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Owner, Espresso Vivace and your host at **Schomer's Table@Lucidcafé**

Return to Schomer's Table

On The Table #1

Dear cyber reader, here we are hunched over our glowing monitors, me with keys clicking like a wood spider trying to crawl out of the tub, you perhaps holding a steaming cup of coffee, and both of us engaged by this new column in the wild publishing frontier of the World Wide Web. Our little corner of this cybergalaxy will be totally dedicated to improving the world's espresso coffee. My charter for this new column is to educate you on espresso techniques. This is why Robin invited me onto his coffee cybersite, **Lucidcafé**.

My espresso techniques are hard won. I established a concept by traveling to Northern Italy in 1989 and again in 1990. Then I built upon what I learned with eight years experience, brewing over and 200,000 espresso coffees at my Espresso Vivace locations in Seattle.

My writing style until now has been technical prose, precise but evocative in its own way I suppose, and I have published at least 40 articles in Cafe Ole, Specialty Coffee Retailer, Fancy Foods, and Coffee Talk, all fine magazines dedicated to the bean. I have written a book and created a video, all dedicated to teaching the world the secrets of fine espresso.

But, dear glowing reader, I am tired of techno-prose. More and more little irreverent bursts of satire have been popping up in my seamless prose, as welcome as dandelions sprouting on a pool table by my editors in the main stream press. I have even been caught punning, word play: the literary equivalent of KA-DUMP-BUMP. Like the bandit of old it is time to move to the frontier. Into the lawless wilds of the web for me.

Seduction

For over four hundred years, since the Turks first roasted the coffee bean, people have been seduced by its earthy-sweet aromas. Alas, each effort to conjure the aroma into a cup has been met with very limited success, or outright disaster. A very long string of eccentrics, mostly aristocratic inventors with a smattering of royalty mixed in, have dreamed up exotic devices to brew coffee.

From cold water infusion to the dreaded American Percolator, each

method/device has fallen short of creating a liquid coffee that tastes just as good as freshly roasted coffee smells. To romance the aromatic flavors the Italians correctly deduced in the mid 19th century that pressurized brewing water might preserve more flavors into the cup. They were right.

From 1906 with the debut of the Bezzera "Ideale" machine at the Milano Fair, Italians were using steam pressure, direct from the boiler to brew Cafe Expres. Coffee made one serving at a time, or expressly for a customer.

In 1947 the Gaggia company of Italy patented a spring piston device to achieve pressure without exposing the coffee to boiling water and the cream coffee, caffe espresso, was born. So our cuisine is only about 50 years old by my method of dating it. The lack of standard practice in espresso preparation is related to the short history of the espresso machine.

Betrayal

But the aromatic promise of freshly roasted coffee was still eluding the Italians. No one was brewing a cup of coffee that tasted exactly like the ground coffee smelled. They were, and still are, lost in several of the interrelated factors involved in the process.

In all the Italian bars I documented from Rome to Trieste, they grind the coffee in advance, so the bar owner could control the dosage using a dosing hopper on the grinder. Coffee flavors were exposed to air in this process. The flavors were oxidizing. And of course, this created an acrid bitterness, and less crema in the cup.

In 1959, they invented the heat exchanger to combat foul water causing build-up in the boilers. In essence it is a small tube running through the large steam boiler, heating very small quantities of water very quickly. Heat exchangers are unstable, heating water up in the steam boiler to as high as 230 degrees F. and trying to cool it back down to a stable temperature of around 200 degrees regardless of volume served. It is a ridiculous, outdated idea, and unfortunately it is the operating principle of every commercial espresso machine sold today with the exception of one brand: La Marzocco. The coffee responds to temperature variation during brewing with a sour bitterness if temperatures are too low, or mere flatness as flavors are incinerated by water over 205 degrees.

The other surviving schools of coffee making were the English Biggin and the French Press. Both fine, non pressurized brewing methods that survive today as the drip cone and of course the French Press. As they rely on a long saturation period without the use of pressure, extra acids are leeched into the brew, which attack the unstable aromatics flavor

compounds and sort of erase them. (They are made bitter but in such low concentration it may not reach out and grab your tongue like bitter espresso.)

So in each case the finest varietal flavors, and the natural carmelized sugars present in a master roast are turned into bitter compounds by imprecise control of brewing variables, oxidation, and on and on. This culinary tragedy plays out millions of times a day the world over until it is the norm. Coffee is bitter! Oh wretched muse where is my inspiration? "Stick your nose in the hopper boy, fresh ground coffee still smells great. Pick your self up and go to work."

Romance

Caffe Espresso: a polyphasic colloidal foam made by forcing pressurized brewing water through finely ground, tightly packed coffee.

What? Polyphasic: having many phases of existence, changing physical properties over an interval of time. Colloidal: having the property of particles suspended in liquid. Foam: a liquid containing trapped gaseous matter in the form of bubbles.

Now the real neat thing is this. This foam, called crema, holds very delicate flavor compounds in suspension just long enough for you to enjoy them. As the foam, or crema collapses in the cup the most delicate flavors are released into the air or immersed into the heavier liquid below, where they perish due to the naturally acidity present in roasted coffee.

Espresso exists only for about a minute, changing wildly in your little cup all the while. So what kind of a fool am I?, doing all this work, dedicating my life for a one minute romance whose promise turns bitter at the slightest offense. Well, there is still the lingering aftertaste. An espresso coffee permeates the spaces between your taste buds and lingers. Sweet remembrance of coffee, fading slowly like the waning September evening light while trolling for Rainbows on Lake Desire.

So that is my daily dance. A technical waltz, repairing grinders, checking freshness, tuning machines, replacing clogged water filters, and forever cajoling my staff into higher and higher levels of excellence in our aromatic pursuits. And for what? World wide fame, fortune beyond my needs, and a lifetime spent immersed in beauty? OK, I'll do it.

A Technical Waltz

So should you want to join me in pursuit of the bean I will give you any knowledge I have gleaned from experience. Your problem will be

how to begin.

My little cyber site will have a permanent section, **Factors in a Perfect Cup**, standing bravely by even if you should boot up at 3:00 in the morning. I ask you to go through each factor and line up your commercial espresso program with the information you find there. (Forget home espresso, use a French Press and go to The Cafe for espresso.)

Then compare the espresso pour out of your machine with the four photographs of a perfect pour in the Extraction Rate section of the book, or on line, but color may not be true on the computer. In espresso, color is information, and a good pour should hold a deep red brown color up to two ounces volume for the double shot. Any mistake you make will result in a sickly whitish crema, indicating excess acids creeping into your cup.

At my Factors site I offer cyber versions of each factor, pared down to the minimum information, without explanation. From time to time my monthly column here at Lucidcafé will expand a factor into great detail for a total understanding. But of course, everything is available in my book **Espresso Coffee: Professional Techniques** for just **$27.95** plus shipping and handling. Operators are standing by....(Well actually voice mail at 206.860.5869).

Conclusion

So what can you expect even if you are perfect? Living like a plumber, crawling under counters adjusting pumps, cleaning clogged drains, and generally pampering a host of exotic machinery, then popping up to rhapsodize on perfect cappuccino with a good customer. For that is the life of as an espresso professional, romance and scraped knuckles. What rewards can you expect in the cup, where are we now in the art?

We have created an espresso that tastes exactly like fresh ground coffee smells about one cup out of five, to be honest. I am happy about 20% of the time. What stands in the way you might ask before you wreck your life in pursuit of perfection? Temperature variation during brewing. The temperature of the brewing water does not hold to a stable value as a shot is drawn, a 25 second event. Also we see variation over a longer time period as the boilers heating elements cycle on and off.

Working with La Marzocco we have gotten temperature variation down to a four degree range which means that your coffee sees a temperature error of no more than +/- 2 degrees F. around your chosen target regardless of volume served. What I think we need to improve the number of perfect cups is a total variation of +/- .5, yes one half a degree variation in brewing water temperature whether you

are operating in a continuous manner or making one shot per hour.

Well as you might have guessed we are working on it. And you now know where to find out if we achieve it. Right here at Lucidcafé dot com. Be there.

Lucid: a high degree of mental clarity, Café: a communal gathering place. Ergo, Lucidcafé: a communal gathering place wherein a high degree of mental clarity is found...

David Schomer