

A very good restaurant, one beloved by many New Yorkers for its compassionate service—it is perhaps the most unintimidating of the city's better restaurants—and its simple but intensely flavorful food. But with all due respect to that justly popular establishment, it is patently ridiculous to rank it ahead of a dozen other places, and in particular such world-class restaurants as Lespinasse, Jean Georges, and Daniel.

Nowhere does Shaw spell out *why* preferring Union Square Café to Lespinasse is patently ridiculous—calling Lespinasse world-class simply begs the question. In a world where access to information is open, the critic does a delicate dance. Shaw is unwilling to condemn Union Square as a bad restaurant; it's just not the kind of restaurant people like him prefer, which is to say people who eat in restaurants professionally and are happy to have a little intimidation with their appetizers. But if he makes that complaint too visibly, he risks undermining his desire to be able to guide his audience. Back when professional reviews were the only publicly available judgment of restaurants, this difference didn't matter much (and critical contempt for the audience didn't matter but when we can all now find an aggregate answer to the question, "What is your favorite restaurant?" we want that information, and we may even prefer it to judgments produced by professional critics.

A common objection to the spread of shared knowledge is the need for professional skill, an idea often expressed with the observation that you wouldn't want brain surgery performed by someone who learned their craft from Wikipedia. Let us stipulate, as the lawyers say, that this is true: when surgery on the brain is

called for, having it done by an accredited surgeon seems like a good idea. The funny thing about this rule, though, is that we don't really need it, because it is self-evident. The stock figure of the amateur brain surgeon comes up only in conversations that *aren't* about brain surgery. The real assertion is that every time professionals and amateurs differ, we should prefer the professionals, and brain surgery is just one illustrative example.

There are two weaknesses in this line of thought. The first is that you wouldn't want a brain surgeon who learned everything he knew from *Encyclopaedia Britannica* either. The brain surgery analogy isn't broadly applicable, because it says nothing about deciding between competing sources of information. Here's an alternate assertion: you should never eat at a restaurant without being guided by a professional restaurant critic. After all, who knows what could happen? You could end up eating at places with simple but intensely flavorful food, and no intimidating waitstaff anywhere in sight. This example is as ridiculous as the brain surgery one, but at the other extreme. But it offers us a range of analogies, and we can now ask, of any given function, "Is this more like being a brain surgeon or a restaurant reviewer?" Brain surgeons know the parts of the brain, and they also know how to wield a scalpel; slicing up parts of real brains is a job that must be limited to professionals, but it's not clear that knowing the names of the parts of the brain must be similarly limited.

The second weakness in the brain surgeon analogy is that it invites the hearer to assume that we should always go with a professional over an amateur. But curiously, no one believes this proposition, not even the people fretting about Wikipedia-trained brain surgeons. In fact, were this preference for the professional

universally applied, we would all be patronizing prostitutes—they are, after all, far more experienced in their craft than most of us will ever be. By comparison, people in love are amateurs (in the most literal meaning of the word). But here intimacy trumps skill. For similar reasons, I sing “Happy Birthday” to my children, even with my terrible singing voice, not because I can do a better job than Plácido Domingo or Lyle Lovett, but because those talented gentlemen do not love my children as I do. There are times, in other words, when doing things badly, with and for one another, beats having them done well on our behalf by professionals. Chris Anderson, author of *Free*, tells a story about his kids’ deciding what to watch on a big TV monitor. His kids are *Star Wars* fans and were given a choice between seeing one of the *Star Wars* movies in high definition and watching YouTube videos of *Star Wars* scenes reenacted with Legos. You can guess which they chose. They already understood the *Star Wars* canon—the novelty came from seeing what their peers were doing with that shared knowledge.

Two countervailing forces, in other words, pull against a bias toward pure professionalism. The first is the Zagat’s counterexample (the value in ordinary people sharing what they know) and the second is the “Happy Birthday” counterexample (the value in doing something that makes you feel a sense of membership or generosity). Sometimes the value of professional work trumps the value of amateur sharing or a feeling of belonging, but at other times people find large-scale and long-lived sharing better. As more people come to expect that amateur participation is always an open option, those expectations can change the culture.

PATIENTS LIKE US

To continue with medical analogies, let’s imagine a patient who actually has a complicated and life-altering disease. Needless to say, such a patient wants a professional to do his diagnosis and treatment, but he also wants to know something about the treatment the doctor prescribes. The doctor won’t have time to give the patient all the information he wants. Here both kinds of amateur value—sharing and a feeling of belonging—can now come to the fore in ways they couldn’t even a few years ago.

PatientsLikeMe.com is a site that, true to its name, allows patients with similar chronic health conditions to share information and offer support. The advantages of joining a group like this fit the transactional model of the current health-care system: patients can learn from one another about how to manage long-term or complex treatments (like deep brain stimulation for Parkinson’s or antiretrovirals for HIV/AIDS) and can offer themselves up as trial patients for medical researchers, thus lowering the cost and increasing the speed with which new therapies can be tested.

Many traditional trials for new therapies proceed with fewer than twenty patients in a particular experimental group (called a panel). But more than fifty thousand people use PatientsLikeMe, creating communities for particular diseases. (Its strategy is similar to PickupPal’s getting drivers and riders in the same areas.) As a result, so many patients with amyotrophic lateral sclerosis (ALS, sometimes called Lou Gehrig’s disease) use the site that they are actually subdivided into categories of ordinary ALS and two rarer variants: primary lateral sclerosis (PLS) and progressive muscular atrophy (PMA).

true only with some commitment to governance structure. eBay, CouchSurfing, PickupPal, and countless other sites that involve real effort or money, as well as real risk, have had to find ways to govern their members in order to produce a larger good. The less catchy but more accurate lesson from eBay is "People will behave if they sense that there is long-term value in doing so, and short-term loss in not doing so." The greater the value and the risk inherent in participation, the more some sort of structure is required to keep the participants concentrating on their shared and sophisticated goals, rather than on their personal and basic ones.

There is no one-size-fits-all set of rules for governing groups that create public value. Working software projects like Apache tend to be brutal technical meritocracies, while groups coordinated via social networks, like the Responsible Citizens, tend to have a more supportive culture, and so on. There are two universals, however: to succeed in creating and sustaining public value, a group must defend itself against external threats (like eBay defending itself against fraud) and against internal threats (like the members of the Apache project defending themselves against getting sidetracked by arguments or inertia). As Bion noted, external threats are the more attention-getting, as groups can easily focus their energies on external enemies, but when it comes to keeping a group of voluntary participants committed to the creation of shared value, internal threats are far more serious.

It's easy to galvanize a group with thoughts of some external enemy, but, in fact, the likeliest source of distraction from a shared goal is from the members of the group with that goal. (Ironically, one of the easiest ways to distract such a group is to get them to

focus on outside enemies, real or imagined, rather than on their shared interests or tasks.) Because the biggest threat to group action is internal, voluntary groups need governance so that we can defend ourselves from ourselves; we need governance to create a space we can create in. Creativity at the personal and communal end of the spectrum requires little of that sort of governance to survive, but the more a group wants to take on hard public or civic problems, the greater the internal threats of distraction or dissipation are and the stronger the norms of governance need to be.

Falling costs create room for experimentation, experiments create value, and that value creates an incentive to benefit from it. If incentive led only to more experimentation, then lowered costs would create a pure virtuous circle. Unfortunately, the incentive to make use of experimental value reaches people who had nothing to do with creating or sustaining it. The larger and more publicly successful a project is, the more people will want to appropriate that value while giving nothing back or even to see the project fail.

To take a participatory example that suffers from these vicious cycles in several ways, consider Wikipedia. Some people act out on Wikipedia to get attention. Shane Fitzgerald, a twenty-two-year-old Dublin student, added a fake quote to composer Maurice Jarre's Wikipedia page, from whence it turned up in Jarre's obituaries worldwide. Other times people want to alter or silence a point of view they dislike. Unlike Fitzgerald's playful hoax, Wikipedia pages on subjects ranging from evolution to Islam to Microsoft to Galileo are under fairly steady threat from people who want the contents significantly altered or removed. Sometimes

the appropriation is an attempt to capture financial value, as when people try to edit Wikipedia articles to add favorable statements about a particular company or to remove unfavorable ones. This tension between the individual and the group reflects the strains involved in taking advantage of cognitive surplus for public and civic uses.

The choice we face is this: out of the mass of our shared cognitive surplus, we can create an Invisible University—many Invisible Colleges doing the hard work of creating many kinds of public and civic value—or we can settle for Invisible High School, where we get lolcats but no open source software, fan fiction but no improvement in medical research. The Invisible High School is already widespread, and our ability to participate in ways that reward personal or communal value is in no imminent danger. Following Gary Kamiya's observation about the ease of getting what we want, we can always use the internet today to find something entertaining to read, watch, or listen to.

Creating real public or civic value, though, requires more than posting funny pictures. Public and civic value require commitment and hard work among the core group of participants. It also requires that these groups be self-governing and submit to constraints that help them ignore distracting and entertaining material and stay focused instead on some sophisticated task. Getting an Invisible University means mastering the art of creating groups that commit themselves to working together outside existing market and managerial structures, in order to create opportunities for planet-scale sharing. This work is not easy, and it never goes smoothly. Because we are hopelessly committed to both individual satisfaction and group effectiveness, groups committed to

public or civic value are rarely permanent. Instead, groups need to acquire a culture that rewards their members for doing that hard work. It takes this kind of group effort to get what we need, not just what we want; understanding how to create and maintain it is one of the great challenges of our era.