BUTTERFLY EFFECT

> Tiny differences in input could quickly become overwhelming differences in output—a phenomenon given the name "sensitive dependence on initial conditions." In weather, for example, this translates into what is only half-jokingly known as the Butterfly Effect—the notion that a butterfly stirring the air today in Peking can transform storm systems next month in New York.
>
> —James Gleick, *Chaos*

On the Polynesian island of Tetiaroa, a butterfly flaps its wings once, twice. Brilliant sable and orange propel the Monarch skyward, and the updraft of that sudden flutter catches a drifting tuft of down that had been about to settle behind a fallen coconut. . . .

. . . As if unconvinced of gravity, the feather dances between earth and sky to land at last in a clear patch of sunlight.

A curlew dodges the flat palm fronds as it descends toward an enticing clump of cattails. But the white down catches its eye, and the bristle-thighed bird swoops upon the fluff of eider instead. Long bill clenched firmly on its new prize, the curlew flaps back to its winter nest.

The mongoose hiding patiently behind the cattails will go hungry tonight. . . .

. . . Almost, the curlew does not survive its trans-Pacific sojourn. Paul and his grandfather find it dying on the Alaskan shore. —Papa-dak, asks the boy, What's wrong with the bird?

—It has used up its strength, judges the old Aleut. He squints across the horizon.

You'd be tired, too, if you had to fly 5,000 miles to get home.

—Will it die?

—Perhaps not, he answers. Give me your scarf, since you're not wearing it anyway.

Paul hands over the woolen wrap and watches his grandfather gently swathe the curlew.

—Time to go. They return to the jeep, the boy peering anxiously at the enveloped bird. Alexander Napotak climbs into the driver's seat and gives the small bundle to his grandson.

—Hold her firmly, but not too tight, he says.

Paul nods eagerly, and the old man smiles. —Don't you worry. The animal doctor in Bethel will fix this brave flyer right up. He's a good one, full of heart.

The boy considers the brown-and-white-flecked curlew and promises to see it well. . . .

. . . There is a young man with yellow hair waiting as he steps off the plane and into the dusty African heat. Somehow the sun seems older and larger here. Paul waves uncertainly and tugs off his windbreaker. It kept him warm in the air-conditioned cabin but is only a liability under the equatorial sun.

—Dr. Napotak? asks the blonde. Bienvenue à Zaire. Hope the trip wasn't too taxing.

Paul shakes his head. —Not as bad as the shots before I left.

—I know how you feel, the blonde says with a grin. But we're so glad you could come. My name's Timothy, Timothy Bruntner. Do you have any luggage to pick up?

—No, no, just this. Paul hoists his rucksack up to demonstrate, and Timothy snags it deftly.

—Got it—no, it's OK. We go this way, he says, and sets off across the tarmac. —Not the most spectacular view, Bukavu airport. Pretty much like any other dirt runway. But when you're in the field, you'll wish for less scenery and more modern conveniences.

—Well, I'm a country boy at heart, says Paul. Been in Alaska most of my life.

—From the arctic to the equator! laughs Timothy. Hope you adjust well. Customs is over here. Can I see your passport a moment? Paul hands it over, and the blond Peace Corps volunteer inserts several bills before presenting it to the customs agent.

—How are your supplies of sera holding out? Paul asks while waiting for the Zairean official to finish his bureaucratic duties.

Timothy sobers. —Barely. We're hoping for more shipments next week. You don't happen to have any news on that front, do you? Hmm. I don't think these UN diplomats understand what a catastrophe hoof-and-mouth is to the Fulani. Of course, having a real veterinarian will be an enormous help.

The agent returns the passport and ID. —Come on, the truck's this way. The roads shouldn't be too bad from here to the Training Center. Don't know how long it'll take you to get north, though. Will you have a chance to see the gorillas?

—I'd like to, says Paul. Very much. And some of the other reserves. I think I could spend quite a few years there. . . .

. . . Nancy N'Shabala is afraid to turn off her shortwave radio and terrified to listen to it. The broadcasts make it sound as if Rwanda is another planet, and all the atrocious

deaths merely solar phenomena. The newsmen cluck their tongues from London, and Washington, and Paris; Nancy bites her lip, hard, to keep from wailing for the friends and relatives whose molested corpses litter the African plain. Thank God Robert is too young to understand.

A motor coughs outside. It seems an hour before Nancy recognizes the Land Rover and can breathe again. —Papa's home, she says to Robert, who has poked his head out from the bedroom. He smiles.

A thousand prayers die in Nancy's heart when Paul steps through the cottage door.

—No, he says. Everything's blocked. Nancy—

—I'm here, she tells him. He cries, and Robert joins him without knowing why.

After a while, the only sound is the radio bringing the horror closer. Paul picks up Robert, now asleep, and carries him into a small, hidden loft. Nancy has already arranged some blankets for the child; Paul takes out his kit and prepares a syringe.

—Wake up, Robert, he whispers. You must be brave for a minute. Can you do that? Are you a brave little boy? Robert nods uncertainly, and Paul deftly slides the needle into his son's arm. —Very good. You're a brave soldier. Now go to sleep. He kisses the child and climbs down the ladder. By the time Nancy has climbed up, Robert is in the deepest sleep.

—He'll be all right, says Paul. It would take an act of God to wake him.

Nancy crosses herself. Both she and Paul pray the house will not be burnt, their boy not be found. Husband and wife hold each other through the night, waiting.

The mob comes just before dawn. Nancy is Tutsi and Paul foreign; neither is spared. Buoyed by their easy kills, the Hutus move on, leaving a sleeping child hidden

in the cottage on the shore of Lake Kivu. . . .

. . . As cells go, it's not such a bad one. Five years ago, Masai Matuba would have been left to rot with twenty other unfortunates in a ten-by-ten hole. At least his four-by-eight pen is his alone. The cot, of course, is a mixed blessing. Masai has no wish to sleep on the ground, but ten square feet more for walking would be nice. Besides, Masai is tall, and his legs hang awkwardly off the edge.

A guard named Tolowai brings him breakfast, the sixth he has received since he was arrested and incarcerated. It's the same plantain and okra mush he's gotten the other five times. —Hey, you! Tolowai! he calls out as the guard leaves.

Tolowai returns reluctantly. —What do you want? he asks. I can't help you. I should not even talk to you.

—Come, come, says Masai. I won't talk politics. I just want to thank you for this food. And for the dinner-time rations, too, quite tasty. Part of Bobby-O's reforms, no doubt?

—Bobby? . . . You mean Colonel N'Shabala? You must address him properly, or —

—Or I'll be thrown in jail? Masai laughs.

Tolowai shakes his head. —You will get me in trouble. I must go now.

—No, wait a minute! I wholeheartedly support the Colonel's attack on crime. How's that? He's even right to arrest me. You know why I was arrested?

—You're Matuba, aren't you?

Masai grins eagerly. —Yes, yes! You know me?

—My daughter listens to you. You shouldn't have sung that song.

—You're absolutely right. As soon as I'm free, I'll only sing nice songs. Really.

The guard grunts, shakes his head, and turns for the door.

—Wait! shouts Masai. At least tell me when my trial is!

Tolowai is surprised. —Trial? he asks.

That first month, Masai treats his arrest as a joke. The second, he begs and pleads with Tolowai for his release, for a trial, for anything. The rest of the year, he screams and tries to break the bars. Other prisoners are put in other cells; some get out, but only to stand upon the scaffold. Masai's second and third years are spent in silence. The singing starts in the fourth year.

Tolowai has serenely withstood all his charge's implorings and imprecations. Yet he is startled one day to hear Masai call his name after so long.

—Tolowai, Masai repeats. Do you hear me? The voice is smooth and sure. —I have written a song. I have written a song for your daughter.

The guard is nervous. —What are you saying? You can't do that.

—I have. And you must give it to her.

—How can I . . . How do you give a song?

—You sing it, of course. Listen.

Masai Matuba sings his song. It is a beautiful song, and painful. And in spite of themselves, some of the prisoners raise their voices, for above all this is a song of hope. Of freedom. . . .

. . . Mansu Hill was meant for crowds, but 100,000 people strain even this vast square at the heart of the City of Willows. Chon Song-ae cannot see the militia troopers surrounding the Revolution Museum; nor can she hear the futile announcements the

Party leaders have been making for the last three hours. The singing is too loud.

—The monument! shouts a voice in her ear. Song-ae looks up to see some of the braver university students attempting to scale the great statue with a bed-sheet banner. Handholds are few, but the song pulses through the crowd to buoy them up. Finally the youths succeed in hanging their standard from the statue's outstretched arm. My Soul Thirsts for Freedom! cries the banner in blood-red lettering. —And my heart yearns for home, echoes the crowd, completing the song's refrain. Though the words have changed as the song moved from language to language, their power is intact.

—This is not the celebration they wanted for National Day, is it? says Kim Tae-bok as the protesters gather breath.

—I still don't believe it, answers Song-ae. Perhaps I'm dreaming.

Tae-bok's smile fades. —It may be a nightmare before the day's out. Another Tiananmen. Another Samil.

Song-ae considers this, shakes her head. —No, she says. A hundred thousand people maybe they could break apart; a hundred thousand singers never.

—And who has told you this truth about songs? asks Tae-bok.

—A magpie, says Song-ae. He whistled to me at dawn, calling out this very song. He knew, and he told me.

A shudder runs through the crowd; the singing falters. For a moment, Song-ae fears that the militia has started firing. But the loudspeakers from the Museum are booming again, and this time she catches scattered words. —We have always supported the will of the people, she hears, which means nothing. Then a new voice speaks, uncertainly at first, and the marchers shout his name to heaven. No one present has heard Pak Chol during the decade he has spent in prison, but his voice is

unmistakable. Barely audible above the din, a single word penetrates Song-ae's mind: elections. She cries.

The holiday is celebrated with real passion for the first time in memory. Soon enough, there will be so much to do; but not today. Today every radio is on, and every musician plays the song. The paper masks dance down the streets and through the fields. Song-ae stamps her feet wildly to the drum and kicks a rice plant. Startled off its perch, a butterfly darts from the plant and flaps its wings once, twice. . . .