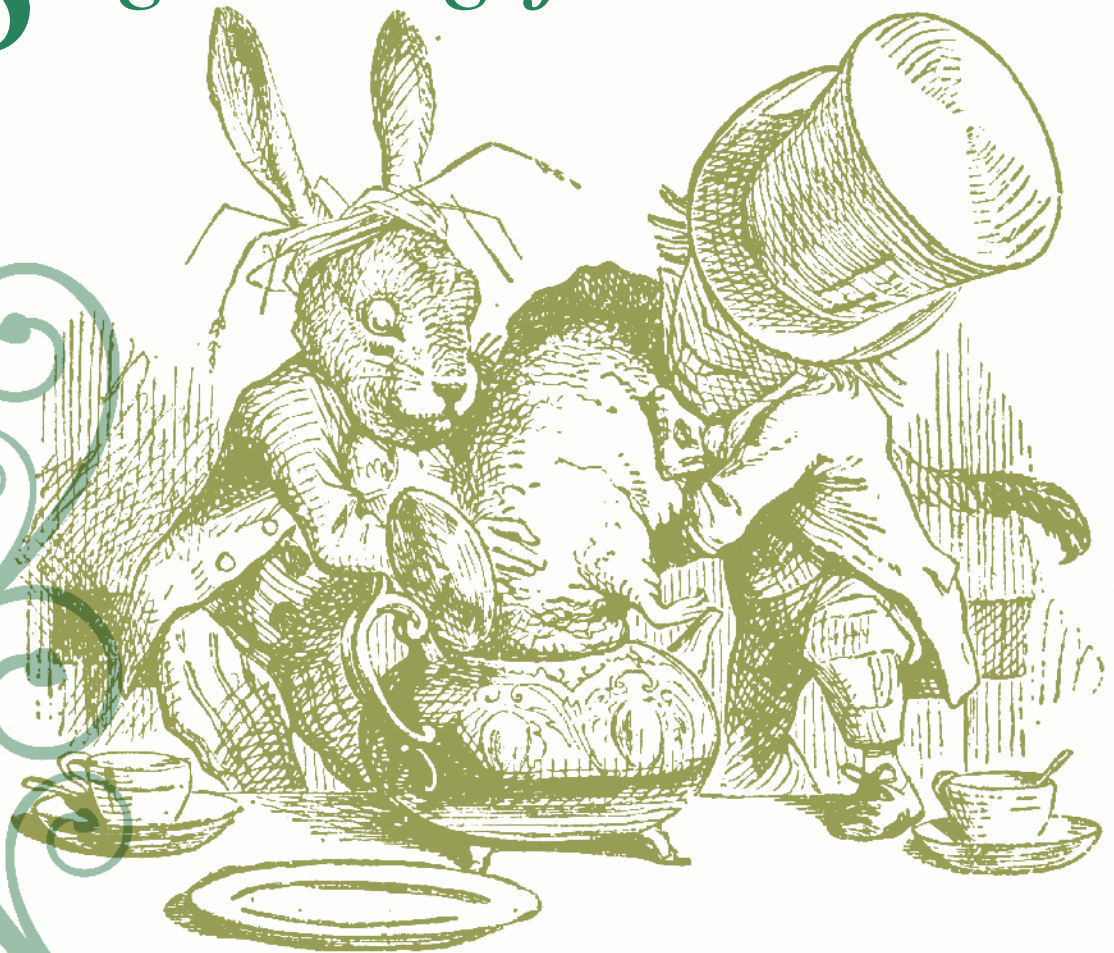


# *Surgical megafauna*



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**S**pecies evolve. John Robinson, vice-president of the Wild Life Conservation Society, notes that the rate of species extinction is currently “one hundred times above baseline.” Dr. Robinson continues, “...but when it comes to large, charismatic species...we don’t lose our large, iconic, charismatic, culturally important megafauna...”<sup>1</sup> The purposes of this essay are (1) to reassure the house of surgery that surgeons are, and always will be, large, charismatic, iconic, and culturally important megafauna; (2) to acknowledge that our country is currently in the throes of an evolutionary milestone in health care; and (3) to characterize surgeons as a cadre of our population uniquely qualified to recognize and communicate health care solutions to the American public.

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Our strategic analysis will derive directly from the deliberate dialectic of the Mad Hatter’s Tea Party:

“Then you should say what you mean,” the March Hare went on.

“I do,” Alice hastily replied. “At least—at least I mean what I say—that’s the same thing, you know.”

“Not the same thing a bit,” said the Hatter. “Why, you might just as well say that ‘I see what I eat’ is the same thing as ‘I eat what I see!’”

“You might just as well say,” added the March Hare, “that ‘I like what I get’ is the same thing as ‘I get what I like!’”

“You might just as well say,” added the Dormouse, who seemed to be talking in his sleep, “that ‘I breathe when I sleep’ is the same thing as ‘I sleep when I breathe!’”<sup>2</sup>

### Surgeons mean what we say

Our government tells us that Americans can now expect to live to be 77.7 years old. Nobody wants to die—so, that’s great. And Malcolm Gladwell reports an astounding complement of successful “...social phenomena [which] can be linked to relative age.”<sup>3</sup> Indeed, Mr. Gladwell assures us that everyone from Canadian hockey players to American four-year college students are disproportionately advantaged if their stork arrived during the first three months, as compared with the last three months, of any calendar year. Interestingly, this apparently extravagant psycho-social windfall, which initially boasts only a couple of months, seems to grow.<sup>3</sup> So, at the rewarding conclusion of a 35-year career, a clinically active surgeon still has several decades of productive life left in him or her—and bountiful competence to burn!

But, let’s look at what that surgeon “means to say,” and how he or she gained, and continues to exalt in, the compounded accrual of that initial calendar head start.

### Surgeons say what we mean

So, if what we say isn’t what we mean, we simply bend the words to fit—we do it by fiat. Let’s examine this strategy using “time” as an example. The logical unit of time is a day. Unfor-

tunately, Earth’s spin is not comfortably divisible into the interval required for our Earth to slog its way around our sun; a full circuit requires 365 days, 5 hours, 48 minutes, and 46 seconds.<sup>4</sup> The moon is pretty easy to see, so the lunar month seemed practical for early agricultural communities, who required direction as to the appropriate season to plant and harvest. But the lunar month is made up of about 29½ days. After three years, a lunar year was more than a month behind the solar year or season cycle. For farmers this was a real problem. The Romans solved this in typically surgical fashion—by fiat. They simply declared seven 30-day months, five 31-day months, and—because they regarded February as unlucky—they abbreviated the potential February ill-fortune to 28 days. They just did it—like a surgeon—and it worked.

### Surgeons see what we eat

Perhaps fortuitously, Adam Smith’s *Wealth of Nations* and our own Declaration of Independence were both published in 1776. Surgeons, accepting Smith’s familiar example of the pin factory, “hold these truths to be self-evident” that clinical focus or broad specialization enhance both expertise and efficiency. Smith’s espousal of commercial liberty would appear to be tailor-made to match the surgical free enterprise spirit. Gratifyingly, but perhaps surprising for this original champion of free enterprise, Smith’s first book, *Theory of Moral Sentiments*, espoused an “invisible inner man” that guided a primary principle of altruism.<sup>5</sup> That socially conscious “invisible inner man” is what talked us all into going to medical school in the first place.

### Surgeons eat what we see

A career in surgery accrues a multitude of rewards. We establish, at lightning speed, an ego-boosting emotional bond with our patients. These bonds can be an aspect of life that is the most difficult to relinquish as a surgeon cruises into retirement. An active surgeon voraciously consumes the manifold gifts tied to our unique profession.

On Inauguration Day, January 20, 1953, Harry Truman transferred the presidency to

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GEN Dwight D. Eisenhower. Dean Acheson had been Truman's Secretary of State through the military attacks of the tumultuous Korean War and the political (and personal) conflict generated by the hearings of Sen. Joseph McCarthy. On the day prior to the inauguration, Mr. Acheson, as Secretary of State, held one of the most influential and powerful positions in the world. On the day after the inauguration, Mr. Acheson described himself as in a state of "Bewildered emptiness at being so wholly uninformed, impotent and on the outside."<sup>6</sup>

The potential for "bewildered emptiness" at the conclusion of a gratifyingly rewarding surgical career is very real. As a form of solace, Mr. Acheson steeped himself in the postpresidency letters of rapprochement between John Adams and Thomas Jefferson. Mr. Acheson was inspired that Adams "Never for one moment believed that the holding of office [as President or surgeon] was a source of power—it was an obligation to service."<sup>6</sup>

### Surgeons like what we get

Surgery has been described as a "fickle mistress." Katharine Graham, the former editor of the *Washington Post*, observed, "To love what you do, and feel that it matters, how could anything be more fun?"<sup>7</sup> That's us! We drive into work in the morning—or in the middle of the night—knowing that what we are doing is important. And our patients, their families, our colleagues, and society respect what we do. That makes it really easy to feel good about ourselves. The profession of surgery is vastly better and more rewarding than whatever profession is second best, according to several direct and recent communications the authors have had with Hiram C. Polk, MD, FACS (professor of surgery, University of Louisville; personal communication, April 23–25, 2009).

### Surgeons get what we like

Species—and professions—are evolving. As we ruminate upon the "future of surgery," we happily acknowledge the unique capacity of surgeons to make decisions and respond to change "while the clock is ticking." No one likes to be

rushed; but the ability to "do something now" is robustly expressed in the surgical genome. In addition, as we review our surgical colleagues we are reminded of an observation of Mr. Acheson: "The longer I live the more I find myself stressing character as the indispensable element."<sup>6</sup> Again, that's us! We live happily in a professional world of characters with character.

In plumbing our future, the fortunate coincidence of facile flexibility and confident character comfortably conspire to guarantee a rewarding niche for the surgeon of the future.

### Surgeons breathe when we sleep

And, like dragons, some of us breathe fire. But, dragons are mythical creatures. And now so are fire breathing surgeons.<sup>8</sup> This observation may serve as the basis for the most formidable tectonic shift in surgical culture in recent decades. Mr. Gladwell relates studies of a Dutch psychologist, Geert Hofstede, who examined national cultural variations and delineated these as a power-distance index (PDI).<sup>3</sup> Cultural deference to an aristocratic hierarchy prevents subordinates from questioning authority even in instances in which their own lives are endangered. Although the hierarchical totem pole still lives in surgery, intimidation is no longer the lingua franca.

We associate a high PDI with dignified, respectful, and comfortably civilized societies. Mr. Gladwell notes that America is a classically low power-distance culture. Anyone wishing to experience a microscopically low PDI, in glorious Technicolor, may simply hail a taxicab in New York City. So, some communication structure between paralyzingly respectful (high PDI) to pugnaciously rude (low PDI) is optimal in the operating room. Neither self-effacing Bodhisattvas nor Bronx cabbies need apply.

### Surgeons sleep when we breathe

But, as Hamlet proclaimed in the English language's most famous soliloquy, "To sleep—perchance to dream."<sup>9</sup> Hamlet must have been acknowledging the formidable benefit that derives from surgical training that is traditionally associated with a hard road: "...the slings

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and arrows of outrageous fortune....”<sup>9</sup> Then, Hamlet continues as a clinically active surgeon, “...takes on a sea of troubles, and by opposing end [s] them....”<sup>9</sup> A life in surgery is (and always will be) the most gratifying, rewarding, and fun life conceivable.

We are currently in the throes of an evolution in health care. In 1929, a western Oklahoma physician, Michael Shadid, MD, proposed a medical agricultural cooperative.<sup>10</sup> He suggested that each farmer contribute \$50 annually to a central fund that would pay doctors to provide all the health care any self-respecting, tough old farmer might ever need. In gratitude, Dr. Shadid’s colleagues tried to strip him of his medical license. Subsequent, quite honorable attempts to conquer the health care dragon have been envisioned by Presidents Roosevelt, Truman, Nixon, Clinton, and now Obama. Since Dr. Shadid’s initial foray, several important aspects of the health care equation have, however, changed. Eighty years ago a farmer (or patient) was delighted (and even surprised) if his or her interaction with the medical community proved—on balance—helpful. Today, Americans expect immediate access to high-tech care at low cost. And, it is very clear that we can have any two of these expectations, but never all three. Like xenotransplantation, comprehensive health care reform is just around the corner—and always will be.

Perception is usually more important than reality. In survey after survey, patients trust their doctors. Paradoxically, the health reform adversaries are decrying government intervention as despicable “socialized” medicine. In fact, through multiple current subsidies (including the formidably successful Medicare and Medicaid), our government has been a major health care payor for almost half a century.

Jennifer Graham notes that medicine has wrought a 30-year increase in U.S. citizen life expectancy during the 20th century—the largest catapulting of species survival in all of world history.<sup>11</sup> Actually, Ms. Graham is disappointed that the aging boomers are refusing to die off to make room for the hungry Generation Xs and Ys. In this regard, surgeons are the biggest offenders. Exercise has always been part of our job. Relatively few of us smoke. And, a chubby surgeon is rare. We surgeons incorporated all the effective

disease prevention strategies generations ago. Surgeons are also effective communicators. We routinely and successfully talk patients into accepting something that they really don’t want to do. We are extroverts—the parties don’t start until we get there.

So, our current problem with health care is that health care is too good. People are living too long, and their postretirement years are too bountiful. That’s the fault of us docs. And, the super high-tech molecular targeting of successful therapies is (no surprise) expensive. Again, that’s the fault of us docs.

Surgeons know that some therapies are more effective than others. Indeed, the most cost-effective medical therapy year after year is lancing an abscess. Routinely, an analysis of the most beneficial risk-adjusted therapies identifies the majority as surgical.

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Whether or not you believe that health care is a right or a privilege, the consuming consensus of citizens currently consider immediate access to high-tech care as emblazoned into our constitutional Bill of Rights. Unfortunately, they also believe that the government (or someone else) should pay for it.

Both the problem (generated by successes) and the solution (delightfully vulnerable to surgical input) are issues of perception.

Unlike “all men are created equal,” all health care is not. Is there a group among us that is capable of discerning the financial cost of a risk-adjusted additional quality calibrated year of life? By virtue of medical and disciplinary psychosocial successes, is that same cohort of the comfortably aging population uniquely able and qualified to communicate its critically important ruminations to the American public? The answers are yes and yes.

In conclusion, we propose that cultural and biological evolution have coincidentally produced and solved one of our era’s most vexing problems. A large, charismatic, iconic, and culturally important cohort of evolutionary history’s megafauna are retiring in droves. This group is uniquely qualified to assess the individual and societal value of the plethora of scientific advances that are now perpetrated upon the unsuspecting public. Pivotal to the socially appropriate application of these therapies is comprehensible communication to the hungry populace. We surgeons have the solution to health care reform in hand.

But, if we do not accomplish this laudable goal in our generation, the senior authors of this essay are confident that the junior authors will. 

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