance to scratch into the center pocket.

Here also: Any across-cut that is thicker than a half ball (or even a half ball) will double kiss, unless you're shooting at least 30 degrees or less along the rail.

If you're playing a Forty cut here you will probably not double kiss but scratch.



POCKETING HANGERS

Try to play this roll. You will notice that when your angle into the rail is 45 degrees or below, there is a big chance for a double kiss.

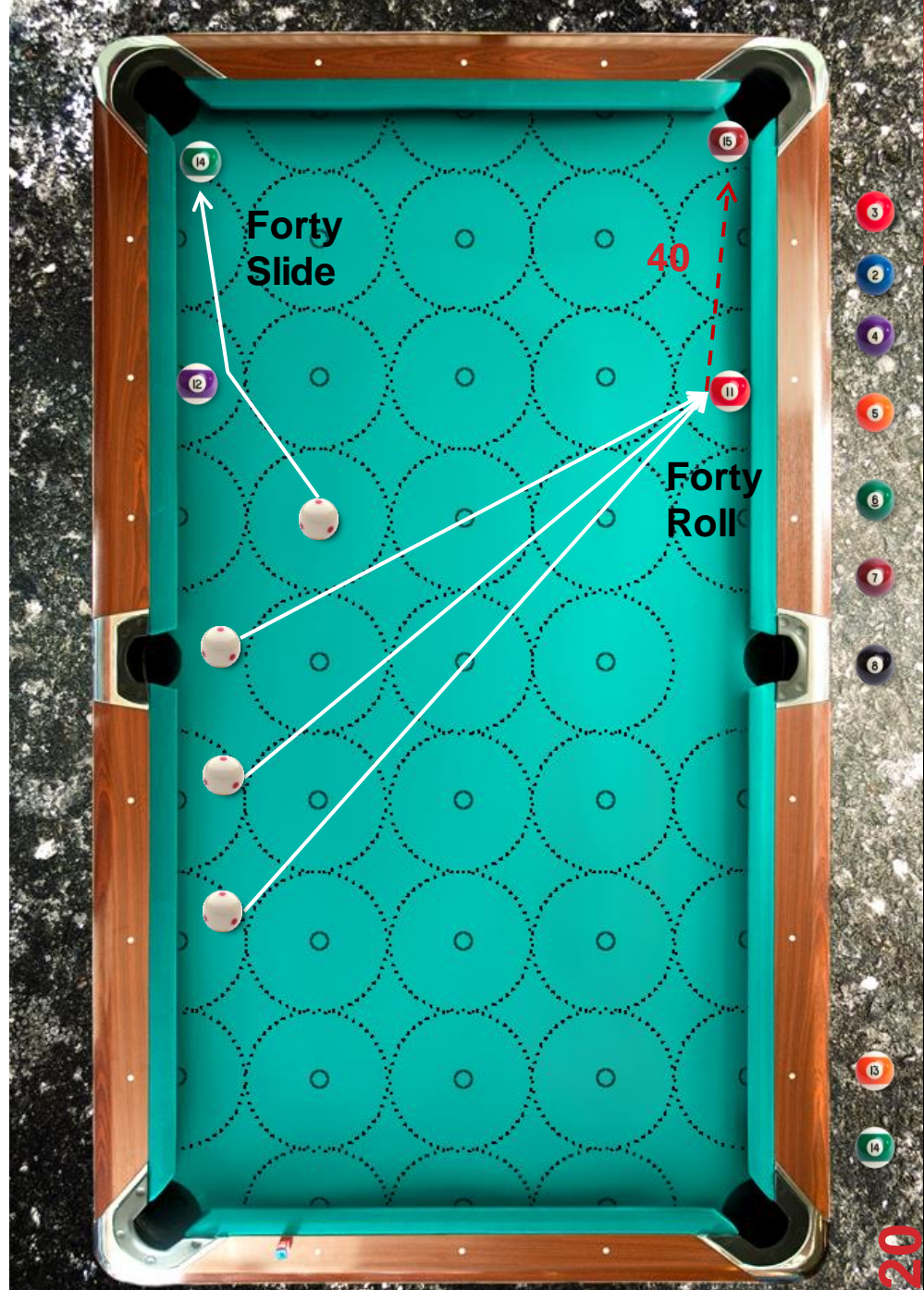
If you're playing a Quarter however you will probably send the cue ball into the rail and even miss the ball.

So if you're playing freshly cleaned balls this shot may be unavailable as a **Roll**.

The Forty **Slide** however is a pretty stable thing when playing 45 degrees across.

Make a mental note that it needs approximately two diamonds to completely approach the cushion.

Also make a mental note that the Quarter Roll from the same angle only takes one diamond to approach it.



IMPOSSIBLE HANGERS

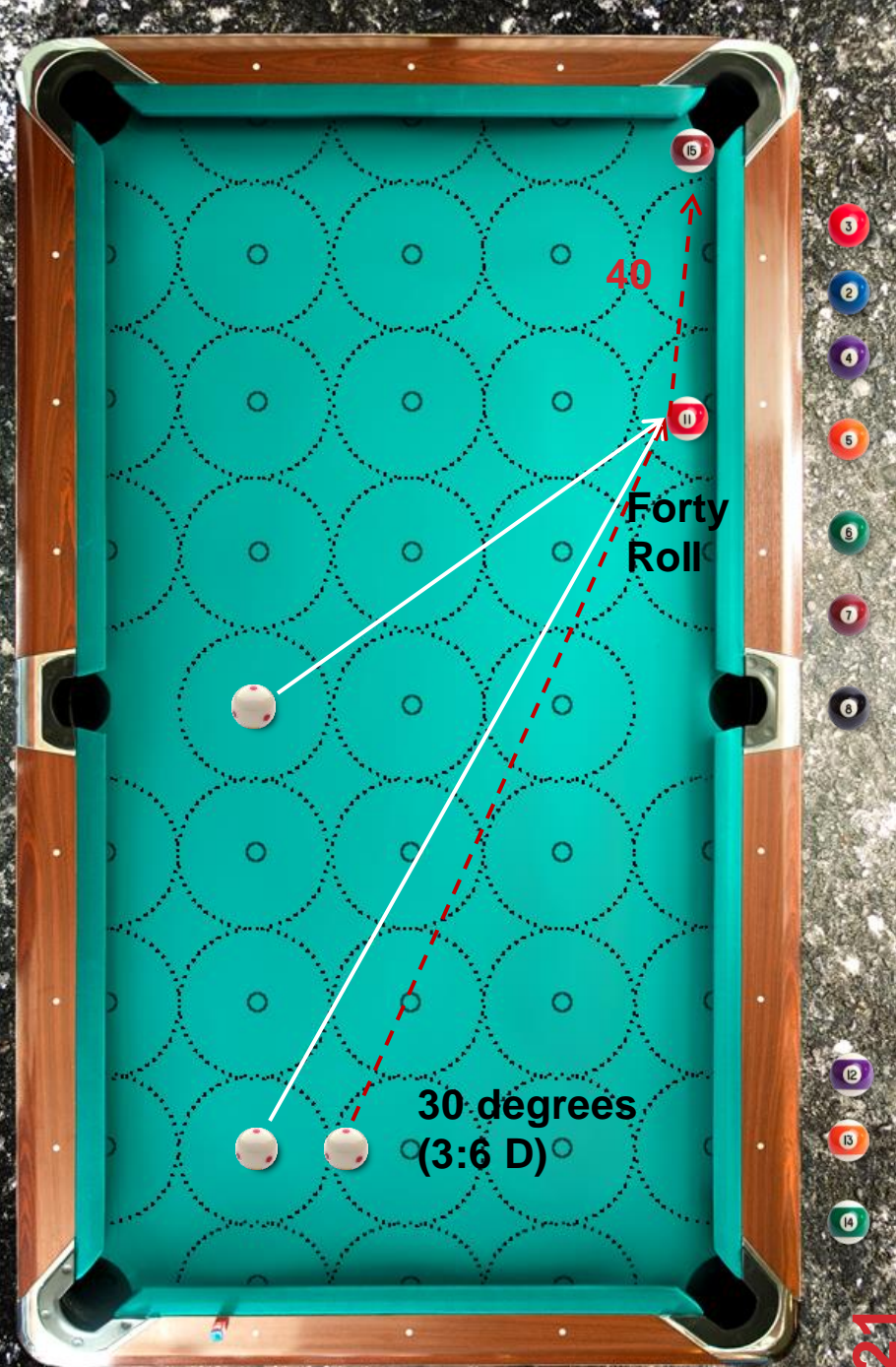
Now let's play our object ball **half an inch off the rail** to avoid the kiss backs. Then the Forty is very available to pocket this hanger.

However the shallower this angle becomes, the more impossible the Roll becomes.

There a good chance for the **Forty Roll** to work even for wide variety of angles.

If you're below 30 degrees to the rail this shot will not work.

In this case, playing a slide produces pretty much the same result as the Rolls.



STEEPER ANGLES

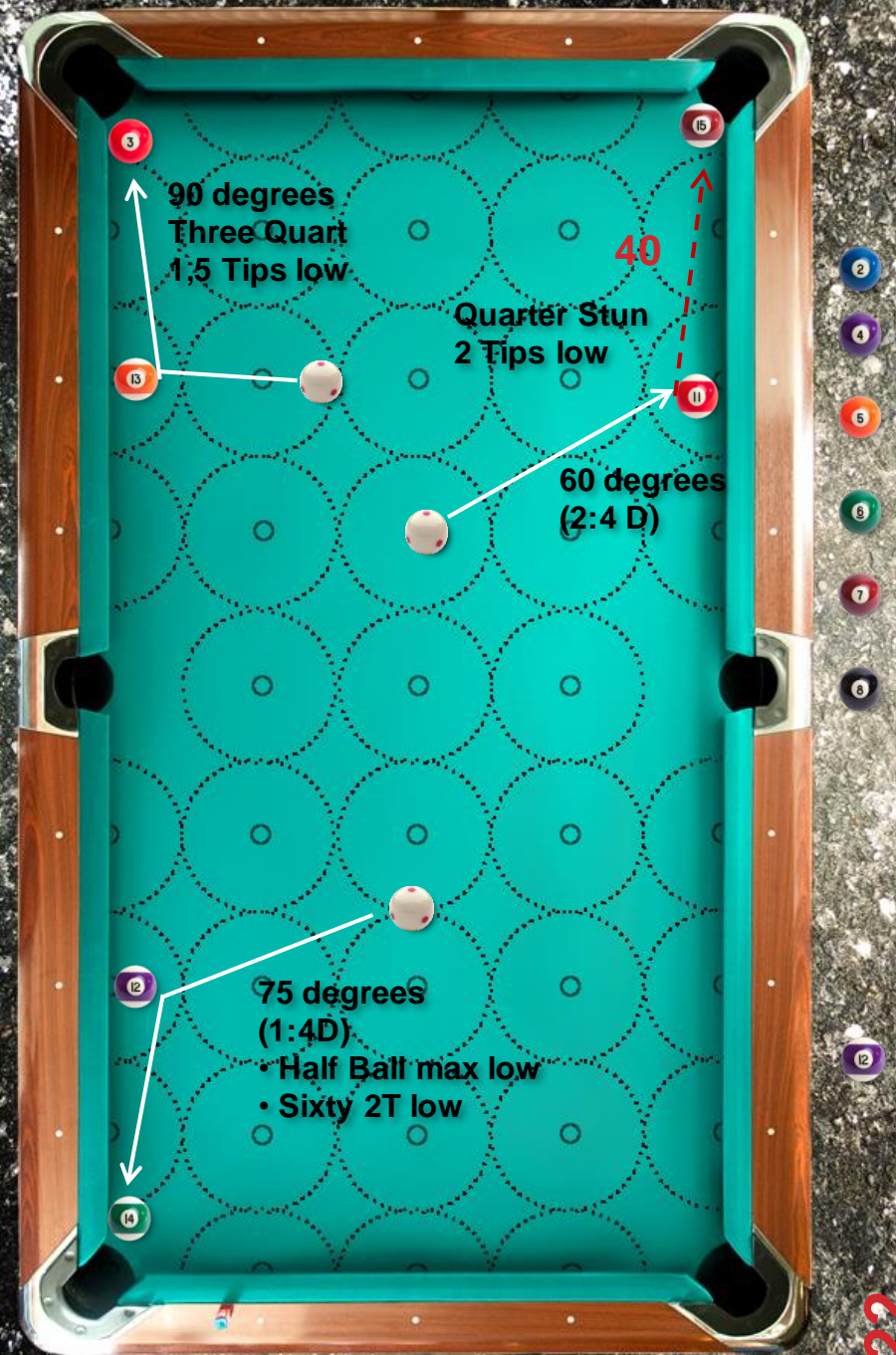
The steeper your angle into the first rail gets, the more „work“ you have to do, since natural roll will bring you into the rail, and stuns have a chance to travel down table and missing the ball altogether.

So finding a **stable route** is essential.

I found it most stable to still play as follows:

1. On a **60 degree** angle, still play this as a Forty and lengthen the path by applying two tips low to the shot. It cannot kiss back, and if I miss it it will probably no longer hang in the pocket but travel a couple inches along the top rail.
2. For a **75 degree** angle, switch to a Sixty to get more mass and apply two tips low. If you want to make sure you hit an edge of rail first you may even play it as a Half-Ball and apply maximum low.
3. If you're **square** to the cue ball, go for a Three-Quart and let the 1,5 tips low do the work. You need a decent amount of mass behind the cue ball, but you also need speed after the carom.

Don't use any other spin on these balls.



ACROSS QUARTER

On a side note ...

So if we were playing Quarter cuts, we will not double kiss. And these routes are really handy.

Every one of them approximately **returns into the diamond where it was shot out from.**

The cue ball will more or less take the red route, ending up slightly closer to the middle pocket for the 2D cut.

This can be a handy route for safety play when there is an obstacle on the opposite side.

Beware of the 2D route.



AND FINALLY QUARTER ROLLS

Still a quarter cut. But this time we're shooting it from 8 diamonds above on half the table (a 30 degree cut).

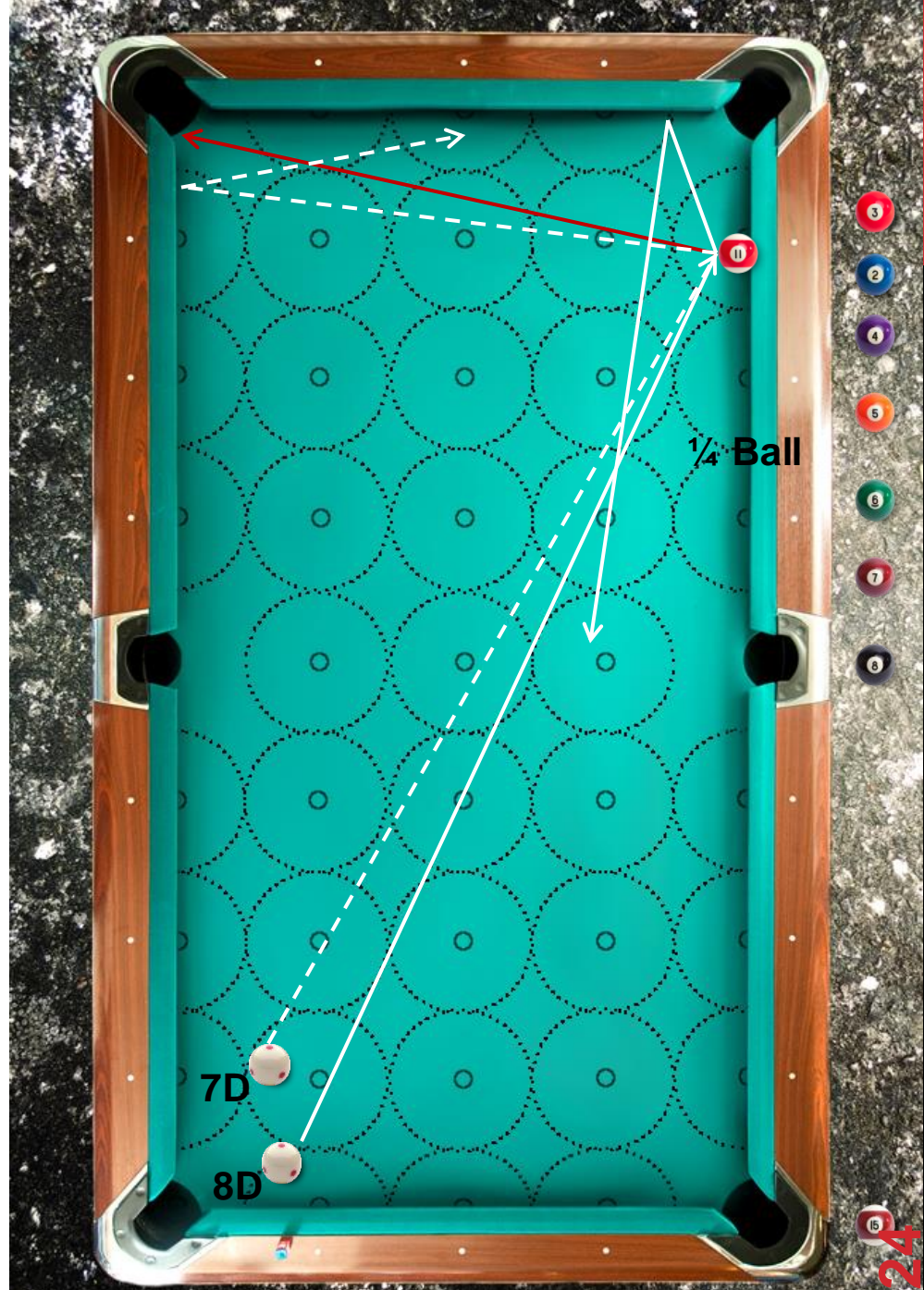
From this angle, the cue ball will follow one diamond when travelling across the table.

Because it is rolling.

It is the same cut as a couple of pages ago, where the 30 degree Quarter cut followed three diamonds down table. When it is played center ball on short distance, i.e. a **Slide.**

So the type of shot does really matter here.

The 7D route for this Quarter Roll is also interesting, especially for safety play, when rolling a Quarter cut.



NOW ...

**OPEN
BANKS**

BEFORE WE CONTINUE

Consider this shot for a minute. You already know this cut. It is on the 60 line if you virtually extend this half table to a full table.

We're going to think this style when we're banking.

So the big question is: Will it also make it into the opposite pocket when we're banking it?

At least ... that's what angle in = angle out would suggest ...



BROKEN ANGLES

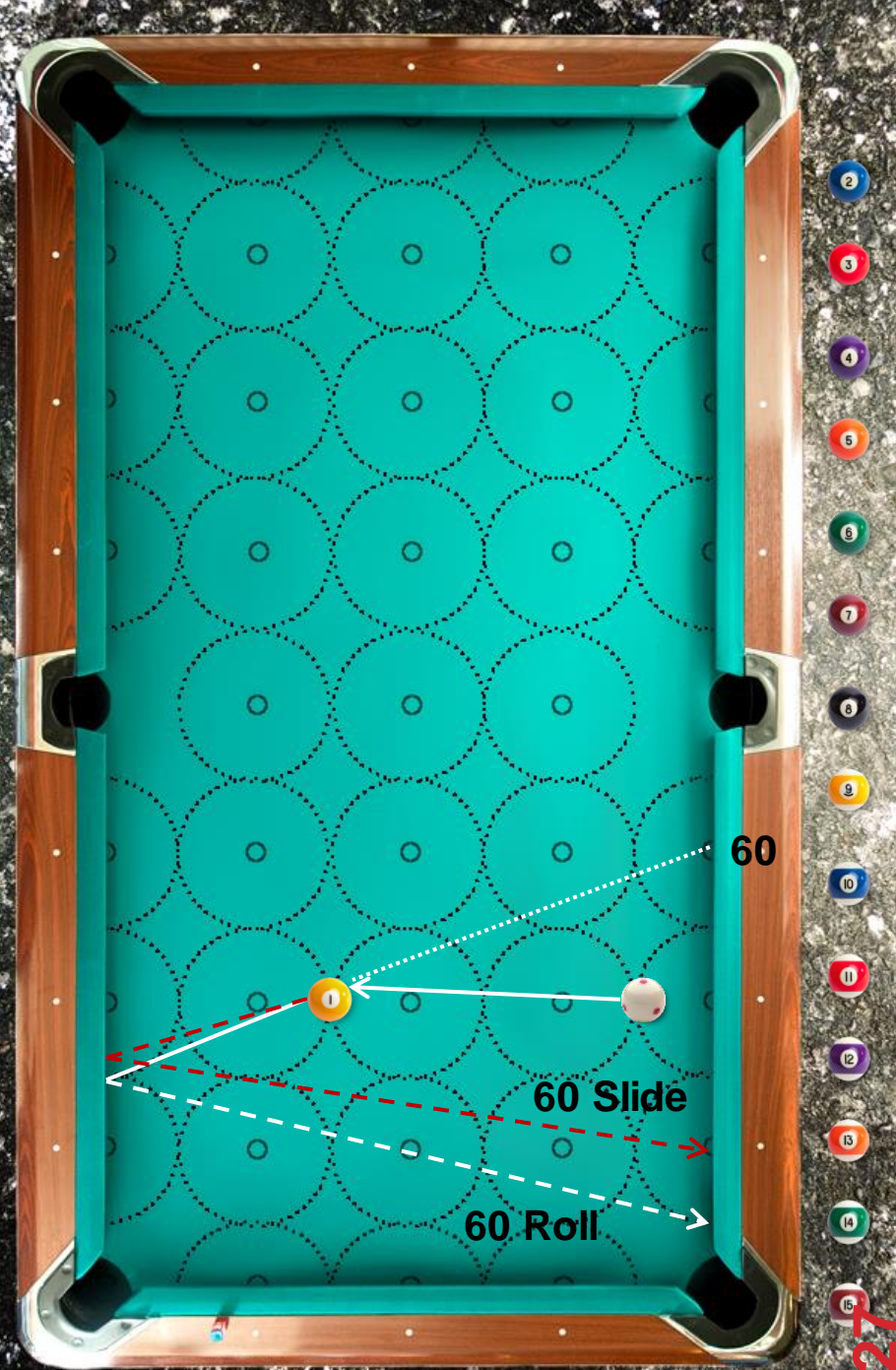
As you will see, **it will not reach the pocket.**

Where it ends depends on many factors. And that's the problem with these shots. Let's fix two things for now: **no side spin, mezzo volume.**

When you **roll it**, it will not reach the pocket but come up short. There is a little bit of **cut induced spin** that will **shorten the angle** of from the cushion.

And then there's a **tiny bit of throw** that add up to two tiny bits when **doubled** over.

When you play a **Slide**, it will come up **even shorter**, because there is **more cut induced spin**. And since there is also **throw**, you will even have to compensate for that. And a medium speed Sixty Slide throws quite a bit.



HOW TO MAKE IT WORK

When playing this as a **Roll**, you will probably have to play it as Half Sharp (i.e. **one tick thinner**), which here means make it flat. Dependent on volume and cloth, maybe even two ticks, as a Half-Ball.

If you're playing it as a **Slide**, you will probably have to make it a Half-Flat, that would be **three ticks thinner**. But the shot is tricky.

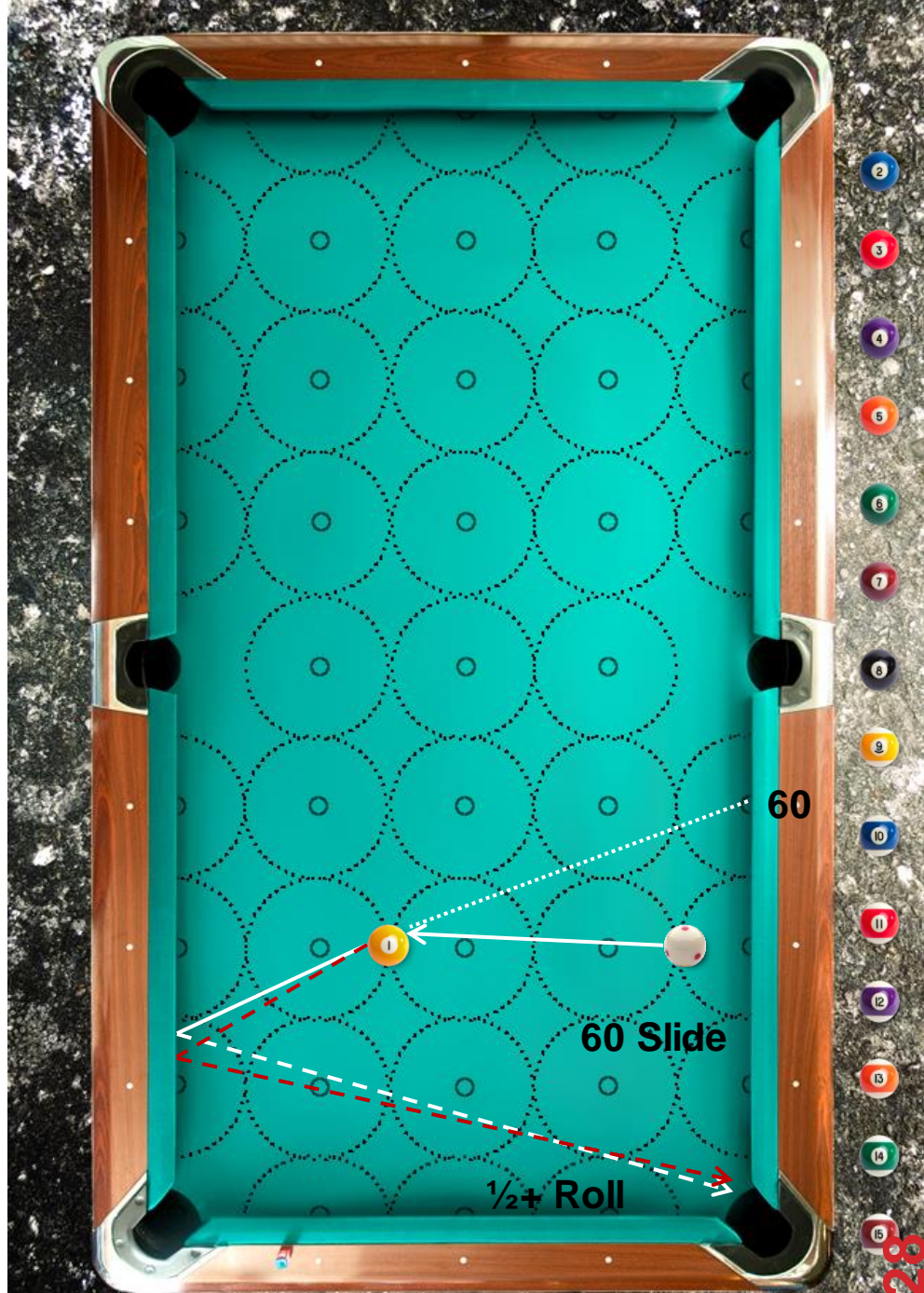
When going from Half Ball to Half-Flat, the **throw and cut induced spin suddenly decrease** by far. So if your shot is just a bit outside a half ball, it is very difficult to control when banking, as **the amount of cut induced spin matters a lot**.

This is because subtle changes in the cut will have a tremendous effect on the resulting angle out from the cushion on these back cuts. That is particularly evil for slides, since they throw a lot more to begin with.

Also note you need the same precision as for a long pot all the way down table.

Which brings me to banking rule #1:

You can't reasonably expect to bank anything that is thinner than a half ball cut.



THE EVIL HALF BALL

So let's examine this standard ball. The ball is approximately a half ball cut, when played as a mezzo Slide (it rests one tick left to the Sixty line in our example). Try to make it a couple of times. You will see that it is **not so easy**.

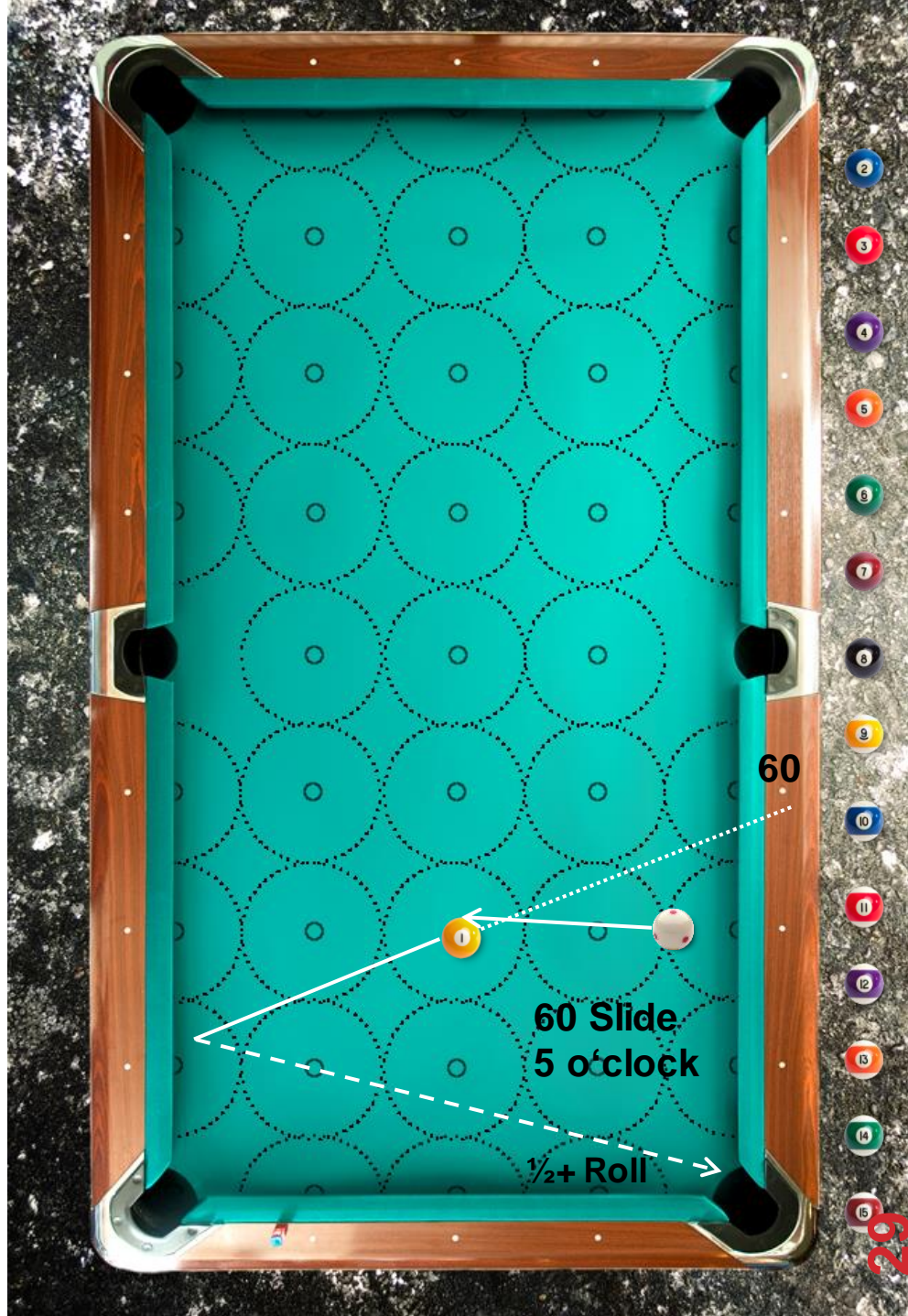
Then try to hit it as a **Sixty Slide** and hit the cue ball on **5 o'clock** (1 tip of outside spin and a contact point well below center).

I bet you will get more consistency once you get the spin right on the Sixty. The problem left is **volume**. If you hit it too loud, the rail will swallow some of your angle. Also only play so much spin that it will **cancel out the throw and cut induced spin**.

Try to play with this. Hit the cue ball on the equator and 1, 1.5 or 2 tips left or right. Then hit slightly below the equator and a bit right. Finally go to the 5 o'clock position and observe the behavior. If you hit 1.5 tips low you need very little spin since spin „sticks“ best.

Try to find a spin with your cue stick, so this Sixty ball is almost neutral and finds the pocket. Try to find one which you can reproduce consistently. It doesn't matter whether that's a tad lower, or a tad more spin.

In principle, you can then **simply bank any ball as if you were playing it down the imaginary table across the cushion**, adding exactly that spin. Maybe a bit less when the ball is fuller, and a bit more when it is thinner.



SOME MORE EXAMPLES

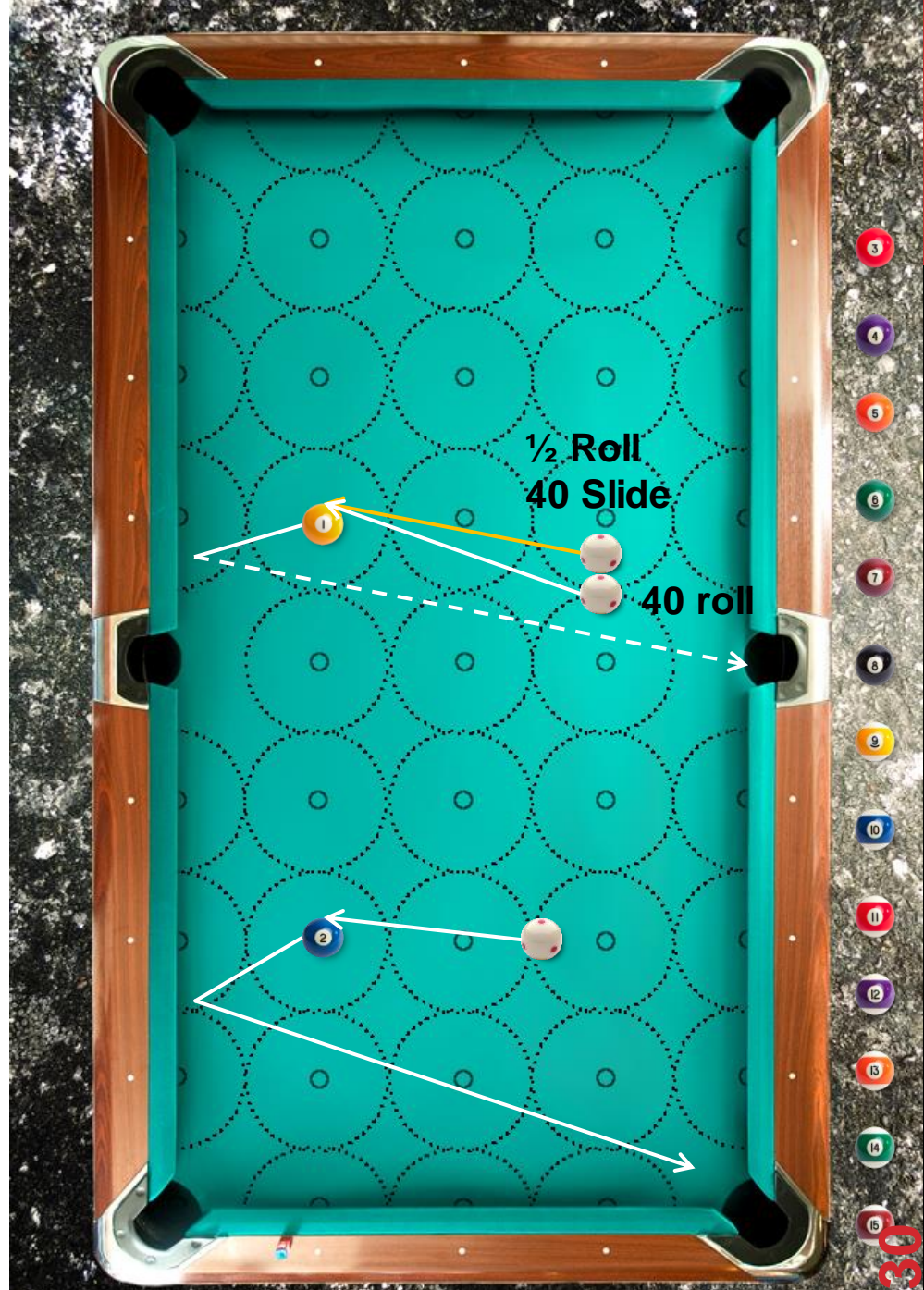
The yellow route when playing the 1-ball needs a Half-Ball Roll, but only a 40 when you slide it.

The increased angle on the ball below takes a 40 roll. Don't hit this too hard or you're in trouble.

If you want to pocket the 2-ball you will probably need a Half-Ball roll, but only a Half-Flat Slide.

Try to pocket it with low right spin in the position you worked out one page earlier.

What's more consistent?



THICK CUTS

The problem does not vanish when the cuts are thicker.

This ball needs only a Hair-Off cut when played as a Roll, but a Ninety when played as a Slide.

Try to play it as a Hair-Off Slide with a tad of outside spin. Maybe half a tip.

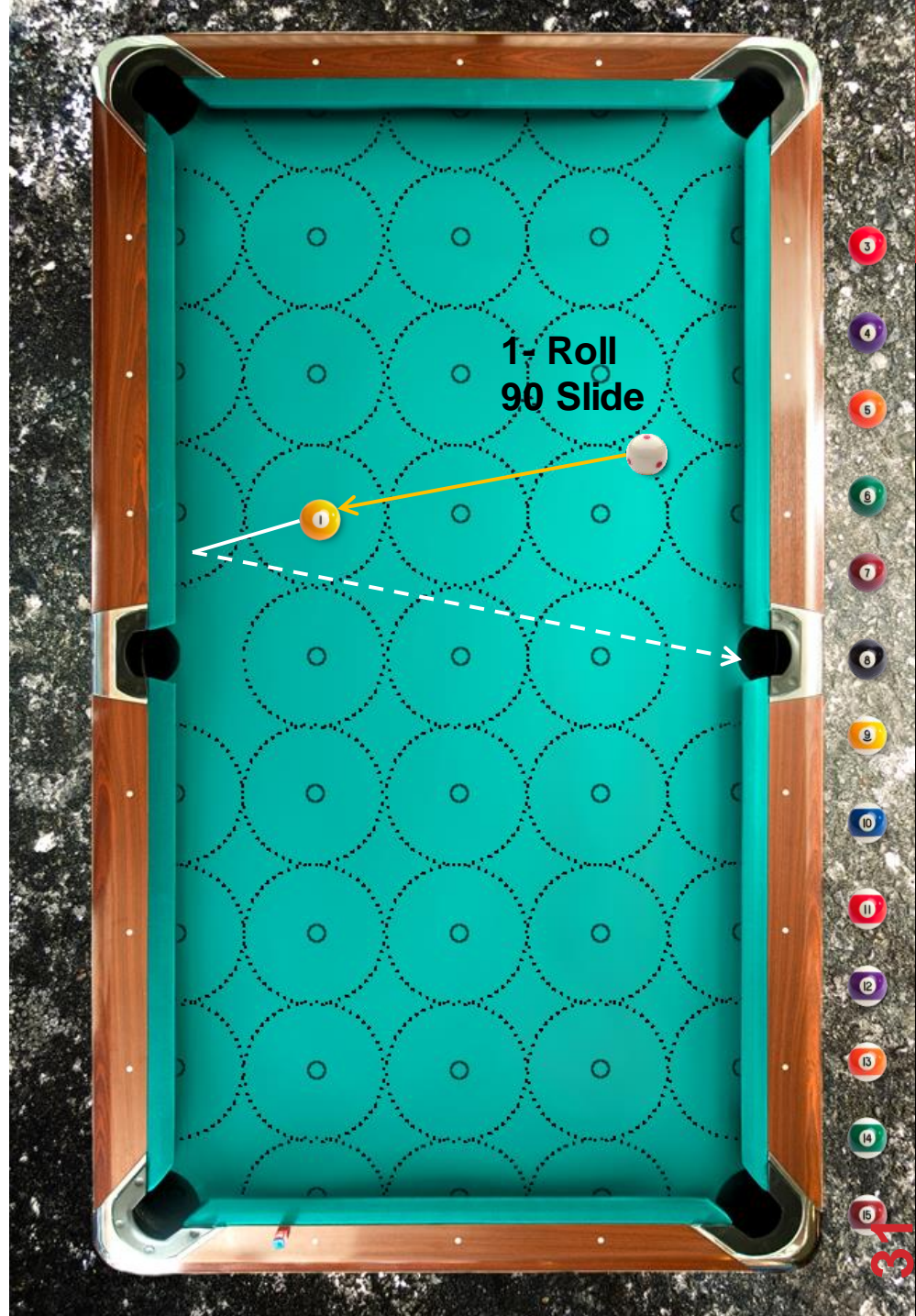
In this case I would probably prefer the Ninety slide, since **hitting a Ninety is a ton easier than hitting a Hair-Off with spin**. At these almost straight in cuts throw and cut induced spin are not that big of a problem.

You may have noticed, the Roll and Slide cuts are only **one tick** away from each other.

That goes for anything which is thicker than a Three-Quart cut.

If the cut angle is between a Three-Quart and a Half ball, you need two ticks correction.

The additional tick you need is usually caused by the speed you send the object ball into the rail.



A WORD ON SPEED

The louder you play, the faster the object ball will hit the cushion, and the narrower its angle out of it will be.

BUT ... for really loud shots ...

Throw is also a ton less.

Cut induced spin is also a ton less.

So when you're going **from piano to mezzoforte**, you will probably have to hit **thicker**.

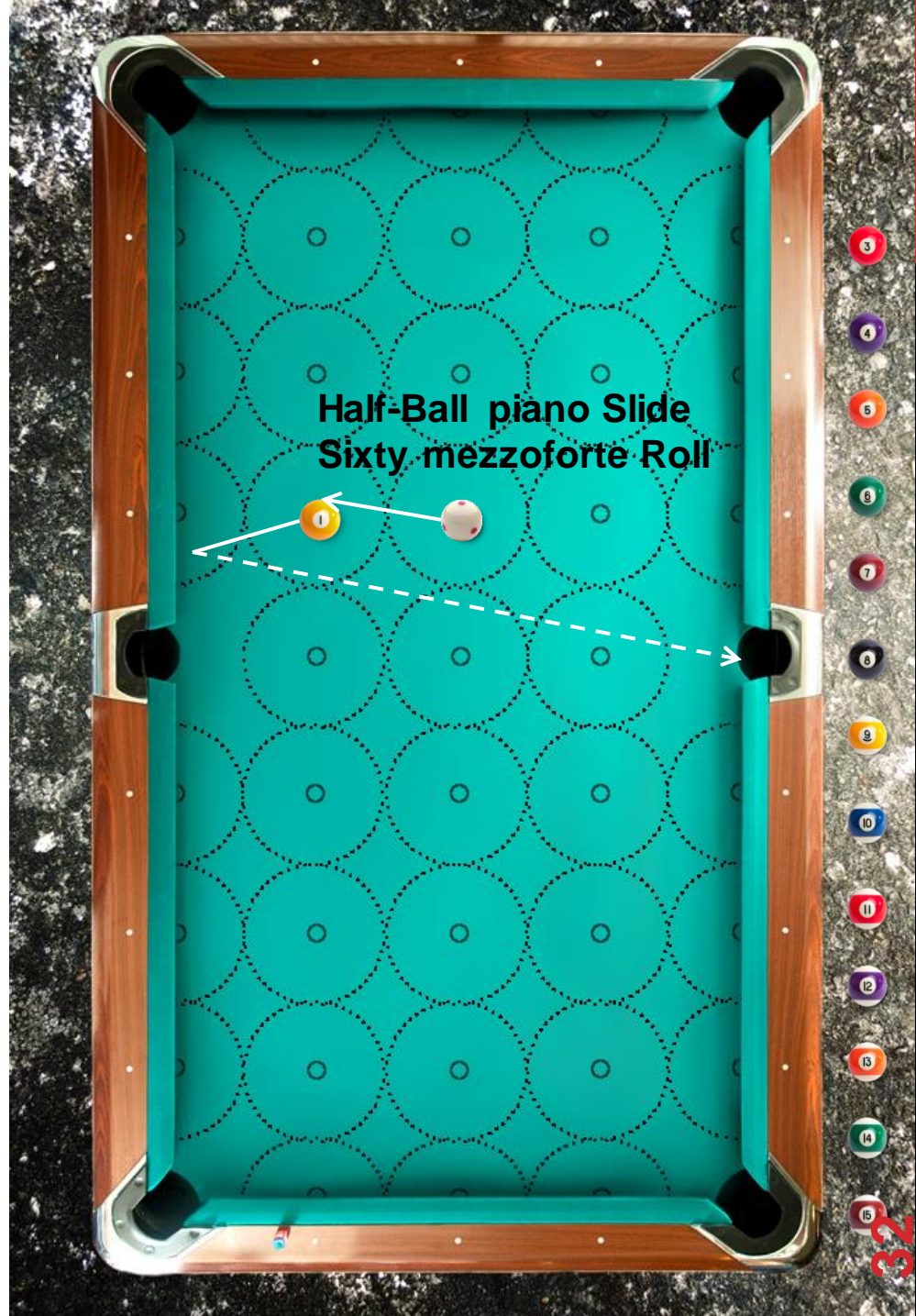
But when you're going **from forte to fortissimo**, you will probably have to hit **thinner** again.

To make it even more confusing, the changes in behavior of the cushion vary more at smaller volumes.

That makes banking rule #2:

Better get used to one standard volume when banking. Play everything (at least) mezzo.

Play louder if you have to and adjust the cut, but never play softer.



CLOSE TO THE RAIL

If you're closer than three quarters of a diamond within the rail, then, you will probably already have guessed it ...

... play it one tick thinner.

In this case the object ball will slide into the rail, whether you like it or not. Even if you play softer than mezzo.

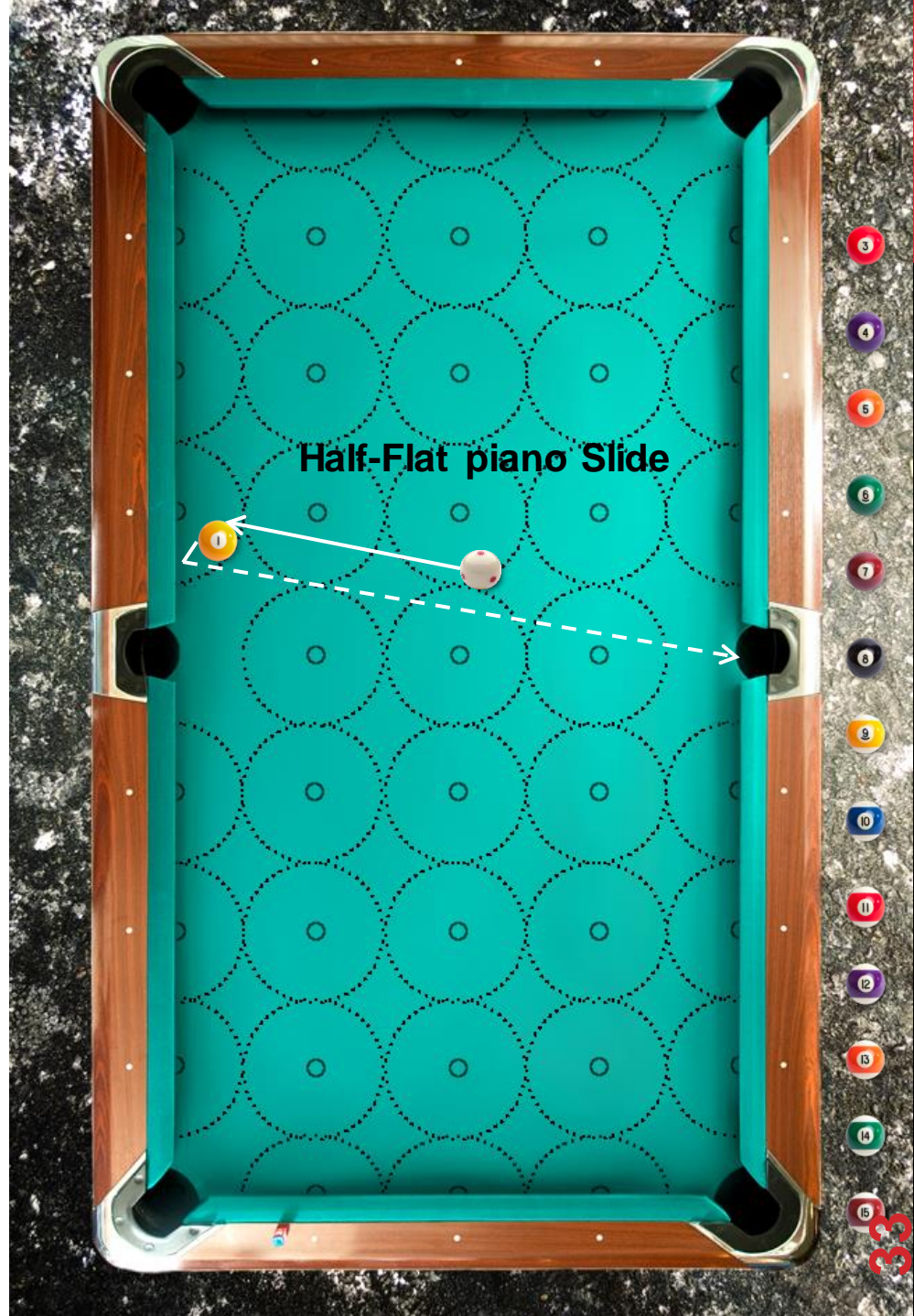
Our example was a half ball piano Slide. If we're close to the rail, we need to play it another tick thinner.

Slide means the diamond system does not work, since the diamonds are positioned behind the cushion so that they work for rolling balls.

For Slides into the rail you need to adjust.

This example also shows you how easy it is to go beyond the reasonable „Half-Ball-threshold“ when adding ticks of correction, which subtracts from the resulting percentage with which you will make the ball.

Also consider the percentage of the cut that stems from correction, and the percentage that stems from the actual cut angle. Getting those effects right contributes almost as much as the cut angle!



FOUR TICKS

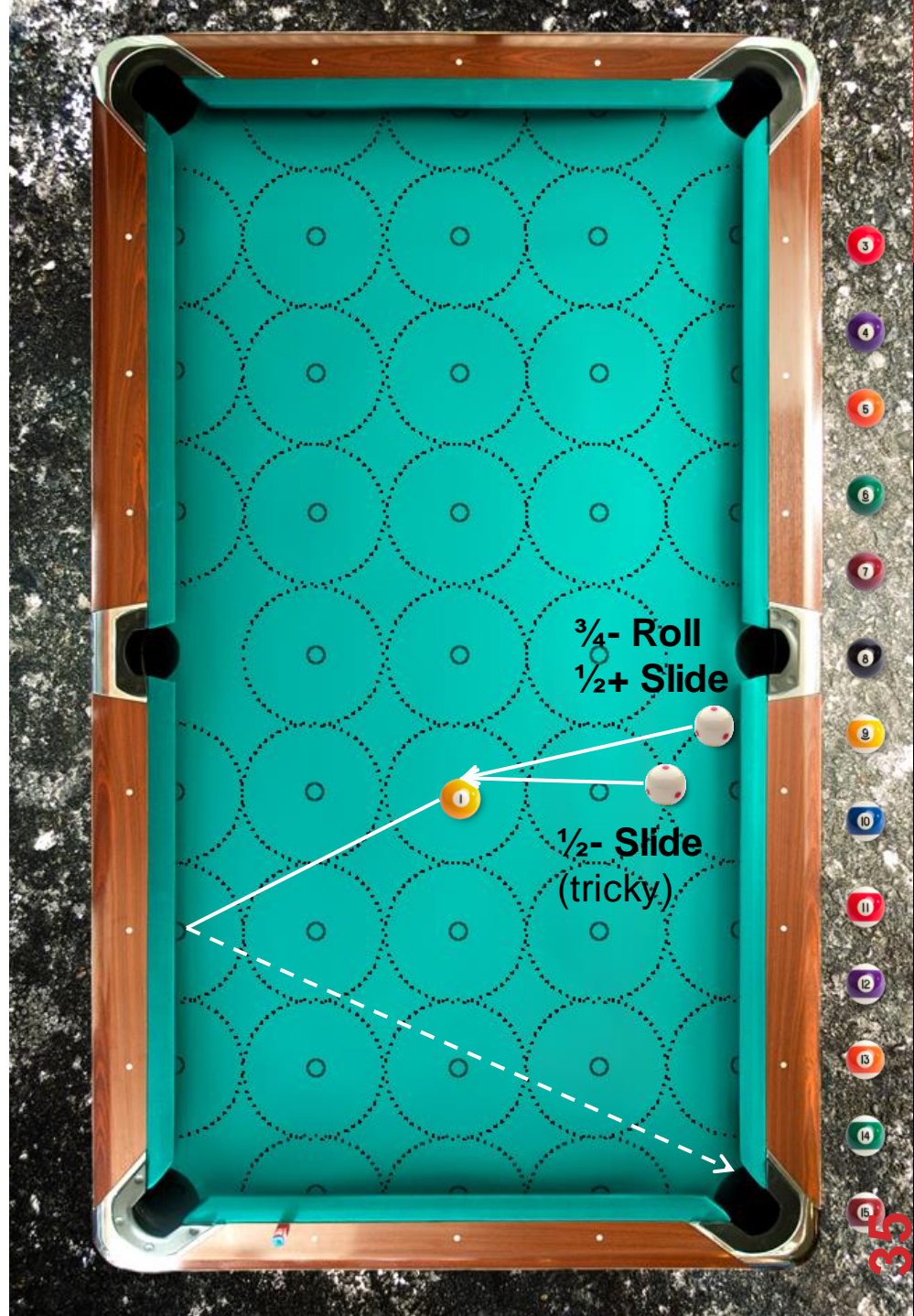
So we need to consider four potential „ticks“:

1. When playing a Roll, play **one tick thinner** than you would normally do, just because we will lose a little.
2. When the object ball is **close to the rail** so that it slides into the rail after the carom, **play another tick thinner** than you would normally do, as it will slide, into the rail, not roll, so the diamond system is off.
3. When **playing loud**, play **one tick thinner** than you would normally do, since the cushion will swallow some angle.
4. When **playing a slide**, play another **two ticks thinner** than you would normally do, and only one when you're playing a cut angle of a Three-Quart or fuller.

So you can see, playing loud Slides involves **heavy corrections**. Since everything played thinner than a half ball does not have good percentages, a good angle to start with would be **between a Straigh-In and a Three-Quart**. If your angle to pocket the ball is thinner than a Three-Quart to begin with, the corrections will make it a very tough back cut.

SOME MORE REFERENCES

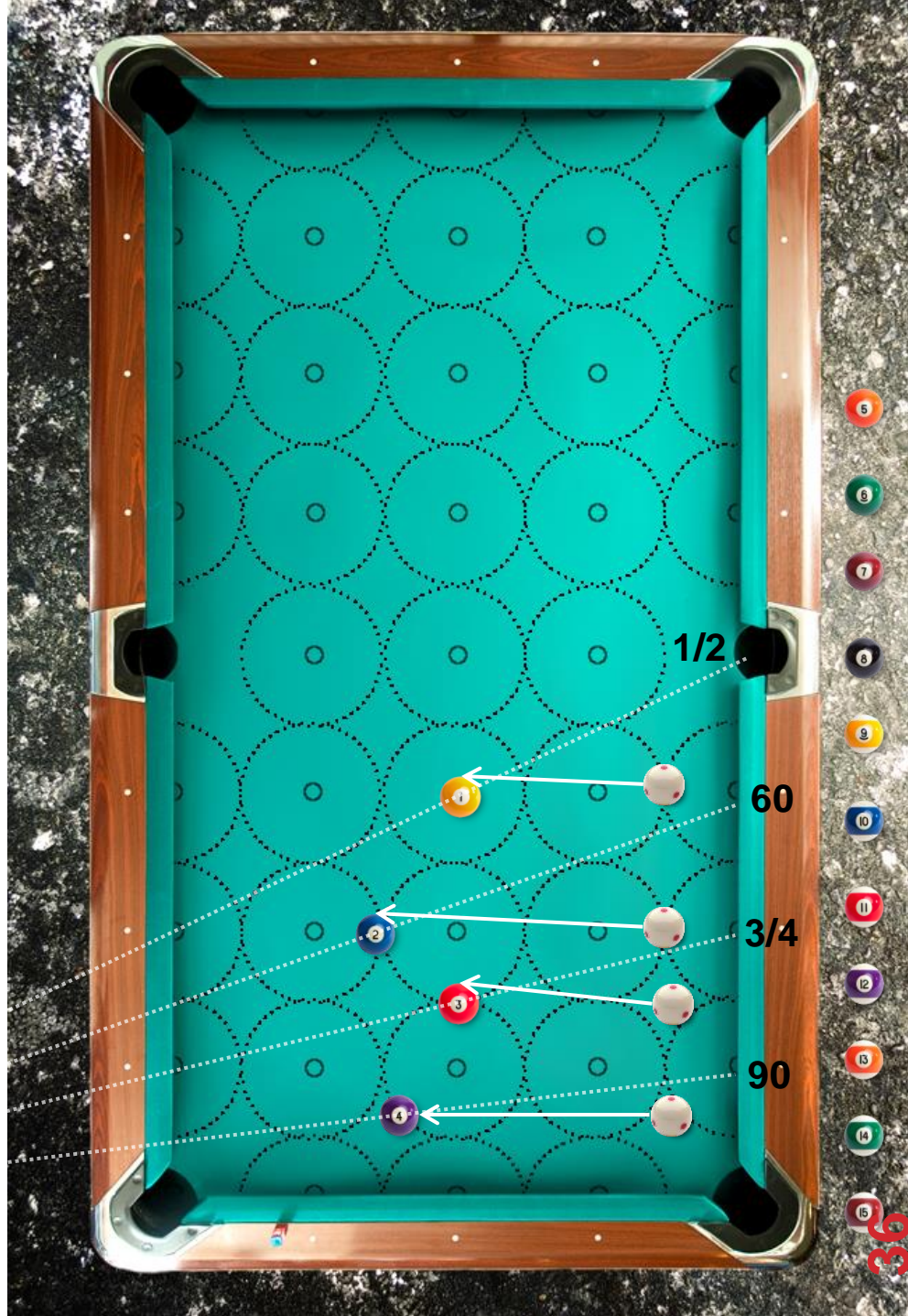
Also try to play these shots as pure Three-Quart or Half-Ball Slides with your standard spin.



YOU KNOW IT ALL

Since you already know what Shot Type you need to pocket these balls into that imaginary pocket down the virtual table, you already know how to bank them:

1. Play them „on system“ and add your personal outside spin to them to make them work.
2. Play them as mezzo Rolls and go one tick thinner.
3. Play them as mezzo Slides and aim a good two ticks, maybe 2.5 **thinner** when you have to play thinner than a Three-Quart, or one good tick 1-1.5 **thinner** when you're playing thicker than a Three-Quart.



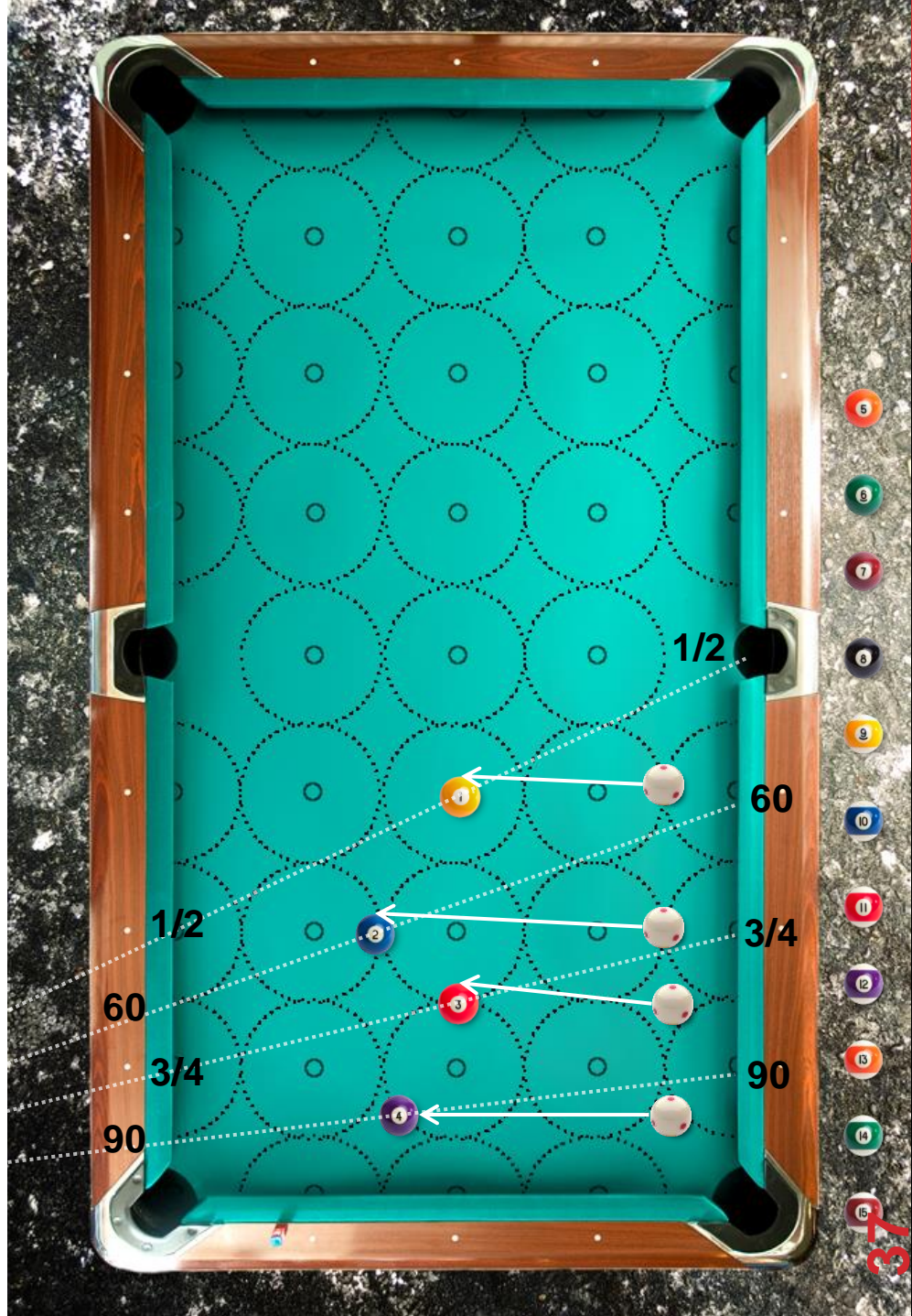
HOW TO FIND THE LINES?

Some people may have difficulties to visualize the imaginary pocket down table, or visualize them at a wrong place. There's an easy fix you can do.

- The Half line goes from the center pocket through the second diamond.
- The 60 line from the third diamond to half a diamond below the second diamond on the opposite rail (i.e. the 1.5 diamonds position).
- The $\frac{3}{4}$ line goes from the second diamond through the first diamond on the opposite rail.
- The 90 inne goes from the first diamond through the half-diamond position on the opposite rail.

The positions are always **slightly „below“** that, as you see in the graphic, because the diamonds are a tad behind the cushion.

Either adjust, or take the position **„across“ the diamond** on the edge of the rail and you should be fine. Since the rail „eats“ a bit of angle you would probably not even notice.



BIG STUFF ...

ACROSS CUTS

HOW TO FIND THE CUT?

Playing an across cut out in the open is similar to playing a long shot down table that is closer to the rail than the cue ball.

We need two pieces of information to aim it:

1. The „table line“ on which it is placed at. In this case we're only counting it in „ticks“.

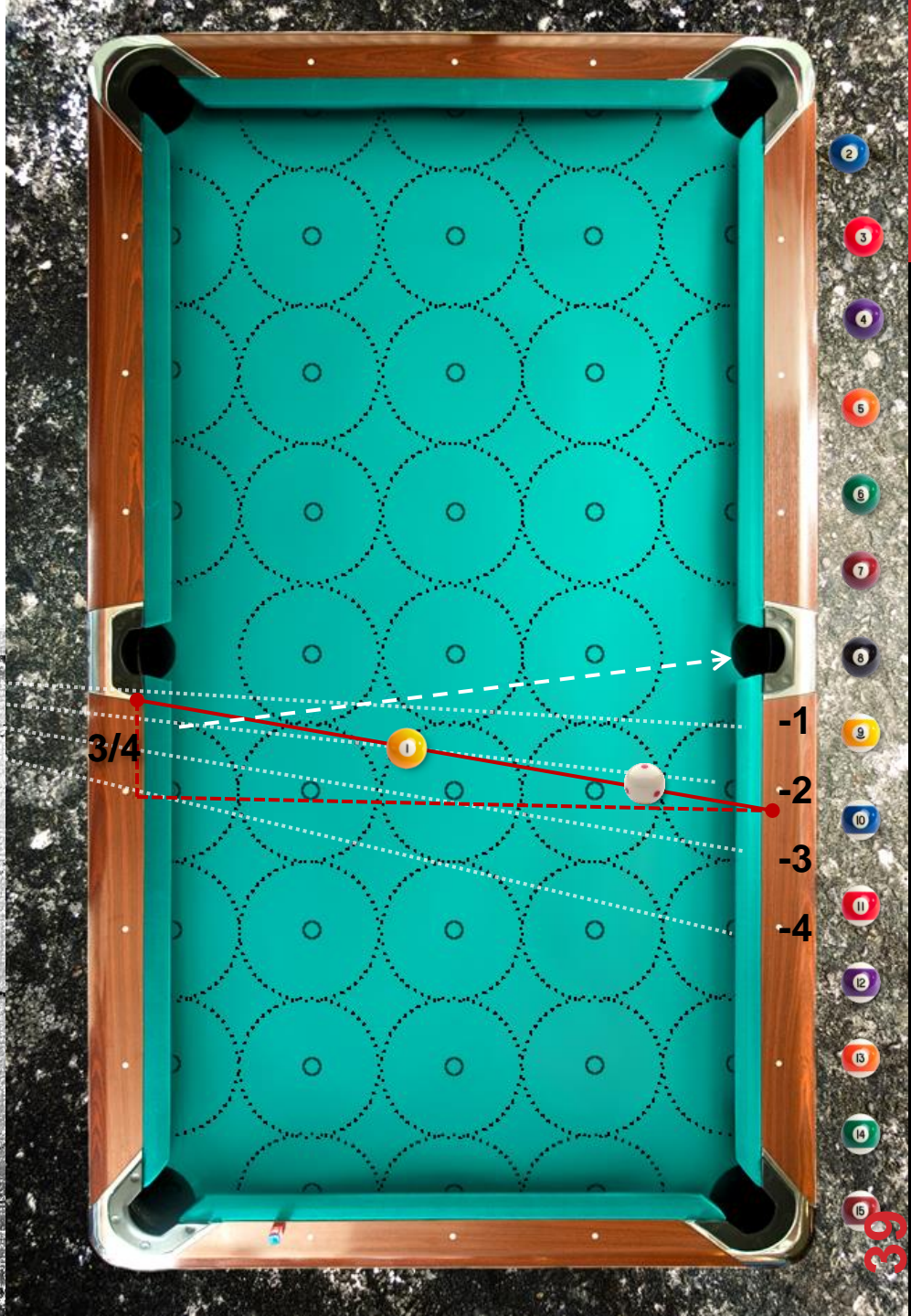
2. The second piece is the „diamond distance“ when aiming across a rough estimate of the cut angle from rail to rail.

Here the Diamond Distance is $\frac{3}{4}$ of a Diamond. Since that is only across half the table we need to double it, so we have 1.5 Diamonds, which equals a Quart-Sharp.

Since the object ball is lying on the -2 Line we need to take two ticks off., resulting in a Hair Thin.

Then Play one Tick thinner than that, because we get some cut induced spin.

So we will play this ball as a Ninety.



STOP!

**Let's do this
step by step ...**

1. GET THE TABLE LINE

Look at the 1-Ball. This ball is lying on the „Ninety“ line if you visualize the extended table.

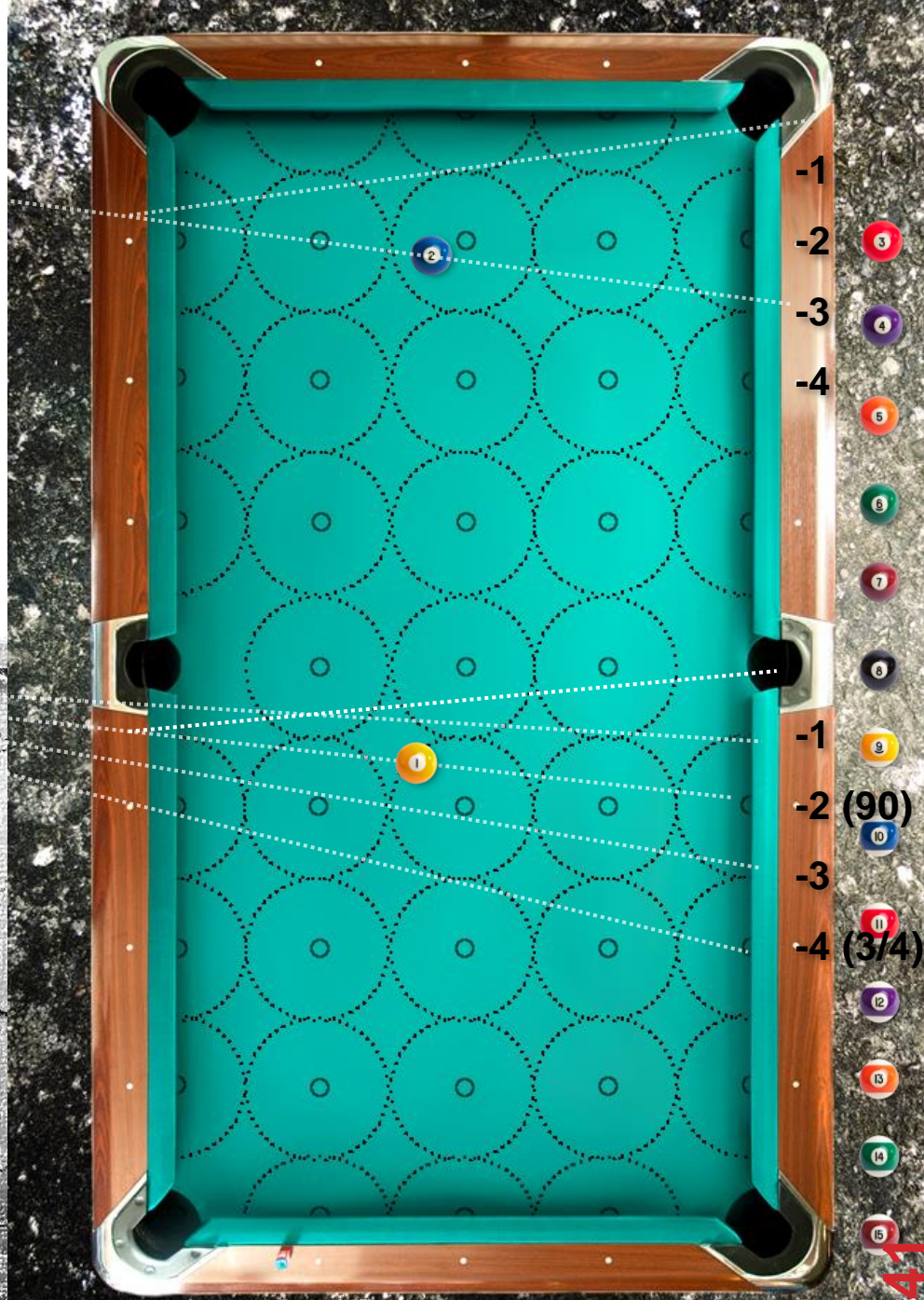
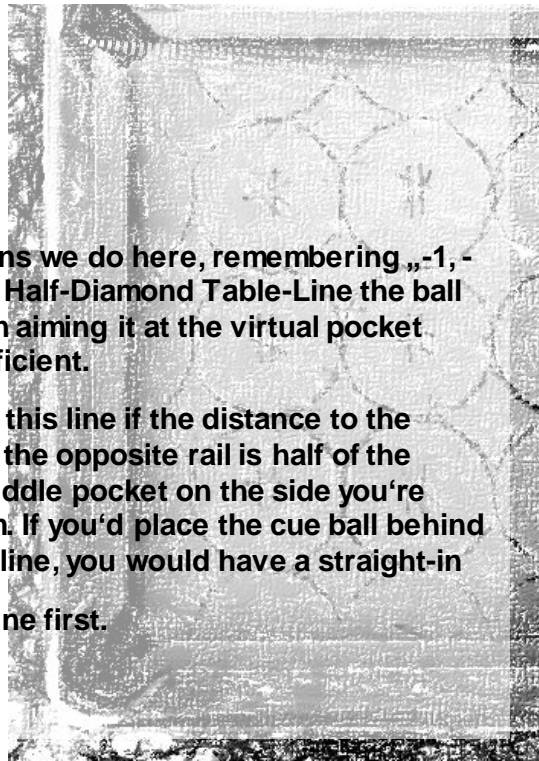
The Ninety-Line is also „two ticks off a center ball“.

If you'd be playing the 2-Ball for the corner pocket, you could of course shift that up. The 2-Ball is resting on the „Three-Sharp“ line, which is also „three ticks off a center ball“.

For the calculations we do here, remembering „-1, -2, -3 etc.“, i.e. the Half-Diamond Table-Line the ball is placed on when aiming it at the virtual pocket down table is sufficient.

You can also find this line if the distance to the middle pocket on the opposite rail is half of the distance to the middle pocket on the side you're shooting out from. If you'd place the cue ball behind the 1-Ball on this line, you would have a straight-in

Always find this line first.



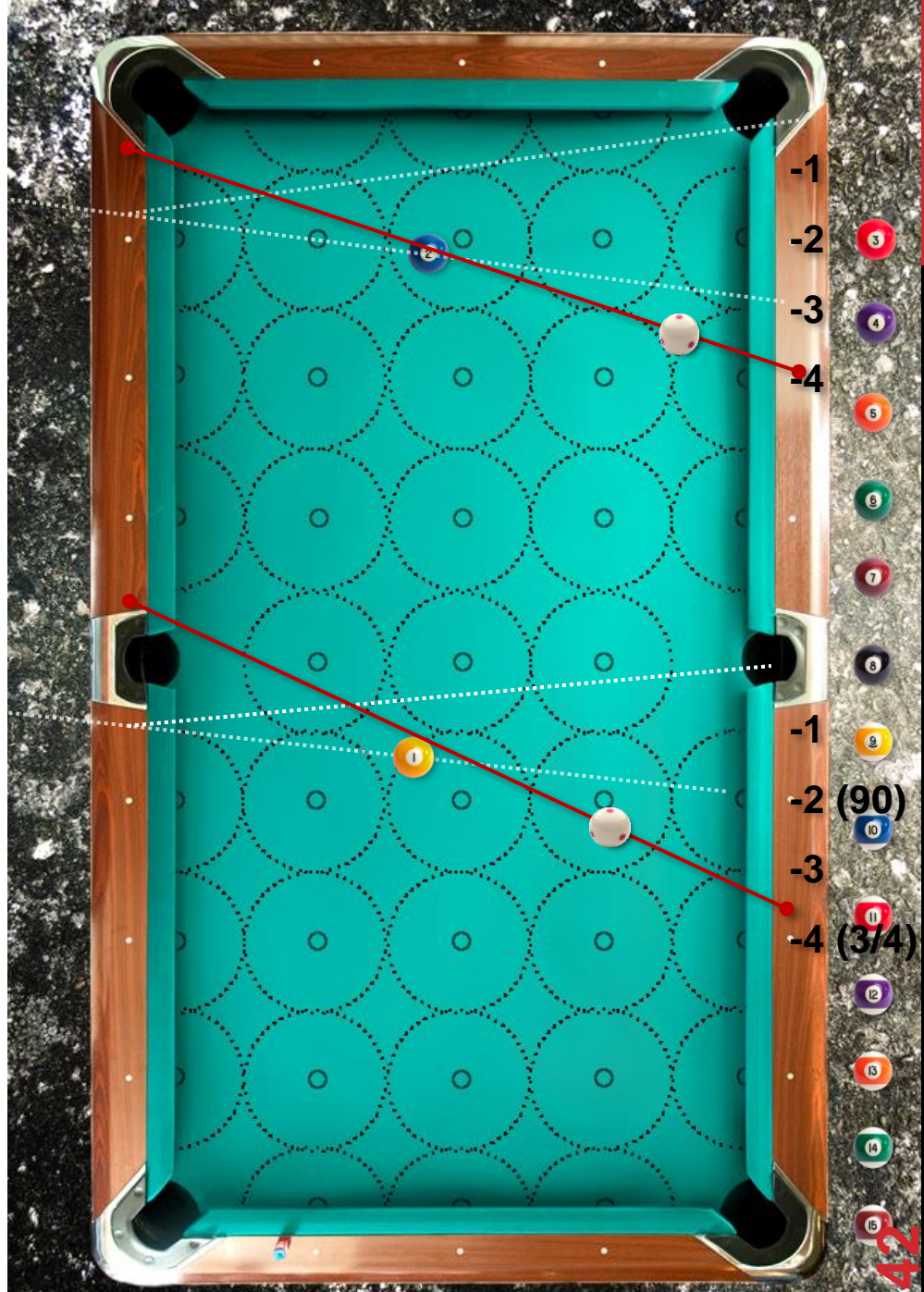
2. DIAMOND DISTANCE

Take a rough guess at the cut angle, and aim the center of the cue ball over the resulting target at the object ball.

When playing the 1-Ball, the rough guess could be „about a Half-Ball“. That’s precise enough.

So the „across“-Distance in case of the 1-Ball is 3 Diamonds.

When playing the 2-Ball the rough guess would be „a Three-Quart“. When aiming a Three-Quart at the 2-Ball We find a Diamond-Distance of about 1.5.



3. COMBINE AND ONE TICK OFF

From the Diamond-Distances we're deriving the Base-Angles.

The **1-Ball** has a Diamond-Distance of 3 Diamonds across half the table (3:4 Diamonds). From the earlier parts you probably already know that this is approximately a **Forty-Cut**.

But we don't want to send the 1-Ball into the rail in a right angle. We see, that the 1-Ball is lying on the „-2“ line. Thus, we need to subtract two ticks, making it a **Half-Ball**.

And since we're getting some cut induced spin, we again play it one tick thinner, as a **Half-Flat**.

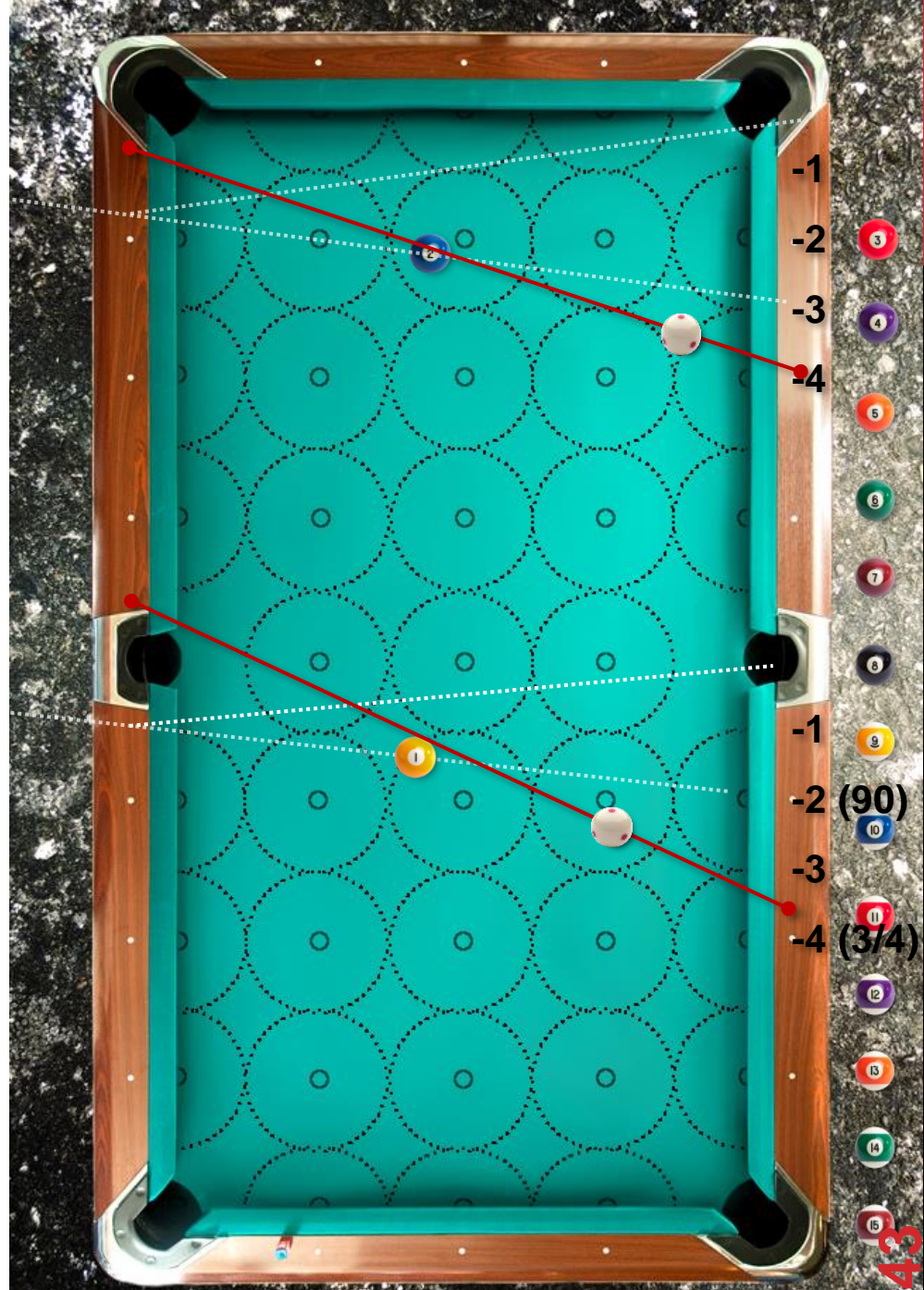
So the 1-Ball should go if you play a Half-Flat.

The 2-Ball has a Diamond-Distance of 1.5 on 4 Diamonds, which is 3:8, which on our „extended“ table would make a **Sixty** cut (the third diamond off the corner pocket).

Here we need to subtract 3 Ticks, as the 2-Ball is resting on the -3 line, giving us a **Three-Sharp**.

And since we're also getting cut induced spin that widens the angle out from the rail, we play it one tick thinner, making it a regular **Three-Quart**.

So the 2-Ball should go if you play a Three-Quart.



TYPE OF SHOT

Here the type of shot also **matters big time.**

If you're playing a really soft Slide, throw will push the one-ball down table. Additionally the angle will widen because more throw also means more resulting cut-induced spin. So you will miss the ball.

If you're playing it as a Roll, the one Tick we subtracted earlier should be enough to make up for these effects.

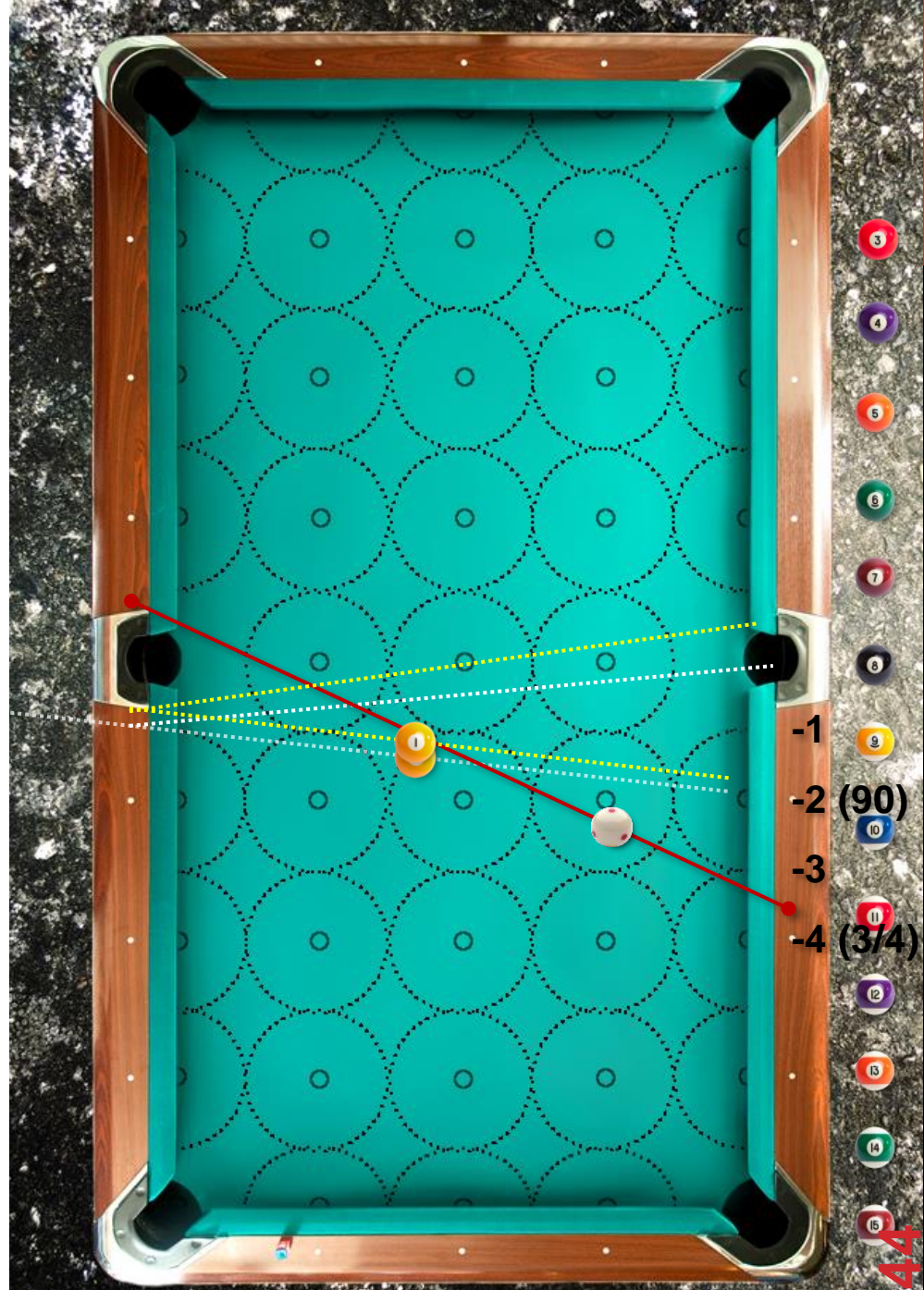
But if you do need to play a Staccato because of your position, you will need to play another Tick thinner, making the shot a tad more unpredictable.

Of course, you could also cancel out that effect by playing it loud. Playing loud reduces both cut induced spin and angle out from the cushion.

And another way to influence the result would be to apply a tip of right spin to cancel out the cut induced spin. (I wouldn't do that for anything thinner than , since you have to really get it right on the point or you throw the object ball off line).

So I suggest finding a shot that works well „on system“, which probably is a **Mezzro Roll**.

Then adjust in Ticks for Slides or playing firm.



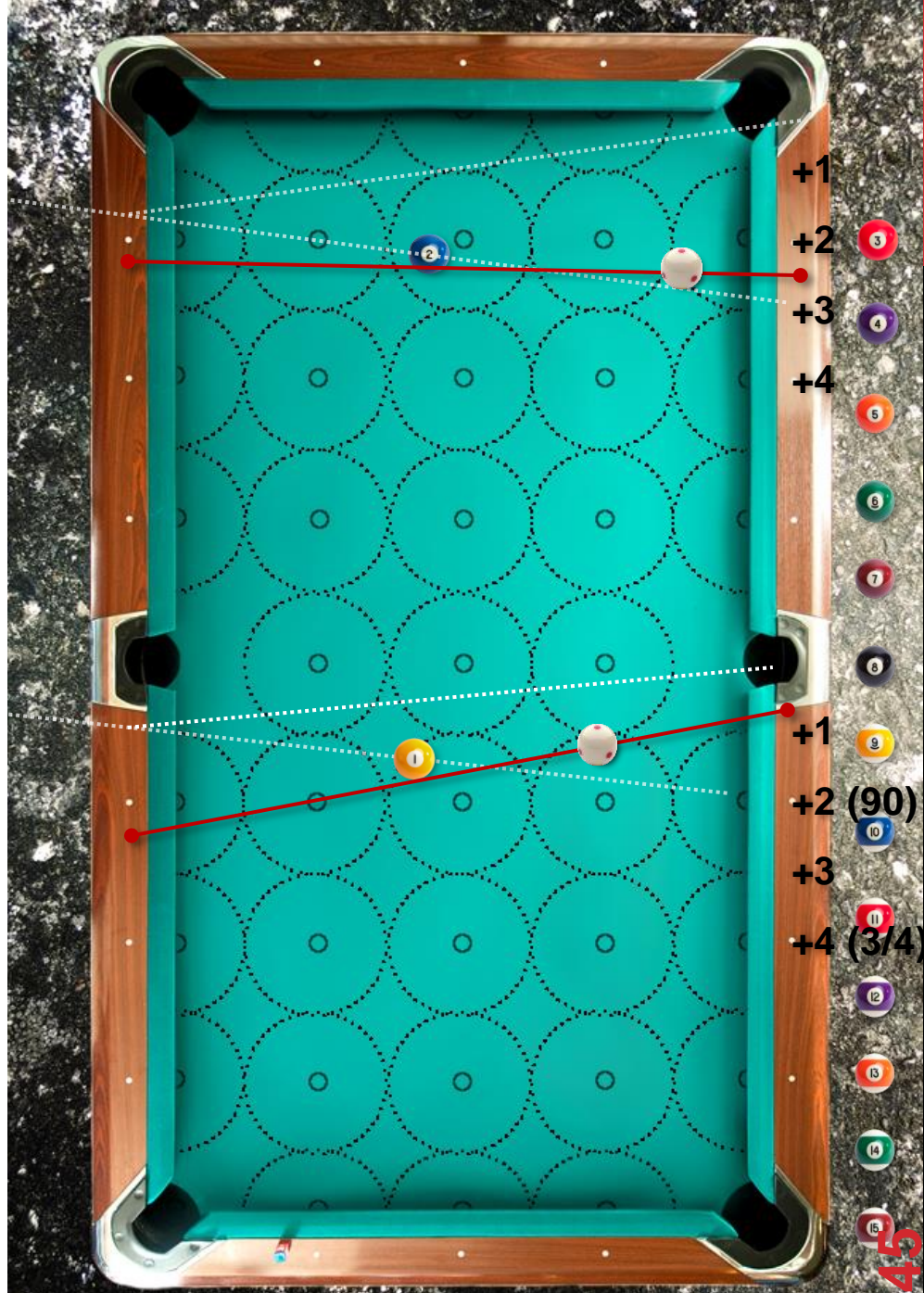
OF COURSE ...

You can also use this method to shoot regular bank shots, which are not aimed „across“.

When playing this **1-Ball**, the Diamond Distance is 1, doubled that makes 2. But now you need to add that to the table line instead of subtracting it, since you're cutting back, not across.

So 2 ticks plus 2 ticks makes 4 ticks, which is a Three-Quart. Then you play another tick thinner to compensate for the cut induced spin, i.e. a **Three-Flat**, if you're playing a Mezzo Roll.

For the **2-Ball**, your Diamond Distance in this case is 0. So you take the table line, which is a Quart-Sharp. Then you play one Tick thinner, which is a **Quarter-Ball**, if you're playing a Mezzo Roll.



AND NOW ...

EXOTIC STUFF

CREATING AN ANGLE

Unfortunately we can only hit the 1-ball straight in, since the 4-ball is blocking the path.

Can it still be made?

That depends a lot on how clean the balls are. If they're freshly polished, it will be tricky to „fabricate“ two diamonds angle via spin. Maybe one.

But if the weather is really humid and you got really dirty Brunswick Centennials, two diamonds may even work.

Always play this shot as a piano shot on 7:30, which is an equivalent to 1.5 tips left and 1.5 tips low. This „medium“ low and left position produces the most throw of the object ball.

You do not want to curve into the cue ball on this shot, that's hardly controllable. You want a solid, but piano shot.



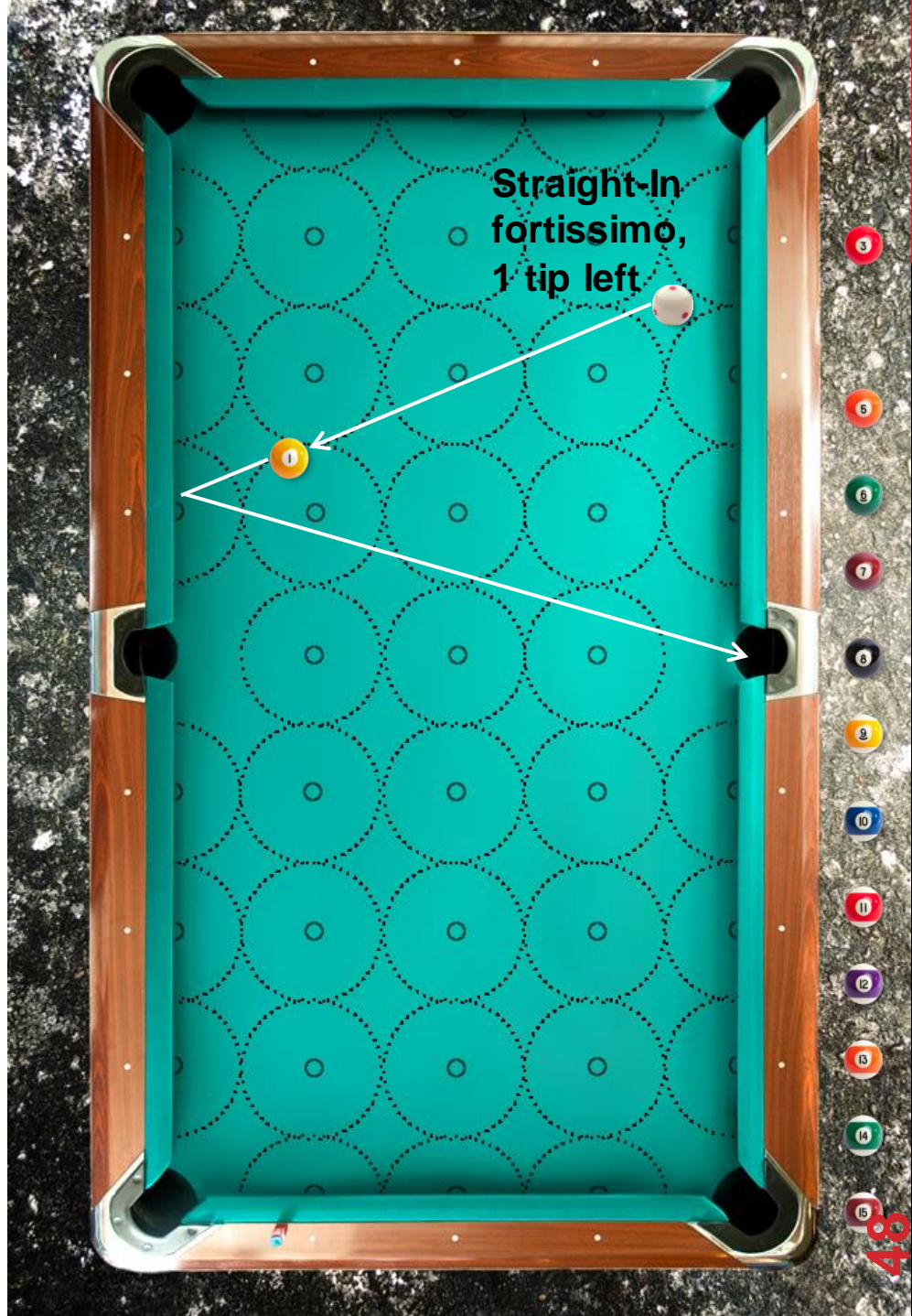
HIDING AN ANGLE

This is about the maximum you can hide. If you play this shot fortissimo, you will probably not be able to get it into the center pocket, but it will come long.

If you play louder than fortissimo, the object ball will probably jump out of the cushion and come even longer. There's a natural upper limit how hard you can hit the cushion before that happens. It depends on the fittin, brand and condition of your table and cushions.

So add one tip of left spin. That makes half a tip of right on the object ball.

That should be sufficient to pocket it.



DONE BANKING PART VII

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