

EXPLORING THE CRAFT OF COFFEE

Nº64

Extracted

**Mastering
Home Espresso**



Review the Magazine

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EXTRACTED MAGAZINE seeks to educate, delight, and empower coffee drinkers everywhere bringing you into the world of **craft specialty coffee**. We build connection and understanding that raises the value and the lives of people in coffee around the world, as well as each individual cup that you enjoy.

Even though coffee is consumed by billions worldwide, many are unaware of the significance of the beverage in their cups. Conscious consumption of coffee leads to not only the best tasting coffee of your life, but more powerfully supports the various cultures and peoples that are responsible for that coffee.

Extracted reflects this growing awareness and empowers all coffee drinkers to discover the richness, not only of flavor, but also of the history and relationships of the coffee in your cup.

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MAGAZINE





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Mastering Home Espresso

Joseph Robertson

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CONNOISSEUR OF THE MONTH

Litia Howland

📷 @Chica_Lish

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100% of Gather Cafe's profits go back to those in need in our local community. They often host coffee tasting events which sparked my interest this past summer. I attended one of their events where they brewed coffee from the local roaster, Prescription Coffee Lab, using a traditional home coffee maker, both hot and iced coffee using a pour over, and lastly from a French Press. I realized then that it was possible to enjoy cafe quality coffee in my own home! It's truly amazing how coffee can bring an entire world together to make it a better place!

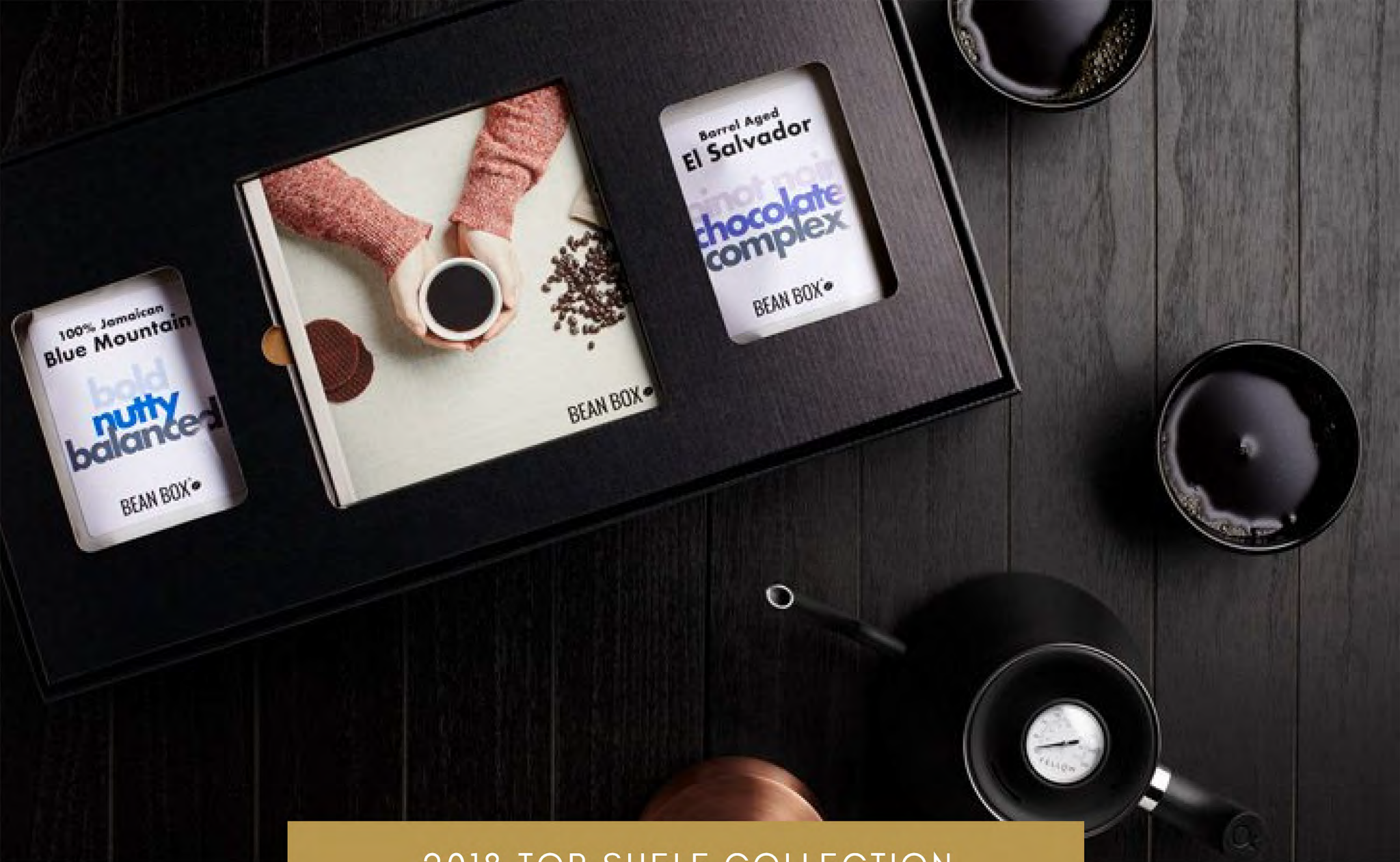
Learn how to be Connoisseur of the Month

Coffee Facts



Crema

The layer of foam on espresso composed of CO₂ bubbles, created during high pressure espresso extraction. It usually looks cream-like. Often spoken of as the best part of the espresso, it's really just bitterness. What Crema actually does tell you, is that the espresso was created at a certain level of pressure, or the coffee is exceptionally fresh.



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Mastering Home Espresso

By Joseph Robertson

Espresso is a drink that holds a certain level of mythicality and legend in the world of coffee. This is a curious thing if you think about the origins of coffee, and the original cultivators of the industry of coffee – because espresso didn't come about until after coffee started spreading through the world.

Originally it was invented by the Italians, who created pressurized machines to very quickly brew mass amounts of concentrated coffee drinks, in order to supply workers with the boost they needed in the middle of their day.

Fast forward to today, espresso has spread around the world and is the most common way that coffee is consumed in a cafe – through various forms. Most places use espresso as the base for most of the drinks that they make, with the latte being most common.

With most of us having grown up in coffee on these tasty experiences, it's no surprise when we want to replicate this at home.



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So what is espresso?

In short, it is a method of brewing coffee using very high pressure (9-11 bars of pressure in commercial machines). This process extracts a high percentage of soluble compounds from the coffee, using a small amount of water. What you get is beyond just a concentrated coffee drink. A proper espresso is in a league of its own, being thick and syrupy, with the ability to hold sometimes indescribable layers of complexity in flavor.

Espresso is the name of the brewing technique, and also the name of the base drink made using this brewing technique. In high-end cafes working with single origin coffees, if you order an espresso, it's common to receive it with a small glass of soda water as a palate cleanser.

While you can enjoy Espresso on its own (and that's something I encourage everyone to try), it makes the base for a number of drinks, including Americano, Macchiato, Cappuccino, Latte, and a host of other variations involving different ratios of espresso to milk, and different styles of foam.

Why would you make espresso?

I think this is a question everyone who wishes to get into making great espresso at home should ask themselves. Knowing your motivations and how you are going to use your equipment will help you make the best long-term decisions. It's easy to spend thousands of dollars on a home espresso setup.

The main argument for making espresso at home is if you just really enjoy drinking coffee as espresso. It's a unique experience, from the ritual itself to the tastes you can discover in your coffee, to the flexibility of drinks you can create. Espresso is nothing like filtered coffee, so don't go into this thinking that you'll get something along the same lines.

The second reason for making espresso at home is that you prefer espresso based drinks - lattes, cappuccinos, mochas, etc. If you've fallen in love with your regular latte at the cafe and want to figure out how to make it for yourself, that is wonderful! Over time you'll definitely spend less - but to do it at the level your cafe does will require up front investment (in time, money, and effort).

Something else you want to give consideration towards is the coffee with which you brew.

What coffee should you use?

You might think that brewing Espresso requires 'Espresso Beans.' This is false. There is no such thing as an 'espresso bean.' That is simply marketing. Espresso is a method and the resulting drink that is created. You can use any coffee in Espresso.

However, you do want to consider the result you hope to achieve.

An illustration featuring a green hand holding a branch of coffee cherries, a yellow woven basket, and a red cloth. The Karmic Circle Coffee logo is in the top right corner. The background is decorated with coffee leaves and orange circles.

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KARMIC CIRCLE COFFEE

Espresso is masterful at pulling out all soluble compounds in coffee. This includes the developed sugars, the oils, the acids - everything which gives flavor and aroma. Because all this is in a smaller package, everything you do with the drink is going to be incredibly susceptible to the acid/lipid balance that you end up with in your coffee.

The key thing you must consider is how often you combine milk with your coffee. The combination of milk and coffee is too complex for this article. The short explanation is that the fats in milk combine very well with the fats and sugars in coffee, but not very well with the acids in coffee.

If you prefer to make milk-based espresso drinks, you'll want to focus on medium to dark roasted coffees in order to create an espresso that has well-developed sugars and lipids. Light roasted coffees whose tastes are the result of the acids in the coffees can easily combine into a sour mixture with milk.

This isn't to say you can't make espresso with light roasted coffees. In fact, espresso alone with a light roasted coffee can be sweet, delicious, and filled with numerous complex tastes.

Making Great Espresso at Home

Regardless of how you make espresso - from the method to the end drink - it all starts with making a great basic espresso. As a side note, in a cafe, you'll usually find this listed as 'Espresso Doppio,' which traditionally means a double espresso, the single espresso being 1 ounce of espresso, and the double being 2.



That is an interesting point to learn because most specialty coffee focused cafes will create an espresso doppio which is not 2 ounces of classic espresso – it tends to be more concentrated and focused. Some might argue that what they make is a ‘ristretto’ which is a restricted espresso. Imagine you are pulling a shot of espresso which takes 30 seconds to brew – a ristretto will take that same shot and end it early, at 15 or 20 seconds.

We’re going to throw the traditional conventions out the window for this article and focus on easily measurable and repeatable practices – to help you make specialty quality espresso consistently.

What’s important in making espresso?

Just like in brewing coffee, it all comes down to the ratios. After all, we are still using water to extract the soluble compounds from the ground coffee. In the case of espresso, we are using different dynamics and with vastly different tools, so what we measure has to be different. For these examples, we’re talking about a full espresso machine that can brew at 9+ bars of pressure.

In espresso, we can most easily and consistently measure how much coffee we put into the portafilter, and how much espresso we end up with.

The baseline measurement we'll use is simple - 2:1. That is, for every 1 gram of coffee we put into the portafilter, we'll expect 2 grams of espresso (give or take).

A typical demitasse cup will hold 1 ounce or about 32 grams of espresso - so we put in 16 grams of coffee and brew out 32 grams of espresso.





How do you make that happen?

There's one singular important concept to understand when it comes to making espresso, and that is pressure. The outcome of your espresso is going to depend on how the water flows through the grounds, and that is all about the pressure in the basket.

Your level of control is limited to three things - the size of your grounds, the amount of coffee, and how you tamp that coffee into the filter. Some advanced machines will also provide control in the form of 'pre-infusion' which is essentially equivalent to

the bloom, where the grounds in the basket are saturated prior to full pressure brewing.

All of these things have an effect on pressure because the pressure created in the basket is not made completely by the machine's pump - it's a combination of the way the machine pumps the water, and how that water meets the grounds. Finer grind, tighter tamp, and more coffee will all influence the pressure in the basket. Too much pressure will lead to over-extraction, too little will lead to under-extraction.

This is usually controlled through grind size. If you keep the amount of coffee you use and your tamping technique consistent, all you need to do to adjust your espresso is change the grind size.



So how you take all this to make a great espresso is to start with 16 grams of coffee, firmly tamp the grounds into the portafilter, and extract. Stop the brew when you hit your 32 grams of espresso. Then taste. If it's astringent/bitter, then grind coarser, if it's sour/watery then grind finer. The change in grind size you make will likely be minute, but even these tiny changes can have a noticeable impact.

This is all about 'dialing in' an espresso. Every time you change your coffee, you'll need to do this. You'll also find that you may need to adjust through one coffee, as weather changes can affect how the coffee behaves, as well as the coffee aging (even throughout just a couple weeks).

The starting point for your grind size is going to vary completely depending upon your espresso machine and your grinder. A good starting point is that your grind may look and feel a bit like wet sand. If your grinder has an Espresso or Turkish settings, go with this and see what kind of results you end up with.

Aside from the grind size, the way you tamp your coffee will have a noticeable impact. Don't be afraid to tamp with force (30 pounds of pressure is often recommended), but also make sure the coffee bed is level.

For further explanation, check out I Need Coffee's tamping tutorial - <https://ineedcoffee.com/espresso-tamping/>



(just as a side note, ignore step 5, polishing, it does nothing).

You also shouldn't take the 2:1 (32 grams of espresso made from 16 grams of coffee) as a strict rule. This is really just a starting guideline. It's important that you pay attention to your taste. A great espresso will be sweet, and with different tasting notes readily apparent (provided you are starting with high quality roasted coffee). A great espresso shouldn't be bitter or sour. A great espresso will have a thick richness that is difficult to describe, but obvious when discovered.

Sometimes you may find that your coffee is better if you put in 16 grams of ground coffee and end up with 50 grams of espresso. Or maybe you need to put in 20 grams of coffee. There is no perfectly right answer, but measuring what you do, and then changing just one component each time is going to be the key to finding the perfect espresso for yourself.

Should you have any question about how a great espresso SHOULD taste, I highly advise you to visit a quality specialty cafe, if you have that resource available, so you can give yourself a baseline of taste perspective. Even if you do not have a good local cafe to try espresso, following the simple guidelines outlined above should bring you there with patience and experimentation.



The Importance of Grind and Machine Quality

As you can guess, from the sensitive nature of espresso extraction with high pressure, the quality of your grind is critical. This means that you can't really make a great espresso without a high-quality coffee grinder.

Minimum level grinder recommendations:

Baratza Virtuoso, Breville Grinder



When asked what gear to get to start making great espresso at home, I often say that you want to think about spending at least as much on your grinder as you do on your espresso machine. This is a little bit of an exaggeration, but it bears considering. You can't really spend less than \$200 on a grinder to make a quality espresso grind, but those \$200 grinders won't give you too much room for improvement in the future.

Consequently, it's difficult to spend less than \$400 (more like \$600 new) on a good quality espresso machine. Once you dip below these price points you're going to have to sacrifice somewhere.

Then, if you start spending \$1000 on a machine, do you really want to skimp on the grinder just to save a couple hundred dollars? The problem with this route is that if you don't get a grinder of the right quality level, you're going to make all the extra \$\$ you spent on the espresso machine moot.

Here are two of my gear setup recommendations for making great espresso at home.

The first is fully manual, the paired **Rancilio Silvia Espresso Machine and Rancilio Rocky Grinder**. You'll make cafe-quality espresso at home with this setup – but you'll need to be comfortable making many adjustments and getting mechanically intimate with your setup.



The second is semi-automatic, with full manual capability, the **Breville Barista Touch** – with a built-in grinder. The Breville Barista Touch will give you a great quality espresso right out of the gate, and gives you the tools to optimize that espresso. It also has a high quality espresso grinder built in, with the level of adjustment capability you need to dial in any coffee. Lastly, it has a very impressive milk steaming capability (one professional I know remarked that this kind of technology could put his baristas out of work).

VIDEO

Breville Barista Touch Espresso Machine In Depth Review

Coffee Lovers TV



Alternative Methods for Making Great Espresso at Home

As you can see, making great specialty quality espresso requires an investment - typically of at least \$1000. You can probably get down to \$800 but you're either going to be doing that via refurbished products or by reducing the quality of your equipment in some way.

Thus far though, we've been talking about espresso created with a high-pressure machine. This is specialty cafe level espresso. If you want to recreate that 'best cappuccino of your life' that you got in a cafe recently, it's the route you'd want to go.

However, there are some lower cost alternatives. These options are not going to make the same kind of 'espresso' and in some (or all) cases are arguably not really espresso, but rather espresso-like drinks. The coffee they make can be used as a base for milk centered coffee drinks or enjoyed on their own.

The benefits of these options include not just lower cost of the machine itself, but also the flexibility of a lower cost/quality grinder. The cost combination is significantly lower. You'll just need to decide if the alternative espresso is enough for your satisfaction. Fortunately, at least two of these options are inexpensive enough that you may want them regardless of how else you decide to make espresso.



The Nomad Espresso Machine

Starting at the high end of the alternatives. The Nomad is a hand powered portable espresso 'machine.' This is actually a very impressive piece of equipment. With it, you can make specialty grade espresso that in some cases is nearly indistinguishable from espresso made on machines that cost 100x as much, due to the fact that it actually pulls shots at 9 bars (and with a hand pump). This is with one significant caveat.

VIDEO

Nomad Espresso Machine Review The Perfect Portable Travel Espresso Machine

Coffee Lovers TV



The downside of the Nomad is that it is not really able to make great espresso with anything lighter than a deep medium roast. The way the Nomad works is you fill the basket with grounds as you would in a typical machine. Then you boil your water separately, adding it to the Nomad tank once boiled. At this point, you start the brewing procedure.

By the time water gets to the brewing chamber and is pulling your espresso shot, the temperature will have dipped below 200 degrees. This is still within parameters for specialty grade espresso, but not if it is lightly roasted.



The 'Moka' Pot

The Moka Pot is one of the most classic coffee makers out there and something you've most likely seen yourself. This brewer also creates coffee using pressure, although it is at a much lower level than a typical espresso maker - brewing at about 1.5 bars of pressure.

The 'espresso' you achieve from this brew method actually approximates a classic Italian espresso. It lacks the thick syrupy nature of a high-pressure espresso, and in my experience isn't able to pull out the nuance of a coffee. But you can get a sweet rich coffee from this. It also usually imparts some sense of roastiness, even if the coffee itself is not overroasted (probably due to the high and direct heat on the brewing chamber).

The Aeropress

The last option here is The Aeropress. Most commonly this brewer is used to make an alternative 'brewed' coffee. It does employ pressure to different degrees, and depending on what recipe you use, you can make an espresso-like drink, very similar to the Moka Pot, but without the roastiness imparted by the previously mentioned tool.

VIDEO

Making Espresso with The Aeropress

Coffee Lovers TV



Mastering Your Espresso

In the end, mastering your creation of espresso at home is going to come down to two things: understanding what you really want, and embracing an enjoyment of experimentation. Creating consistent delicious espresso means you'll frequently be analyzing and adjusting your brew parameters. It's the most fickle brewing method, but when done right is an experience like none other.



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A man with a beard is shown from the chest up, wearing a dark grey t-shirt. He is holding a clear glass cup to his lips with his right hand and drinking. The background is dark and out of focus. The text is overlaid on the image.

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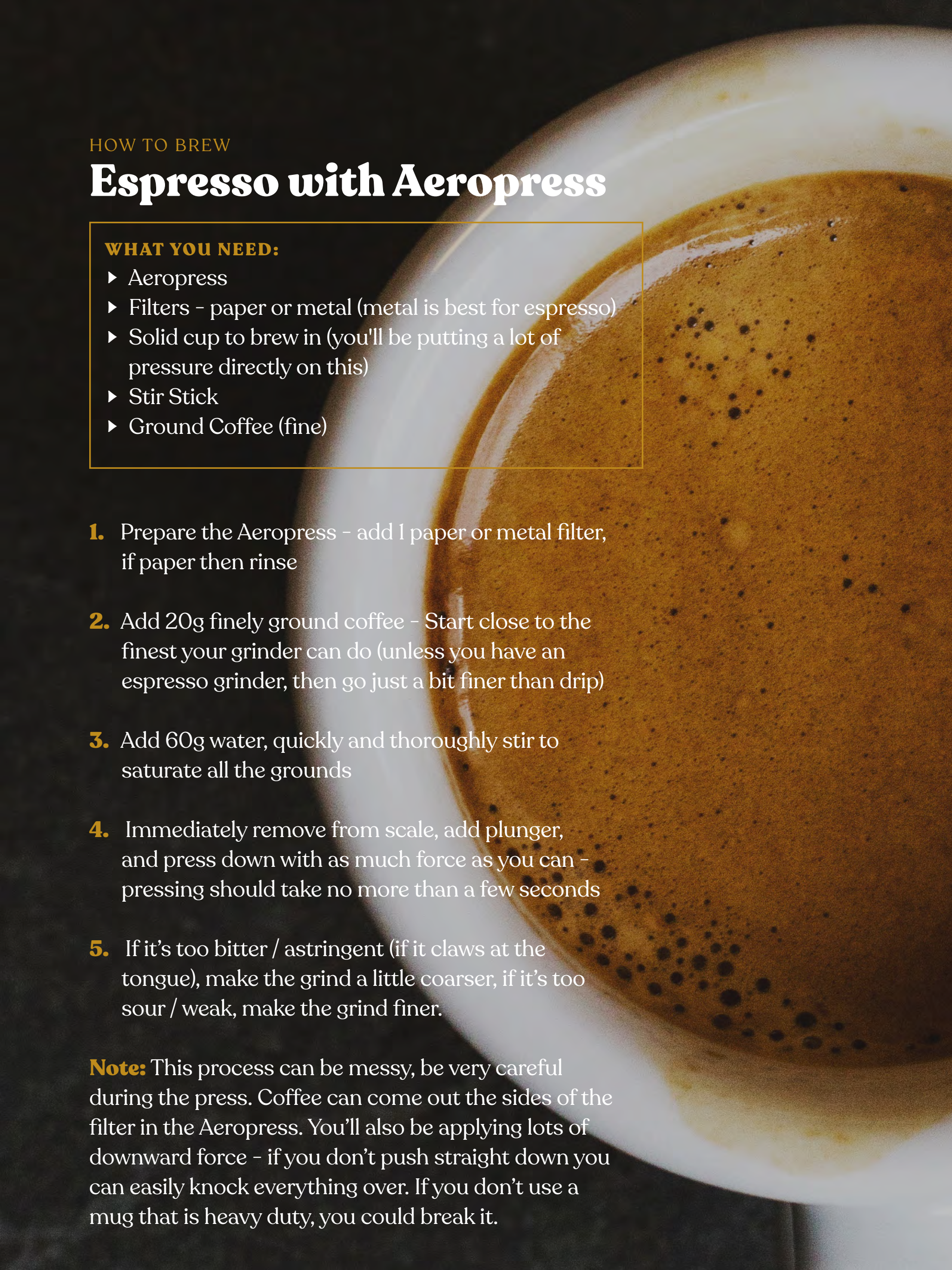
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Coffee Tastes



Sour

Sourness in coffee usually denotes some kind of problem with the brewing process. This is often an under-extraction as a result of not using enough coffee or having too large a grind size for your method. Sometimes though, acidity can be misinterpreted as sourness. Citrus is a common taste that is found in coffee, lemon in particular.



HOW TO BREW

Espresso with Aeropress

WHAT YOU NEED:

- ▶ Aeropress
- ▶ Filters - paper or metal (metal is best for espresso)
- ▶ Solid cup to brew in (you'll be putting a lot of pressure directly on this)
- ▶ Stir Stick
- ▶ Ground Coffee (fine)

1. Prepare the Aeropress - add 1 paper or metal filter, if paper then rinse
2. Add 20g finely ground coffee - Start close to the finest your grinder can do (unless you have an espresso grinder, then go just a bit finer than drip)
3. Add 60g water, quickly and thoroughly stir to saturate all the grounds
4. Immediately remove from scale, add plunger, and press down with as much force as you can - pressing should take no more than a few seconds
5. If it's too bitter / astringent (if it claws at the tongue), make the grind a little coarser, if it's too sour / weak, make the grind finer.

Note: This process can be messy, be very careful during the press. Coffee can come out the sides of the filter in the Aeropress. You'll also be applying lots of downward force - if you don't push straight down you can easily knock everything over. If you don't use a mug that is heavy duty, you could break it.



THE SOUL, THE SWORD, AND THE GUEST

COFFEE WITH THE BEDOUINS
IN LITTLE PETRA



The Wadi Muaysra Al Gharbiyy and Little Petra

THE BEDUL BEDOUIN HAVE INHABITED THE PETRA BASIN for a long, long time. A short walk away (if you know where you're going) from the Seven Wonders Bedouin Camp are the vestiges of a nine thousand-year-old stone age village. Goat paths surround heavy stones piled up in rough circles and rectangles. The villagers didn't use mortar, but the stones still stand after nine thousand years of flash floods and sandstorms and the occasional earthquake.

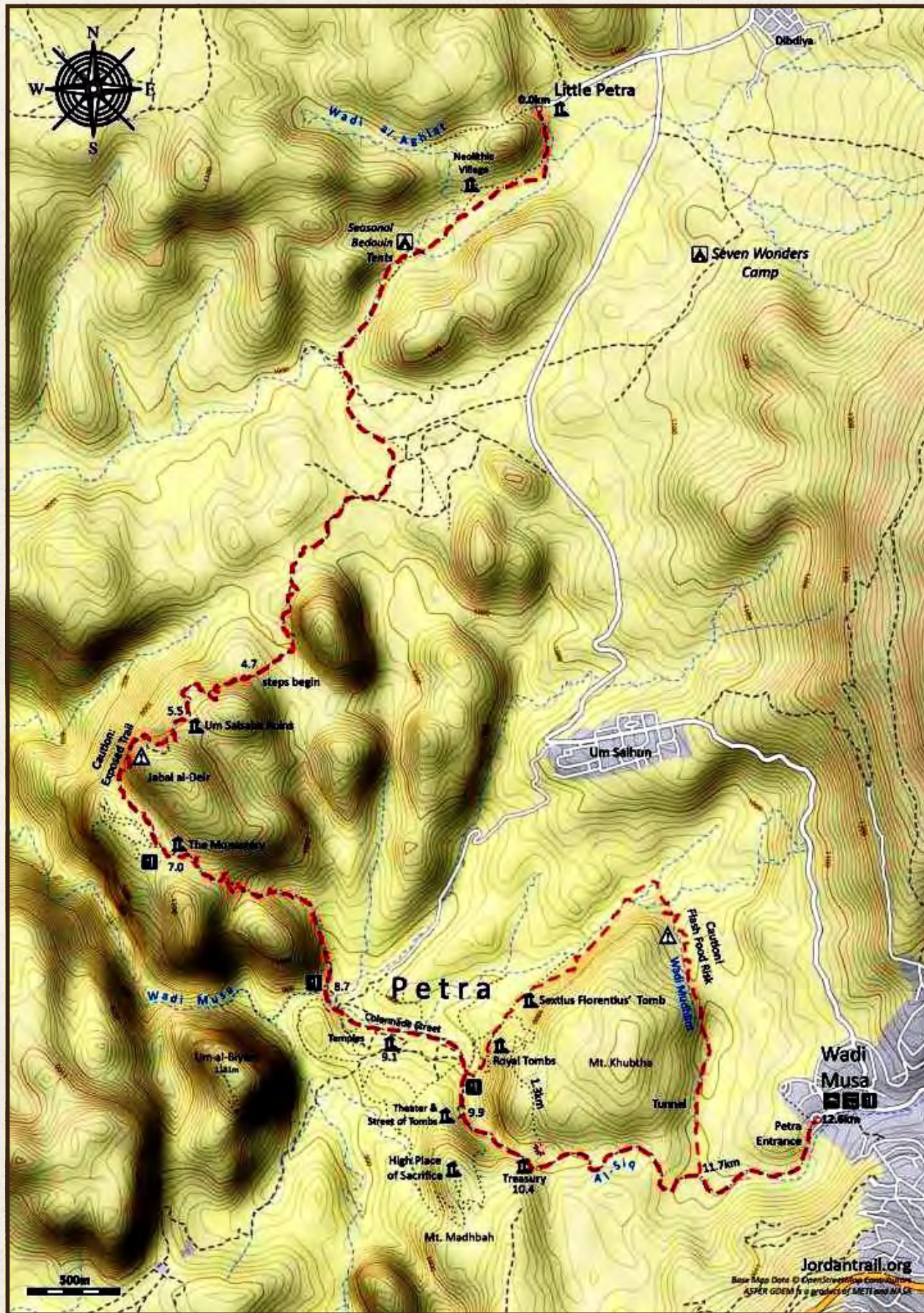
Numbering only about one thousand people, the Bedul have continued their traditional activities of goat herding and rainfall farming of wheat and barley. The Bedul have provided the labor for almost every archaeological project in Petra, and many have become skilled excavators. They have always excelled as guides and often have been called upon to lead search and rescue teams for tourists lost in the vast reaches of the Petra Basin or the dry *wadis* of the Great Rift Valley.

Deep in the Petra Basin, the Bedul have continued to use ancient Nabataean diversion dams in their fields and archaic threshing floors to process their harvests. They maintain and use trails and roads constructed thousands of years ago by the Nabataeans. One of these trails runs from Seven Wonders Bedouin Camp to *Siq al Barrid* (the Cool Siq), the narrow canyon at the entrance to Little Petra, and beyond that the path winds through the *Wadi Muaysra al Gharbiyy* to the ruins of *Um Salsaba* and the Hidden City of Petra below.

On our second day at the camp, we walked to the paved road and looked for signs for Little Petra. A pickup truck with a few local men stopped and one, later photographed by Ruthie jumping above a sandstone stairway he had restored, offered to guide us from Little Petra to the Monastery. From that moment we were in his hands, a guest of the entire tribe.

To be a guest of the Bedul, or of any Bedouin, is to be offered the hospitality of the desert dweller. That hospitality can mean a great deal: sanctuary, even life itself. In an environment where a day without water or shade can easily lead to death, a stranger may enter the tent of a Bedouin and stay as a guest for three days. In those three days no questions will be asked. He will be given food and water, and if necessary, the host will protect the life of the guest with his own.





The hospitality we were offered was simple and gracious. Before we started on our trek, we drank tea in the cave where our guide's parents stayed during grazing time for their goats; most of the year they lived in a house in the nearby village. The artifacts our guide's father had found along goat trails spanned thousands of years.







The Monastery, or *Al-Deir*, high above the most touristed part of Petra, is rightly famous for its enormity, beauty, and serenity. It's named for the Byzantine crosses carved into its interior, but it was built in the Third Century BC, and its history as hallowed ground goes back much further into Nabatean antiquity. Once, the courtyard in front of the tomb was filled with columns oriented to the sacred geometry of the pyramidal peaks that surround and conceal the plateau. Thousands of years ago, processions of

worshippers climbed the eight hundred tortuous steps from the valley to the plateau, steps worn until the stone has become slick and shiny. What or who was worshipped there isn't clear: it could have been a stone endowed with life, called a *betyl* by the Nabateans; or Isis, the Egyptian Goddess of women and fertility; or *Dushara*, the Supreme God of the Nabateans, the Lord of the Mountain; or Helios, the Greek god of the Sun; or Eros, the Greek god of love.

The route from Little Petra to the Monastery is just over four miles, but some of it is steep, and I've learned through experience to allow an hour for every mile when climbing is involved. It's desolate country, but by no means unoccupied. It's also a neighborhood, just one where the neighbors are spread pretty far apart.









Sometimes the path is apparent, ancient steps cut into rock or a broad flat jeep road. But often we cut across fields or scrambled over smooth and trackless mountain bluffs. Greens and reds predominated in the canyon walls, and despite the clouds, which kept the weather from getting too hot, we could almost always see for miles across the deep Petra Basin. At last the central spire of the Monastery came into view, and we dropped down to the sacred plateau. It is far larger and better preserved than the Treasury, with none of the crowds or vendors. It's a wonderful, somewhat challenging hike from Little Petra, not to be attempted without a guide.

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A Connoisseur's Brewer

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Filter Stories

Berries and Lemon

James Harper

Martin Shabaya is one of Kenya's best baristas. And he dreams of opening his own coffee shop.

'I want to start something small, so I can make a coffee that is an experience for [my friends]'

But he can't.

'A very small percentage drink Kenyan coffee because it's expensive, especially the high-quality coffees' Martin laments. 'Most ordinary Kenyans can only afford a dollar or less for tea. But coffee is mostly \$2 and above. The prices are ridiculous for the ordinary Kenyan'. The average Kenya earns about \$1 an hour. How often would you drink a \$2 espresso if you have to work two hours for it?

And so, the complex and highly prized coffees from Kenya get exported instead of being brewed by Martin in his own cafe for his community. 'It's very saddening' Martin sighs.

But Martin doesn't give up without a fight. He plans to win the 2015 World Barista Championships in Seattle. If he wins, Martin believes Kenyans will start asking to taste these award-winning coffees and Martin is one step closer to opening his dream cafe.

Little does Martin know he's chosen to compete in one of the hardest competitions in the coffee world, with the best baristas from over 40 countries competing every year.

The winners are always from rich countries, some accompanied by big teams and having spent over \$50,000. And they're desperate to win: they will become an overnight celebrity in the coffee world.

Martin's situation couldn't be more different.

He's all alone and it's his first time ever outside of Kenya. 'I



was amazed by everything. 'Look at that building!', I was thinking to myself'.

The day before the championships, Martin is scouring the streets near his hotel looking for last minute ingredients.

Competitors need to make three types of drinks for a panel of expert coffee judges: espressos, milk coffees and a signature beverage - a creative drink blending coffee with non-alcoholic ingredients. Martin's crafted a drink called 'Coffee Grape-y', a mixture of squashed grapes and espresso, with touches of orange juice and cardamon. 'I didn't bring grapes from Kenya, I wanted to find them in Seattle' Martin recounts.

It's almost 6pm, and he locates a supermarket to pick up the grapes he needs. But just before he enters, the supermarket locks the door and flips the 'open' sign to 'closed'.

'I was so shocked! I could see the grapes inside. In Kenya, if you see a customer, it's all about money, they will always open the door for you. But in Seattle, all stores close at 6 and it's still daylight!'

Martin is panicking - he doesn't have much time the next day to find his ingredients. He has to find them tonight.

He knows that there's a restaurant in his hotel. It's his last shot. 'I went to the executive chef, spoke to him nicely and asked for 200g'. Huzzah! Grapes.



As the rays of morning light glint off the Space Needle, Martin enters Seattle's giant state convention centre to change Kenya's coffee drinking culture forever.

Donning a crisp white shirt and waist apron, Martin pushes his cart on stage. He has 15 minutes to make his drinks, as the judges score him on the flavours of the coffee and his overall presentation.

Smooth jazz music croons over the speakers and Martin begins: 'Good morning to you all, I'm feeling so honoured to be representing my country here'.

After a minute or so, he begins to make Coffee Grape-y. 'This is an enchanting flavour combination', Martin explains as he squeezes orange juice and crushes cardamon into a cocktail shaker. 'Last but never least, I went for these rich, red ripe grapes'.

He puts eight of his grapes into the shaker and begins crushing them with the end of a wooden rolling pin.

But there's a problem.

There's so much juice in the shaker there's no space for Martin's espresso.

Martin had prepared his routine using local Kenyan grapes, small and packed full of flavour. American grapes 'are more tasteless and more juicy' Martin explains.



Up on stage, instead of offering the judges a delicate combination of sweet juices with distinct espresso flavours, the judges are served glasses of watery grape juice that drown out the espresso.

And Martin's problems don't stop there: his coffee also misbehaves and pours with no crema (the rich brown foam that floats on top of an espresso).

It's a disaster. When all is said and done, Martin comes 43rd out of 48 competitors. His dreams of opening a cafe are further away than ever.

But Martin isn't a quitter. He's going to try again and beat these rich competitors at their own game.

In the Filter Stories podcast, we follow Martin's journey as he competes in the 2016 and 2017 World Barista Championships. The drama of Martin's journey in Seattle is just the beginning of an even more incredible story. You can listen to that episode, 'Berries and Lemon', by searching for Filter Stories wherever you get your podcasts.

PODCAST

Berries and Lemon

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Crema

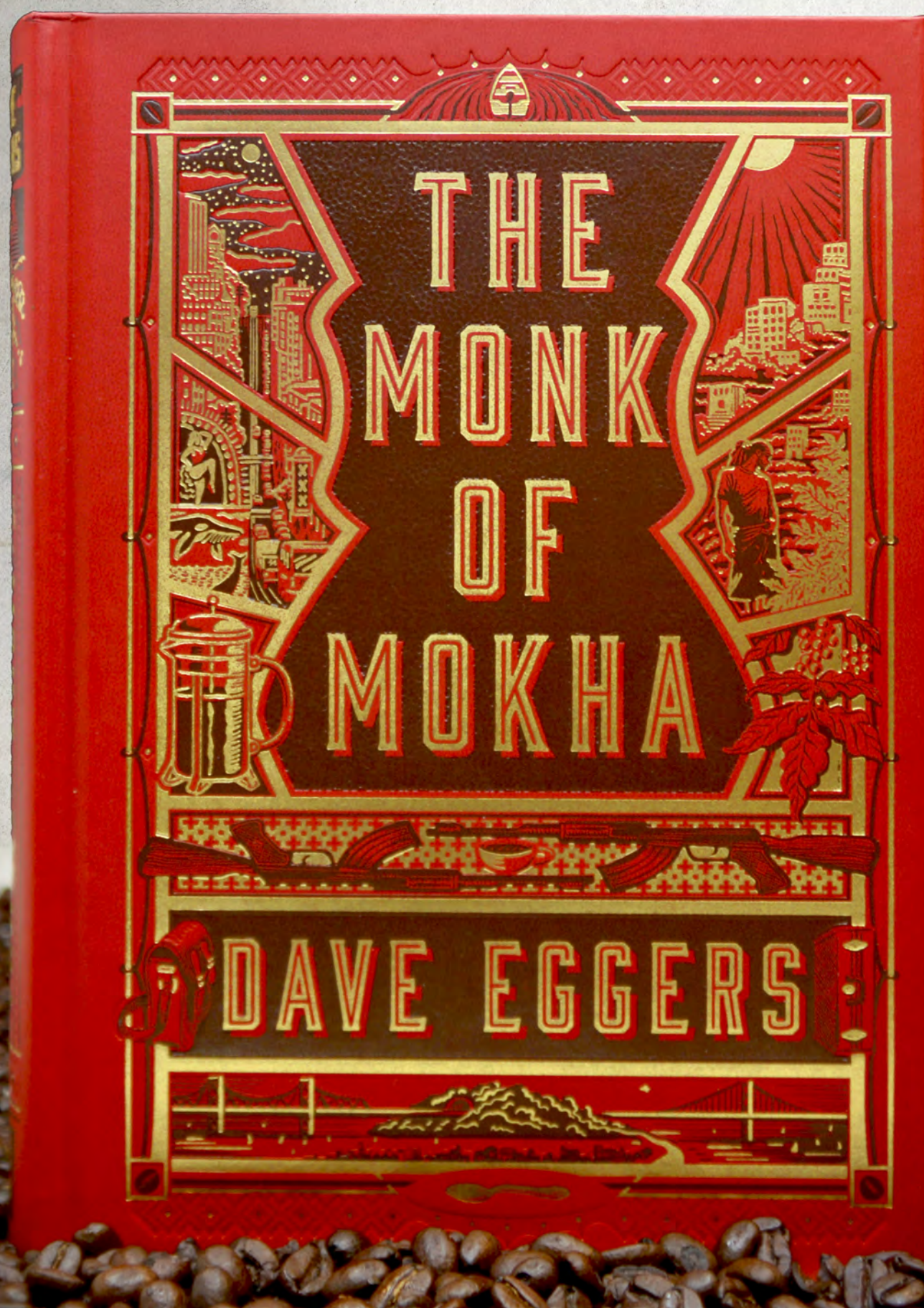
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READERS QUESTIONS

What is Crema?

‘The Crema’ of a coffee has become a most controversial subject, prone to myths and misconceptions, not the least bit of which are due to how coffee has been marketed to sell expensive machines.

In essence, Crema is simply CO₂ bubbles trapped in layers of coffee oils on top of the coffee. It is most accurately used in conjunction with Espresso since this phenomenon is most noticeable when high pressure is employed (the pressure makes it far more likely for gasses to get built up in the oils).



The Erroneous Assumptions and Myths Regarding Crema in Espresso

It's important to understand that Crema only adds bitterness to the coffee - it is after all just a bunch of CO₂ stuck in coffee oils. Other than this it has little valuable addition to the flavor of a coffee. It is not flavor packed like many people think.

Crema is often also considered a sign of great coffee. This idea is prone to misinterpretation. Crema results from different factors like high pressure as well as the freshness and roast of a coffee.

Not having a Crema on your espresso can be a sign that your espresso was not pulled with sufficient pressure. However, it is not necessary to have a great espresso. In fact, if you can somehow remove the crema, you can find yourself with a much sweeter, and more flavor clarified espresso (so far the only way I've seen this done well is by using a vacuum chamber).



Crema That is Not In Espresso

The most common reference for Crema is espresso, however often people will call any instance of the creamy brown foam/oils on top of coffee 'crema.'

If we decide to take Crema to be the 'cream looking foam-like substance sitting on top of coffee that consists of CO2 bubbles trapped in coffee oils' then this can apply to all forms of coffee, but the Crema on a French Press (for example) and the Crema on an espresso are not exactly the same thing.

A woman with blonde hair is wearing a white hooded sweatshirt. On the left chest area, there is a red logo that consists of a stylized 'X' with a small circle at the bottom right.

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The same misconceptions do exist, however, such as in the French Press, where many people believe that this part of the brew contains all the flavor. This is false. It only contributes bitterness, and removing it (which you can do with spoons in a French Press) results in a sweeter, cleaner, more flavor clarified French Press.

Crema is more of a coincidental occurrence that happens to appear often when you have great coffee – but is itself not worth trying to manufacture or keep around.

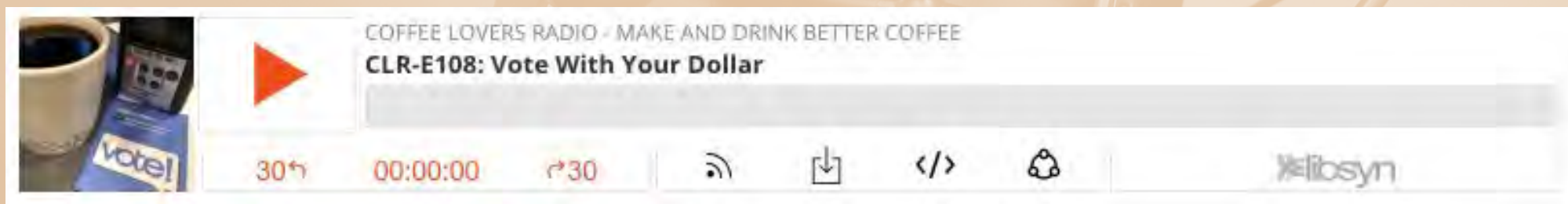
Got Coffee Questions?

[**Email the Experts**](#)

CLR-EPISODE 108

Vote with Your Dollar

Coffee Lovers Radio



It's voting season! We want to encourage everyone out there to make their voice heard. In the spirit of that, we also want to share our thoughts on how every time you spend money you are making your voice heard. This is especially true in coffee. Discover how it matters when you spend your money in coffee – what are you influencing? what are you voting for?

Hosts

Joseph Robertson, Extracted Magazine

www.extractedmagazine.com

Jesse Nelson, Conduit Coffee

www.conduitcoffee.com

Vote with Your Dollar

By Jesse Nelson

Coffee has unique influence in the world. So many hands touch coffee along its path from seedling to cup, that every sip engages a huge spectrum of cultures. Second only to oil, we ship and consume coffee more than any other commodity – a real fuel for society. So when hundreds of millions of people depend on our 3 billion cups a day, coffee is political.

Just a roasted seed in your hand requires so much effort, start adding water and milk and cafes and the impact of your morning routine can be huge. Where your dollars go, the hands that bring that back to the beginning of the process, influences the millions involved in the supply chain.

Every purchase is casting a vote with your dollar – choosing how that transaction supports the hands leading to it, and back. We cast 3 billion votes a day, influencing an incomprehensibly large system.

The Commodity Futures Market for coffee is near all-time lows (\$1.13/lb as I write this), meaning the farm level is receiving less than 25 cents per pound. Most coffee consumed is purchased through the “C” Market, that’s why you see it for \$3 a pound at the Big Box. Yet, we’re seeing a renaissance in specialty coffee, and that is the power of voting with your dollar. Buying into a system that celebrates sustainable farming and communities.

Purchasing from a small business selling coffee puts your dollar to work at every level back to the farm, producing a much higher quality and ethical product. And the best part about coffee is that the more you care about the systems supporting it, the better your coffee will be!

But to get a little more political...

In our current crisis of civility, coffee stands out still as a unique line connecting our routines and livelihoods. When our president ostracizes “shit hole” countries, he’s disparaging all the beautiful people that are growing, processing, and lifting all our coffee at origin. Nearly all our coffee comes from countries that have been dragged through the struggles of globalization, mostly hidden from our minds as we casually sip on our 3 billion cups a day.

The farmers are pressed from all directions and many are giving up. From commodity brokers to climate change there is often little hope left for the impoverished producers. They are joining others in similar situations and looking for answers. These are the “huddled masses yearning to breathe free,” yet the news cycles have us fearing this “caravan,” but I think we’re more afraid of why they are banding together. We are scared of addressing the impact of our dollars, reassessing and reorganizing how we think about our food systems, and just the sheer magnitude of the task at hand.

This starts with adjusting our daily routines and voting with your cup. So, “voting with your dollar” in coffee really is political. But, also so is voting in general. Because coffee is so large, it is an election issue. Will we help the struggling producers? Will we continue to tear up decades of international networks that offer hope in these producing countries? These are the hands that make your cup of coffee so valuable.

To borrow from Wendell Berry: The line that connects a Central American “caravan” to the bombing of a Yemeni village to the murdered farmworker rights activist to a cup of coffee seems to run pretty straight. But there’s a different line that connects the perfect Yemeni coffee cherry to the volcanos of Guatemala to your cup. It’s up to you which line you want your dollar to follow.

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The True Magic of Great Coffee

I always find that most guides for making coffee are very specific. Do these steps, in this order. Make sure you use a specific amount of coffee, poured in a specific way.

In my observations this does two things. It gives you a way to make a great cup of coffee, if you follow exactly those specific steps - assuming you have a number of other variables roughly the same (like, the quality of the coffee). It also tends to polarize people's opinions into thinking that those are the ONLY ways to do those things.

The thing is that coffee is anything but absolute. If there's one thing that you've been learning while reading these issues, I hope it's that coffee is such an incredibly unique and variable experience, that there's really no right answer to anything. There are preferences, beliefs, and strong opinions on taste and quality. But as far as processes go, it's a wide world.

To me, the most important lesson in coffee is that embracing enthusiasm for exploration will take you far. Not every cup you create is going to be the best. Learning how to identify the taste in your coffee, and what that means as far as the brew, is going to be the best thing you can do.

This is why my 'Mastering Home Espresso' article in this month's issue wasn't a 'do these steps to make great espresso' brewing guide. The only thing that is absolute about Espresso is that pressure is the defining key - but even that is not a perfectly definitive variable (the amount of pressure can obviously change and you can still make a great espresso).



One thing I've discovered my own travels and experiences is that espresso's concentration of taste and aroma gives you a wonderful perspective into the world of coffee taste which may be more challenging with brewed coffee. That is, espresso's vibrancy and intensity of flavor combined with wild variability makes it much easier to detect changes in taste due to minor adjustments in brew parameters. You will absolutely know when an espresso is too sour or too bitter, because it's going to violently assault your senses - and you won't need to make huge changes to see a difference.

On a broader scope, I hope that what you take from my perspectives isn't a directive of what should be, but rather a guide towards opening your experience. The most difficult thing in coffee is widening your reality to realize things like it CAN actually taste of honey and cherries and blueberries and dark chocolate and peanut butter, and that coffee CAN actually be so naturally sweet you'd think someone snuck sugar into your cup, and that coffee CAN be so smooth and lacking in bitterness that you wonder how you ever choked down what you previously thought was 'real coffee.'

Are your eyes opening? That's the true magic of coffee.

-Joseph Robertson

This Month in Coffee

November 2018

Unfair Coffee Prices Push Hondurans to Migrate

This is a story being seen all over the world - coffee farmers everywhere being pushed out of coffee because commodity prices are so low they can't afford to even grow it.

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Differences Between Hot Coffee and Cold Brew Revealed by Chemists

The most interesting part of this brief article is the tested research that supports the pH of hot and cold brew are not different enough to warrant cold brew being called 'low acid' coffee.

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Harvest and Arrivals: A Roaster's Guide to Coffee Seasons

This is a neat visualization of the seasonality of coffee - though the article is written as a roasters guide, I think it's interesting as a coffee drinker to consider what season it is for coffee so you can know what to expect as fresh.

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To Make a Cup of Coffee, It Takes More Than a Village

A lovely account of all the effort and people that goes into making your every day cup of coffee.

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The World's Best Destinations For Coffee Lovers

Love travel and coffee? This will give you some ideas of fun places to visit...

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