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SUEDHANG

Mikolaj Pocięcha
BREW

Introduction
to brewing coffee
by hand

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SUEDHANG

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Hello.

Hi, my name is Mik. My journey in the industry took me through Sligo, Dublin, Barcelona, Berlin and now, Tübingen. Here, I am a part of SUEDHANG. Together with Anna, Anna, Anja, Emanuel, Erika, Jairo, Laura, Lora, Lena, Lena, Martin, Moritz, Raquel, Robin, Sebastian, Slobo and Tabea, we make coffee.

I wrote this for people who already have some experience in brewing by hand. I assume you have basic knowledge of brewing equipment, techniques to use it

and you work with reasonably light roasted, specialty coffee. The purpose of this manual is not to revolutionize the world of coffee brewing. It is simply the modern approach to it, without the facade of vague descriptions and unstructured explanations. BREW should bring you more clarity, ability to be consistent and elevate your skills. BREW is divided into three parts:

- 1) What?
- 2) Why?
- 3) How?

It has been done so to further the understanding of the process. From manipulating or working with the ingredients, choosing the tools and finally putting them to use.

What?

This section is dedicated to evaluating what we are working with. Through sensory evaluation we can estimate the properties of the ingredients and learn to read them. Very much like an instruction manual before attempting to put together a shelf.

What we learn during this process will help us to choose appropriate tools and techniques later. Through cupping and evaluating we can try and plan ahead of the latter steps of creating a recipe and adapting a compatible technique.

Cupping Structure

All my brew methods start with an evaluation of a coffee via cupping. We're gonna use 12 g of coffee per 200 ml of water and prepare it the following way:

- 1) Samples should be ground immediately and infused with water no more than 15 min after.
- 2) Particles should be slightly coarser than typically used for paper filter percolation brewing.
- 3) Water should be fresh and brought to a temperature of 96 C°.
- 4) Water should be poured directly onto the grounds to the rim of the cup.
- 5) Grounds should be left undisturbed for 4 min before evaluation.
- 6) At the 4 min mark, the surface crust should be broken with a repeatable pattern in each cup then cleaned using a pair of cupping spoons.
- 7) Samples are usually cupped to determine the differences between them, to describe their flavours or your preferences in the following order:
- 8) The fragrance of the dry grounds.

- 9) Flavour, aftertaste, acidity, body and balance.
- 10) Sweetness, uniformity and cleanness.

Sensory Evaluation

I rarely brew something without cupping it first. It's beneficial to experience it in such a way so choosing a technique and deciding on parameters becomes an informed decision based on your sensory experience. Sense of taste and smell is probably the most primal of all. We navigate with it from our very first days on earth. It is how we first recognized our mothers as infants. Unlike more physical senses such as touch or hearing, taste and smell are chemical, heavily connected and reliant on our memory.

We taste sweet, sour, bitter, salty, or umami with the addition of mouthfeel. The rest are aromas. When we combine the two, we have flavour. Sense of taste is based

on the gustatory system, which allows us to identify things through fluid-phase stimuli. In contrast, the sense of smell relies on the olfactory system recognizing the chemical compositions of airborne substances. Our tongue senses sweetness in its front, sour and salty on the sides, while bitterness is perceived in the back. Aromas are more complex, sensed through our noses and rely on memory. What we perceive can be divided into two groups of compounds:

- 1) Volatile compounds in a gaseous state that we experience as the aroma.
- 2) Non-volatile compounds that we can taste using receptors in our mouth.

That's why we slurp our coffees. That may sound and look ultimately unappealing to passers-by but does have a purpose. We want to oxidize. We want to experience the best of both worlds at the same time. By slurping, we let the volatile compounds into our nose

while evenly distributing the rest of the liquid across our mouth. The majority of what makes coffee taste a certain way is due to volatile compounds. That means compounds in a gaseous state. Compounds that are radiating from our brew into the air and our nose. Aromas are most noticeable when coffee cools down. More specifically, when it produces the most vapour, the biggest concentration of volatile compounds is released, which happens at 70 C° to 60 C°. When coffees are hotter or colder, research strongly suggests that most of their distinct characteristics disappear.

Influential Factors

The first thing worth noting is the colour of the cup you are drinking from. An interesting read is a 2014 experiment conducted by George Van Doorn, Dianne Wuillemin and Charles Spence titled "Does the colour of the mug influence

Why?

This section is dedicated to exploring the why's behind the ingredients applied to the brewing process. Each parameter can be used as a tool. Having read the previous section now is the time to choose what we will use to build the final cup.

In this section, we will discuss how to manipulate and take advantage of water make-up, various temperatures as well as particle shapes and sizes.

How?

In this section, we will discuss the physical devices and methods that can be used to brew filter coffee. So far we have talked about the sensory, chemical and physical properties of our ingredients and what effect they have. We have read the previous two sections and chosen the tools. With a decent understanding of these, we can now put them to practice and start brewing.

cause undesirable bitterness. Another option is dividing it into more than one uniform pour. You might want to do this to increase the strength and/or the length of extraction. In my experience, it is possible to do so with good results up to six times. Each sub-division shouldn't last more than 45 sec and less than 20 sec. Experimenting with that is best begun by making divisions of equal weight and length. Doing this is especially beneficial with coffees that may lack a sufficient body with more traditional pouring techniques.

Pouring Techniques

Pouring techniques are of crucial importance to any pour-over method. The intensity and pattern will have an impact where applied or broken. The key to achieving repeatable results and even

distribution is consistency. Whatever technique you choose, make sure to keep repeating it.

The thing it has the biggest influence over is agitation and directly, extraction. Pouring water in different patterns, volumes, speeds, and pulsing takes practice. Accuracy doesn't happen overnight. It's best to start with a simple one and slowly develop it. Additionally, pulsing occurs by rapidly increasing or decreasing the speed and weight of the pour by an upward movement. It results in increased agitation.

The problem likely to occur is channelling. Channelling is caused by an uneven distribution of water on the coffee bed. This situation will be more likely to take place the finer you grind. It is caused by air and/or Carbon Dioxide essentially creating a tunnel in the puck. Since most of the water will flow through it, it will allow uneven extraction leaving

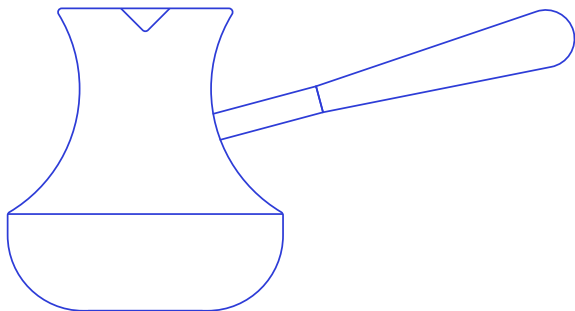
some areas under and others over-extracted causing an unpleasant, unbalanced result.

Sample Recipes

Disclaimer: Methods described below are my personal favourite starting points. It's impossible to say if one or any of them will particularly suit a certain coffee as the diversity of roasts, processing methods and countries of origin is wide and cannot be generalized. I hope you will try them out, compare them to your own, and develop them into something better than they are in their primal form.

Methods described below relate to alternative and pour-over style methods. Percolation brewing has previously been discussed on page 36. I recommend adjusting the recipes below to relevant variables. The knowledge you have gained

from previous sections should be sufficient to develop a suitable recipe with ease.



Ibrik/Cezve Unfiltered

Equipment

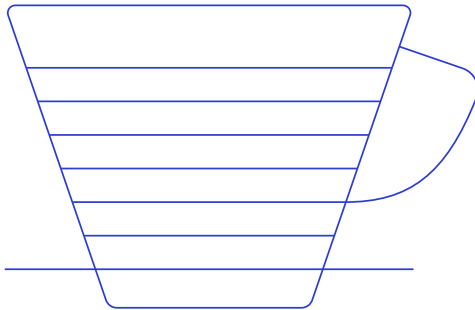
- 1) Kettle, scales and timer.
- 2) Ibrik.
- 3) Stirring rod.
- 4) Stove or burner.
- 5) Collection vessel.

Measurements

- 1) Coffee: 8.5 g.
- 2) Water: 70 g.
- 3) Total brew time of 2 min 30 sec before decanting and 2-3 min after.

Method

- 1) Add coffee to the ibrik.
- 2) Add the total volume of water at approx. 50% of the ending brew temperature.
- 3) Gently stir six times and place on the burner.
- 4) Maintain suitable heat to allow 2 min 30 sec brew time.
- 5) When the foam starts to rise, remove from the heat and slowly pour into the cup.
- 6) Leave undisturbed for 2-3 min before serving.



Kalita Wave

Equipment

- 1) Kettle, scales and timer.
- 2) Kalita.
- 3) Kalita Wave filter.
- 4) Collection vessel.

Measurements

- 1) Coffee: 15 g.
- 2) Water: 250 g at 90 C°.
- 3) Total brew time: 3 min.

Method

- 1) Pre-heat the Kalita and collection vessel.
- 2) Place the filter and rinse with hot water.
- 3) Add coffee.
- 4) Pre-brew with 40 g of water for 40 sec.
- 5) Add 80 g of water with an aggressive pour, leave for 45 sec.
- 6) Gently pour another 80 g of water, leave for 20 sec.
- 7) Slowly pour the remaining 50 g of water.
- 8) Brew should be done in approx. 3 min.

Also, brew
Canephora,
please.

With the skills you gained with this book, I'd like to encourage you to brew things other than Arabica. It's challenging and a lot of fun. Until very recently Canephoras were considered Arabicas lesser cousins. Although widely spread in the industry it has barely been around the specialty coffee scene. That's all about to change, however. Any product treated as a commodity has less emphasis on quality and therefore has less potential to satisfy expectations that come with drinking specialty coffee.

BREW was written out of necessity, to clearly explain the basics of brewing coffee in a technical and informative way that can be easily applied into practice. The approach is rooted deeply in the process of analysis through tasting and using mindfully chosen tools.

From 'What?' to 'Why?' to 'How?' it aims to bring more clarity, and elevate your skills.

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