

Cement and Speed

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Upstate New York where I live near Rosendale in the summer, you find the remains of 19th-century stone kilns in which limestone was burned to a fine powder for cement. Abandoned limestone mines run for miles through the hills. Every so often you find a weathered blue sign by the road like this one:

DISCOVERY OF CEMENT

At Bruceville, Nathaniel
Bruce burned in a blacksmith's
forge some native rock and
discovered cement in 1818.

State Education
Department 1939

Actually, cement was "discovered" in many places and at different times in Europe and North America from the late 18th century onward. And it was not really discovered but rediscovered, because it was used in ancient Egypt as well as in ancient Greece and Rome. This repetition and the centuries of forgetting between its ancient and its modern discoveries seem more than fitting for such a material, mimetic in the following ways: (1) Its modern "discovery" mimes its ancient past; (2) the name given it around 1800 as "cement rock" reminds us today of the obvious yet forgotten wonder of synthetic materials that mimic natural ones; and (3) to be specific, the fact it can be moulded and shaped as liquid stone

allows it to mimic many forms ; as modernist architects such as Corbusier made into a virtual religion. One hundred years ago, this Rosendale cement found many buyers and was famous for its durability. Real rock, we could say. It took 30 days to harden, I am told, was the cement used to build the Brooklyn Bridge, and for a long time it was stipulated in New York State law that a certain percentage of cement used on state freeways had to come from Rosendale. Hard as stone, they said. But Portland cement, patented in 1824 in England and developed in the United States by mid-century, hardened in 30 hours. Not so hard, but it did the job and destroyed the market for the cement from around here. The cement industry disappeared, but the stones of the kilns remain like crumbling altars in the hardwood forests of ash and maple. There are myths as well. People around here say the White House in Washington stores its files in the unused mines that honeycomb the hills.

Cement is made by burning limestone in stone kilns. Andean Indians, however, put limestone in their mouth, not to make cement, but to add to the coca leaves they chew so as to more speedily release the effects for which cocaine is famous. In the mountain peaks above El Bordo in the Cordillera Central of Cauca, Colombia, sits the tiny village of Almaguer, whitewashed adobe huts running along a steep ridge under a blue-domed sky. It was one of the very first mining settlements in the New World, but nobody has mined there in a long time. Indian women sit on the ground there on market day in irregular rows in the midday sun. The sky is dazzling up there and the air bone dry. They are selling coca leaves carried over the hills in woven cloth bags that seem like they will last forever. Next to each bag are cakes of lime to chew along with the coca. Down in the valley, young men in civilian clothes with acne and long hair stop the bus with machine guns, looking for cocaine. They open up your 35-mm film canisters. It is 1976, long before the war started. I'd never even heard of cocaine outside of the dentist's office. When I got off the bus in El Bordo down in the valley on my way to Almaguer, a chubby young man asked me if I was CIA. What was I meant to say? Yes? No? Way up the mountain where the sky touches your face, a strangely dressed man kept following us on the mountain paths, always a few hundred feet behind on those winding trails. Something was brewing up there. But all you need is limestone, a.k.a cement. The coca is everywhere.

When the Colombian government, urged on by the United States in the 1980s, blocked the importation of the chemicals needed to process cocaine from coca, the chemists soon came up with a substitute. What do you think it was? Cement! Soon cement trucks were heaving their way across the mountains and down into the jungle. An army colonel said not so long ago there was enough cement carried into the Putumayo to pave that enormous province several times over. Since the army controls all the checkpoints, the colonel must know what he's talking about. Since the army controls all the checkpoints, you would think maybe they would have stopped all that cement. But who can argue against cement, the backbone of modernity?

Cement is intimately related to water. It needs water to harden. This seems counterintuitive. The 1st-century Roman architect and builder Vitruvius understood stone as composed of four elements: air, earth, fire, and water. As a builder, he wanted a substance like stone but malleable. When you stop to think about it, this is like something out of a fairy

tale: *like stone but malleable*. Smashing up limestone into small particles and mixing them with sand was not good enough, for there was neither unification nor hardening. That could only come with intense heat, which left the stone porous: "The water and air, therefore, which are in the substance of the stones, being thus discharged and expelled, and the latent heat only remaining, upon being replenished with water, which repels the fire, they recover their vigor and the water entering the vacuities occasions a fermentation; the substance of the lime is thus refrigerated and the superabundant heat ejected"¹. I quote at length because this is such a vivid example of the ancient four-element theory of being that preoccupied the pre-Socratic philosophers. It is vivid in that it makes stones seem alive and capable of amazing metamorphoses once they have been processed by man, pulverised to a powder and heated. You start with stone. You make a powder. And then in the process of building, you add water and end up with a new form of "stone" in accord with the shape desired. It sounds like magic but we call it technology.

In Guapí, on the coast, cement buildings stand out as signs of the modern and the good. What a contrast such buildings make with the older wooden houses! Cement comes on oceangoing boats from Buenaventura, while lumber comes from the trees upriver, although wood is becoming scarcer and certain types of hardwood, such as *chachajo*, are almost impossible to find along the mid- to lower reaches of the Río Timbiquí, for instance. The older wooden houses in Guapí and Santa Bárbara are often huge, a few almost the size of a city block, two tall stories in height. Inside, the houses are dark and musty. The floor creaks underfoot. The walls between bedrooms are opaque to head level and then become slats to assist the circulation of air, such that at night when a light is burning, striated rectangular shadows like a Piet Mondrian painting splay across the interior walls and ceilings and out onto the street. When you sleep, you hear the person in the next room sleeping, an occasional creak or a whimper. The staircases are the steepest I have encountered, steeper than the 17th-century houses in Amsterdam, for instance. Most wooden houses are badly in need of repair. Rarely are they painted. The colour is a patchwork quilt of greys and browns, of old and new planking wherever a new side has been built or a patch made. The planks are not tightly joined, one next to the other, like weather-boarding. Instead, their edges abut one another, leaving a slight gap. As you walk the street, it seems like the walls of the houses are passing you on either side as a moving series of verticals and horizontals, depending on how the planks have been nailed. Improvisation is ubiquitous, each wall a different mosaic. This suggests flexibility, which is indeed true, as put to the test by earthquakes, which frequent the coast and are more destructive of cement buildings.² The downside with wood is fire, which swept through Guapí in 1933 and 1967, burning much of the town to the ground, and devastating fires like this have occurred in all the towns of the coast.³ But cement is fire resistant and lasts far longer than wood. In 1955 a new batch of Catholic priests trained local men in reinforced concrete construction and built a huge Gothic church with flying buttresses and a lacelike cement brick superstructure for ventilation. Like all cement buildings here, it has become mottled with fungus so it seems even more worn down by the tropics than the older wooden buildings.

After the church was built, the cement workers went out to sea in their pea-green boats where they built the prison on the island of Gorgona. Then they went back to Guapí and built the Banco de la República.

the church

the prison

the bank

Every so often in Guapí, I come across an elaborately carved wooden bedstead ; made by the prisoners in Gorgona years ago. This is no bed for mortals but for gods. The carving craves wood, eats wood, makes love with the woodenness of wood till it fuses with it and becomes one with the wood it chisels at and deflects into flower petals and whales by whose side scamper dolphins across ocean waves lit up by flights of angels. This is the ancient art of mimesis, with a vengeance, wood on the move, woody metamorphoses speaking poetry as the prisoner with all the pressed-in time in the world eases his chisel softly round the bends. In my friend's cement house with its grand echoes and hard tiled floor, her bed is the one *objet d'art* of which the house can boast. When you open the bedroom door, the bed radiates, like lifting the lid of a pirate's treasure chest.

This cement that is so expensive and comes from so far away, from the interior and sometimes from neighbouring countries, is also poured out in immense quantities for landing stages and steps for canoes and larger boats. You only have to see how treacherous a muddy bank becomes after a few weeks of use to appreciate solid cement underfoot. Slimy black river mud and mottled cement unite in one happy interface. One descends from concrete to mud and one ascends from mud to concrete as part of one's amphibious being.

Even though there are hens here, eggs come from the interior of the country, like cement. The hens lay only if fed corn, and that's not easy to come by. On the cement landing steps at Santa Bárbara, I see black hens in crates unloaded from Buenaventura. And here I am in the bosom of nature, together with imported hens.

It will take 400 bags of cement, each weighing 100 pounds, to replace the gravel steps on either side of the church on the hill at Santa Maria. One dugout canoe poled upstream by two men can carry ten bags from Santa Bárbara and takes two days of Herculean labour.

Speed: Talking with kids at Guapí, I was amused to realise the way they referred to motorised river craft was by a number ; *nueve nueve, quince, veinte y cinco, setenta y cinco* ; meaning the horsepower of the outboard motor hitched to the stern. There are many canoes still with the beautiful pointed ends fore and aft, but the squat-ended, high-sided dugout with the motor screwed astern is now a major feature on the rivers, despite the fabulous expense of the motors and gasoline, which, like cement and black hens, come from the interior.

At the wharf at Santa Bárbara, launches come in at great speed. Their bows point way up in the sky. The stern is sunk deep in the water. The *motorista* cuts the motor and puts

the boat in a tight curve as it settles into the water and coasts to the cement steps. Often the boat carries a government employee or a small group of such. The ones from the interior assume a look of superiority that belies their trepidation as regards the new world enclosing them, as the launch loses speed and nature reasserts itself in a tepid, rocking motion and the clammy heat gels. With its supernaturally endowed speed across the surface of the water, this boat is their sign of power, their privilege, and their escape from all that now threatens. The motors and their speed seem to be saying, "Look! Out there mud and mangroves, mosquitoes, rain, and unremitting poverty, a forlorn world buried in amphibious horror! But with me and my birdlike speed skimming the waters, you are not only removed from the raw nastiness of nature. You turn it into a spectacle like the view from a train window. What does place mean now? Place has become an unravelling ribbon of time, and the ribbon is yours to put in your pocket as a trophy".

But the motors lie. The godlike promise of speed's glory is torture. The human body disintegrates into a shuddering mess, and the rain darts like hot needles into your eyes so you are forced to look down at your feet all the time. Passengers become inert matter, turned inward into their agony, waiting with animal-like patience for the journey to end. Your actual physical body that you thought you knew so well becomes a dumb insensate part of the surge of grey river water. Yes, the motors lie. Far from being removed from the raw nastiness, far from having nature as spectacle, you enter deep into the shuddering resistance of nature. Otherwise, life is slow. In fact, it's stopped. Maybe you could even say life here is going backward. Think, therefore, what it must be like, to hurtle through the elements like this, defying basic laws of physics and God. Prometheus unchained. Then the motor cuts and it's all over. The boat sinks down with a sigh. You hear the sound of the river once again. You stagger up the steps in the sun's steamy glare, a few greetings, and it all comes to a standstill. The waiting that is life begins once more. A meal of rice and warmed-up tinned tuna, if you're lucky, and a night of Peruvian TV adulating the president, the white race, and explosively fragmented ads for beer in the English language. Then the generator cuts out at 10.30. No postal service. No telephone service since many months, and even when there is one, there is none, it being so inefficient.

But speed. Yes! That we do have. It's addictive, the poetry of the gods, bow lifting, the spray cascading in the fan-shaped wake, wreaking havoc on lesser vessels, the noise preventing all speech, the thudding on the hull as we skip from wave to shuddering wave out in the open estuary. All this is new. And escalating. Like the arms' race or the 20% inflation the country's suffered under for as long as I can remember ; inflation being the central bank's way of raising taxes in a country where the rich are untaxable (but not unkidnappable). No sooner have we gotten used to the 9.9, than it's the 15 horsepower, and after that the 30, and so on it goes now to 200 horsepower, and instead of just one huge motor, you install two! When I first travelled from Guapí to Santa Bárbara in 1971, and felt very lucky to arrive alive, the trip took the best part of a day with a 15-horsepower motor. Now in the store owner's double-engined open boat carrying twelve passengers, all without life jackets, it can be done in one hour! This must be the closest thing to flying possible, while still technically in the water.

Farther north, the Embera Indians of the Chocó and southern Panamá have stories of phantom *gringo* boats with zombie crews, creatures of diabolic realms that spell great danger. Shamans make models of such boats to use in curing séances. The model works by sympathetic magic. In copying the phantom boat, you get its mysterious power. Now with the benefit of our 200-horsepower engines, we too have become zombies stock-still in our faster-than-light phantom *gringo* boat.

As we head out of the estuary, the hull thumps on the waves. The boat shudders with each concussion. Sometimes we surf on the waves as we round the point near the reef. Big-beaked birds fly in formation low over the sea under the canopy of a grey sky. We are on parallel tracks for a while, the birds and us. We move in a straight line, but the horizon has a different trajectory. It circles us, leaving the coast a tiny smudge without the slightest distinguishing feature. We are no less empty than the emptiness we smash through.

Why the speed? Is it required for some practical reason, or is it for the thrill, which turns out to be an ordeal, the thrill of being modern as well as the thrill of speed itself? Once you've tried to sort through this, you'll find you're asking a quite different question. Especially on the coast, where life is so slow. Speed takes you to the very opposite of speed. It takes you to the river's own power, to two women in white dresses standing precariously balanced, their bodies tensed and slightly bent, poling downstream a dugout canoe filled with green plantains like giant fingers beautifully bunched amidships, manoeuvring their slender vessel through rapids. At times the canoe moves like a shot from a gun. One slip and it's all over. Other times it seems suspended as on a glass surface. Like insects, its long poles scratch the surface, and the whole scene seems to move with them and not just the canoe. The river slips past and takes slices of the world with it. A movie screen. Or it may be way out in the calm of the estuary, paddles slowly dipping as if there's all day and tomorrow too, slipping across the surface of deep muddy waters.

But the vessel was once even stiller and slower, standing upright in the forest around Santa María where the best and last trees for canoes exist. It was cut down by hand, hollowed out and roughly shaped by axe in the forest where it lay, then dragged to the village. Enter the *labrador*. The woodman. There are around 15 in Santa María. For this mining town is also a world of wood. Even the basic tool of mining is made of wood: the *batea* in which Lilia's newborn now lies, just the eyes peering out of swaddling clothes. The wood for the *batea* comes from what is left over in the making of a canoe, and *bateas* come in two sizes. The larger is for panning gold. The smaller, more ellipsoid but still basically a saucer of wood, is used as a baby's cradle. So:

trees
 canoes
 gold
 child
 a circle or an ellipse

The *labrador* uses nothing but an axe, a machete, and two kinds of small planes, one for flat surfaces and one for the interior curves. Nearly all craft on the coast have been made this way, tree trunks become boats, every tiny angle and indentation bearing the mark of the hand of its maker. Vicente Angulo looks at me young and strong as he puts the finishing touches with nothing more than a machete to a beautiful paddle seven feet long, made of one of the hardest woods, *chachajo*, his face in a grimace, belied by an expansive smile. "You've no idea how much work it is with an axe. How it gets to you, aching deep in your body. How much we'd give for a chain saw". But there is only one power saw in the village. The man who owns and lives off it is very thin, very nice, has a crumpled leg, and his tumbledown little house on stilts is stuck way out beyond the tail end of the village. In fact, he is not from the village. He comes from way downriver. How much *chachajo* or *palo de mulato* for canoes would there be left if everyone here had a chain saw?

I met a man who owned a sawmill. It was way downriver in the estuary where the bigger boats dock against piles of dark weathered lumber, one plank slipped flat on top of the next so as to form an improvised wharf from a mountain of rotting wood. He was a big man with a generous nature who had long ago given up physical labour. His wife and children lived in Cali, and he stayed most of the time with his mother, who lived on the river in an empty two-story wooden house with a steep staircase and creaky interiors. For him, the coast was memories and a place to exploit. His existence here was an enforced one, sweetened, no doubt, by the fact he had one of the better-paying "jobs" with the municipal administration as well. What surprised me was that while he could identify cut lumber easily, he could not identify the living trees from which the lumber came.

Men paddle standing up with those long paddles like Vicente Angula was making. Women's paddles are half as long, and they paddle with long, slow, elegant strokes, sitting on tiny wooden seats with tiny backrests. Sometimes you see them paddling with a baby at the breast.

There would be no 200-horsepower motors without cocaine, and cocaine is what allows cement to rise in the streets of the coastal town like dream castles. I cannot think of anywhere else in the world ; or at least in my world ; where speed can actually be experienced like this: *fulsomely*. It is common enough to hear of speed in relation to electronic mail and transfers of cash, air travel, and fax machines. Yet such speed remains at a stage of remove. The human body remains encased in a standard environment as in a capsule. Not so, however, on the water with two giant Yamaha outboards at full throttle.

A Lesson in Natural History: It was only on the coast that I became aware of the change in time. The incoming President of the Republic, a man named César Gaviria, had at one shot introduced neo-liberal economic policy and US-inspired daylight savings time to relieve pressure on the nation's electricity supply, and somehow, with the defeat of Marxism and the triumph of free-marketeteering dogma, this all seemed tied into the arrival of the gold-digging Russians. As the machinery clambering up the Río Timbiquí indicated, it was the time of the "economic opening", President Gaviria's *apertura económica*. So, we ask, was this bold attempt to change the time the last flicker of the authoritarian state surrendering

its power to the market? Or, better still, did it not illustrate the thesis that the free market is only free to the extent that the state legislates basic categories of experience, including the Kantian ones of space, cause, and time itself?

The radio, TV, banks, government offices, and commercial airlines fell into line. But on the coast, most people, including the church in Guapí and the schools there, followed the old hour so that there were two times ticking away an hour apart and even more opportunity for creative games with time. And when people tried to confirm which time was meant, they would ask, "*Hora Gaviria* (Gavirian time)?" ; testimony to a love of confusion no less than admiration for the man who had tried to change time. For even behind the anonymity of the clock face and its immaculate working lurks the invisible hand of a person, but it needs a joke to reveal its unconscious presence. To cap it off, there was a rumour along the river that Gaviria himself was a partner in the Russian mine and had visited there at least once by helicopter.

Changing the clock for daylight savings time is routine in many First World countries. It means adjusting the workday more finely to the daylight hours, in other words, more efficiently exploiting the energy of the sun so as to more efficiently exploit the energy of people. On the coast this change created two clocks that confused time itself, locked into the heady drama of the cosmic struggle between a mere man and the sun itself, or at least between the modern state and our ancient friend, the sun. What is at stake in this drama is the domination of nature, including man's inner nature, the sense of time in relation to the dawn's spreading light. "The sun gives without receiving", says Bataille.⁴ Speed, gold, and cocaine all partake of that logic, that love of giving over and over again without restraint. But only divers do it right. Blood pours from their noses. Their life is on the line. The risks are huge. The rewards might be huge too. Their hands become their eyes as they pull the sun down through the water into the opaque green murk at the bottom of the river and so transform it into gold.

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NOTES

1. Stephen Sass. *The Substance of Civilisation: Materials and Human History from the Stone Age to the Age of Silicon* (Arcade, 1988, New York), p. 130; R.H. Bogue, *The Chemistry of Portland Cement* (Reinholt, 1955, New York), p. 5.
2. Gustavo Wilches-Chaux, H. Meyer and A. Velásquez. "La Costa Brava". In (ed.) Pablo Leyva Franco, *Colombia Pacífico*, 2 vols. (FEN, 1993, Bogotá), Vol. 2, p. 491.
3. *Ibid.*
4. Georges Bataille. *The Accursed Share: An Essay on General Economy, Vol. 1: Consumption*. Transl. Robert Hurley (Zone Books, 1988, New York), p. 28.