
Java Man

How caffeine created the modern world.

(make this bigger)

by Malcolm Gladwell

The original Coca-Cola was a late-nineteenth-century concoction known as Pemberton's French Wine Coca, a mixture of alcohol, the caffeine-rich kola nut, and coca, the raw ingredient of cocaine. In the face of social pressure, first the wine and then the coca were removed, leaving the more banal modern beverage in its place: carbonated, caffeinated sugar water with less kick to it than a cup of coffee.

But is that the way we think of Coke? Not at all. In the nineteen-thirties, a commercial artist named Haddon Sundblom had the bright idea of posing a portly retired friend of his in a red Santa Claus suit with a Coke in his hand, and plastering the image on billboards and advertisements across the country. Coke, magically, was reborn as caffeine for children, caffeine without any of the weighty adult connotations of coffee and tea. It was, as the ads with Sundblom's Santa put it, "the pause that refreshes." **It added life. It could teach the world to sing.**

One of the things that have always made drugs so powerful is their cultural adaptability, their way of acquiring meanings beyond their pharmacology. We think of marijuana, for example, as a drug of lethargy, of disaffection. But in Colombia, the historian David T. Courtwright points out in "Forces of Habit" (Harvard; \$24.95), "peasants boast that cannabis helps them to quita el cansancio or reduce fatigue; increase their fuerza and ánimo, force and spirit; and become incansable, tireless." In Germany right after the Second World War, cigarettes briefly and suddenly became the equivalent of crack cocaine. "Up to a point, the majority of the habitual smokers preferred to do without food even under extreme conditions of nutrition rather than to forgo tobacco," according to one account of the period. "Many housewives... bartered fat and sugar for cigarettes."



The original Haddon Sundblom advertisement.

Even a drug as demonized as opium has been seen in a more favorable light. In the eighteen-thirties, Franklin Delano Roosevelt's grandfather Warren Delano II made the family fortune exporting the drug to China, and Delano was able to sugarcoat his activities so plausibly that no one ever accused his grandson of being the scion of a drug lord. And yet, as Bennett Alan Weinberg and Bonnie K. Bealer remind us in their marvellous new book "The World of Caffeine" (Routledge; \$27.50), there is no drug quite as effortlessly adaptable as caffeine, the Zelig of chemical stimulants.

At one moment, in one form, it is the drug of choice of café intellectuals and artists; in another, of housewives; in another, of Zen monks; and, in yet another, of children enthralled by a fat man who slides down chimneys. King Gustav III, who ruled Sweden in the latter half of the eighteenth century, was so convinced of the particular perils of coffee over all other forms of caffeine that he devised an elaborate experiment:

A convicted murderer was sentenced to drink cup after cup of coffee until he died, with another murderer sentenced to a lifetime of tea drinking, as a con-

trol. (Unfortunately, the two doctors in charge of the study died before anyone else did; then Gustav was murdered; and finally the tea drinker died, at eighty-three, of old age--leaving the original murderer alone with his espresso, and leaving coffee's supposed toxicity in some doubt.)

Later, the various forms of caffeine began to be divided up along sociological lines. Wolfgang Schivelbusch, in his book "Tastes of Paradise," argues that, in the eighteenth century, coffee symbolized the rising middle classes, whereas its great caffeinated rival in those years: cocoa, or, as it was known at the time, chocolate, was the drink of the aristocracy.

"Goethe, who used art as a means to lift himself out of his middle class background into the aristocracy, and who as a member of a courtly society maintained a sense of aristocratic calm even in the midst of immense productivity, made a cult of chocolate, and avoided coffee," Schivelbusch writes. "Balzac, who despite his sentimental allegiance to the monarchy, lived and labored for the literary marketplace and for it alone, became one of the most excessive coffee-drinkers in history."

Here we see two fundamentally different working styles and means of stimulation: fundamentally different psychologies and physiologies." Today, of course, the chief cultural distinction is between coffee and tea, which, according to a list drawn up by Weinberg and Bealer, have come to represent almost entirely opposite sensibilities.

Coffee Aspect Tea Aspect Male Female Boisterous Decorous
Indulgence Temperance Hardheaded Romantic Topology
Geometry Heidegger Carnap Beethoven Mozart Libertarian
Statist Promiscuous Pure

That the American Revolution began with the symbolic rejection of tea in Boston Harbor, in other words, makes perfect sense. Real revolutionaries would naturally prefer coffee. By contrast, the freedom fighters of Canada, a hundred years later, were most definitely tea drinkers. And where was Canada's autonomy won? Not on the blood-soaked fields of Lexington and Concord but in the genteel drawing rooms of Westminster, over a nice cup of Darjeeling and small, triangular cucumber sandwiches.

All this is a bit puzzling. We don't fetishize the difference between salmon eaters and tuna eaters, or people who like their eggs sunny-side up and those who like them scrambled. So why invest so much importance in the way people prefer their caffeine? A cup of coffee has somewhere between a hundred and two hundred and fifty milligrams; black tea brewed for four minutes has between forty and a hundred milligrams. But the disparity disappears if you consider that many tea drinkers drink from a pot, and

have more than one cup. Caffeine is caffeine. "The more it is pondered," Weinberg and Bealer write, "the more paradoxical this duality within the culture of caffeine appears. After all, both coffee and tea are aromatic infusions of vegetable matter, served hot or cold in similar quantities; both are often mixed with cream or sugar; both are universally available in virtually any grocery or restaurant in civilized society; and both contain the identical psychoactive alkaloid stimulant, caffeine."

It would seem to make more sense to draw distinctions based on the way caffeine is metabolized rather than on the way it is served. Caffeine, whether it is in coffee or tea or a soft drink, moves easily from the stomach and intestines into the bloodstream, and from there to the organs, and before long has penetrated almost every cell of the body. This is the reason that caffeine is such a wonderful stimulant. Most substances can't cross the blood-brain barrier, which is the body's defensive mechanism, preventing viruses or toxins from entering the central nervous system. Caffeine does so easily. Within an hour or so, it reaches its peak concentration in the brain, and there it does a number of things--principally, blocking the action of adenosine, the neuromodulator that makes you sleepy, lowers your blood pressure, and slows down your heartbeat. Then, as quickly as it builds up in your brain and tissues, caffeine is gone--which is why it's so safe. (Caffeine in ordinary quantities has never been conclusively linked to serious illness.) But how quickly it washes away differs dramatically from person to person. A two-hundred-pound man who drinks a cup of coffee with a hundred milligrams of caffeine will have a maximum caffeine concentration of one milligram per kilogram of body weight. A hundred-pound woman having the same cup of coffee will reach a caffeine concentration of two milligrams per kilogram of body weight, or twice as high.

In addition, when women are on the Pill, the rate at which they clear caffeine from their bodies slows considerably. (Some of the side effects experienced by women on the Pill may in fact be caffeine jitters caused by their sudden inability to tolerate as much coffee as they could before.) Pregnancy reduces a woman's ability to process caffeine still further. The half-life of caffeine in an adult is roughly three and a half hours. In a pregnant woman, it's eighteen hours. (Even a four-month-old child processes caffeine more efficiently.) An average man and woman sitting down for a cup of coffee are thus not pharmaceutical equals: in effect, the woman is under the influence of a vastly more powerful drug. Given these differences, you'd think that, instead of contrasting the caffeine cultures of tea and coffee, we'd contrast the caffeine cultures of men and women.

But we don't, and with good reason. To parse caffeine along gender lines does not do justice to its capacity to insinuate itself into every aspect of our lives, not merely to influence culture but even to create it. Take coffee's reputation as the "thinker's" drink. This dates from eighteenth-century Europe, where coffeehouses played a major role in the egalitarian, inclusionary spirit that was then sweep-

ing the continent. They sprang up first in London, so alarming Charles II that in 1676 he tried to ban them. It didn't work. By 1700, there were hundreds of coffeehouses in London, their subversive spirit best captured by a couplet from a comedy of the period: "In a coffeehouse just now among the rabble / I bluntly asked, which is the treason table." The movement then spread to Paris, and by the end of the eighteenth century coffeehouses numbered in the hundreds--most famously, the Café de la Régence, near the Palais Royal, which counted among its customers Robespierre, Napoleon, Voltaire, Victor Hugo, Théophile Gautier, Rousseau, and the Duke of Richelieu.

Previously, when men had gathered together to talk in public places, they had done so in bars, which drew from specific socioeconomic niches and, because of the alcohol they served, created a specific kind of talk. The new coffeehouses, by contrast, drew from many different classes and trades, and they served a stimulant, not a depressant. "It is not extravagant to claim that it was in these gathering spots that the art of conversation became the basis of a new literary style and that a new ideal of general education in letters was born," Weinberg and Bealer write.