

A LATTE ART STARTER BOOK

EVERYBODY LATTE ARTS!

Written and illustrated by
Dennis Hew



Decent Espresso
edition



EVERYBODY LATTE ARTS

By Dennis Hew

Decent Espresso Edition

decent
ESPRESSO

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Introduction

Before we jump into the main topic, you may have some doubts—like who is this Dennis Hew? What qualifies him to teach latte art and coffee?

Many people believe that a teacher should be a champion in the field or an award winner in order to qualify to teach.

I don't believe this is true, and I'll show you some examples. The famous chef Gordon Ramsay and the late Bruce Lee are both well known in their fields. One is a culinary arts celebrity who became a multiple restaurant owner, the other was a legendary martial artist who became a movie star.

Do they possess any championship titles? No, they do not. Nonetheless, they're respected teachers, mentors or coaches. It's because they're passionate about teaching and spreading their knowledge.

Gordon Ramsay spreads his knowledge through TV shows, inspiring millions to learn the culinary arts. Bruce Lee made movies to share his martial arts mastery. He changed the traditional Kung Fu film industry and inspired generations.

You may argue that these are rare or exceptional cases in history. Fine. How about your school teachers, then? Your science instructor or your English teacher? Did they get literature awards, Nobel Prizes, or other honors? Probably not. However, many of them are very skillful in teaching and full of patience, even though they're not champions in their fields.

So, who is this Dennis Hew? I'm an entrepreneur who started a small, humble weekend coffee class at a café named RGB Café in Kuala Lumpur, Malaysia. My classes started in 2017, and my classes were always fully booked. Since then, I founded the Barista Experience Academy. I also host a podcast, "The Coffee and the Company." I'm certified by the Specialty Coffee Association (SCA) as an Intermediate Barista and a Professional Barista.

I've taught over 8,000 students (no webinar: it's in person). I've committed thousands of hours to teaching and providing face-to-face and hand-in-hand guidance. How I started the classes harkens back to how I started as a weekend part-time barista.

In 2013, when interest in specialty coffee was booming in Kuala Lumpur, I had my first flat white with latte art on top. I'd never tasted such delicious coffee without sugar before, and I was intrigued. I asked for a weekend job there, and I was accepted.

Fast forward to 2017: I gained working experience with a few cafés, yet felt like I hadn't developed enough and couldn't move on to the next stage of learning. I felt like I was teaching more than being taught, and I became demoralized by earning a minimal wage.

I was certain that my time was worth more than what I was earning. I thought of quitting my part-time gig at the café, but then the owner asked me to kickstart a coffee class. Her roasting room was vacant on weekends, and she had an extra espresso machine in the room that I could use for teaching.

So I started the class alone and from scratch – designing a post, creating a syllabus, handling digital marketing, scheduling bookings and so on.

As it happened, I enjoyed teaching so much that although my body ached from working all day on weekends, I didn't feel like I was working at all.

Along the way, I've often received messages from followers in other countries who tell me that their country or their hometown has no coffee class.

Since I routinely write about coffee, sharing my knowledge with videos on Instagram ([@sinnedhew](#), [@baristaexperienceacademy](#) and [@thecoffeethecompany](#) if you're curious), I got the idea to write a book to reach out to a global audience and those I can't teach personally.

Guess who illustrated this book

I did, from cover to cover. I started writing this book without knowing how to illustrate digitally. When I was a kid, I liked to draw and doodle with an old-school pen and paper. My drawing hadn't developed since then.

But I had many ideas I needed to show to you: my readers, my friends, my IG followers, my audience from all over the world. And so as my book progressed, I had to learn digital illustration skills. Simply because latte art requires more than just words – it needs visuals. I believe that we're all visual creatures.

One fine day, I received a new tablet from my day job and it came with an attached pen. This sparked an idea in my brain and changed my perspective on developing this book.

You might notice as you turn the pages that my illustration skills gradually improve from the first picture to the last. Many times, I drew and failed. I taught myself to make these illustrations better and better.

Nonetheless, I've found that I enjoy illustrating. It calms my mind, gives me purpose and trains my mindfulness. I'm not a skillful drawing artist, but from the bottom of my heart, I spent a lot of time learning from scratch.

At the end of the day, my goal is to pass on the knowledge of what I learned the hard way to you, my friends throughout the world, so that you have an easier (and less frustrating) way to learn.

Why do we need latte art on our coffee?

We live in a digital world. At any moment, we pull our smartphones from our pocket and scroll through our social media platforms or check notifications.

Modern people (like you and me) also like to snap photos before we eat or drink, then upload our pictures to social media to share amongst friends, family and followers.

From a business perspective, it's free advertising to create beautiful food or products for your customers to share on their social media. And I don't think any business owner would have anything against that.

From the customers' perspective, if the prices are similar, they'll always go to the café that serves fancy coffees with beautiful latte art, rather than one that does not.

Just ask yourself the same question: comparing the two coffees below, which would you choose if they were both the same price?



Formula for latte art

There's no point in having a cup of coffee with nice latte art if it tastes diluted or tasteless. It's also pointless to have a coffee with a nicely calibrated espresso base but the steamed milk is messed up — maybe it's too hot or has too much dry foam.

What constitutes tasty coffee can be subjective or debatable. But based on my judgment through years of serving coffee to customers, I believe my formula – while not the best – would at least not be mediocre.

To make a tasty cup of coffee requires two items: delicious espresso plus nicely textured steamed milk. And here I have to be honest with you: with or without latte art, the coffee tastes the same. Latte art is purely eye-pleasing and for aesthetic purposes.

Hence:

Espresso + steamed milk + pouring skills = latte art.

What's the recipe for espresso, and how do I make nicely textured steamed milk? We'll cover that in a later topic.

How important is a shot of espresso in making latte art?

Very important. If you asked Ray Kroc (founder of McDonald's) if fries were important to his restaurant business, I'm sure he would have said they're important, too.

Let's imagine... in a burger combo, if the burger is delicious but the fries are uncooked or chewy, is the meal still delicious to you as a whole?

Same goes for a shot of espresso, or what I call “shot black.” A good espresso shot allows you to make a nice contrast and makes it easier to land some latte art. Most importantly, it also makes café latte taste delicious.

Therefore, both calibration and milk-texturing skills are equally important.

10% learning through class, 90% learning through daily practice

When I was in my early '20s, I took guitar lessons. After a class, teachers usually ask students to go home and practice the songs or skills they learned during the class. My guitar teacher taught me a very important philosophy: if we want to improve on anything that we've learned, we have to practice over and over again.

Humans are capable of 'motor memory'. Activities and routines in our day-to-day life, such as driving a car, riding a bicycle, or scrolling on your phone have become habits. We often perform these actions without thinking because we do them so frequently.

I've never seen a good musician who doesn't practice, and I've never seen a skillful latte artist who doesn't make latte art addictively and often. Good baristas need to enjoy both making and drinking coffee in order to improve their skills.

To give you more examples:

An experienced driver can drive without thinking about when to step on the brake pedal or when to shift gears. He or she can do it automatically in a heartbeat.

Yet another example:

A new barista is unable to make many latte art patterns because he or she didn't practice enough (or drink enough). Like a driver who just got his license, every single step requires some thinking before he's able to execute.

So how does one practice latte art? By making coffee for yourself, your customers or anyone at all. And try not to waste liters of milk while trying to create a pattern out of it.

Many people ask, "what's the most difficult latte art pattern to me?" The answer is simple. The most difficult pattern is the one I never practice.

I strongly believe that any pattern is achievable if you put your heart in it and practice diligently. I don't want to discourage you from attending a coffee course or class. Instead, I advise you to commit to drinking more coffee, so that you're able to make more of it.

Attending a course gives you a shortcut that helps you correct your mistakes immediately.

MILK TEXTURING

Instruments for texturing milk

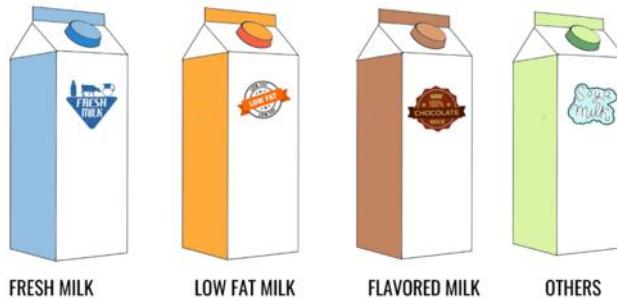
This part of the process is crucial because it plays an important role in the taste of white coffee. Each of the items below has its own design and purpose, so let's explore them.

For texturing milk, you need:

- Milk
- Espresso machine (steam wand)
- Milk pitcher
- Thermometer
- Wet cloth (for cleaning)

Which type of milk is suitable for latte art?

Many people ask what sort of milk works for latte art and which milk pairs best with coffee. In this chapter, I'll introduce what's available in your supermarket chiller and what's best for latte art.



Fresh milk (cow's milk)

This is the most-common milk in your local supermarket, and by far the best milk in terms of taste and texture. I'm not too bothered about the fat content, because this is more of a taste preference. For texturing, it should work fine, though I believe the higher the fat content, the shinier and sweeter the milk gets after it's textured. This is terrific for a cup of white coffee, but it still comes down to your preference.

Some fresh milk brands have heavy cream-tasting notes, which is my least favourite. But some people like it that way.

Please note that UHT (ultra-heat treatment) full-cream milk is not suitable for latte art. You can find this type of milk on the shelves, not in the chiller. It's pasteurized with high heat and kills off endospores during the process. This gives it a longer shelf life, but also gets rid of the sweetness of the milk. And UHT steamed hot milk will smell and taste bad in coffee.

Low-fat milk or skinny milk (cow's milk)

For texturing, I would say there's not much difference from fresh milk, but I've found this type of milk to be less sweet when paired with coffee due to its lower fat content.

Flavoured milk (chocolate, vanilla, honey milk, etc)

At one point, I was curious to see if I could make my coffee with chocolate milk or vanilla milk to add some special taste. But it ended as an epic fail. Flavoured milk doesn't texture well, and it's designed to be consumed chilled or cold. After it's steamed, it tastes bad and weird, especially when it's paired with coffee. In short, these types of milk don't work well with coffee and latte art.

Others as in soy, almond milk and more (alternative milks)

Due to the rising number of vegan consumers and lactose-intolerant patrons, you can find many alternative milks nowadays. As I write this, I see more brands and options available in the supermarket.

Personally, I'm not a vegan and not in favour of alternative milk in terms of taste. I've tried a few brands that work well for texturing, but you can't compare the result with cow's milk. **You can't pour a fancy latte art with alternative milks: the most you can make is heart shape or tulip.**

Some brands are designed for baristas or coffee making, and they work really well. I've had a bad experience with vegetable milk. The taste is savoury and the texture is very thick. My coffee ended up tasting like cream of mushroom soup.

A Decent perspective

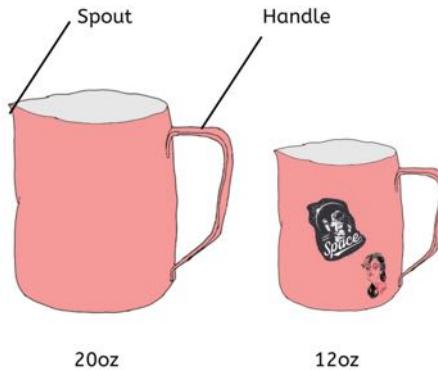
New alternative milks get created often, and some of them are "barista blends" that might be better for making latte art than previous blends.. Your local store might have an alternative milk that works well for you.

Milk pitcher: which type do you love the most?

Let's talk about milk containers. We call them milk pitchers. Unlike ordinary pitchers you get from kitchenware shops or Ikea, this type of pitcher is designed mainly for texturing milk and pouring latte art. It has a pointy spout designed to pour latte art.

In the next illustration, you'll see two popular sizes of pitchers. Of course, you can find even bigger sizes than the ones pictured here.

If you notice, some baristas like to use a smaller pitcher to texture milk. Then they transfer the milk into a bigger pitcher. I'll explain this in detail in a later chapter.



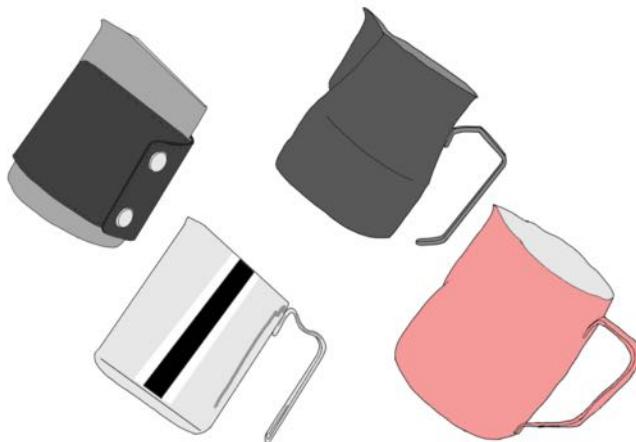
The illustration above shows two sizes. Typically, the barista uses the 12oz size to texture the milk and serve a single cup of coffee. If you want to texture milk for two cups of coffee, you can use the 20oz jug to get two jobs done at a time.

A Decent perspective

Decent Espresso makes a 350ml and a 600ml milk jug. Learn more about these jugs [here](#).

Why not use a 20oz pitcher to texture a single serving of milk?

A bigger pitcher has a bigger diameter. To texture silky-smooth milk, the barista has to introduce air into the milk to make microfoam. The next step is to swirl the milk to make it silky.



Shown here are different types of pitchers in the market. I've searched for the name of each type of shape, but unfortunately, most producers provide a minimal description of their product.

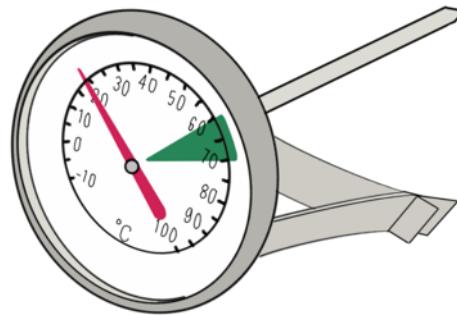
The comfort of a pitcher's handle and the symmetrical alignment are both important when it comes to pitcher selection. I always advise people to hold and feel the pitcher before you proceed to purchase.

I've had some bad experiences when I bought a pitcher without trying it out first. I ended up owning an unsymmetrical pitcher that poured unsymmetrical latte art.

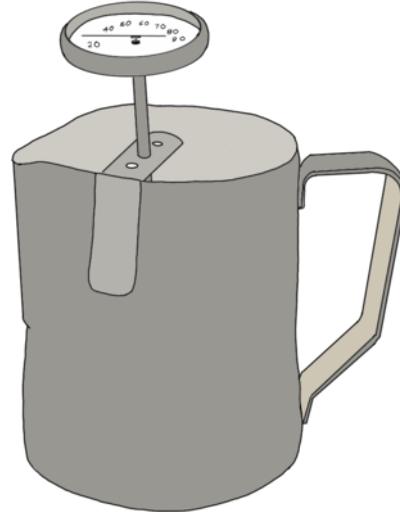
If you pour a single serving of milk (for a 6oz cup, let's say) into a 20oz pitcher, this means less swirl RPM (revolutions per minute). Less RPM swirl means less-silky milk. In short, you create less-delicious milk.

Thermometer – is it necessary?

In short, yes, you need this especially when you're a newbie. I suggest you get one before you start to texture any milk. Reason? As I mentioned previously, you need to know when to turn off your steam wand during the texturing process. You will also train your temperature sense with this tool.



Shown above is a manual thermometer. Some people prefer a digital thermometer, which has a slightly higher price point.



The illustration above shows a thermometer mounted onto a milk pitcher.

Two ways to use a thermometer:

1. Just like the previous illustration, the thermometer is mounted onto a pitcher. But the downside is that the thermometer will block your view of the inside of the pitcher.
2. Leave the thermometer out of the pitcher. After you turn off the steam wand, check the temperature with the thermometer. The downside: you might run the risk of texturing milk at a less-ideal temperature. But ultimately, you'll learn faster, and you won't rely on the thermometer all the time.

Temperature?

55°C – 60°C. Some say 60°C – 70°C. There's no written rule. I think 65°C is a little too hot for me to drink after the coffee is made, but as long as you don't scorch the milk with a temperature that's too high, this will be alright.

What if the water or milk is under or over the ideal temperature?

Under (below 55°C)

Lukewarm coffee. Your customers or guests will complain and request that you redo the coffee. This will double your cost and waste time.

Imagine if you paid big bucks for hot soup noodles during winter in a fancy noodle bar, but they serve you lukewarm soup noodles. Wouldn't you demand a redo as well?

Over (above 70°C)

Similar to cooking, higher temperatures have a higher risk of burning the coffee and milk. Burnt coffee tastes like cigarette ash and smoke, not to mention that it will burn your lips and hands when you hold the cup and drink.

If the temperature is too high when milk gets textured, it will lose its natural sweetness and taste blunt.

Imagine that you love wagyu steak and prefer it cooked medium-well done. But the restaurant serves you overdone wagyu steak with visible black burnt marks on it. Would you care to find out what's in the chef's mind that he'd want to waste this precious wagyu steak?

Note: for best texture, use chilled milk, because this will create a shiny result.

A Decent perspective

Decent Espresso's milk thermometer accommodates Celsius or Fahrenheit measurements, and it has very low latency, so it reads the temperature very quickly.

Learn more about it [here](#).

A cloth: should I get a fancy one?



No. Microfibre or a regular cloth will get the job done. Use this cloth solely to clean your steam wand. For the sake of hygiene, don't wipe your counter with it. I always leave this cloth folded on the espresso machine's drip tray. Some prefer to leave it on a saucer beside the espresso machine when it's not being used. This cloth should be rinsed regularly and kept wet so it's easier to wipe off the milk stains after texturing milk.

MILK FOAM

How much foam do you need?



The illustration above shows a few popular beverages with milk.

Three major espresso-based white coffees – what's the difference? **The main difference is the thickness of foam.** Foam and milk dictate the taste of a milk coffee. Let's compare a few cups.

Cappuccino:

Rule of thirds. $\frac{1}{3}$ of the cup is foam, therefore this has the least milk for coffee, which also means this is the strongest coffee amongst the three.

Café latte:

Cut the cappuccino's foam by half, leaving a little bit more milk for coffee.

Flat white:

Cut the café latte's foam by half. This makes a large amount of milk for coffee, so this is the mildest coffee among the three.

What about foam for other beverages?

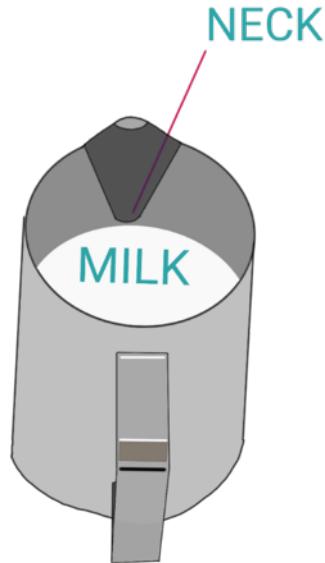
Café mocha, hot chocolate, cortado or piccolo café latte are also served with café latte's foam.

Why do some cafés serve different beverages in different sizes or with different cups?

There could be a few reasons. Each cup design may represent a different beverage (for example, a glass for café latte or a ceramic cup for cappuccino). This makes it easier for a waitress to identify each beverage based on the cup design without asking the barista during rush hour. It also depends on a café's customers. Some customers like their café latte served in a bigger coffee cup so they can sit longer and hang out.

Let's texture milk!

First, you need to know your cup size. Then you'll know how much milk you need. Baristas go through this with practical experience and repetition.



For example, if you're making a 6oz cup of coffee with a 12oz pitcher, then I would usually measure with the neck. Leave around 5mm distance between the milk and neck. Some pitchers have markings to indicate liquid volume.

A Decent perspective

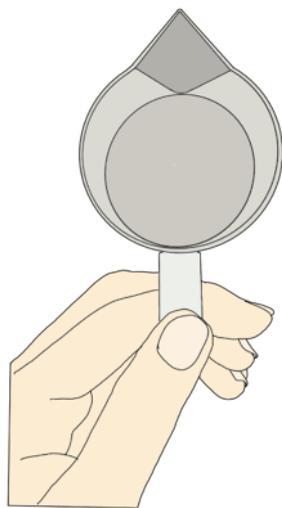
The Decent milk jug shows measurements in ounces and milliliters on both sides of the jug, so left-handed and right-handed baristas can see them easily.

Remember to use only chilled milk for best results.

How to hold a pitcher to texture milk

I believe that if you want to improve, then you have to consistently do something the same way until it becomes a habit. So I urge you to hold the pitcher the same way every time. This way, you can avoid burning your fingers while you're texturing milk and you'll improve your skills faster.

TOP VIEW



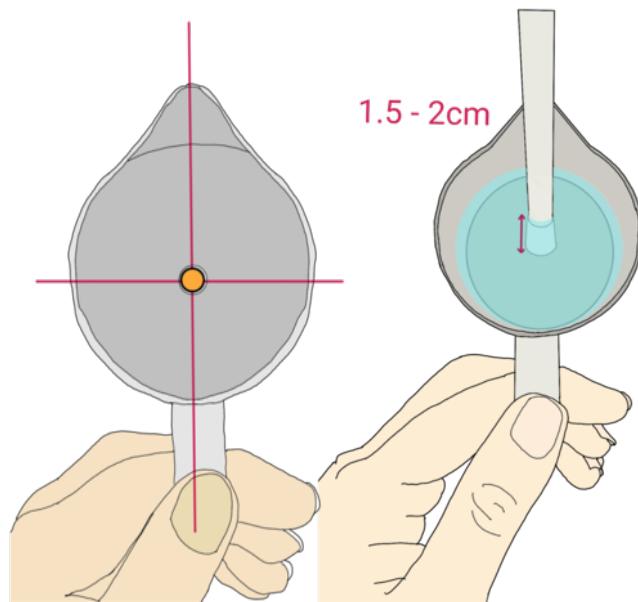
SIDE VIEW



Shown here is a style of holding a pitcher that's symmetrical with a flat bottom. Avoid any contact between your fingers and the pitcher body.

Symmetrical jugs with a flat bottom allow newbies more ease in positioning the tip accurately.

Steam wand positioning



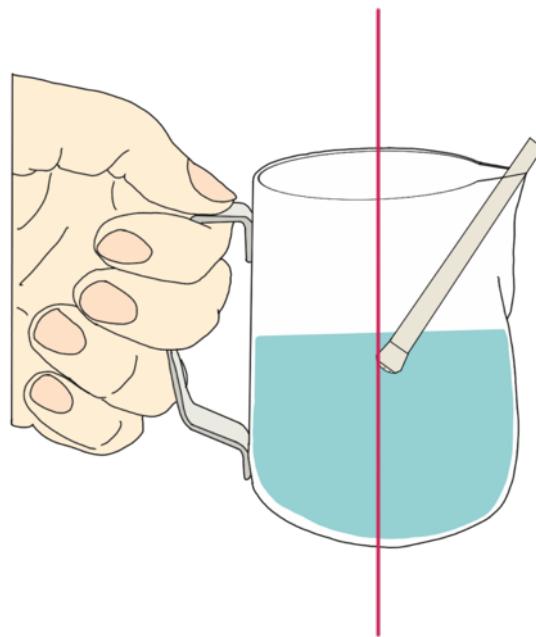
Step 1

Place the steam wand tip right in the centre of your pitcher, then submerge the tip into the milk around 1.5cm – 2cm.

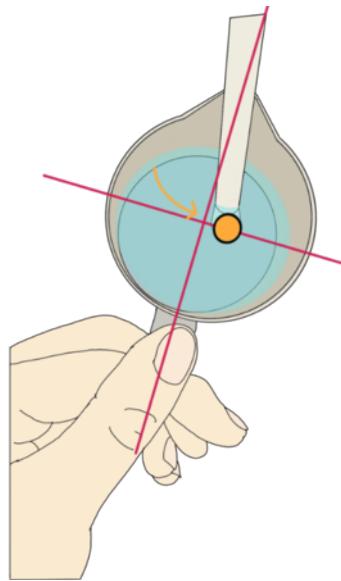
If the placement is too shallow (1cm or less), the foam will immediately flow in as soon as you turn on the steam, and it will be too late to control how much foam you need.

Also, don't place the tip too deep (3cm or more) because during the steaming process, every second counts. If the tip is submerged too deep, it will take time to introduce air into the milk to generate foam.

I used a blue colour in this illustration to represent milk.
Because milk is white, it's more difficult to see it on a white
background.



From a side view, the milk should look like the preceding illustration. Always keep the bottom flat so that you can easily measure the position accurately. You don't have to think much about the degree of tilt. Keeping it flat is the easiest way.

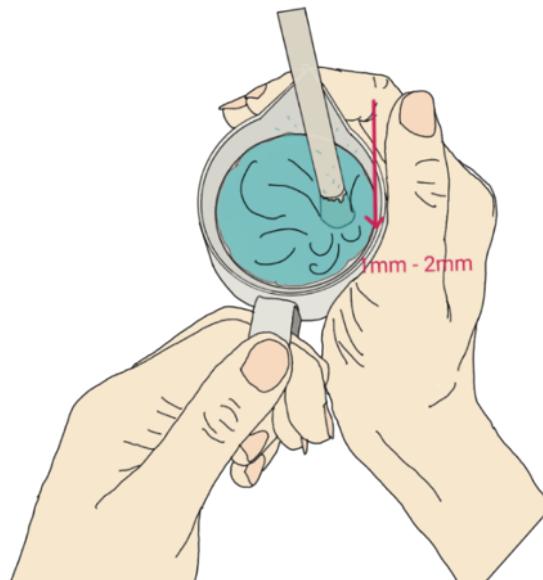


Step 2

Rotate the pitcher to make the tip off-centre.

This position allows milk to swirl easily and create a vortex. If the wand tip is placed right in the centre, it will create a messy swirl, just like a tsunami. This creates a higher risk of rough bubbles on the surface and not-so-shiny milk.

Note: don't place the tip close to the pitcher's wall, because this will generate higher swirl power. You'll end up with milk spilling out of the pitcher.



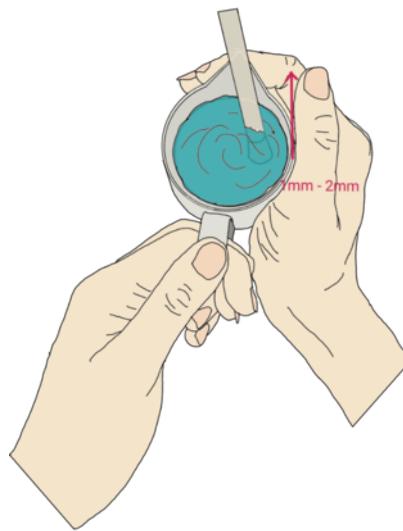
Step 3

After you turn on the steam, immediately use your other hand to hold the bottom of the pitcher to feel the temperature.

Move the pitcher down for foam.

Gently lower the pitcher 1mm - 2mm to generate a chirping sound to introduce air into the milk and create foam.

Note: when lowering your pitcher, don't do it hastily. It needs to be lowered steadily and gently. If you lower it quickly, the chirping sound will be very thick and rough, and it will generate very rough textured milk.



Step 4

When the chirping is done:

- Move pitcher up for the swirl.
- Lift the pitcher **1mm – 2mm** — high enough to silence the chirping sound, and let it generate a swirling vortex.

When the temperature reaches 55°C - 60°C, turn off the steam and wipe the tip with a wet cloth.

The result should be glossy, shiny and silky. Some describe it as similar to wet paint. It should be full of microfoam, with minimal bubbles on the surface.

Practice advice

I recommend that you practice this procedure with the ingredients below:

Tap water

One drop of soap (dishwasher, hand-washing soap or any liquid soap).

A few pieces of ice cubes (to chill the water).

This is how café baristas train their juniors at a low cost and with unlimited tries. These materials will generate very similar sensations with milk (in terms of the texturing process only, not pouring latte art).

Remember this magic phrase

“Pitcher down for foam, pitcher up for swirl.”

The details:

- Pitcher down 1-2mm for foam (chirping sound)
- Pitcher up 1-2mm for swirl (shiny milk)

Watch it on YouTube:

How to texture milk

Questions for texturing milk

How long does it take to texture milk?

It's not about time. It's about the correct temperature: 55°C-60°C. Your outcomes may vary with different machines and different steam pressure.

What is the chirping sound?

It's similar to the sound of paper tearing. This sound represents steam introducing air into the milk and creating microfoam.

How much foam do I need?

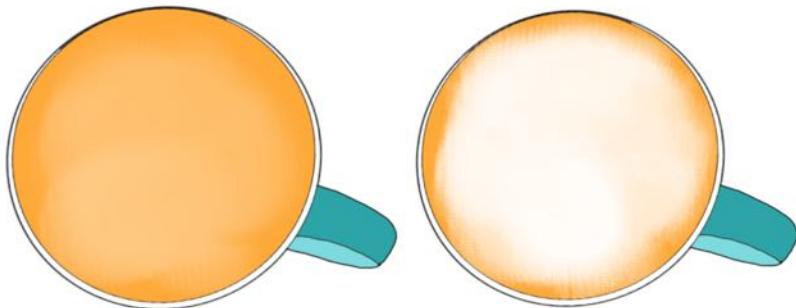
With more foam, it becomes a cappuccino. Less foam is for café latte, and the least foam is flat white.

The chirping sound is most important. No chirping sound means no microfoam. No microfoam means that no latte art is going to happen.

I've lifted up the pitcher 1mm–2mm, but there's still a chirping sound. What's the solution?

Lift the pitcher another 1mm–2mm until it swirls without a chirping sound.

Mistakes revealed



Many people around the world have contacted me and asked why their latte art doesn't turn out. Most of their attempts look like the illustrations above.

Illustration at left: "No matter how I try, my coffee has no latte art."

It could be either or both of these reasons, One, you didn't get a chirping sound during the texturing process. No chirping sound, no foam, no latte art.

Two, after you've textured the milk, for whatever reason, you didn't immediately (and I mean As Soon As Possible) pour the milk into coffee and start making latte art.

Illustration at right: "My coffee is always foamy. No matter how I try to pour, it will be completely covered with white foam."

This is mainly because you made too much chirping sound during the texturing process. As a result, it's too foamy. And no matter how you pour it, it's still a completely white surface.

Watch it on YouTube:

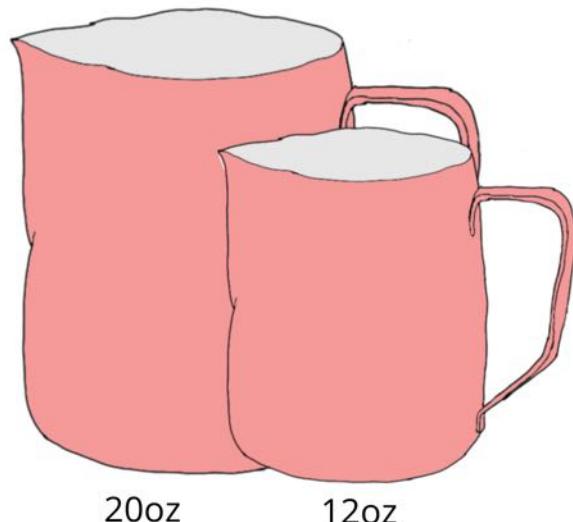
Milk steaming common mistakes

Rephrase Steps (Texture Milk)

1. Position at centre point.
2. Rotate to off-centre point.
3. Pitcher down for foam.
4. Pitcher up for swirl.
5. Turn off the steam when the temperature reach 55°C - 60°C.

Remember to purge the steam wand before and after use!

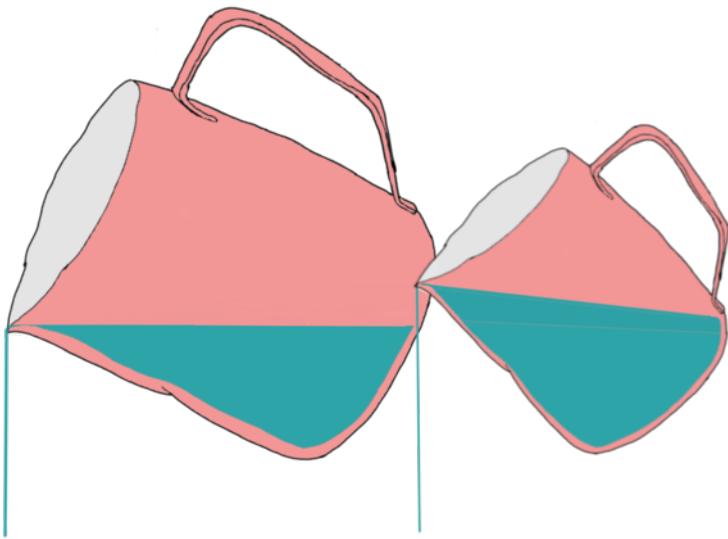
Introduction to milk pitcher sizes



As I mentioned previously, the most commonly used pitchers come in two sizes, as shown in this illustration. What's the purpose of the different sizes? Basically, the small pitcher is meant for a single-cup serving, while the bigger pitcher can texture two to three servings of milk at once.

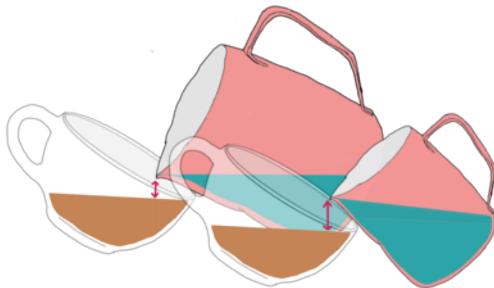
You may have seen some videos of baristas transferring milk from a small pitcher into a big one to pour latte art. You can head to Instagram and search #latteart to watch videos of baristas performing this procedure.

Let me explain further with an illustration.



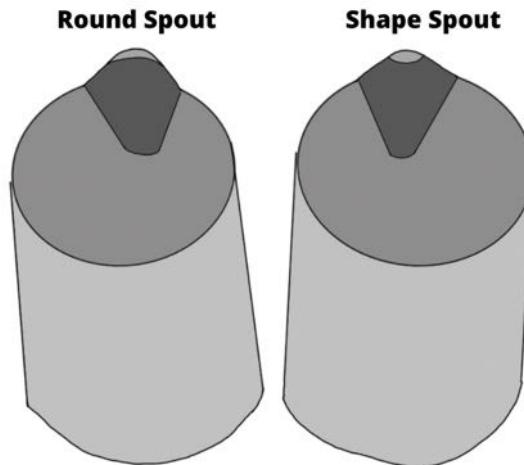
Here you can see two different-sized pitchers containing the same amount of milk. However, the big pitcher can be tilted lower than the small pitcher when you pour it.

The advantage of being able to tilt lower is because you can access many areas within the cup without the pitcher's neck getting blocked by the cup lip. This also enables a barista to start making latte art with a cup that's less filled. Especially if you want to stack layered tulips, your cup should be less full so you can add more stacks of tulips.



If a cup has less coffee in it, you get more space to stack more layers.

Types of spouts to choose



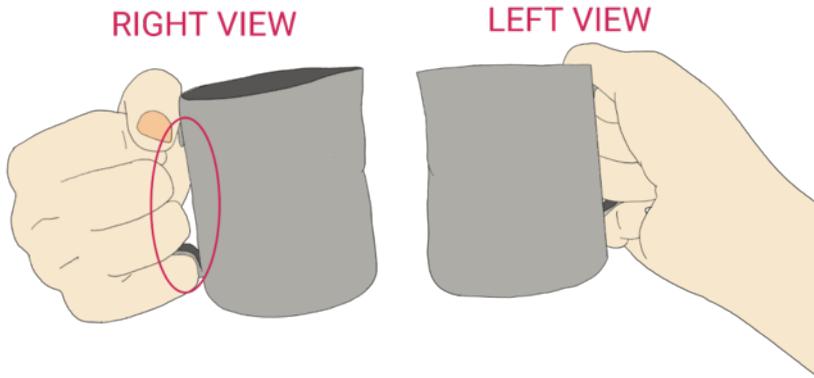
A barista will usually choose different spout types to pour different latte art. The illustration above shows a round spout and a shape spout. (I wish I could draw better so you can more easily spot the difference.)

Usually, a **round spout pitcher** is meant for solid latte art patterns, because the wider spout produces a broader stream of milk to create a bigger or broader solid pattern.

A **shape spout** can be used for patterns with both solid and fine lines. It enables you to pour a thinner stream of milk to make layered lines (if you're trained in wiggle techniques), yet it's still able to pour a solid pattern.

Some pitcher makers produce very sharp spouted pitchers with claims that it's easier to make finer lines with great contrast.

How to hold a pitcher



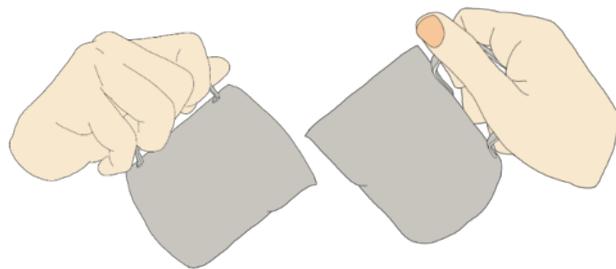
There are many ways to hold a milk pitcher, but this is the one that I've found comfortable. The red circle shows that my fingers never come into contact with the lower part of the pitcher, because they might get burned. And that will affect your mood when pouring.

My thumb is placed on the upper part of the pitcher (which is not hot) because this will give me a better grip and more control when I pour.

Pay attention to these two things:

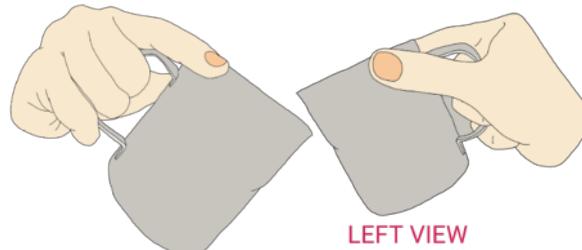
1. The way you hold the pitcher should be comfortable and not painful.
2. Hold the pitcher firmly – not too loose, not too tight.

On the following page, you'll see more holding styles to explore.



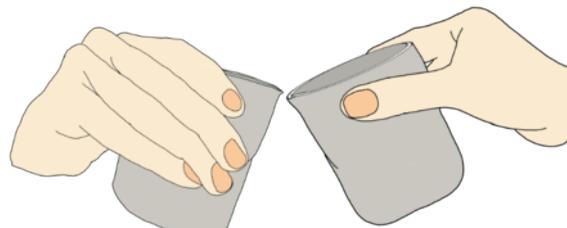
RIGHT VIEW

LEFT VIEW



RIGHT VIEW

LEFT VIEW



RIGHT VIEW

LEFT VIEW

Why am I shivering when I pour?

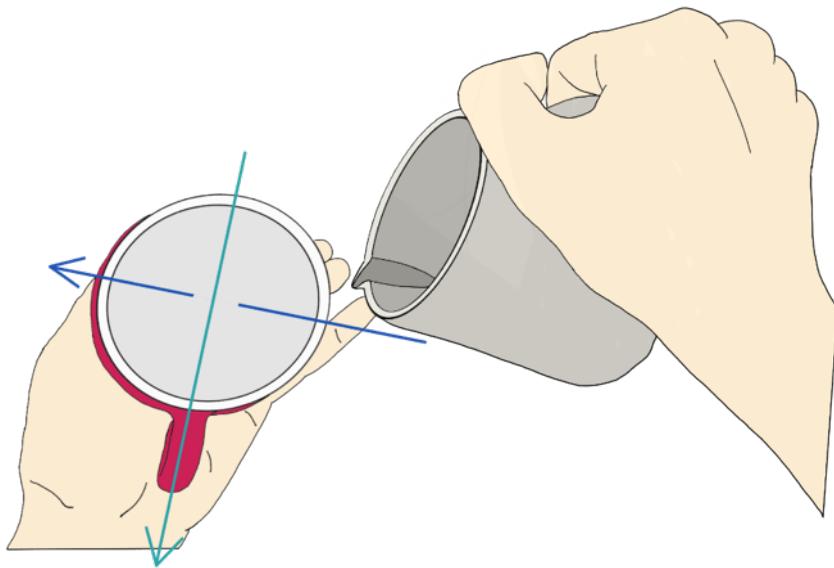
If you hold a pitcher or cup too tightly, it might make you shiver when you tilt the pitcher or cup downward. Put both items down, and relax your hands. Then pick them back up and try holding them with less muscle tension and force. This will reduce the shivering effect.

Standing posture

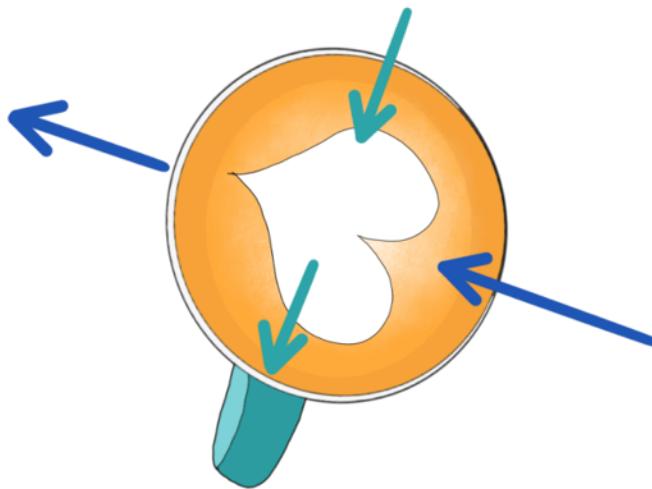


If you want to pour symmetrical latte art easily, you should stand symmetrically. Your legs should be apart (shoulder width) and your arms relaxed (not clamped close to your body). Hold the pitcher and cup right below your chest. This will give you a clear view and give your pitcher arm more freedom to manoeuvre.

I find this posture more comfortable for pouring, and it's easier to produce symmetrical latte art.



With this posture, your eyes should be facing the angle indicated in blue (in the illustration above) while holding both instruments. The cup's handle should be pointing towards 6 o'clock (for basic heart, tulip rosetta pattern). You'll notice two arrows in the illustration.



Blue arrows:

Pitcher pouring direction, facing horizontally from 3 o'clock towards 9 o'clock.

Dark blue arrows:

Cup's handle facing 6 o'clock with a vertical line.

The result should look similar to the previous illustration, and your latte art should be symmetrical. The ultimate goal is to make the pattern face the drinker. Keep in mind that the majority of people are right-handed. If you're a left-handed barista, you should flip to the opposite direction.



I've found some other postures difficult (like the one shown above) because my pitcher arm is more restricted. I've found it rather difficult to raise my arm higher to tilt the pitcher in this position.

TYPES OF FREE- POUR LATTE ART

SOLID PATTERN LATTE ARTS



Heart Shape



3 Stacks Tulip



9 Stacks Tulip

Above are some of my works for solid pattern latte art and a 9-stacks tulip. I used a 20oz pitcher to pour the additional stacks. I usually advise students to start with the basics, as shown above, and then move on to fine lines.

Because the heart shape and the 3-stacks tulip are the fundamentals of all latte arts, they enable us to master the art of pouring and cup tilting.

Note: Many baristas can pour more than 9 stacks, but please don't be greedy: more stacks don't mean nice contrast and symmetry.

FINE LINE LATTE ARTS



Winged Heart



Slow Winged Heart



Classic Rosetta

Defining a perfect pour for latte art

A perfect pour latte art should meet these criteria:

- **Intention:** pours with a goal to create a specific latte art picture.
- **Contrast:** the art shows clear lines or contrast between the foam and coffee.

- **Symmetry:** the latte art faces the drinker and it's symmetrical.
- **Consistency:** the barista can make the same pattern twice consecutively.

Real inconsistent scenarios

A barista claims to be able to create up to a 10-stacks tulip, but the result looks like a clump or cloud with minimal contrast. This defeats the purpose of stacking.

A barista claims he can create many types of latte art: like a swan, rosetta and more, but just like winning the lottery, he can only do it once in a blue moon. Most of the time, he fails. I would consider this "luck," not the ability to pour.

A barista claims to be able to make advanced patterns, like a unicorn, squirrel or "Red Indian." But in reality, none of the patterns look like what he claims.

Practice with water and imagination first

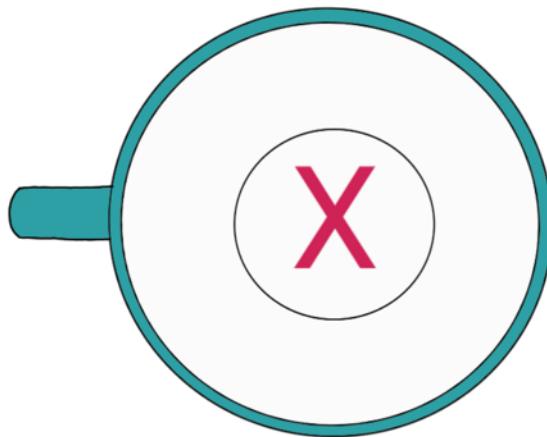
As I mentioned previously, I'm a person who strongly believes in training motor memory through repetition.

Cafés train their new staff with continuous practice, and it's a "must" for latte art training.

Now that you know how to hold a cup and pitcher, it's time to train with water and imagination before we do the real thing with milk and coffee. This will simplify the learning progress, reduce frustration and let you train at a lower cost. Let's start!

Learn to control the flow

Pouring latte art means controlling the flow of milk. Usually, I advise learners to practice with water first. This will help most people get over their fear of spillage. Remember not to grip the cup or pitcher with too much strength, because this will cause your hands to shiver.



Flat position:

Distance between the tip and surface:

The distance between the pitcher's tip and the coffee surface shouldn't be too high, because this will produce a drippy flow and create bubbles on the surface.

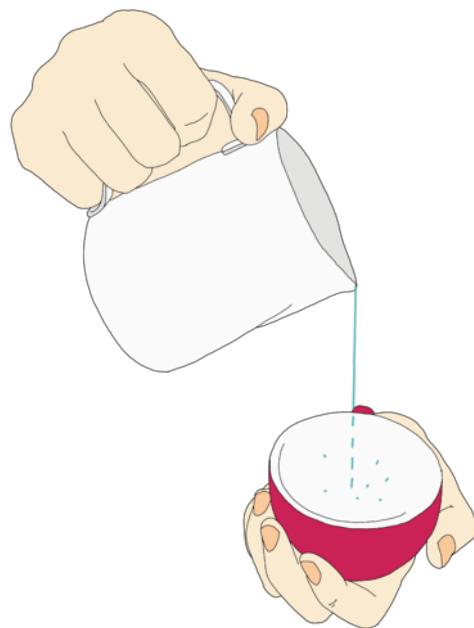
In addition, the tip shouldn't be too close to the surface, because this will generate a lot of white foam on the surface. This is what we call "dirty" latte art.

Ideally, you should have around 8cm-10cm of space between the pitcher's tip and the coffee surface.

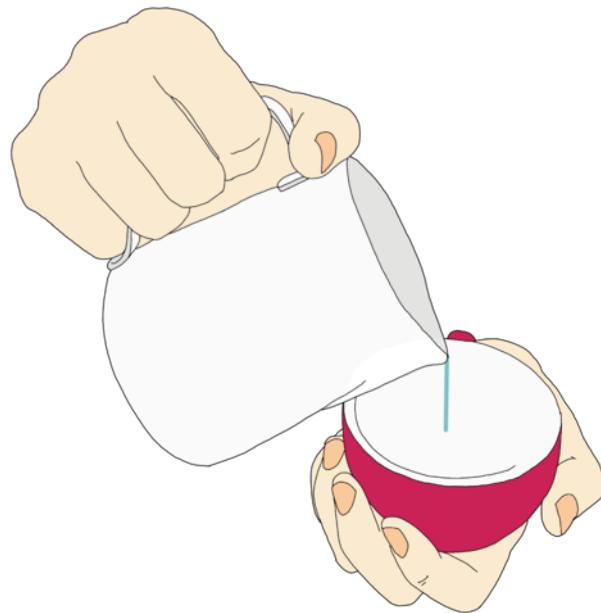
Try standing in front of a mirror to check your posture and the height at which you hold the pitcher and cup. Then verify with the illustrations below.



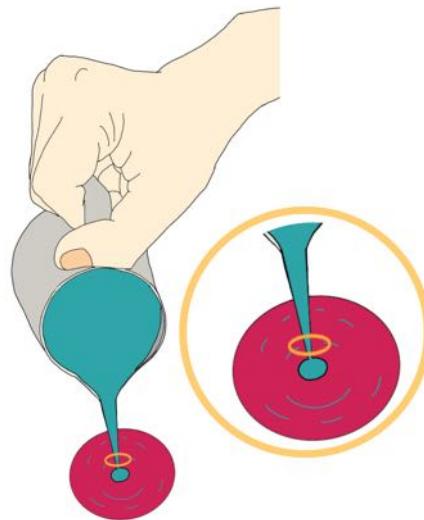
The illustration above shows the ideal distance between the pitcher and cup. Try to maintain this distance at all times, because as you pour the liquid it will fill up the space, bringing the cup's liquid closer and closer towards your pitcher's tip.



This would be too high to pour, and you'll end up with bubbles on the coffee.



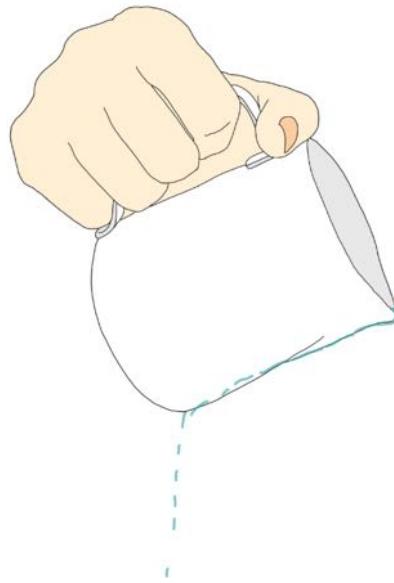
This is too close to the surface, and it will generate too much white foam on the surface.



Usually, this speed fills half the cup. In the illustration, the orange circle shows that the flow is thin enough without dripping.

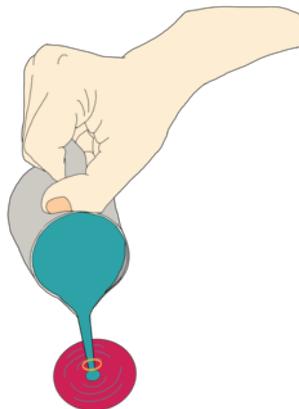
Pouring too slowly will create a weak flow. As a result, the latte art pattern will be tiny because the flow isn't strong enough to expand the pattern. Pouring too slowly will also cause a dripping effect and create bubbles. Bubbles are bad for latte art because they can block your flow and prevent you from creating symmetrical latte art.

Hopefully, you now understand why your latte art sometimes turns out to be tiny or undersized.



The illustration above shows an even slower pour than in the previous example. This is what will happen if you pour too slowly with some classic pitchers – the liquid flows backward. This is quite discouraging, and it might make you want to stop practicing.

But don't let this put you off. It's OK to overflow and spill.



Next, let's practice pouring fast. Note the orange circle highlights a stream that's a little thicker than the previous one.

Again, try not to pour too fast, or your latte art will get messed up. How can you tell if it's too fast? If you pay attention to the ripples, a pour that's too fast will produce very strong and high ripples.

Your heart shape will become an eggplant or an elongated shape. You have to find a sweet spot between a flow that's not too slow or too fast.

Conclusion: What's the difference between fast and slow?

Metaphorically, just like driving at 60km/h (slow) or 80km/h (fast), the contrast is not much, but it has huge effect on the result.

Watch it on YouTube:

Practice with water before pouring latte art

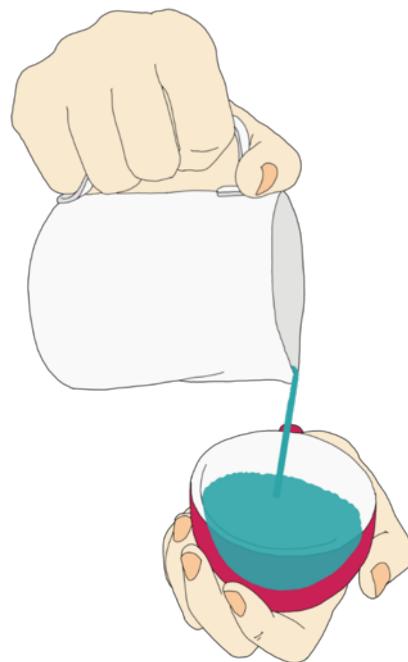
LATTE ART, WATER PRACTICE 1



Let's begin! Start by pouring a slow flow right into the centre of the cup until it's 50% filled.

In every pour, flow consistency is the key to success.

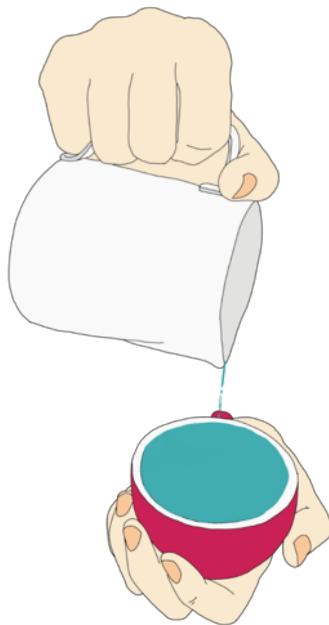
WATER
PRACTICE 1



When the cup is 50% filled, **speed up your flow rate. You should pour faster.**

Then keep a consistent flow rate until the cup is 100% filled.

WATER
PRACTICE 1



Once the cup is completely filled, cut off the flow immediately.

Remember: **stop when it's filled, not when you're afraid of overflow.**

Why can't I stop when it's 90%, 80% or 95%?

Let's say you make two cups of coffee. One cup is 100% filled and the other is 80% filled.

In terms of taste, the one that's 80% filled will taste much stronger because less milk was poured into the coffee. And from a customer's perspective, he or she would bring the two cups back to you and question you about the lack of standardisation of your products. You'll also cause your customers to not have confidence in your coffee-making skills.

Water practice 1 rephrase:

Control the flow

Water practice tips

1. Flat cup.
2. Pour a slow flow right in the centre point, up until cup is 50% filled.
3. Increase speed and pour a fast flow, up until 100% filled, then stop.
4. Repeat as many times as you can until you're confident.

LATTE ART, WATER PRACTICE 2

Importance of tilting a cup

In this practice, you're going to learn about tilting the cup from an angle until it's flat and even.

To make latte art that has a nice contrast (especially solid-pattern latte arts), the pitcher's tip has to be very close to the coffee surface. This can be done by tilting the cup very low, right before the contents spill out. If you can, try to touch the coffee with the pitcher's tip. Yes, you can let the tip touch the coffee. Just remember to wash the coffee stain at the tip after you're done.

Now let's get started.



Step 1

Start by tilting the cup at a slight angle, as shown in the illustration above.

Pour a small volume of water, and imagine it's a shot of straight espresso. Then, pour slowly into the centre of the imaginary shot.

Flow rate: Slow

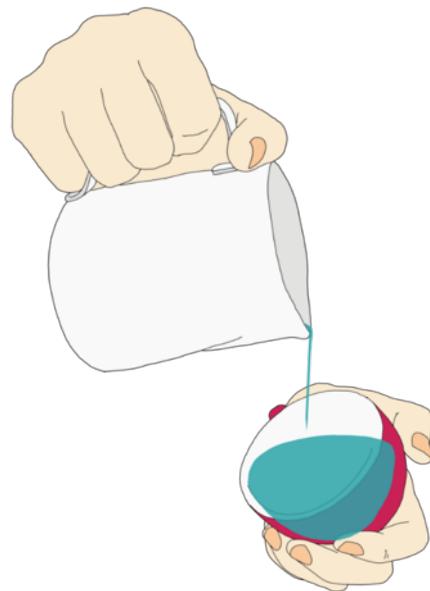
Distance (tip to surface): around 8cm-10cm.

Why tilt the cup instead of starting flat?

You won't normally see a barista start pouring latte art with a flat cup because the coffee will have a shallow depth.

Pouring foam and milk onto a thin, shallow espresso shot creates an overflow of white foam back to the top. In short, you'll get dirty latte art.

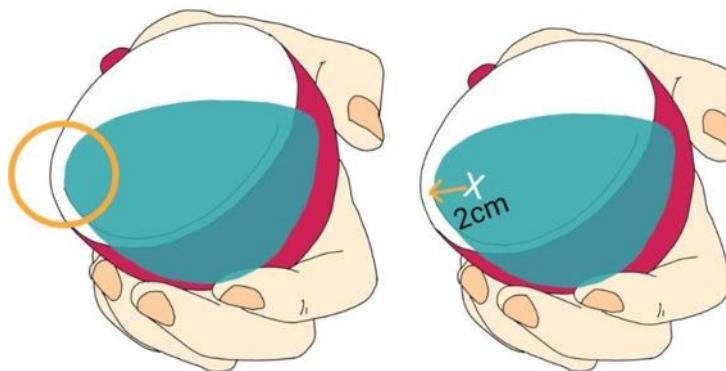
If you tilt the cup, the shot has a deeper depth and the foam can dive through the surface of the coffee, thereby giving you cleaner latte art with more contrast.



Step 2

Right about **50%** filled, **stop** for half a second, and then...

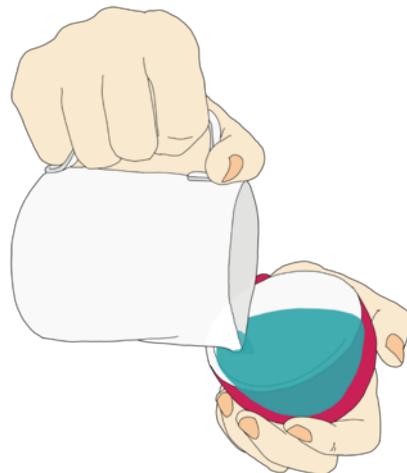
NOTE: I advise newbies to **stop** before the next move. After you're experienced and you can pour confidently, you don't need to stop any more.



Right before the next step, you have to know the position for your tip to land.

Two things you need to pay attention to for water practice:

1. The orange circle in the illustration on the left shows that the water is right at the edge of the cup lip. This is the only way to get the pitcher's tip close to the coffee surface.
2. In the illustration on the right, the position for the pitcher's tip is 2cm from the cup lip, where I've put a white X. That's where the tip should touch the water surface.



Step 3

Let your pitcher tip dive into position X, and start to pour fast. Then...

Flow rate: fast

Position of tip: 2cm from the cup lip.



Step 4

As you pour, tilt the cup slowly back to a flat position. This will prevent spillage and provide the closest distance for your tip.

Remember this phrase:

"Pour fast, tilt slow."

Flow rate: fast

Position of tip: Same as in Step 3. Don't move the tip around. Stay at this position with a consistent flow rate until the cup is filled.



Pour until the cup is 100% filled. Only then do you stop, as I mentioned previously.

Water practice 2 rephrase: “Tilt the cup”

Water practice — tilt:

Tilt the cup.

Pour a slow flow at the centre of the water until it's 50% filled (tip distance 8-10cm from the surface).

Stop for a half second to check if the water reached the cup lip (water almost spilling).

Dive your pitcher's tip into position X, pour with a fast flow (2cm from the cup lip).

Pour a fast flow up until it's 100% filled, then stop.

Repeat until you're confident.

Solid Latte Art: Heart Shape, the mother of all latte arts.

Before we move on to the next chapter, please make sure that you know how to pull a decent calibrated shot and have no problem in texturing milk.

Otherwise, please go back to the previous chapters and read them thoroughly. Apply and diagnose what went wrong. You have to master these two skills first before making latte art.

I've personally been through the hard ways (trying to master pouring skills without mastering calibration and texturing), which eventually slowed my learning progress significantly compared to others.

Allow me to list some scenarios that might happen if you don't master calibration and milk-texturing skills:

- **Tasteless coffee** – failure in calibration.
- **Dirty latte art**, full of bubbles on top of coffee – failure in milk texturing.
- **Coffee is too hot** – not familiar with the temperature.
- **Difficulty pouring out latte art**, the shot is too watery – trouble calibrating espresso shots.
- **Every cup of coffee is a flat white**, even though the order is cappuccino. Or every cup is a cappuccino, even though the order is a café latte or flat white – milk texturing skills not mastered yet.

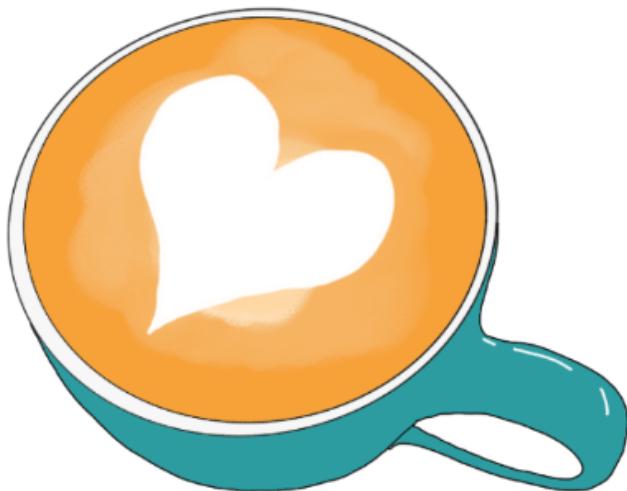
So, don't try to take a shortcut. It will ultimately turn into a long route.

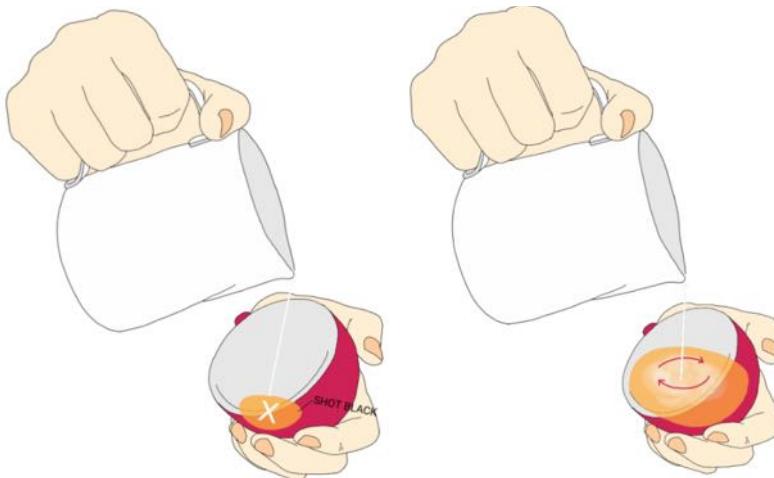
Done?

Let's get started!

HEART
SHAPE

A Solid Heart Shape





Step 1: Mixing

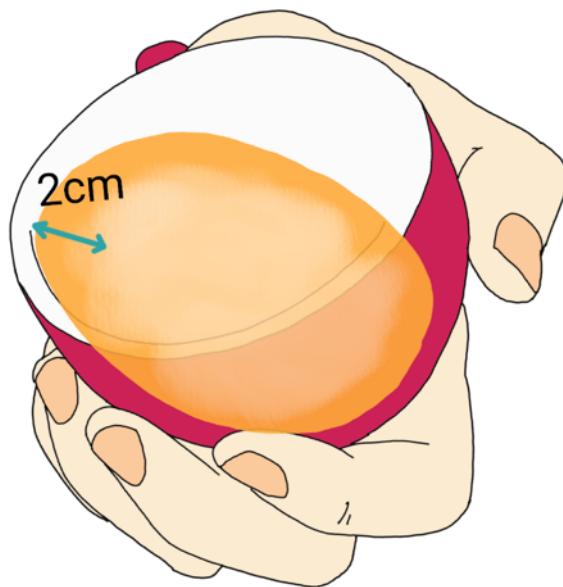
After pulling a shot and texturing the milk, begin by pouring a slow flow right into the centre of the shot.

Then immediately, move in a circular motion while maintaining a slow flow rate (as slow as Tai Chi) right at the centre of the shot.

This step is to mix and soften the crema, because crema is oil. And when it cools and dissolves, it becomes islands of particles. If the coffee isn't mixed well, these particles will prevent you from making a symmetrical latte art pattern.

Flow rate: Slow

Height of tip to coffee: 8cm - 10cm



When it's about 50% filled, the position of the tip is around 2cm away from the cup lip (similar to water practice).



Step 2: Landing

Dive the tip in the correct position, touching the coffee if you can. Then pour a fast flow (but not too fast).

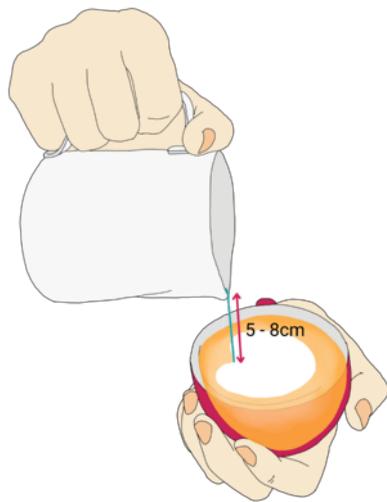
Flow rate: Fast

Mistakes to avoid

If you pour too slowly, the pattern will not expand and you'll have a tiny heart shape.

If you pour too fast, the heart shape turns into an eggplant or an elongated weird shape.

You need to practice with water until you achieve the right speed of flow.



Step 3: Lift up

Lift up around 5cm – 8cm, then immediately you have to...

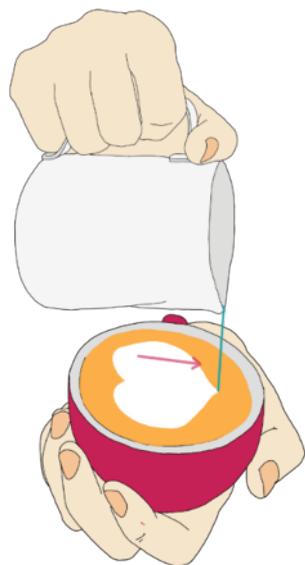
Flow rate: Slow

Mistakes to avoid

If you lift too high (12cm and above), you'll produce lots of bubbles on the surface.

If it's too low (1cm – 3cm), you'll drag the shape into an elongated heart shape or a heart shape with a big, fat tail.

If you lift up, but you keep pouring at that height for too long, the buttock gap on top of the heart shape will close, and it will look like a strawberry shape instead.



Step 4: Cut through

Move your pitcher slowly forward, and keep tilting your pitcher down to keep the milk pouring. This is to generate a tail for the heart shape and simultaneously fill the cup up to 100%.

The speed of moving forward will depend on how much space is left for you to fill. I suggest beginning by moving slowly.

Flow rate: slow

[Watch it on YouTube](#)

[Basic heart shape - learn this first!](#)

Mistakes to avoid

If you finish your pour by cutting through with high speed, then your cup will not be filled up, and this will make your coffee contain less milk.

If you cut through with high speed and then stop at the edge of the cup to fill it up, your latte art pattern will be dragged and become elongated.

If you cut through with a fast flow, again, the latte art pattern will get dragged and be elongated.



Heart Shape step rephrase:

1. Mixing

Start pouring a slow flow into the centre of the coffee.

Then move circularly, as slow as you can.

2. Landing

Dive into the coffee 2cm away from the cup lip. Start to pour fast.

3. Lift up

Lift up around 5cm away from coffee.

4. Cut through

Immediately cut through by pouring and moving forward slowly towards the edge of the cup to achieve a 100% filled cup.

Mistakes revealed (heart shape)

1



2



3



4



5



6



Here are some examples of various mistakes and asymmetrical latte art.

These are common mistakes that people make. So when these happen to you, you'll know the reasons why.

1. Elongated latte art

This usually happens if you cut through too quickly towards the edge and then wait at the edge to fill the cup, or you cut through with a fast flow rate.

2. Strawberry shape

This happens when you lift up but stop before cutting through, resulting in the buttock gap getting closed.

3. Symmetrical heart shape

Clean and tidy latte art with a symmetrical pattern for right-handed drinkers.

4. Heart shape not positioned towards drinker

This latte art points sideways, which means the barista isn't holding and positioning the pitcher or cup correctly.

5. Dirty latte art

During mixing, the pitcher pours too close to the coffee, which is why there's an overflow of white foam. This makes the latte art less clean and with less contrast.

6. Small latte art

During landing, the pour speed isn't fast enough. Therefore there's not enough strength for the pattern to grow bigger.

How do you know if you can move on to the next pattern? Simple: if you can do this confidently and consecutively two or more times without any problem, you're ready for the next pattern – 3-stacks tulip.

Solid Latte Art, 3-Stacks Tulip, Stepping Stone & Winged Tulip

A solid stacking tulip

Again, if you can't make a heart shape confidently yet, please go back and master that before moving to stacking.

The stacking technique can be used in many types of latte art. For example, the stacking heart, stacking swan, multiple layered tulip, rotating tulip, and propeller stacking. This technique will get you to tilt a cup confidently, and it also opens up many possibilities to create your own style of latte art.

First, you have to start with basic stacking, which is the 3-stacks tulip.

There are two types of the classic 3-stacks tulip:

- **Stepping-stone-3-stacks tulip**
- **Winged-solid-3-stacks tulip**



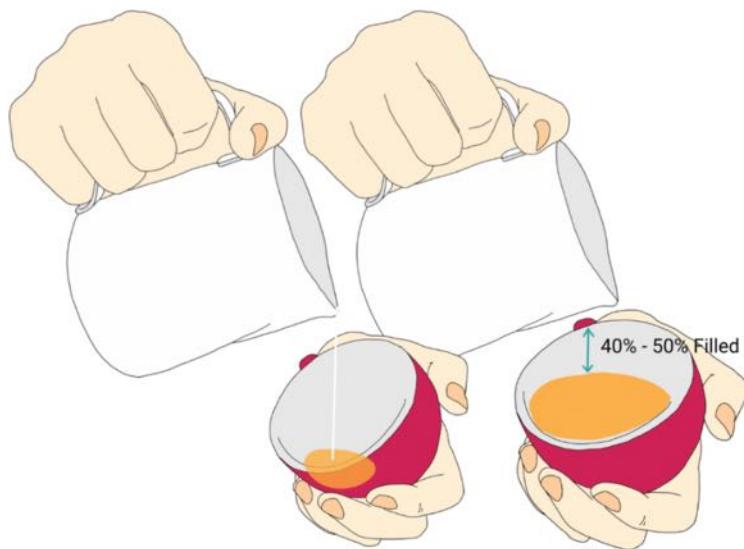
Through years of teaching, I have found that stepping-stone-3-stacks tulip is the easiest for newbies to learn. Once you've got this, you can master the winged-solid-3-stacks tulip in no time.

So, let's get started.

STEPPING STONE
STACK TULIP

Stepping-stone-stack tulip

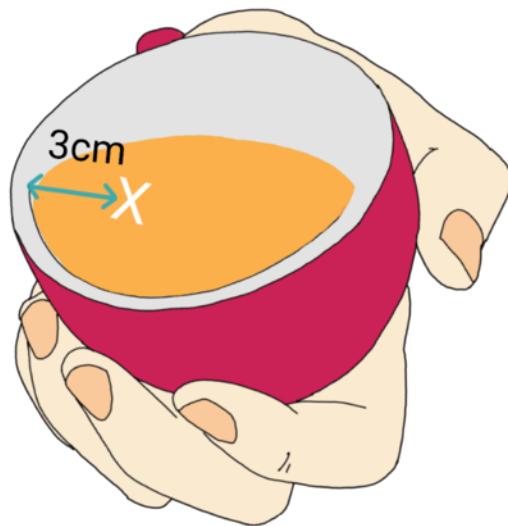




Step 1: Mixing

Start with the usual: pour with a slow flow to the centre of the coffee and move circularly. Fill up until 40-50%, then...

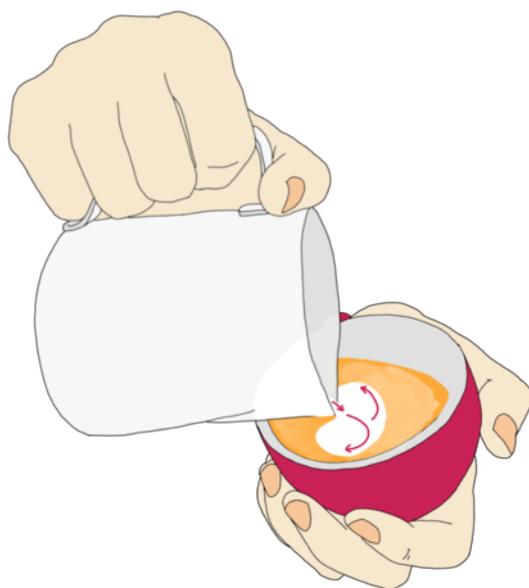
Flow rate: Slow



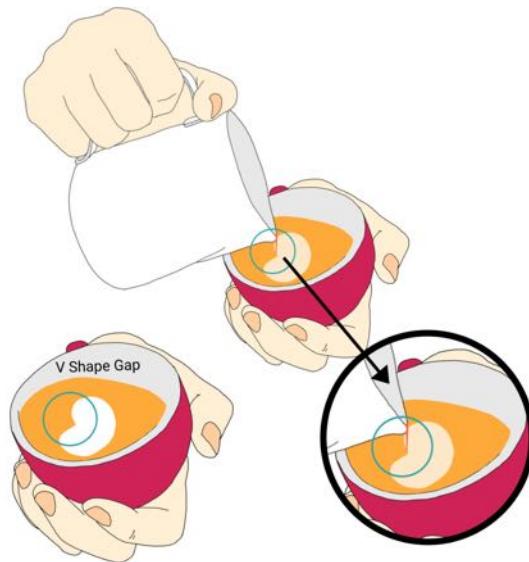
Step 2: Landing (1st stack)

For stacking patterns, you need to plan your stacks before pouring. This is essential to pouring a clean stacking tulip. So for the first stack, it should be 3cm away from the cup lip.

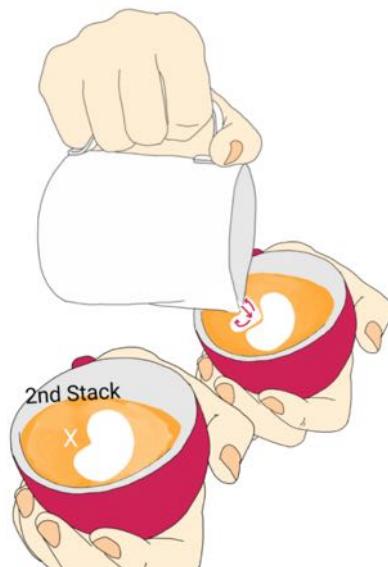
STEPPING STONE
STACK TULIP



Flow rate: Fast



The pitcher's tip needs to lift and tilt forward a little bit (as shown above in the illustration on the right) to create a "V" gap. Pay attention to the tip (as shown above in the green circle) because this will create a cleaner contrast in-between stacks.



Step 2: Landing (2nd stack)

For the second stack, the landing position must be behind the first stack, as shown in the X in the illustration above. That's where you need to dive the pitcher's tip in. Then...

Flow rate: fast flow



Step 3: Landing (3rd stack)

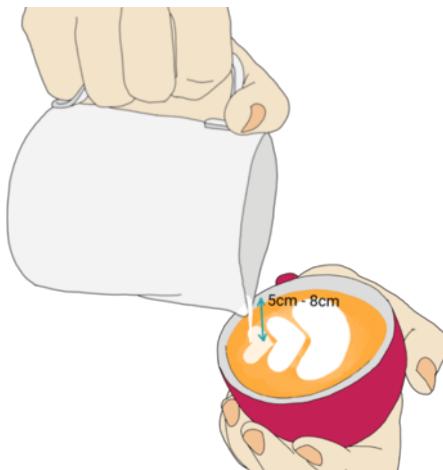
This final stack will be nearest to the cup lip, as shown in the X in the illustration above. Again, pour fast, and the pitcher's tip has to be close to the coffee surface. Touch the coffee if you're able to do so. Make a big heart shape, then...

Flow rate: fast flow

Mistakes to avoid

Before you pour, you have to plan each stack's landing spot. Don't try your luck or go with your feelings. It usually won't turn out well. Plan before you pour.

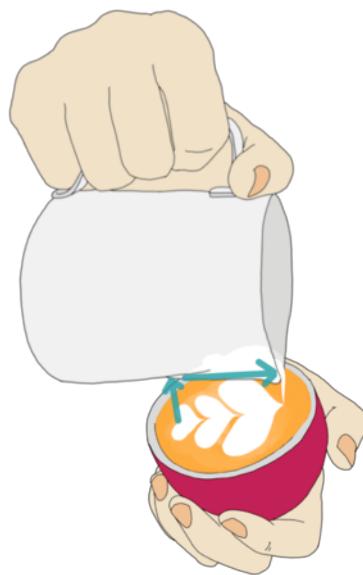
For each stack, you must land on the yellow coffee surface behind the white foam. **Do not land on the white foam.** Otherwise, no matter how many you try to stack, it will merge into one single stack. Remember, contrast is key to making latte art look good.



Step 4: Lift up

Lift up about 5cm – 8cm, as shown above. Then immediately...

Flow rate: Slow



Step 5: Cut through

Cut through to get the tail out steadily and slowly.

Flow rate: Slow



Three-stacks tulip, complete

Three Stacks Tulip (stepping stone) steps rephrase:

1. Mixing

Start pouring slowly into the centre of coffee. Then move circularly, as slow as you can.

2. Landing (1-2-3 stacks)

First stack, dive down into the coffee at 3cm away from the cup lip. Start to pour fast. Don't forget to create a "v" gap for each stack.

Second stack, dive down and land a distance away from the first stack.

Third stack, land near to cup lip. Dive down and touch the surface to land a heart shape.

3. Lift cup

Lift up around 5cm–8cm away from the coffee surface.

4. Cut through

Immediately cut through by pouring and moving forward slowly towards the edge of cup, and fill it up until 100%.

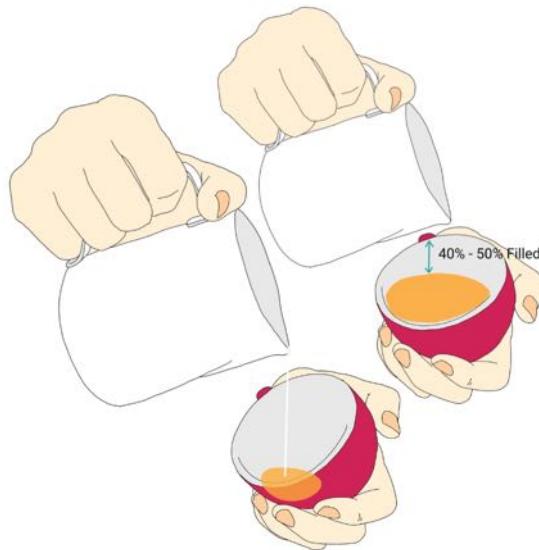
[Watch it on YouTube:](#)

[Three-stacks tulip demo](#)

Winged-Stack-Tulip



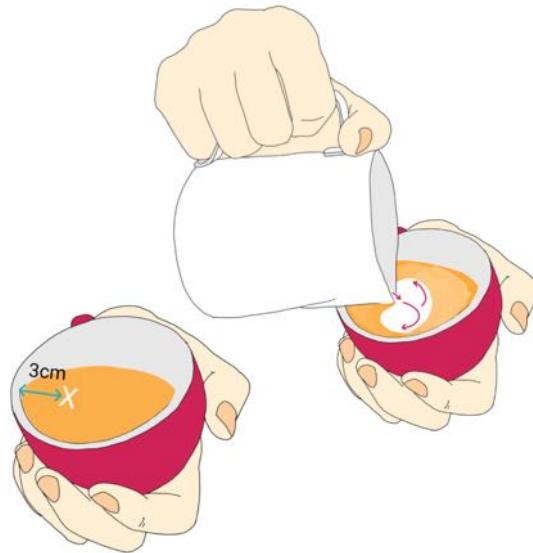
This pattern is very similar to the previous pattern. The only difference is the landing of the second stack, which will generate a different kind of 3 stacks tulip.



Step 1: Mixing

Start pouring slowly into the centre of coffee. Then move circularly, as slow as you can.

Flow rate: Slow

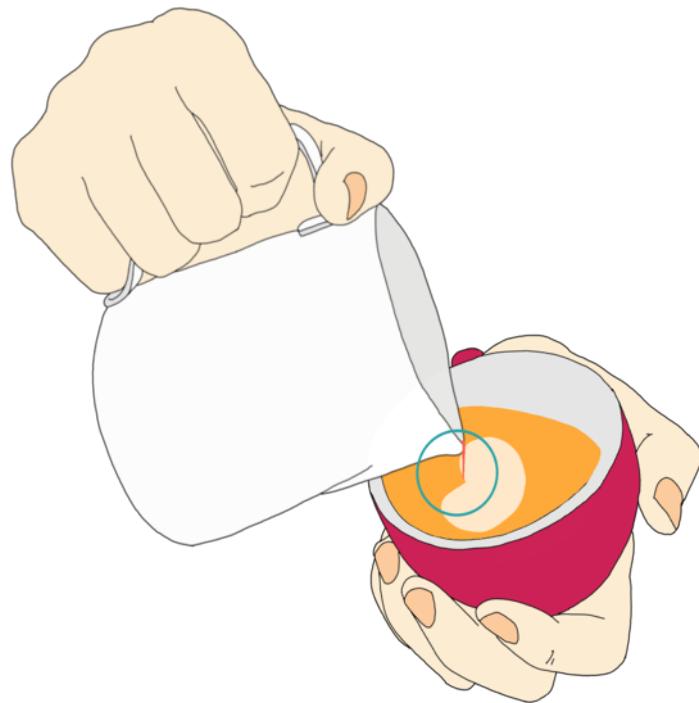


Step 2: Landing (1st stack)

With landing at "X" position.

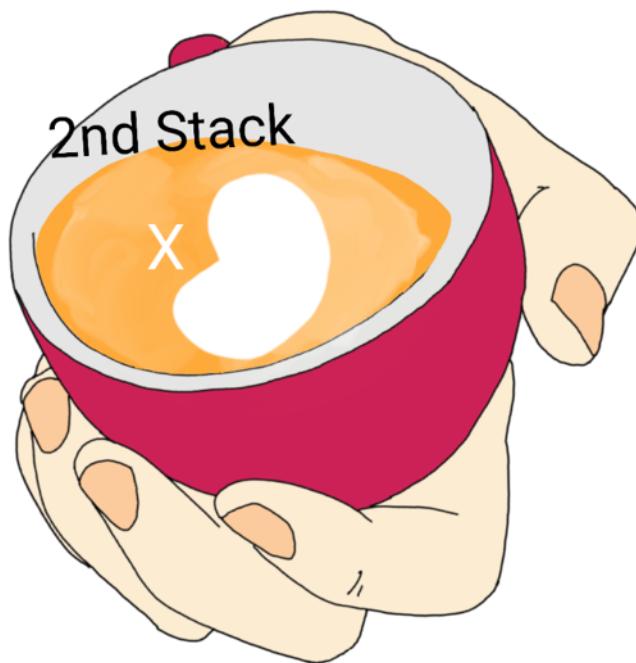
Flow rate: Fast

WINGED
STACK TULIP

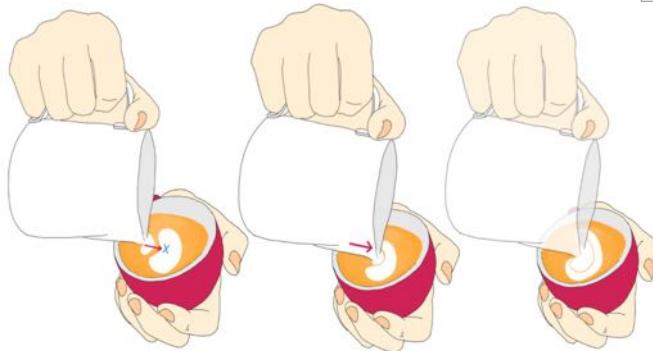


Again, don't forget to make a "V" gap.

WINGED
STACK TULIP



Land your second stack at position "X," as shown above.



Step 2: Landing (2nd stack)

This is the part where we'll do it differently from the previous pattern.

For the second stack, you need to pour a fast flow from the landing, slide forward to the middle position, and pour until the second stack shape is big enough. This allows the first stack to wrap up like a pair of wings (illustrations from left to right).

WINGED
STACK TULIP



Without the pitcher, it will look like the illustration above, where "X" marks the position for the next stack.

Mistakes to avoid

The key to success? A fast flow rate and the pitcher must touch the surface for the foam to follow the sliding manoeuvre. Otherwise, it becomes one straight, visible root or stem-like shape.

Flow rate: fast

Watch it on YouTube

Steaming, pouring the milk into a larger pitcher, and creating a winged-stack tulip.

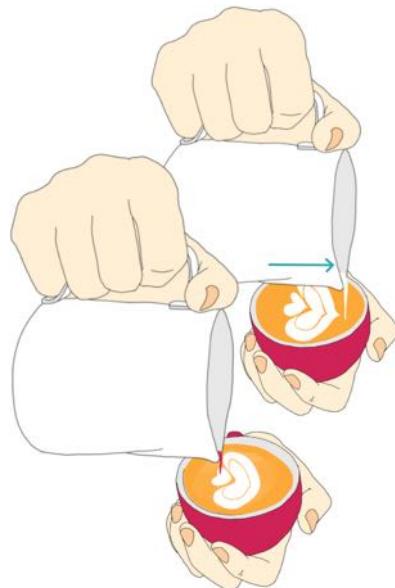
[Latte Art with XXL](#)



Step 2: Landing (3rd stack)

Land a big heart shape away from previous stacks, then...

Flow rate: fast



Step 3: Lift up

Step 4: Cut through

Flow rate: slow

Three Stacks Tulip

(winged tulip) steps rephrase:

1. Mixing

Start pouring with a slow flow into the centre of the coffee. Then move circularly, as slow as you can.

2. Landing (1-2-3 stacks)

First stack, dive down into the coffee 3cm away from the cup lip, and start to pour fast. Don't forget to create a "v" gap for each stack.

Second stack, dive down and land a distance away from the first stack. Then slide forward into the middle position, and keep pouring until the first stack wraps up like wings.

Third stack, land near the cup lip, dive down and touch the surface to land a heart shape.

3. Lift up

Lift up around 5cm – 8cm away from the coffee surface.

4. Cut through

Immediately cut through by pouring and moving forward slowly towards the edge of cup, and fill it up until 100%.

ALL
STACKED TULIPS

Mistakes revealed (Tulips)



1. Why does the tulip have different-sized stacks?

For the first stack (bottom), the landing is too far away from the cup lip, probably 5cm – 6cm away, which means the tip is too far away from the surface. For the second stack, the landing flow rate was too slow, which is insufficient for the shape to expand in size.

2. How come I can't see the stack lines?

Each stack was landed too close to each other. As I mentioned earlier, you need some distance between each stack in order to create clear contrast.

3. Why is there a visible root-like line across the tulip?

Usually, there are two main reasons:

Number one: during the lift up and cut through, the pitcher tip is too close to the coffee surface.

Number two: there's insufficient milk in your pitcher. Before you've finished your pattern, there's only foam pouring out. So no matter how high you lift, there will still be a line. If this happens, just fill more milk into your pitcher the next time you pour.

4. Why is the first (bottom) stack washed out?

For the first stack landing, the tip distance is too far. Remember, it should be 3cm – 4cm away from the cup lip. To me, this looks more like 5cm – 8cm away. The farther the distance between the surface and pitcher's tip, the more likely the pattern will be washed out.

5. Why are my stacks so tiny?

You need to pour a fast flow as close as possible to the coffee surface for each stack. If the landing flow rate is too slow, you'll get tiny stacks.

Over my years of training in latte arts, for this particular pattern, I've found that most people share one trait that causes the mistakes shown above: fear of spilling.

One of the ways to overcome this fear is to practice with water. Go ahead and spill the contents more than 10 times – your fear will be significantly reduced. Then your mind will be free and your hands will move without hesitation, like driving a car without thinking much about it.

Here's another tip: it's good to analyse your past mistakes with recorded videos, but don't over-analyse. This will cause your mind and body to disconnect, and we need this synchronization (body and mind) for achievements.

Now you know about stacking, but how about more stacks?

When you're confident with this, you can use the same technique for more repetitions. If you want to make more stacks, then you have to start the first landing earlier. For example, 50% filled to land 3 stacks, then 20-30% filled to land 7–8 stacks.

The pitcher size matters. I recommend using a big pitcher (20oz) for multiple stacking, because it can land lower than a small pitcher. See my previous chapter regarding pitchers.

Fine Line, Winged Heart: Learn to Generate Lines

About winged hearts

All the fine line patterns you've seen — a Rosetta, a Swan, or a Winged Tulip — derive from this basic pattern.

In order to make this wing (bottom part), you need to land, then wiggle with the correct manoeuvre, speed, and flow. This will create a wing with good contrast.

You'll see two different styles in the following illustrations. The difference is caused by the wiggle speed and the moving formation.

**Slow-Winged
Heart**



**Winged
Heart**



Slow winged heart – wiggle slowly. This will create thicker lines and more contrast.

Winged heart – wiggle slightly faster to create thinner lines. This will make the wing tidy and neat.

Patience and determination are the keys.

This wiggle skill requires extra patience. In my case, I tried my luck without any guidance or mentor, and it took me two years to master this skill. By “master,” I mean being able to make clean winged patterns with nice contrast.

I studied many latte art videos and made many failed attempts. It was a do-or-die situation (self-motivated), so I studied and failed until I could do it. Then I got my first apprentice, and I was able to train him to do this within three months.

With these illustrations, you might learn more detail. It could take you a month, or a few weeks.

You may ask which you should master first: the slow wiggle or the wiggle?

This remains a mystery. I've taught some people who start with the slow wiggle, some are fine either way. But one thing's for sure: don't skip this pattern or try your luck with the Rosetta or Swan first. I've been there and wasted eight months of my time not mastering either the wing pattern or any other patterns, like Rosetta.

Patience and determination are the keys. This technical information is help you understand and run faster for the next level.

Nothing works until you try and fail enough.

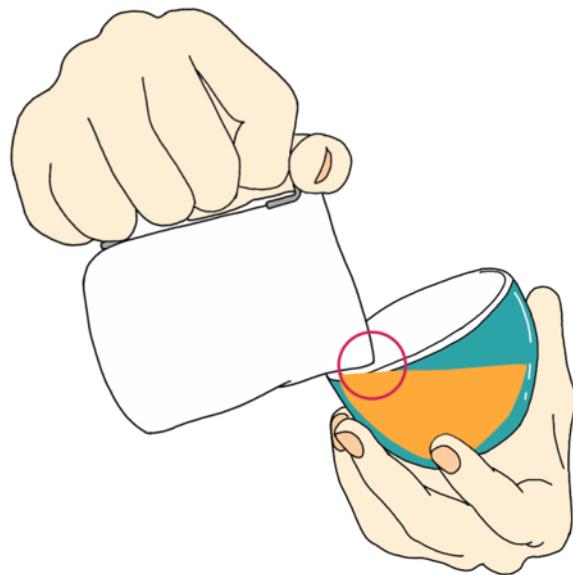
Let's get started.

Concept of wiggle

There are a few key points you need to know about making a fine-line pattern.

Foam. You need café latte foam or flat white foam. If the foam is too thick, it won't follow your wiggle manoeuvres, and your lines will have less contrast.

Distance. Unlike solid patterns, fine-line patterns require the pitcher's tip to keep a distance (see the following illustration) of around 0.5cm – 1cm. The tip shouldn't touch the surface.



Wiggle speed. I'll explain in detail below.

I get many questions about the speed or tempo, and the width of the wiggle.

It's difficult to tell you how fast is "fast" or how slow is "slow" in writing, but thanks to modern technology, we're able to communicate better.

In music, musicians refer to a metronome for tempo guidance. You can use a metronome app (plenty of these for iOS or Android) which makes a tick-tock sound, indicating the speed for us to follow.

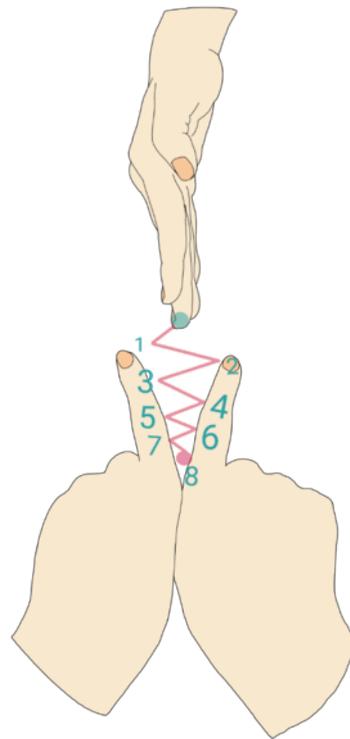
I've tried a few of them; they all measure speed by beats per minute (bpm), so you don't have to worry about which application to download.

So, here are the wiggle tempos for your reference:

Slow wiggle is in a range of 100 - 110 bpm.

Wiggle is in a range of 150 - 160 bpm.

THE WIGGLE



The illustration above is to give you a better idea of how to practice the fluid move of slow wiggle.

THE WIGGLE

Practice with other people's hands (gap width of around 3cm). Or if you're alone, you can draw on a piece of paper. Just make a tapered shape so you can practice wiggling with the hand that holds the pitcher.

You need to move forward while wiggling according to the tempo. Don't forget to turn on the metronome!

There should be 8 touch points. Touch each point with each sound or beat from the metronome.

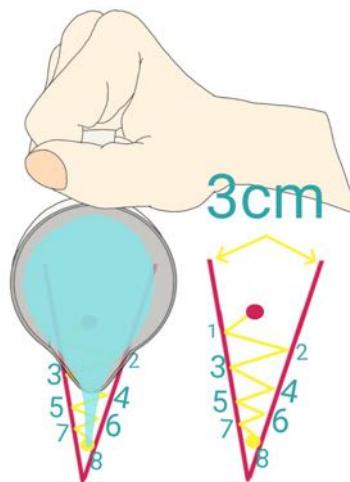
The 8th point is where you push it forward. And this tapering movement will create a neat wing that wraps around the top of the heart.

Points 1 – 7 means you wiggle 7 times. More wiggles will create more layers but you'll get less contrast, and the outcome will be a blurry wing. Fewer wiggles will create fewer lines. So 7 times is just nice. A range of 6 – 8 times is just nice, depending on cup size. The priorities are contrast and cleanliness.

Mistakes to avoid

- If you wiggle at the same point for the entire wing, you'll generate a blurry wing. Or worse, it will be one solid stack.
- Movement has to be fluid and smooth, but a robotic arm movement will not work in real pouring.

(fluid and smooth like squid swimming in the sea)



After you practice the wiggle concept with your hands, try it with a pitcher. It will feel very similar.

My advice is to practice with water first before using milk and coffee. Practice at least 5 – 10 times before you attempt the wiggle with milk and coffee.

Mistakes to avoid

These are some common mistakes that I've made, and many other people. Let me list them:

Wiggle too fast and too much. This will create a very blurry wing.

Wiggle too widely. This will create an unsymmetrical wing, where one side is higher than the other.

Wiggle repetitively at the same spot. This also will create a blurry wing.

Slow winged heart

Let me write down the requirements to make this to work.

Slow winged heart

Foam: café latte foam.

Wiggle tempo: 100 – 110bpm.

Landing tip distance (wiggle): 0.5cm – 1cm from surface.

Landing for solid heart: touch the surface.

Landing position: 3 – 4 cm away from cup lip.

For this pattern, I'll change from the side view to front view, so it's easier for you to understand.

Step 1: Mixing

Again, start with the step below, and mix until it's 50% filled, then...



Step 2: Landing with wiggle

Land at 3 – 4cm away from the cup lip, then pour fast, as the tail is out, then...



Immediately start to wiggle with the right tempo. It will start to lay out the lines, as shown in the illustration above — note the numbers within the “V”. This is a rough idea about how to wiggle to each touchpoint and keep moving forward in a tapering movement, then...

Remember to keep a tip distance of 0.5 - 1cm away from the surface throughout the wiggle process!



As you wiggle, keep moving forward until the 6th or 7th wiggle. Then give a final push forward to create a "V" gap, as shown in the illustration above, before lifting up for the next move...



As seen in the illustration above, land a heart shape at the X position. This time, you have to touch the surface and pour fast. Then...

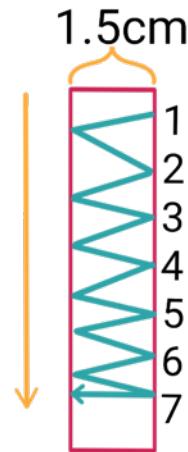


Step 3 and 4: Lift Up and Cut Through

Lift up then cut through to the X position with a slow flow rate. Some people cut through until the edge of the cup. This depends on your personal preference.

Winged heart and formation

This wiggle concept is slightly different compared to a slow wiggle. This formation isn't tapered. It stays the same width, as you can see in the illustration below.



As you can see, the illustration shows a different formation of wiggles. There's no tapering—so it stays the same width, but still requires you to wiggle while you move forward and maintain the same tempo. The width is narrower – around 1.5cm.

Practice with hands (your own or other people's) and water the same way as before.

Specifications for winged heart:

Foam: café latte foam or flat white foam.

Width: around 1.5cm.

Wiggle tempo: 150 – 160bpm.

Landing tip distance (wiggle): 0.5cm from surface.

Landing for solid heart: touch the surface

Landing position: 3 – 4 cm away from cup lip.



Step 1: Mixing

You know the drill: fill the cup to 50%, then start...



Step 2: Landing

3cm away from cup lip, do the landing, whenever you see the tail is out...

As you wiggle, follow the tempo. Not too fast, not too slow (use the metronome for guidance), and fast flow, you have to keep moving forward slowly.



Then after the final wiggle (5th or 6th wiggle), give a final push forward with a gentle lift up to create a "V" gap. Then it should look like the illustration above: shaped like a tomato, with internal lines like a chopped onion (full of lines).

WINGED
HEART



At the X position shown above, you can...



Step 3: Land a heart

For this part, again it's solid latte art, so you have to touch the coffee with the tip and pour fast to land a heart...

Step 4 and 5: Lift up and cut through

I don't need to explain this part.

Layered heart

There's another version of the top heart, which can be from 2 to 5 layers. Of course, if you'd like to keep it simple and master the basics first, a single heart is a good start. But after you master the single heart, you may want to try a 2-layered heart and keep building your skills to create a 5 or 6-layered heart.

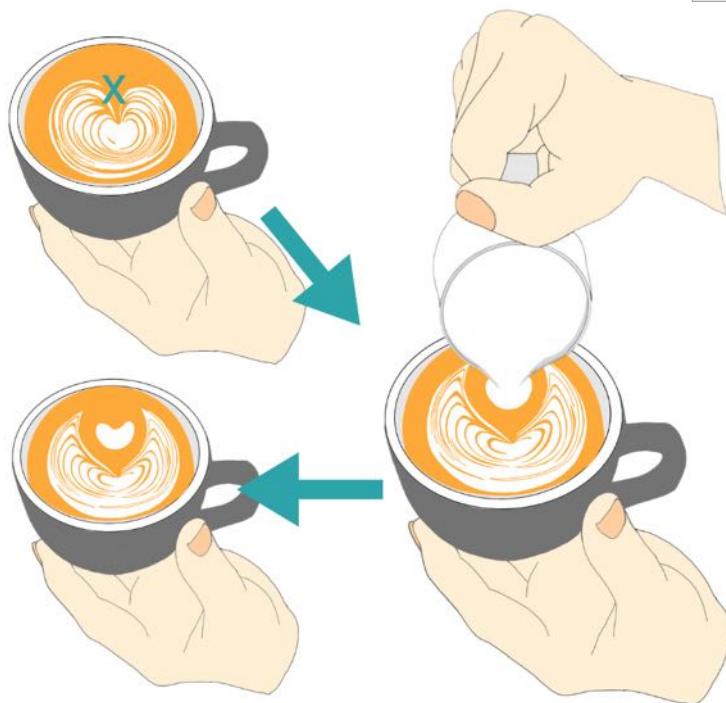
After you get the idea of landing a 2-layered heart, you'll get to make 3, 4 and more. But take it step by step. I would never advise a newbie to jump right into 2 or 3-layered heart at the start.



The illustration above shows a 3-layered top heart. It looks like an inverted chopped onion.

Next, I'll explain how to make a 3-layered heart..

LAYERED
HEART



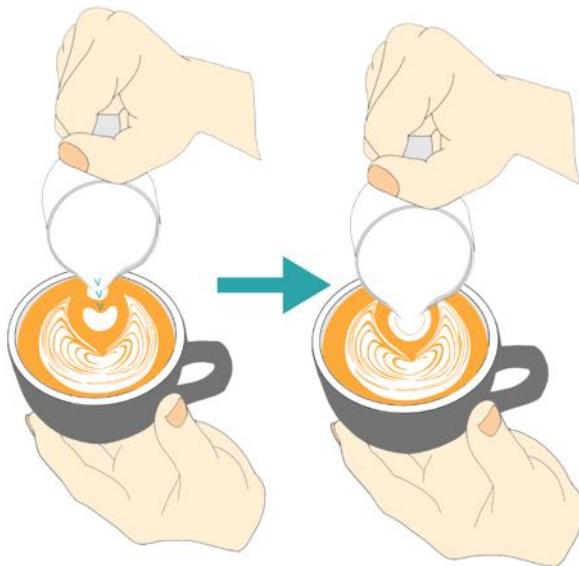
Land the first layer

At the "X" position, touch the tip and land a first layer (as slow as possible) with a small lift-up gesture to create a "V" gap, then...



Land the second layer

Referring to the "X" position in the previous illustration, land another layer.



From the "X" position, land a second layer. This part is a bit tricky. **You have to pour with a fast flow and touch the surface with the pitcher's tip.**

Then slide forward to the centre of the first layer. After this, you'll have space for the following layers. The foam should follow your movement if you pour with a flow that's fast enough. Otherwise, it will end up as messy foam.

This stacking repetition needs to be done as slowly, steadily and gently as possible.

You should note that if you want to make more layers, the following layering steps are a repetition. Hence, the more layers you want, the more space you'll need. So you'll need to start the landing earlier.



Land a third layer

Refer to the illustration above: it's the same step as before.

LAYERED HEART

Again, remember that the more layers you want to make, the more space you need. So if you're planning to make a 4 or 5-layered heart, then you need to plan your landing ahead.

For example, instead of landing at the usual 50% filled cup, your first landing should be earlier, when the cup is 30 - 40% filled. I recommend that you plan ahead —not just for this pattern, but for any other latte art pattern as well.

LAYERED
HEART



Finally, you have to lift up and cut through to make the layered heart look like an inverted chopped onion.

Winged Heart (slow winged or winged) steps rephrase:

1. Mixing

Pour slowly into the centre of the coffee, then move circularly, as slow as you can until the cup is filled 40 – 50%.

2. Landing for wing (wiggle)

Slow wiggle tempo is 100 – 110 bpm

Wiggle tempo is 150 – 160 bpm

(Use the metronome app to guide you.)

Wiggle while moving forward 6 – 7 times.

Slow wiggle – tapered formation.

Wiggle – straight formation.

3. Landing for a top heart (single or more layers)

Single heart – land a big heart on top of the wing (touch and pour fast).

Layered heart – land a “V” gap at the top of the wing (3cm away from the cup lip) at the edge of cup, land and slide forward into centre of first layer (touch the surface and pour fast), lift with “V” gap. Repeat for desired layers.

4. Lift cup

Lift up around 5cm – 8cm away from the coffee surface.

5. Cut through

Mistakes revealed (Winged Heart)

1



2



3



1. Why is my 3-layered heart so big?

You started landing too early when you landed the wing. You probably started landing when the cup was 30% filled.

Eventually, when you did 3-layer stacking, you had more time, especially on the third stack. That's the part where you spent too much time (landing the third stack) because you wanted to fill the cup.

2. My wing looks like a single stack. Why?

It's mainly because of the way you wiggle. You're touching the surface (with the tip) while wiggling. As I explained earlier, you need to make fine lines without touching the tip to the surface during wiggling. Leave minimal space between the tip and surface — around 0.5cm to generate a layer of lines.

3. My wing is not clean. The lines are blurry and washed out. What's happening?

Wiggle tempo is very important. This happens because the wiggling tempo is inconsistent (the wiggle speed is fast, slow, then fast or vice versa). It is also partly because the flow rate isn't fast enough.

[Watch it on YouTube](#)

[Layered heart](#)

[Winged heart](#)

[Slow-wiggle winged heart](#)

Born of Winged Tulips

After you've mastered both the slow wing and the regular wing, you can now use your creativity to make different patterns. Below are some of the same techniques for making different patterns.



Classic Winged Tulip

The preceding illustration shows the classic fine-lines tulip. In technical terms, I call it the **7-3-3 Tulip**, because it has 7 wiggles (bottom), 3 wiggles (centre) and a 3-layered heart (top).

The cup's capacity and your experience matter. To make this pattern, I would use a 6oz (177ml) cup. With smaller cups, it's more difficult to make fine lines. You might have seen some people on social media using bowl-like cups: 10oz (295ml) to 12oz (354ml) cups to make many lines. It also depends on a café's preference in cup sizes.

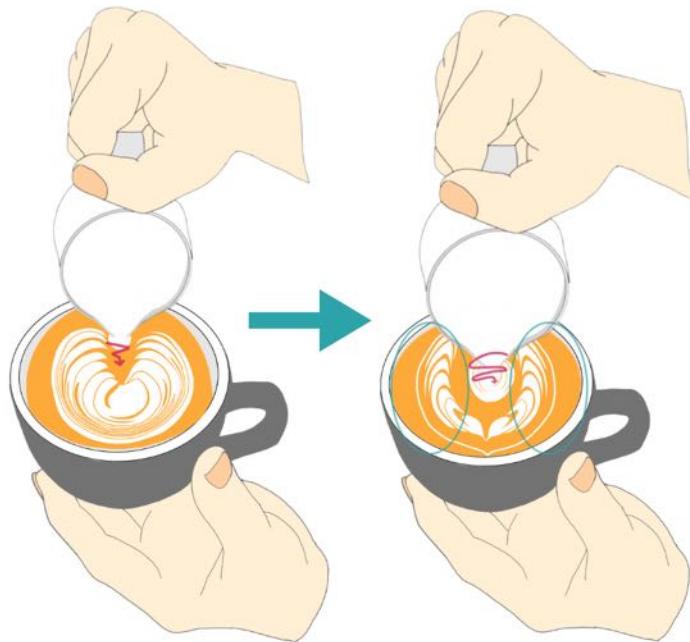
This requires many failed pouring experiences to achieve. That's why I always encourage newbies to move step-by-step to be more productive. No idea what I'm talking about? Need a tutorial for this? Let me explain.

Classic Winged Tulip – a brief tutorial

I assume you're already experienced with the wiggle and stacking techniques. If you're not familiar with them, please go back to the previous chapters and start from there. If you're ready, then here it comes.



After you've made a wing as usual, at position "X", you have to...



WINGED
TULIP

You have to land a wiggle heart. This is a 7-3-3 Winged Tulip, which means on this middle part, you have to wiggle three times. Now, if you want to wiggle more, it's fine. But for me, three times is fine.

The previous illustration shows landing at the "X" position, then a wiggle while moving forward. While doing that (wiggle + sliding forward), you'll notice that your wing starts expanding (the green circles in the illustration). This is a good sign that you're doing it right.



When you're done with the wiggle, it should look similar to the cup on the left. Follow up by topping with a 3-layered heart, or if you like to keep it simple, with just a single heart. Again, the top heart has to land with a fast-flow rate, and you have to touch the surface.

WINGED
TULIP



1-1-1 Winged Tulip

There are many versions of this. You can use your creativity to play with different stacks. The illustration above shows stacks in one-by-one on top of the wing.

WINGED
TULIP

You could use this technique to play with different styles—for instance, a 1-2 Winged Tulip, or a 2-2 Winged Tulip. It depends on the cup size. I made a 5-3 Winged Tulip with a 7oz cup before, and it was easy when I realized my mistakes after replaying my self-recorded videos. Then I could master my stacking and winged techniques.

[Watch it on YouTube](#)

[Slow-winged tulip](#)



2-1 Slow Winged Tulip

I repeat: there are so many patterns you can make after you've mastered these skills (wing, slow wing, stacking). This tulip is a slow wing topped with a 2-layered and single heart, which makes the whole pattern look different with just a minor tweak.

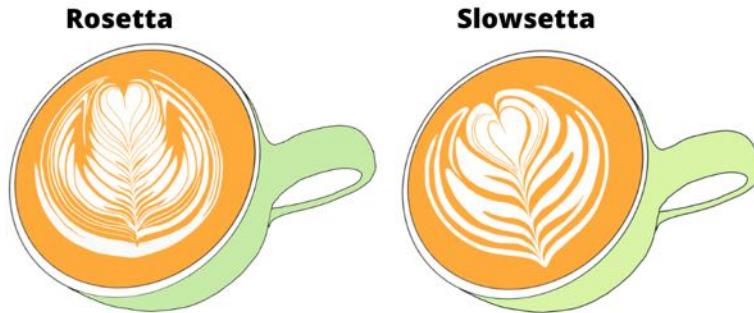
LATTE ART 2: FINE LINE LATTE ARTS

Why I refuse to teach Rosetta by skipping basics.

For basic fine-line patterns, the Rosetta is the benchmark for latte art skills by far. It's also the most difficult for most newbie baristas. I noticed that most newbies jump straight into this pattern and ignore the basic patterns. I was one of them as well.

But when I awoke from this behaviour, I realized that I'd wasted 8 months of my time on perfecting the Rosetta (while skipping basic patterns) and I had failed. I also realized I'd achieved nothing on basic patterns (I could barely make a tulip) and I still couldn't make a clean, neat Rosetta.

This is why my book presents to you the tutorials for basic Heart Shape, Tulip, and wiggle techniques — then Rosetta. Learning from my experience, I refuse to teach students who only want to learn the Rosetta pattern or the Winged Tulip and skip the basic patterns, because I know it will be a waste of their time.



I'm going to introduce two types of "Settas". Just like the Winged Heart, there's a slow-wiggle type called "Slowsetta," and a regular one called "Rosetta."

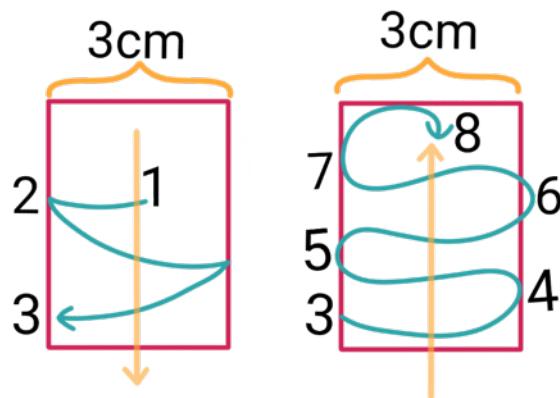
Besides the tempo and wiggle repetition differences, there's an additional difference in the wiggle formation.

After I failed the Rosetta at first, I learned the basics, then Slowsetta. Then I eventually got the wiggle right for Rosetta by picking up the tempo.

But you can have it your own way: either the Rosetta first or the Slowsetta. However, because I believe in learning to walk (slow) before learning to run (fast), I suggest the Slowsetta first.

Slowsetta Wiggle Concept

The wiggle has two parts.



1. **Forward** (illustration at left).
2. **Backward** (illustration at right).

As I mentioned before, the forward-wiggle formation will create a tidy wing that wraps upwards. The backward wiggle will then create the neck for Slowsetta, as you can see from the illustration on the right. The backward-wiggle formation should be shaped like a snake. After this wiggle, top it with a heart shape or a 2-layered heart shape.

Wiggle more, wiggle less?

The number of wiggles depends on the capacity of your cup. If you use a bigger cup — like a 10oz cup — then you can wiggle more. If your cup is smaller, like 5oz, you could have 5-6 wiggles.

I would use a 6oz cup as a standard.

Specifications for the Slowsetta wiggle:

Foam: café latte foam or flat white foam

Width: around 2-3cm

Wiggle tempo: 100 – 110bpm

Landing tip distance (wiggle): 0.5 – 1cm from surface

Landing for solid heart: touch the surface

Again, I advise practicing with your hands and water before getting into the real thing. This pattern needs to have very fluid, smooth manoeuvres and you need to perform them calmly.

Slowsetta

Step 1: Mix until the cup is 40 - 50% filled.

Step 2: Land at 3cm – 4cm away from the cup lip, then continue with the steps.

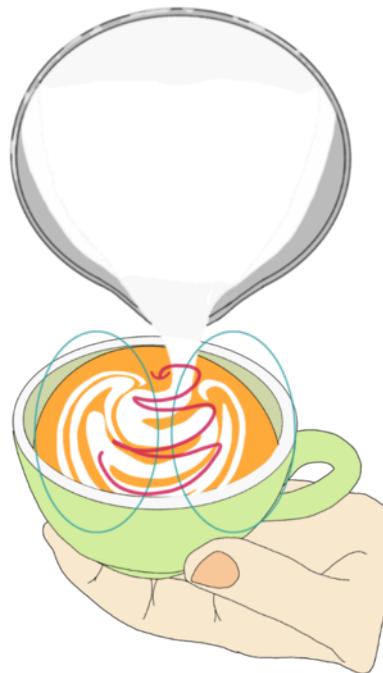


Landing

The illustration shows that after a tail flows out, immediately follow with a tempo wiggle forward around 3 times, then...



Around the 4th wiggle onward, start wiggling backward to create the neck.



Remember, you have to wiggle backwards, like drawing a snake. The illustration above shows approximately the 7th wiggle. When you pour fast enough, the wing will wrap up (as highlighted in the green circles). Next...



This is the part where you need to make the final wiggle, like a dragon head on top. Then...



On top of the dragon head, at the "X" position right before the white foam, land a heart shape. Touch the surface and pour a fast flow. Always remember, never, ever land at the white foam – because the patterns will merge. That's why the "X" above is on the coffee.

Step 3: Lift up.

Step 4: Cut through.

And it's a wrap for this. The next pattern is the Rosetta. And to tell you the truth, it's a classic and basic pattern, but also the hardest for newbies. So before you go there, you should master the wiggle and stacking skills.

Watch it on

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YouTube

The Slowsetta

Rosetta and Formation

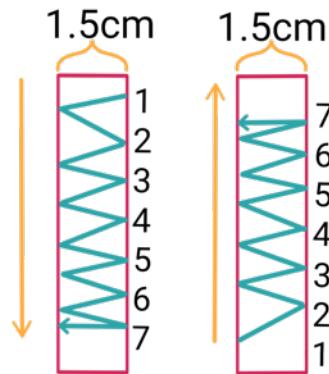
This is the final pattern in this book. But this won't be my last book. Your support means everything to me. Therefore, I hope to cover many more variants and more technically advanced patterns in the near future.

Rosetta – I don't know why they gave this a feminine name when the real inspiration came from a fern leaf. There are many types of Rosetta — too many to cover — so I'm choosing this pattern because it's easiest for newbies.

So let's begin.

Wiggle concept

Similar to the Slowsetta, this pattern has two parts: forward, then backward.



I would give 10-14 wiggles for this. It also depends on your style and creativity. Based on my 6oz cup, I could wiggle around 14 times or less. As the illustration above shows, the formation should be 1.5cm in width. It's narrower, but consistently the same width all the way.

A different wiggle repetition, flow rate and wiggle tempo will create a different style of Rosetta.

This is one of the reasons why it's difficult to produce exactly the same Rosetta pattern every time. We need to be very aware of what we're pouring in terms of technicality, but it's not impossible.

For this tempo, I would go roughly at about 160bpm – 170bpm.

Specifications for Rosetta:

Foam: café latte foam or flat white foam

Width: around 1.5cm

Wiggle tempo: 160 – 170 bpm.

Landing tip distance (wiggle): 0.5cm from surface

Landing for solid heart: touch the surface

Rosetta

Step 1: Mix until the cup is around 40% - 50% filled.

Step 2: Land, following the instructions below.



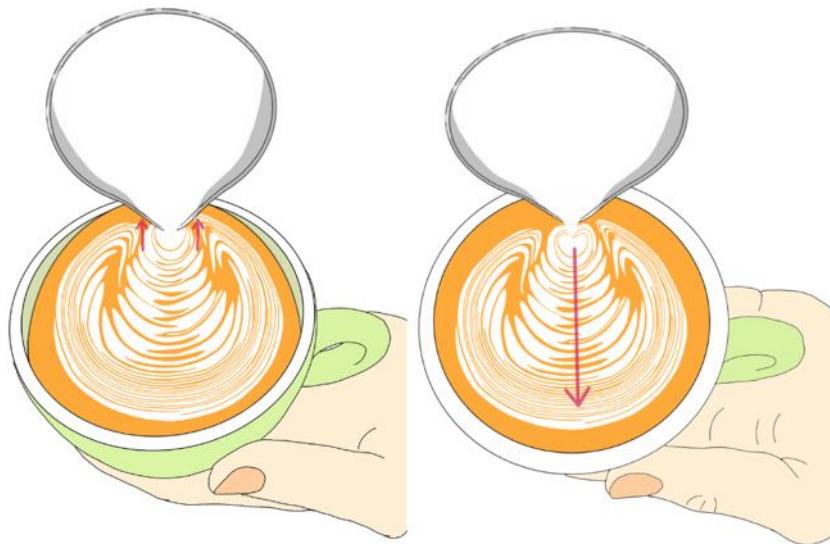
Land at 4cm from the cup lip. As soon as the tail is visible, start wiggling at 160-170bpm, at a consistent width of 1.5cm with seven forward wiggles.



When you notice the wing starting to wrap upward (as shown in the illustration above, in the red circle), then start wiggling backwards, until ...



The neck should show up clearly and with good contrast. Then you need to land a heart or a 2-layered heart, but try not to stack too many layers, as it will compress the whole picture and blur out the contrast of the whole pattern.



Step 3: Lift up

Lift up right after you land a heart.



Step 4: Cut through

The Rosetta may sound and look very easy with these few simple illustrations. In reality, it may be way more complicated than I described. But keep practicing with water and getting the tempo right. These are crucial for success and to better understand the wiggle concept.

As I've mentioned many times: patience, determination and calmness are keys to making good coffee with latte art.



Most importantly, you should enjoy the process of making good coffee for yourself, your family, loved ones and friends.

I understand that new latte art patterns can be a pain in the ass at the start. Just like our love life or starting a business, it's not easy to start and not easy to maintain, but as long as you enjoy what you do every day, it will maintain itself.

[Watch it on YouTube](#)

[Pouring a rosetta](#)

Mistakes revealed:

Slowsetta and Rosetta



You can make more mistakes than the ones I showed in the illustrations. But these should give you an idea. Don't you worry; I've made these errors before as well. Look at it from another perspective: these are the pathways to pouring a nice, neat Slowsetta or Rosetta. I've never seen anyone pour a nice pattern during the first few trials. Therefore, be patient and determined.

1. How come my slowsetta doesn't have neat leaves and a bigger shape?

Generally, this happens when you don't pour fast enough. The flow rate of the milk didn't produce enough strength to push and expand into a bigger pattern size. You need a fast flow rate to generates a neat pattern.

2. Why does my slowsetta bottom seem washed out, although I poured fast enough?

For the landing part, you've poured too far away from the cup lip. You need to land around 4cm away from the lip. In this pattern, it looks like the pour was at least 6cm away. This distance will lead to a washed-out pattern.

3. It's weird that my rosetta pattern is hitting the lip. What's going on here?

This is also another classic example of starting the landing too far away from the lip. And I can tell that the wiggle didn't follow the suggested tempo.

4. The heart shape on top of my rosetta looks tiny and the wing doesn't wrap up. Why?

The straight answer is that the flow rate is too slow and the wiggle too fast. As I mentioned, the right flow rate generates the strength to expand, so that the wing will wrap upwards. The landing flow rate for the heart shape was too slow, as well.

5. I've finally made what looks like a rosetta, but why isn't the whole pattern clean and neat?

This is a great start. This shows that you're on the right track. One last thing you should work on is the wiggle tempo, keeping a consistent width. These are the keys to landing any nice, neat latte art pattern.

How was this book conceived?

I enjoy teaching classes and coaching students from inexperienced to skillful. I feel proud cultivating them and watching them grow.

Often, I've received requests from my followers to guide them because their hometown or country doesn't have coffee classes available. Therefore I'm also eager to teach people outside of Malaysia, but I can't reach other countries and run my local classes simultaneously.

Latte art classes can't be conducted via Zoom webinars. You need an espresso machine for hand guidance or visual guidance. But a book is a good idea for those of you in distant countries that I can't reach.

Also, I've bought books about latte art, but I couldn't understand much from them. The books don't provide clear technical how-tos or explanations; they only showcase photographs. They don't teach fundamentals like texturing milk.

When I searched "latte art book" on Google, I found limited choices. So I came up with a brighter idea of what the market needs.

Acknowledgments

What I've learned from my years of experience at the coffee bar, home coffee bar, and teaching classes, I've passed on to you. If you read this book page-by-page and apply it to your daily practices as a home barista or at a café, this information will lead you to the next level.

I also have to acknowledge that there are many perspectives; I'm still a student, keeping my heart curious and open. I believe we can serve better coffee worldwide.

Though I can't teach you face-to-face, I hope this book has revealed and demystified latte-art pouring techniques and texturing methods. I struggled with these at first without any mentor to guide me through countless moments of frustration.

I would like to express gratitude to my friends, my followers, my supporters, my loved ones, my colleagues and family. Thanks for giving me space and time to write and for being emotionally supportive.

And also, thank you for purchasing this book from me. Please share it with whoever you think is in need of such information.

My learning philosophy is:

When you've learned something, you pass it on to others. This will double your improvement and benefit all.

If you want to move on to the next stage, give teaching a try. You'll understand the subject even deeper.

I believe in a win-win situation.

Feel free to visit or DM me via Instagram @sinnedhew (Dennis Hew) or visit my YouTube tutorial channel or my The Coffee and the Company podcast (on YouTube).

I would be glad to know how your improvement progresses and how you're able to inspire others to make coffee at home or at a coffee bar.

Stay healthy and see you again.

