## General Anesthesia for the (Young Doctor's) Soul?

Brown Medical School, Commencement

MAY 28, 2001

Last Monday, sitting in clinic in rural Haiti, I realized that I was sweating for two reasons. One, it was seasonably hot. We always sweat in clinic. Two, I was frightened about giving this address. The fear itself had two sources. One, it's a great privilege to be here on this day, the day of your oath taking and transformation. Two, most graduation speeches are boring and forgettable. (Some are memorable largely because they are so boring.)

This latter realization struck fear in my heart. I sat there, hearing the multitudes outside, and tried hard to think of a single scrap, a word, an idea from a commencement address heard in high school, college, medical school, or grad school. But not one of them stuck. I say this apologetically, of course, since good things must have been said. I was inattentive or perhaps engaged in overly robust celebration afterward. I'm not sure what happened, but it was neither a neurologic nor a vascular event that erased these speeches. (Nor, I must add as an infectious disease guy, was it an embolic event.) The speeches never got logged in! On that Monday, I knew I had one week to find what might be called the roach-motel approach: speeches check in, but they don't check out. How could I find a way to get in your heads and stay?

On Tuesday, I did a literature search. We don't have access to MEDLINE in rural Haiti, so I went into my own library.<sup>5</sup> I've been living in Haiti for a long time, so let's just say I have a big, if uneven, collection. Graduation, graduation. I remembered something from the English writer P.G. Wodehouse about a memorable graduation speech. It was a story of a certain Augustus Fink-Nottle, a bookish herpetologist who's gang-pressed into delivering the commencement speech at a boys' school. I recalled that Gussie, like yours truly, was terrified and did something, I couldn't remember what, to make it memorable.

After clinic was over, I found the story. Rereading it did not inspire calm. In fact, where I'd once laughed, I now found myself sweating and trembling. Fink-Nottle, normally an abstemious chap, had gotten smashed before going on stage. Gussie proceeded to insult distinguished members of the audience and to accuse the winner of the prize for scripture knowledge of cheating after the kid failed to answer the question "Who was What's-His-Name—the chap who begat Thingummy?" Wodehouse draws conclusions about speeches: "It just shows what any member of Parliament will tell you, that if you want real oratory, the preliminary noggin is essential. Unless pie-eyed, you cannot hope to grip."<sup>6</sup>

This counsel did not help me grip. Getting pie-eyed in the morning would be frightening enough even when you don't have to drive from Boston to Providence. Surely there was something else I could do if I wanted to make a memorable point or two? I scarcely slept on Tuesday night, as my nightmares included a slurred speech punctuated by insults to your dean.

On Wednesday, I decided to base my Brown intervention on data. The problem called, clearly, for more research. I mean, what sort of Harvard faculty could conclude otherwise? I conducted a double-blind, controlled study of the entire population of central Haiti. I flew in a large research team and expensive consultants from the Harvard School of Public Health.

The survey showed a statistically significant correlation between amnesia and graduation speeches. Granted, the N was small: this was central Haiti, where not many have had the privilege of going to high school, much less graduate school. But chisquare tests do not lie: the picture was grim if I followed the norms. I trembled with fear, not malarial rigors. Would I have to do what Gussie Fink-Nottle had done? Do you need a designated driver in order to deliver a good graduation speech?

On Thursday, I fasted and prayed. I lit incense. I chanted and sat in the lotus position until I had bilateral nerve palsies. The medical staff and patients wondered what on earth was wrong, since I am usually a rather reliable guy. And still no inspiration came.

On Friday, I bit the bullet and did what we do in internal medicine: I called a consult.

Deep in the Haitian hills there lives a wise woman. She's called a "mambo," which translates in Hollywood-speak to "voodoo priestess." I've known her for years, and she's said to have an answer for everything. She's a bit like the woman who bakes cookies in *The Matrix*, and especially so on that day as she was sitting on a low chair stirring something in a charred pot.

I laid out my dilemma. A pregnant pause ensued; my mambo friend did not look up from her work.

"First, why are they asking *you* to talk to them? Are they going to become tuberculosis specialists or something? Fever chasers? What?"

"No," I said, "they're a mix. You know, psychiatrists to surgeons. Scientists, too."

"Well, that's good," she said. "We need all types, as they so often say, however insincerely, in your country. But it still doesn't explain why they'd want *you* to talk to them."

This was a bit too much like that part of *The Matrix* where the cookie lady tells Neo that he's not the one. I must've looked crestfallen, since the mambo continued in a kindlier tone.

"Who else will be there?"

"The students' parents and their teachers and their deans. And other sundry kin."

"Ah yes," she added. "Their 'significant others,' as you say in your country."

"Yes. I am very nervous about it because I would like to say something meaningful but have only a few minutes."

"I see your problem," she said, still stirring, "and I'm starting to remember something. A recurrent dream. What school is this?"

"Brown," I said.

She started, looked up from her pot, and smiled broadly. I knew she'd never left Haiti, at least not in the flesh, so I was wondering what was up.

"Brown! Now I understand the meaning of my dream!"

I took this to be a good sign but was puzzled.

"Look over there, child. What do you see?" She gestured to her left without looking up. A hummingbird hovered over a bush with bright red blossoms.

"A hummingbird," I said. But the word in Creole is wanga

*neges*, which means "woman charm." It can be ground into a powder with power not to give meaningful speeches but rather to seduce women. I failed to see the relevance to my dilemma and knew that crude pre-feministic tactics are frowned upon at Brown. Besides, seduction of the entire audience was the goal.

"Yes, indeed. The wanga neges. In Latin, *archilochus colubris*. And where is it?" (This, theatrically.)

"It's buzzing over the hibiscus bush near your temple." The Creole word for hibiscus is *choublak*, which comes, it is said, from the U.S. military occupation of Haiti earlier in the last century: the blossom was used to shine the soldiers' boots. Shoe black. Pretty flower, ugly name.

"What color is its throat?" she asked.

"Red."

"No, silly, its throat is brown. This is relevant, since brown is a blend of white and black and yellow and red. Remember, too, that the heart of the woman charm beats 1,200 times per minute when feeding, faster than any other creature. Now, where is the talk to be delivered?"

"Providence, Rhode Island."

"Providence! On an island! That's really amazing. It all makes sense!"

"No, well, it's not really an island."

"You don't say? And I suppose 'providence' is happenstance, too? Unrelated to my dream?" She raised an eyebrow—archly, I thought.

"Look," I said, mustering a bit of pride, "what are you getting at?"

"Don't end sentences in propositions! It's all very clear now. You are going to the university that is brown to speak to them of providence, and to remind them that they are not really living on an island. Like the word *choublak*, which is both beautiful and ugly, you'll say something that is harsh but you will say it in a nice manner. You will fly there like a bird and not row in a boat, even though a boat is necessary to reach most islands."

"Ah," I said, "so that's what the hummingbird means?"

"No silly. The hummingbird means that you will charm them, even though your heart is beating fast."

Stunned, I said nothing. It really did seem to hold together. But how would that help me with my speech?

"Look, I will give you four suggestions," she concluded gravely, "not counting the one about prepositions. First, remember that it's permitted to be anecdotal in such instances; you should talk about your poorest patients. Second, do not quote either Dickens or Shakespeare; use no Latin. Keep it heavy but light. Third, you can't please everyone in such a diverse audience. Focus on those receiving their degrees but don't try to get cute with them. For example, don't say 'Yo, what up?' when you start. Fourth, because it's Brown, be careful to offend no one. They're very sensitive about that there, it is said. You can be PC and still get to the point."

I took careful notes, thanked her, and left with new purpose. I had an entire weekend to get ready.

Now that you've heard the story about how I pulled these remarks together, you're more than halfway there! Allow me to make one last prefatory comment before I discuss providence with a small "p" and make, as did my mambo friend, four points. I'm not one of those who thinks that one medical specialty is somehow superior to another. Sure, I joke with the cardiologists at the Brigham about how exciting their work must be diagnostically—all their patients have the same disease! And I also like the occasional joke about how best to hide something from the orthopedic surgeons: put it in the literature. But I hope to address all of you, from future pathologists to budding (sorry) endocrinologists. Allow me to salute you, in typical Brown fashion, as "differentially abled" physicians. What I'm about to say is meant to be applicable to all branches of medicine and medical research.

Providence. Good fortune, whether merited or not. You are going through the transformation even as medicine undergoes a great change. I use the word "transformation" because the moment is so often transformative: you will now be asked to worry about others, many of them perfect strangers, more than yourselves. And not just anyone: the sick and vulnerable. Of course, almost all parents—and, may I add, especially mothers—do this whenever needed. But you're not doing this because your patients are your children. You're doing it because your patients are your patients and deserve fierce loyalty and the best you can offer. That's what medicine could be about, should be about, must be about.

That part is difficult but agreed upon. (Did I just end a sentence in a preposition?) The harder questions are about who gets to become a patient. I mean *your* patient, because everyone is a patient eventually. But who has ready access to the best that medicine has to offer, much of it based on relatively recently developed technologies and all of it available—providentially, it would seem—right here? Certainly not those who need it most.

The irony, now, is the best that medicine has to offer keeps getting better—thanks in large part to the health sciences also represented here today. The big leap forward that physics made a century ago is now happening in medicine. That's good news. The bad news is that unless we make *equity* our watchword, we become party to a process that promises to reserve its finest care for those who need it least, leaving billions of sick people without decent medical care.

All four points were hidden in there. But now, as the game show host says, in question form please.

Ι.

To whom do we owe primary allegiance? To the sick, of course, and that's easy enough to figure out on a busy call night because they're in your face. But what if they're not in your face? What if you're busy in the lab, making medical progress possible? We all know that the burden of disease lies most heavily on the poor or otherwise marginalized and yet they do not receive the best care. So far, when physicians have banded together, we've fought mostly for ourselves. In the future, our allegiance to the sick must be stronger, even, than our allegiance to one another. Otherwise we start to slide down a slippery slope. I refer here not to the slope from Percocet to Versed to Halothane. I refer to the unintentional slide toward general anesthesia for the soul. When under such anesthesia, we can function in most settings but risk missing the great moral questions that face modern medicine. That brings me to the second question . . .

## II.

Why, exactly, should we fear general anesthesia for the soul? As any intern can tell you, there's nothing wrong with some oblivion after a hard night on call. But general anesthesia for the soul threatens to cheapen medicine; indeed, it already has. We can still point with pride to the difference between a vocation and a job. Now more than ever, however, medicine needs to be about service rather than conventional rewards. Curing, preventing, easing pain and suffering, consoling—these are both our "prod-uct" and our reward.

The commodification of medicine—health services for sale—continues apace without measures for caring for those who cannot pay. Soon we risk hearing, even in casual speech, the words of Plato, who in *The Republic* asked, "But tell me, the physician of whom you were just speaking, is he a moneymaker, an earner of fees, or a healer of the sick?"<sup>7</sup> (Note that I am not breaking the Latin Rule, as Plato was Greek, not Roman.)

Even in this affluent country, physicians have failed to make sure that all citizens have health insurance; most physicians are not yet active participants in this debate. In much of the rest of the world, including the countries in which I work, it's much worse. Equity of access was one thing in the era of leeches but quite another in our times. And the most peculiar thing about our times, as far as medicine goes, is related to important changes in technology. This segues to the third question.

## III.

What will be different about medicine in the twenty-first century, and how are these changes related to general anesthesia for the soul? The short answer: well, medicine is actually effective now. Or could be. I can't very well mumble something about the best of times and worst of times, as that would be breaking the mambo ground rules, but think about it: no matter what specialty you've chosen, your practice will be completely different from that of only a single generation ago. The human genome is sequenced. Drugs are now designed rather than discovered. Surgical procedures are safer, less invasive. Diseases deemed untreatable as recently as a decade ago are now managed effectively.

But each of these triumphant truths must be qualified by "for some." Your generation will have to deal with a growing outcome gap as some populations have ready access to increasingly effective interventions while others are left out in the cold. Worse, those excluded are those who would benefit most.

Just take AIDS, the latest rebuke to hope. Over the last five years, AIDS deaths in this country have dropped sharply. So have HIV-related admissions to our hospitals. This is due, in large part, to the development of better therapy targeting the virus itself. But these advances have served only a tiny minority of those who stand to benefit. For most living with HIV, lifesaving drugs are unavailable. There are all kinds of excuses. The tools of my trade—again, I'm an infectious-disease doc—have been termed "not cost-effective" in an era in which money is worshipped so ardently that it's difficult to attack market logic without being called a fool or irresponsible. Treating AIDS in a place like rural Haiti, which lacks health infrastructure, is dismissed as "unsustainable" or not "appropriate technology."

Each of these ideas, from cost-effectiveness to sustainability, could be a means of starting conversations or ending them. But in my experience in international health, arguing that treatment is not cost-effective is largely a means of ending unwelcome conversations about the destitute sick. On page 6 of the *New York Times* of April 29, 2001, you can hear a high-ranking official within the U.S. Department of the Treasury object to a strategy that would make HIV drugs available on the continent on which they are most needed. According to the article, "He said Africans lacked a requisite 'concept of time,' implying that they would not benefit from drugs that must be administered on tight time schedules."<sup>8</sup> These ideas stop conversations because many who would continue them are under deep anesthesia.

This leads me to the fourth question, which is no doubt on your minds as you pick up your diplomas.

## IV.

What is the key step in the Krebs cycle?<sup>9</sup> OK, that's a joke. Heavy yet light, she said.

The fourth question: what will be the yardstick by which we gauge our success as a profession? Answering a question about the future calls for prophetic powers, and my mambo is not here. But I believe we'll be judged by how well we do among the destitute sick. Strategies designed to prolong life into the tenth decade will flourish in the affluent world, but only if general anesthesia puts all souls to sleep will history judge us by the longevity of the affluent. No, discerning judges will look instead for falling life expectancies among the poor, wherever they live.

What will historians of the future say about our actions over the past decade, during which 10 million African children were orphaned by AIDS, a decade in which life expectancies have plummeted in Haiti and a dozen other countries? And where life expectancies do rise for the poor, what of the fact that they rise so much more slowly for some than for others?

Many have documented the impact of poverty and social inequalities on the distribution and outcomes of infectious diseases. Working in Haiti or in a slum in Peru or in a prison in Russia, these are our priorities. But what about in affluent settings? What about with noncommunicable diseases? The *New England Journal of Medicine* has published studies documenting the impact of racism in choice of strategy for the management of coronary artery disease. After learning that African Americans are less likely to be referred for cardiac catheterization than whites with the same indications, do we really think that enalapril is more effective in whites with left ventricular dysfunction than in blacks with LV dysfunction for *biological* reasons? An acute editorial accompanying this study, published in the *Journal* earlier this month, draws different conclusions:

It is indisputable that social perceptions of what a person is or is not influence the availability, delivery, and outcome of medical care. It is incontrovertible that these perceptions apply with dismaying regularity to black people and other minorities in the United States. And it is undeniable that lifestyle, socioeconomic status, and personal beliefs are powerful influences on health. But these are matters of morality and culture, and we must clearly distinguish them from the biologic aspects of race-based medicine—from the danger of attributing a therapeutic failure to the patient's "race" instead of looking for the real reason.... Research to root out social injustice in medical practice needs continued support, but tax-supported trolling of databases to find racial distinctions in human biology must end.<sup>10</sup>

Social injustice in medical practice. Science has revolutionized medicine but there was no revolution and no plan for ensuring equal access. *Excellence without equity* is what you now inherit. It's the chief human rights problem of twenty-first-century medicine, and only when we're all under general anesthesia of the soul will we be able to ignore it as the century marches on.

So what, dear Class of 2001, do we need from you? We need excellence with equity, of course. And here's the part I'd ask you to remember. We need you to shape the profession so that there's commitment to equitable service in the face of growing inequalities of outcome; we need humility and resolve in the face of bold technological advances. Note that you can change the order around—service, humility, inequality, technology—and make that into a nice mnemonic, if you like.

And there you have my graduation speech. I hope, dear colleagues, that I have kept it heavy but light. I hope that even without a powdered hummingbird I have managed to charm. I feel lucky to be here, certainly, on the very day that you all make that marvelous transformation from students to physicians. I hope that you go out there and seize medicine with both hands, with your heads and hearts, and force science and technology to serve the sick. For science and technology will and should be the heart of modern medicine, but you must add the soul. You are, providentially, products of the finest medical education in the world. Resisting the easy anesthesia that privilege affords is going to be your next big challenge.

Thank you, congratulations, and good luck.