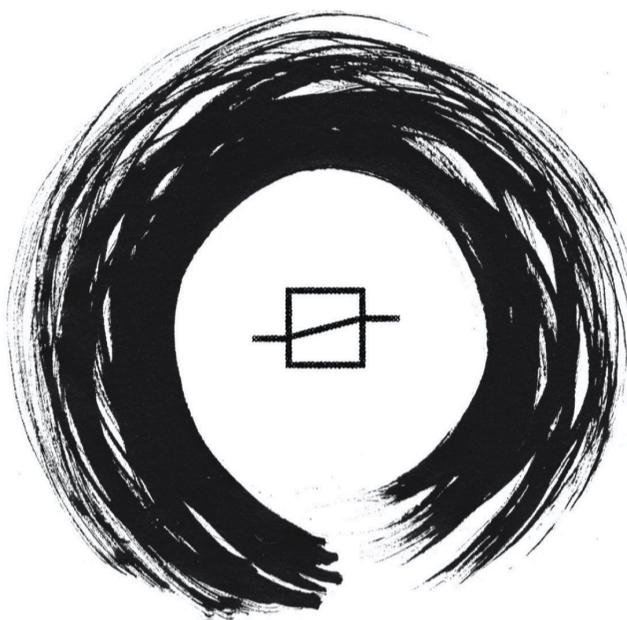


VOL. 2 MEXICO2

FIELDTRAVEL

DIGEST





This is FIELDTRAVEL
Redshift Coffee Roasters
c 2019

*Strange is the night where black stars rise,
And strange moons circle through the skies,
But stranger still is
Lost Carcosa.*



Introduction

The Challenge of Specialty

I was on my final cupping session of the day, tearing through another round of samples carefully prepared and presented. The sounds of slurping had dwindled. All others had fallen away and it was down to just three of us facing the onslaught of importers vying for our attention. By this point, a typical coffee cupper would be hard pressed to find something truly extraordinary - the samples all merging into sameness - despite the plethora of micro-lots, heirloom varieties, experimental natural, honey, anaerobic, carbonic processes. All the samples merged into, dare I say, the conventional. That is, until I tasted a natural processed Mexico that was like no other coffee I had sampled before. Otherworldly, vibrant, pure, alive, it was beyond anything I had ever experienced. I knew I had to unlock its secrets.

This lot was from an importer I had never heard of before, Hurqalya Trading, and was curiously marked Mexico2. Who was this importer and what did they mean by Mexico2? I was determined to find out. And what I discovered would change the course of my life forever.



I remember my first trip to origin. Ask any coffee buyer and they will tell you that traveling to origin can be a life changing experience. To see firsthand the care and expertise that goes into growing specialty coffee opens your eyes to the challenges facing coffee growers. Secluded behind gated fences, away from the poor and hungry, a coffee farm is a paradise garden, carefully maintained by pioneering families whose stories of trial and error in a harsh landscape serve to inspire anyone who makes the challenging flight to such an exotic land.

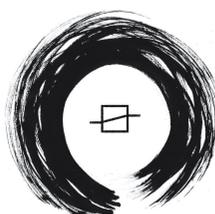
My first origin experience was no different - arriving at the tiny airport in Tuxtla Gutiérrez, Mexico was a shock to the senses. The tropical heat and humidity assaulted me the moment I stepped off the plane, before I was swarmed by hordes of men, women and children trying to sell trinkets or begging for money. In those first few moments, you quickly learn to find a familiar face that can guide you through the throngs of locals. A sense of relief always follows once you are safely inside your hired vehicle, whisked away from the crush of the crowds and into the lawless traffic. A cacophony of sounds and smells assault you as you peer out into the chaotic scene.





Finally, one can relax when the guard opens the gate and waves you into the coffee estate, leaving behind the noise and chaos, into a carefully curated space, as comforting as your favorite third-wave coffee shop. Here we can find the paradise imagery that photographs well for hungry followers on our social media pages. This is specialty coffee: a clean minimalist coffee bar, micro-lot beans tumbling out of a vintage roaster, action shots of barista competitions and latte art, and just as important - beautiful images of coffee trees in a verdant setting with the smiling face of the coffee patron.

This is the challenge of specialty coffee - to navigate through the difficult landscape of poverty and environmental degradation to arrive at the right look and feel that separates us from conventional coffee. Specialty coffee tells a story, and the stories we want to tell are from multi-generational estate owners who have successfully carved out their own space that looks and feels exclusive. Stories that align with our sensibilities of refined good taste, our quest for the rare and exotic. A trip to origin makes you realize just how special we are.



The coffee tree, or genus *Coffea*, belongs to the family Rubiaceae, of which there are some 500 genera and over 6000 species. Some are trees, most are shrubs, a few are herbs, but they are all tropical, and found in the lower story of forests. The coffee tree is more of a shrub than a tree, but left untended can grow to some 20 feet. It is evergreen and never drops its leaves. Like many other evergreen plants in the tropics, it has evolved its own bug repellent: caffeine. Caffeine is a stimulant and over-excites most insect species that come in contact with it. There are a number of varieties to the *Coffea* genus: various authorities give a range of 25 to 100, but only three have any commercial concern: *Coffea Arabica* (comprising 80% of the market), *Coffea Canephora* (better known as Robusta, with about 20%), and *Coffee Liberica* (less than 1%).

The Arabica variety is an allotetraploid inbreeder, which means the flower contains both sexes and can therefore self-pollinate, unlike the Robusta tree, which has to be bred with two trees. It is by virtue of good fortune - or happy coincidence - that the tree that first made its way to India and then to Amsterdam was of the Arabica variety and not Robusta. The subsequent spread of coffee around the world would have been nearly impossible otherwise. Over the years, mutants, or variations, to the Arabica tree have emerged. Today there are some 50 plus variations, called cultivars. The first identified was the bourbon cultivar, distinguishing the tree from those cultivated on the island of Reunion. The trees coming from Yemen seeds are recognized as the original type, or typica. These two, Arabica Bourbon and Arabica Typica, are nearly identical and impossible to ascertain from herbarium specimens. Both are considered heirloom varieties that are most prized for flavor quality.



After the rainy season the coffee tree bursts into small white blossoms that smell like Jasmine. As these blossoms are pollinated the petals fall away and a cherry forms. Within each cherry there are usually two seeds, lying side by side, that cause the flat part of the coffee bean. Occasionally, only one seed forms, creating a smaller, rounded seed called a peaberry. Every now and then, three seeds form, one growing into another creating a shell like bean called a mother bean. Regardless of the number of seeds inside, they are all encased in a slimy substance called mucilage. This layer is, in turn, surrounded by the fruit of the cherry and, of course, the skin.

The processing of the coffee cherry involves getting rid of all the layers around the seed itself. It is here that we make our first step from conventional coffee to specialty coffee. For much of conventional coffee history, quality was defined by the cleanliness of the preparation from cherry to bean. It was generally accepted that



Full Wet Process coffee drying on patio.

good coffee was clean coffee, free from off flavors that could result from processing. Professional coffee tasters were skilled at detecting tainted characteristics due to processing and rewarded growers for clean, well processed coffee beans. The method generally preferred was the "**full wet**" method of washing the fruit from the beans and evenly drying them on patio beds until they were of uniform moisture. If the process is done correctly the coffee beans will display a clean bright citrus acidity of fresh lemon. This is known as "good acidity" in the conventional coffee trade.

However, the implementation of full wet processing throughout the global coffee growing community faces two significant hurdles: the first is the abundance of fresh water; the second is the investment in the necessary infrastructure in the form of wet processing mills. Certain countries invested heavily in such infrastructure, such as Colombia and Costa Rica, and were rewarded in a premium for their clean coffees, whereas countries such as Brazil competed for lower prices rather than quality. This method also tended to favor estate grown coffees as the landowners were more likely to receive the necessary financing to invest in infrastructure improvements. The

development of small farmer cooperatives in recent years has mitigated this to some degree.

By having a uniform method of processing, the coffee trader focuses on any defects or taints that may negatively impact the coffee's flavor. This defect/taint-free coffee is delivered to the roaster, who must then tease out a roast profile based on its terroir - a particular challenge especially when considering the similarity of growing practices among estate-grown coffee, many of which use similar fertilizer, agro-inputs, and little to no shade cover. This leads to few environmental variations in terroir beyond elevation and rainfall. The result is a coffee that is clean, defect free and uniform but lacking any real distinction. The premise here is the absence of bad equals good - or at least not rejected by the roaster. Terroir *does* have a positive effect on coffee - but only when the actual environment the coffee is growing in reflects real biodiversity in flora, fauna and growing techniques - a fact that small farmer cooperatives have capitalized on.

A new generation of coffee aficionados, however, is throwing the old rules out. Bringing the same sensibilities that brought back the bacteria to make sour beer, today's specialty roaster is rewriting what makes coffee good. Processing methods that in the past were considered rudimentary and tainting the coffee's flavor are now intentionally being utilized to alter the coffee's flavor in the hopes of creating distinction - something that stands out on the cupping table. Something special.



First, a discussion about defects and taints is in order. Defects are things that are recognized in the industry as anything that negatively impacts coffee quality. Things like over-ripened or under-ripened cherries, black beans, sour beans, sticks, stones, insect-infestation, disease, etc are all universally understood as defects. Taints are variables that impact the flavor quality. Things like mold, ferment, petroleum, past crop, etc., will negatively alter a coffee's flavor. The way a coffee is processed also impacts the coffee's flavor. While wet processed coffee results in clean, uniform flavor, other processing techniques leave recognizable characteristics. These characteristics may taint the flavor but may not necessarily be considered defective. In short, all defects are taints but not all taints are defects.

Historically, coffee traders were trained in “defect cupping” to identify taints and reject coffee shipments that reflected poorly on flavor quality. The coffee would be roasted very light, a “trade roast,” to emphasize acidity to determine crop quality. In this model acidity was a pass/fail criteria: coffee that displayed something other than citrus may be cause for concern. But now taints are not universally understood to be negative, especially when it comes to processing fermentation. The general rule of thumb is if one or two cups in a sample display a taint that is a defect, if they all uniformly display a taint then it is intentional.

In recent years many of the characteristics of fermentation that would have once been considered defective are now thought of as favorable. It is more a question of scale than kind. Cuppers still recognize ferment as a defect, but it is only a defect if it is perceived as being overdone - “over” fermented. This is due to the adoption of “Trade Roasts,” now commonly called Light Roast, as an indicator of quality coffee itself among the current generation of coffee roasters. In this roast style, acidity dominates. For this generation, acidity *is* flavor. The only variation in flavor then would be a variation in acidity - described by a litany of fruit names. The best way to affect such acidity is in post-harvest fermentation.

Post-harvest fermentation involves the revival of a number of processing methods that leave a taint on the coffee’s acidity. The first to gain acceptance was “**natural**” or “**dry**” processed coffee. This method dispenses with the immediate pulping of the cherry by leaving the fruit on the bean to dry in the sun and has widely been used in



Cherries drying on raised beds.

areas where there is a lack of water for processing. In the past, these coffees would have been considered lower value due to the rudimentary processing method (and often uneven results). It is not uncommon today to find producers setting aside a portion of their crop to offer natural processed micro-lots alongside their traditional fully wet processed coffee. Instead of offering it at a discount, it is now a premium.

Similarly, what used to be considered wet processing's cheaper cousin, **semi-wet**, has enjoyed new notoriety as "**pulped natural**" or "**honey processed**." These processes originated in areas where water was plentiful but infrastructure for wet mills was unavailable. Many small producers have long processed their small lots of coffee in this manner, using a small pulping device and laying out the pulped beans out to dry. Depending on how clean the beans are when drying determines whether the technique is "white honey" or "black honey." The amount of fruit left on the bean will cause varying degrees of alteration, for better or worse depending on your preferences. Small producers in the past were encouraged to clean as much fruit from the bean as possible to mimic the quality of full wet processed coffee. Now, certain producers intentionally leave varying amounts of mucilage on the bean to affect the fermentation.



Honey Process (Pulped Natural)

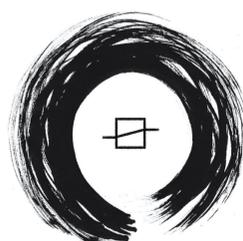
Beyond simply reviving old or primitive methods, there has been an explosion in "experimental" coffees by many estate producers and exporters. If an estate owner didn't want their wet mill to go to waste they could experiment with extended fermentation times or double fermentation. With **double fermentation**, the coffee cherries are allowed to soak overnight - and spend some additional time in the fermentation tank - before going to the de-pulpers. Some prefer this method, since it is a much cleaner way to control fermentation. Others may experiment with **enhanced**, or **co-fermentation**, by adding additives to the fermentation tank, like citric acid to boost the acidity or other ingredients like hops or coconut, etc, to create varied flavor characteristics.

Finally, some growers have experimented with maceration of the cherries before pulping. The idea here is to control the amount of oxygen to the fermenting fruit. This can be done as simply as placing a tarp over a pile of fruit, to sealing the cherries in bags, or even sealing them in containers such like drums. This process is usually described as **carbonic maceration** or **anaerobic maceration** and typically results in a more pronounced winery - or, if overdone, boozy - character.

The flavor characteristics that result from post-harvest fermentation have recognizable taints that modern roasters celebrate with descriptors such as stone-fruit, raisin, strawberry, quince, etc. Whether these characteristics represent a move towards higher quality lies in eye of the beholder, or in our case, the mouth of the taster.

These methods have been successfully employed as a value-added measure for many producers since cupping scores often weigh acidity above all other characteristics. For many, the grail is to create a coffee that cuppers describe as "juicy." With perpetual low prices that have come to define the coffee trade it is no wonder that producers would experiment with ways of adding acidity to boost value. The disconnect is attaching these flavors to terroir or botanic species. Many modern roasters wax poetic about altitude, varietal, and farmer dedication when the flavor attributes are principally derived from post-harvest manipulation. The specialty coffee industry, rather than promoting bio-diversity (which would have the additional benefit of combating climate change), has taken the easy way out. It is the modern equivalent of flavored coffee - a way of taking conventional coffee and imposing a flavor on it rather than highlighting an inherent quality present in the bean. Or, more plainly, to take something conventional and call it "specialty."

But this "specialty" - it's all smoke and mirrors, all puffery. Micro-lots are a false scarcity illusion in pursuit of profit and status. That will no longer do. It's time we make specialty coffee truly special. It's time to forge a *fourth way*.



BODEGA 4

**EQUIPO DE
APLICACIONES**

**NO
FUMAR** 



The Pioneers Muxbal Estate

The synth-wave vibrates my bones while the sonic-generator builds the Gateway field. With the geo-coordinates set, we have a direct link established. Electricity tingles across my body as I step through the Gateway into Mexico2 and greet our coffee partners on the Muxbal estate. Jorge Gallardo is there to meet us and take us up to the farm. We find ourselves in a steep jungle, the colors beyond vibrant, the sky impossibly clear. I have never breathed air as fresh as this. There is something magical about an environment free of industrial pollution it's as if I have stepped into a dreamland. Jorge is a second generation traveler, his parents some of the first pioneers to establish a permanent dwelling beyond Java2 with the development of a stable Gateway.

It was a happy development in many ways. The original travelers on Java2 were already coffee obsessed, bringing in their favorite roasts on a regular basis. When it became clear that they would need to develop a revenue stream to further their habitation on Earth2, exporting coffee was the natural answer. Java2 offered plenty of opportunities for coffee trade, but some folks recognized that there existed other ideal locations now available with the Gateway. The Gallardo family - innovators who established one of the first purpose-built settlements for growing coffee - already knew Chiapas2 showed great potential, but not without requiring collaboration and hard work.

"It was very challenging in those early years since there was absolutely nothing here beyond virgin forest and coffee trees," Jorge explained. "We had to rely on other early travelers to help us build out the initial facilities and living quarters." Slowly the estate began to take shape. "We knew we had something really special with an environment this pristine . . . We



knew the coffee would be unlike what anyone could imagine.”

Jorge himself is part of a multi-generational coffee farming family. Cassilda, his mother, was born on a coffee farm on EarthPrime that was started by her grandfather. Jorge’s mother developed a deep love of ecology early in her life, convincing her father to begin planting shade trees on their 500 acres. She left the farm for university on the East Coast of the United States to study agronomy and there fell into a group of fringe scientists that formed a part of the Ong’s Hat Ashram. Jorge’s father was one of the scientists his mother met at the ashram, Jorge a happy product of the tantric practices used in early travel. With the development of the Gateway, Jorge’s mom realized the coffee farm of her dreams: the outcome of a new reality, where zero industrial farming practices had been established and coffee trees grew in harmony with their environment.

The main house is a simple but elegant L-shaped building consisting of a main room for dining and relaxing, a small kitchen and a wing for individual bedrooms, each with their own bathroom. Wrapping around the building is a covered porch, the back having a spacious area for outside dining - something we did most every day. The style reflected Jorge’s German heritage of purposeful, under-stated design.

In the early years, of course, they lacked the facilities to produce fully wet processed coffee so Jorge became a master of natural process and honey processed coffees, something he remains proud of today despite the farm now having its own wet mill. With the same keen scientific mind as his mother, Jorge has taken his naturals and honeys to extraordinary heights. Beyond simply the purity of the environment, Jorge’s careful approach brings out the intensity of flavor that these coffees possess.

Over time the Gallardo’s were able to cultivate nearly 250 hectares dedicated to coffee production. While coffee trees dominated the area, a rich tapestry of diverse forest cover shaded the trees. Beyond the farm itself, dense jungle took over. Growing up on the farm, Jorge couldn’t resist the occasional forays into the thick forest to swim in a pool under a waterfall. Sometimes he would follow the river to Lake Hali. Beyond it, just as the travelers in Java2 discovered, Jorge once came across a monumental structure - an abandoned Maya-like city with large pyramids flanking a large center courtyard. Despite being drawn to the structure, he never entered the city. He didn’t want to meet the same fate as those who disappeared in Java2.



After another full day spent exploring the farm we all enjoyed a fabulous meal prepared from the bountiful gifts of Mexico². Our conversations bled deep into the evening as the night sky descended on us, a blanket of stars so thick and luminous one could almost reach out and touch them. It's no wonder our ancient civilizations gave so much attention to *Astronomy*. From behind his pallid mask Jorge couldn't resist a story to entertain us, enthralling us with a play he learned from Java² about the unspeakable - a whisperer in darkness - that while Earth² may be empty of humans, it was not uninhabited. The abandoned monuments stand as a sign of the king, who rules over the invisible ones. Something awoke in me, like an unremembered dream, as he recounted the unheard voices calling travelers to their doom. Sadly, we never heard the second part of the play. The hour was late and so we all bid goodnight to our host and retired to our quarters.

Spending even just a short time here on Earth² makes me realize what a scourge humans are to our world. Despite the increasing consequences of climate change,

the last few decades have been enormous steps backward. Everyone talks about sustainability, but we all know that is an empty term. Each catastrophe reaffirms itself as the new normal. Experiencing what our world could be, without humans mucking it up, is revelatory - but I wonder what it would take to make this happen on EarthPrime. No one in our world even seems to care about how bad it's become. We can protest corporate greed all we want but clearly, we are the problem. If there is a solution it isn't coming from us.

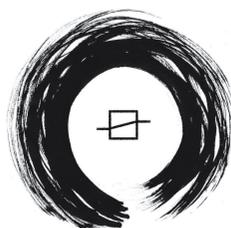
I was greeted with a fitful, restless sleep, no doubt spurred by Jorge's tales. The Gateway was set to open early the next day and I needed a good rest before our return but sleep eluded me. I tossed and turned, feeling the tug of the stars. I wanted the night sky to pour into me again, so I roused myself, got dressed, and stepped out into the cold night, eerily quiet save for the hoots of owls in the darkened trees. I found myself wandering away from the safety of the compound and followed the river, the stars above so bright as to illuminate my way. Directly above me was Sirius, fixed and consequent. I felt the pull of the jungle, an unspoken urge calling me from the dark depths. Soon I was deep in the forest, drawn by a silent but powerful yearning - a feeling of discovery of the appalling truth. Despite the many warnings not to wander astray, overcome by madness, my will no longer my own - how could I refuse when the stars were right?

The river guides me ever further into the unknown. Now, the stone monument rises above the jungle in the light that never warms. I am pulled along by an unspeakable force that I dare not question. The stones loom so large ahead that they block the night sky. The city beckons me, I step onto the polished stone, the path leading me to a courtyard among the towers. I arrive at a dais in the center of the platform. On the dais is a black stone knife. I take it in my hand and suddenly find myself in a room, *two doors barred and windows barred. One door to let me in, the other just mirrors it. It is a nexus of a crisis and the origin of storms. Just the place to hopelessly encounter time and then . . .*

"Who's there?" I cry out.

A figure draped in yellow tatters emerges from the shadows.

"Call me Destinova."



*Let the red dawn surmise
What we shall do,
When this blue starlight dies
And all is through.*

