

So too with the changes to LamdaMoo. Before the balloting, LamdaMoo was regulated through norms. These regulations of social structures were sustained by the constant policing of individual citizens. They were the regulations of a community; the rise of democracy marked the fall of this community. Although norms would no doubt survive the establishment of a democracy, their status was forever changed. Before the democracy, a struggle over which norms should prevail could be resolved only by consensus—by certain views prevailing in a decentralized way. Now such a struggle could be resolved by the power of a majority—not through what a majority did, but through how they voted.

I've romanticized this bizarre little world far more than I intended. I do not mean to suggest that the world of LamdaMOO before democracy was necessarily better than the one after. I want only to mark a particular change. Like CC, and unlike AOL, LamdaMOO is a place where norms regulate. But unlike CC, LamdaMOO is now a place where members have control over restructuring the norms.

Such control changes things. Norms become different when ballots can overrule them. And code becomes different when ballots can order Wizards to change the world. These changes mark a movement from one kind of normative space to another, from one kind of regulation to another.

In all three of these cyber-places, code is a regulator. But there are important differences among the three. Norms have a relevance in CC and LamdaMOO that they do not in AOL; democracy has a relevance in LamdaMOO that it does not have in CC or AOL. And monitoring has a relevance in AOL that it does not have in LamdaMOO or CC (since neither of the latter two use data about individuals for commercial purposes, either internal or external to the organization). Code constitutes these three communities; as Jennifer Mnookin says of LamdaMoo, "politics [is] implemented through technology."³² Differences in the code constitute them differently, but some code makes community thicker than others. Where community is thick, norms can regulate.

The final space in this survey is also constituted by code, though in this case the "management" has less ability to change its basic architecture. This code is net code—a protocol of the Internet that is not easily changed by a single user. At least it was not easy for me.

. l a w . c y b e r

His name was IBEX, and no one knew who he was. I probably could have figured it out—I had the data to track him down—but after he did what he did, I did not want to know who he was. He was probably a student in the very first class about cyberspace that I taught, and I would have failed him, for I was furious about what he had done. The class was "The Law of Cyberspace"; version one of that class was at Yale.

I say version one because I had the extraordinary opportunity to teach that class at three extraordinary law schools—first at Yale, then at the University of Chicago, and finally at Harvard. These were three very different places, with three very different student bodies, but one part of the course was the same in each place. Every year a “newsgroup” was associated with the class—an electronic bulletin board where students could post messages about questions raised in the course, or about anything at all. These postings began conversations—threads of discussion, one message posted after another, debating or questioning what the earlier message had said.

These newsgroups constituted what philosophers might call “dialogic communities.” They were spaces where discussion could occur, but where what was said was preserved for others to read, as in CC. That was the dialogic part. The community was what was made over time as people got to know each other—both in this space and in real space. One year students in the class and students outside the class (who had been watching the .law.cyber discussions develop) had a party; another year the students outside the class were invited to attend one class. But over the three years, at three different schools, it was clear that three communities had been made. Each was born on a particular date, and each lived for at least a couple of months.

My story here comes from Yale. Yale is an odd sort of law school, though odd in a good way. It is small and filled with extremely bright people, many of whom do not really want to be lawyers. It fashions itself as a community, and everyone from the dean on down (not a “Yale” way to describe things) strives continuously to foster and sustain this sense of community among the students. To a large extent, it works—not in the sense that there is perpetual peace, but in the sense that people everywhere are aware of this sense of community. Some embrace it, others resist it, but the resistance, like an embrace, says that something is there. One does not resist the community of people on a Greyhound bus.

One extraordinary feature of the Yale Law School is “the Wall.” The Wall is a place where people can post comments about whatever in the world they want to say. A letter can be posted about gay rights at Yale, or a protest about Yale’s treatment of unionized workers. Political messages are posted as well as points about law. Each posting makes additional ones possible—either scribbled on the original post or appended underneath the post.

An extraordinary sign for any visitor, the Wall is located right at the center of the law school. In the middle of a fake Gothic structure is a stone space with scores of papers posted in random fashion. Around the posts stand wandering students, reading what others have said. This is Yale’s speakers’ corner, though the speakers are writers, and the writing is substantive. There is little to be gained on the Wall through rhetoric; to gain respect there, you must say something of substance.

One rule, however, governs this space. All postings must be signed; any posting without a signature is removed. Originally, no doubt, the rule meant that the posting be signed by the person who wrote it. But because this is Yale, where no rule can exist without a thousand questions raised, a custom has emerged whereby an any-

mous post can be signed by someone not its author (“Signed but not written by X”). That signature gives the post the pedigree it needs to survive on the Wall.

The reasons for this rule are clear, but so too are its problems. Let’s say you want to criticize the dean for a decision he has made. The dean, however sweet, is a powerful person. You might well prefer to post a message without your name attached to it. Or say you are a student with political views that make you an outsider. Posting a message with those views and your signature might draw the scorn of your classmates. Free speech is not speech without consequence, and scorn, or shame, or ostracism, are likely consequences of lots of speech.

Anonymity, then, is a way around this dilemma. With anonymity, you can say what you want without fear. In some cases, for some people, the right to speak anonymously makes sense.

Still, a community might want to resist this right. Just as anonymity might give you the strength to state an unpopular view, it can also shield you if you post an irresponsible view. Or a slanderous view. Or a hurtful view. You might want to question the policies of the dean, or you might want falsely to accuse a fellow student of cheating. Both utterances benefit from anonymity, but the community has good reason to resist utterances like the second.

As far as I know, IBEX never said anything on the Wall. Instead, he spoke in the newsgroup associated with my class. By design, the newsgroup was open to anyone at Yale who wanted to speak. Unlike the Wall, however, the technology allowed users to call themselves whatever they wanted. “IBEX,” of course, was a pseudonym. For purposes of the Wall, a pseudonym was just like anonymous speech—you had to use your real name. But in a newsgroup a pseudonymous posting is quite different from an anonymous posting. Over time you can come to know the character of a pseudonym. In the class that year, along with IBEX, we had SpeedRacer, MadMacs, Cliff-Claven, Aliens, blah, and Christopher Robbin. While members of the class might know who these participants were (we all knew who MadMacs was, but only a few of us knew SpeedRacer), each pseudonym had a character whether people knew who they were or not.

The character of IBEX was bad. This much was clear from the start. Before IBEX appeared, life in the space flourished. At first people were timid, but polite. Brave souls would post an idea or a joke. The conversation would continue around the idea or joke for a bit. After a couple of weeks the conversation would become quite intense. Patterns of exchange began. People had questions; others had answers. People stumbled as they spoke, but they were beginning, slowly, to speak.

Some things about how they spoke were immediately noticeable. First, women spoke more in this space than they did in class. Maybe not more in a statistically significant sense, but more.³³ Second, helpers quickly developed, and those who received their help. Soon a class developed online—a real class that identified itself as such and spoke as a class in a way that a teacher dreams of in real space, and in a way I had never known.

Why this happened I could not really say. Una Smith may have been a catalyst. I said that I taught this course three times. Each time (without my intervention at all) there was an Una Smith participating in the newsgroup. At Yale she was a real person, but after Yale I thought of her as a type. She was always a woman from outside the class; she was always extremely knowledgeable about the Net and about USENET; and she always wandered into my (virtual) class and began telling the others how they should behave. When someone violated a norm of the Net, Una would correct them. Often this instruction was not taken terribly well (these were, after all, law students). Soon the class would rally to defend the instructed and to challenge her to defend her rules. And of course, expert that she was, she usually had an answer that did defend the rules she had dictated. This exchange soon became a focus of the class. Una had drawn their anger, and the class gained cohesiveness as a result.

About a month and a half into the course, the group reached an apex of sorts. It became the best it would be. I remember the moment well. Early on a spring afternoon I noticed that someone had posted the first line of a poem. By the end of the day, without any coordination, the class had finished the poem. There had been rhythm to the exchanges; now there was rhyme. Things hummed in the newsgroup, and people were genuinely surprised about this space.

It was then that IBEX appeared. I think it was just after we had discussed anonymity in class, so maybe his later claims to have been serving a pedagogical role were true. But he appeared after one of our classes—appeared, it seemed, just to issue an attack on another member of the class. Not an attack on his ideas, but on him. So vicious and so extensive was this attack that when I read it, I didn't know quite how to understand it. Could it have been real?

Almost immediately, conversation in the group died. It just stopped. No one said anything, as if everyone were afraid that the monster that had entered our space would turn his fury on one of them next. Until, that is, the victim responded, with an answer that evinced the wounds of the attack. IBEX's words had cut. The victim was angry and hurt, and he attacked back.

But his salvo only inspired another round of viciousness, even more vile than the first. With this, other members of the class could not resist joining in. IBEX was attacked by a string of characters in the class as cowardly for hiding behind a pseudonym and as sick for what he had said. None of this had any effect. IBEX came back, again and again, with an ugliness that was as extreme as it was unrelenting.

The space had been changed. Conversation fell off, people drifted away. Some no doubt left because they were disgusted with what had happened; others did not want to be IBEX's next target. There was a brief period of life in the space as people rallied to attack IBEX. But as he came back again and again, each time more vicious than the last, most simply left the space. (One time IBEX came back to protest that he had been wronged; in the week before, he claimed, he had not posted anything, but someone wearing the white sheet of IBEX had posted in IBEX's name, so that he, the real IBEX, had been defamed. The class had little sympathy.)

But it was not just the online class that changed. As we met face to face each week I felt the atmosphere bend. People felt the creature in the room, though no one could believe he was a student at the Yale Law School. This was their classmate, hiding behind a smile, or a joke, in real space, but vicious in cyberspace. And the very idea that this evil was hidden under a smile changed how people felt about smiles.

Some called this the “David Lynch effect,” an allusion to the film producer who portrays the rot of society just under freshly painted facades. We felt in that class the rot of our community just under the surface of smiling and functional students. There was a (relatively tame) Jake Baker in our midst. The space had permitted behavior that destroyed community—community that the space itself had created. Community had been created in part through the ability to hide—to hide behind a benign pseudonym; to hide hesitation, or editing, in the writing; to hide your reaction; to hide that you were not paying attention. These anonymities had made the community what it was. But the same anonymity that created the community gave birth to IBEX as well, and thus took the community away.

HOW ARCHITECTURES MATTER AND SPACES DIFFER

I said this at the start, but now it should have some real meaning: cyberspace is not a place; it is many places. Its places don’t have one nature; the places of cyberspace have many different “natures.” These natures are not given, they are made. They are set (in part at least) by the architectures that constitute these different spaces. These architectures are themselves not given; these architectures of code are set by the architects of cyberspace—code writers.

The spaces I have described here are different. These differences have been the purpose of my description. My aim has been to remind you of the different character that these places have, and to remind you again of the reasons that these places have these differences.

In some places there is community—that is, a set of norms that are self-enforcing within the group. Features such as visibility (as opposed to anonymity) and nontransience help create those norms; anonymity, transience, and diversity make it harder to create community.

In places where community is not fully self-enforcing, norms are supplemented either by rules imposed through code or by rules recognized through democratic procedures. These supplements may further some normative end, but at times they are in tension with the goal of community building.

If we had to simplify this diversity of spaces by finding one dimension along which we could rank them, that dimension might be their amenability to outside control. “Community” in the sense that I’ve used the word means a group able to enforce its own norms among its members. In this, the groups I’ve discussed are