## Comment How may you help me? Gregory A Petsko

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The road to hell may be paved with good intentions, but if you're looking for the entrance ramp, my current bet is that it was the invention of the self-service gas (petrol) station. Thanks to this exciting development, touted as a boon to the time-strapped consumer, motorists can come into direct contact with carcinogenic fumes while handling one of the most explosive, flammable materials ever created. Selfservice gas stations have also increased the profits of the automotive repair industry, since no one ever checks their oil or tire pressure anymore. The phenomenon has led to a curious linguistic paradox: such gas stations are still referred to as 'service stations', even though service is precisely what you can't get at many of them. Self-service is outlawed at gas stations in New Jersey, however, proving something I've suspected for a long time: that the US would probably be a better country if the Mafia just ran it overtly.

Merging onto the Hades Highway, we next encounter the Automated Teller Machine (ATM), a device ingeniously constructed to make it easier for banks to charge you extra for something they used to do for free, namely giving you your own money. When the only way to withdraw or deposit funds was to enter the bank and talk to a human being (the non-automated teller), such service was provided for free. With the advent of the ATM, banks quickly realized that most people would primarily use such machines to spare themselves the inconvenience of traveling to the bank from wherever they were, so they began charging a fee for using machines that were not actually located at one of their own branches. In other words, as soon as they recognized that remote ATMs were helping consumers, banks started levying a tax on the benefit. It wasn't enough that the bank was already making two or three times more interest on your money than they were paying you for the privilege of letting them use it; they had to take a cut off the top as well. (Please note that both the self-service gas station and the automated teller machine have saved their respective businesses vast amounts of money in personnel costs. In the case of the

ATM, the money that banks made by having fewer actual tellers apparently wasn't enough for them.)

Perhaps the center lane on the tollroad to perdition is the self-service check-out kiosk that many supermarkets - and increasing numbers of other large chain stores - have now introduced. Bad enough that you have to take your groceries off the shelf, put them into your cart, take them out of the cart to be scanned, and when you get them home, unload them again; now you can also have the pleasure of scanning them yourself and, after paying for them, putting them into bags yourself. The grocery stores are saving bundles of money on the checkers and baggers they don't have to hire (about 2.5 per kiosk), but as far as I can tell this hasn't translated into lower food prices anywhere.

I see no end to this trend of offloading onto the consumer things that companies used to do for us. Airlines now ask us to check ourselves in at automated kiosks when we get to the airport, and are trying to get us to book our own flights online so they don't have to hire people to do it for us over the phone. And those maddening telephone menus that ask you a million stupid questions and give you a billion useless options when you call for service or information are simply another way of having the customer replace the person who used to ask those things and make decisions about where to route the call. The number of retail kiosks is expected to grow by over 60% worldwide in the next three years. The fast-food sandwich chain Subway is experimenting with kiosks that take orders and accept payments (they still have human employees to actually make the sandwiches but probably will soon ask us to do that too). Self-service medicine is doubtless next, as governments and insurance companies realize they can cut costs by having us diagnose our own illnesses ("if you have a temperature over 101°F, press 1; if you are comatose, press 2"); perform our own surgery ("please place removed body part in bagging area") and, if we mess up, sue ourselves for malpractice ("to cross-examine yourself, please speak clearly into the microphone").

But what drives me crazy is the sheeplike way consumers are taking this abuse. Surveys show that self-service is generally popular, even though numerous studies have demonstrated that it doesn't save the customer any time (in fact, in some settings, such as supermarkets, it's actually slower than being served by a person, partly because the self-service machines seem to screw up so frequently) and hasn't led to lower prices. I think people believe that it's faster, or ought to be (and, to be fair, in the case of the ATM it really is more convenient), but I bet one of the main reasons they favor it is the same reason so many believe driving their own car is safer than flying, despite decades of evidence that it's not: the sense of being in control. Most of us have had so many bad experiences with service personnel over the years that we harbor the illusion that doing things for ourselves is faster and better, even though it's often neither. Of course, as companies reduce staff thanks to us doing their work for them, it becomes even harder to find a service person when you really need one - for example, if you want to do something more complicated than these inflexible machines are programmed to handle. This business of my doing things employees should be doing has gotten so pervasive that it's starting to make me paranoid (OK, more paranoid than usual): I keep imagining that one day soon I will walk into a store and a smiling staffer will greet me with a cheery "Good morning, Sir. How may you help me?"

Still, I was coping reasonably well until a couple of years ago, when I found that the same virus had started to infect my professional life. The first symptom was when genomics journals - ahead of the curve in adopting internet technologies - began demanding that I fill out an online form every time I reviewed a manuscript or even declined to do so. In other words, I was having to enter my information into the editorial database, exactly the job that the editor used to do. Soon, all journals began doing this, leaving me to wonder: so just what is it that editors do now? I suppose they could spend their time reading the reviews and making decisions, but some of the treatment of my own manuscript submissions (not to mention some of the stuff that's gotten published when I said shouldn't be) leads me to wonder if they're even doing that. Maybe they're just sitting around congratulating themselves on having gotten the scientists to do so much of their work for them. I've been ignoring as much of this as possible, usually just sending in my reviews or acceptance/decline-to-review by e-mail, although I increasingly feel like I'm trying to stand against a hurricane.

But the last straw as far as I'm concerned has come from the funding agencies. Not only have they started demanding that we submit parts of our grants electronically, thereby saving their administrators the trouble of entering that information into the grants databases; in some cases they have been insisting that we submit the entire grant electronically, as well as sending in paper copies to save them the trouble of preparing those. The US National Science Foundation does this, using an ironically named system called FastLane, which in its early incarnation (it's better now) was so buggy that it took me longer to submit one grant than it did to write it (it was only a short proposal but I'm not exaggerating). And I can't ignore such demands because, well, we're talking about the funding agencies here for goodness' sake, and no one can afford to alienate them. Their gleeful offloading of tasks onto us hasn't stopped with that, either, because now when they ask us to review grants, they don't send those by mail, they simply e-mail us the file and expect us to print it out for ourselves (the journals are starting to do the same with manuscripts for review). I'm sure their printing costs have gone down enormously; my printing costs, on the other hand, have gone up almost threefold over the past two years.

Given that all this seems to be irreversible, how can we keep from ending up doing everybody else's job as well as our own? My solution is to accelerate the trend to the point where it becomes threatening: in other words, we should do even more of the editors' and grants administrators' work. We should reject our own papers regardless of what the referees say, just like they do. We should submit our grants with reviews we prepare ourselves, plus detailed funding decisions including, of course, budget cuts that make it impossible to do half the work we need to do. We should harass ourselves for reviews even when we have been asked to review four manuscripts/grants by the same journal/agency. If we do enough of these things, eventually publishers and the heads of funding agencies will realize that they don't need any editors or administrators at all, but I'm hoping that before that happens those employees will see the danger coming and reverse this horrible process. And then we can get back to the way things should be. You and I will just do our jobs, and they will just do their jobs. Whatever those are.