



Series 2

Episode 23

Vengeance is Mine, Sayeth the Debater

WARNING: DO NOT TRY THIS AT HOME. The following characters are paid professionals operating under controlled conditions. Attempting to emulate them is probably not going to turn out all that well. Trust us on this.

Lily Maru had worked out every detail, traveled down the branches of every possibility, and convinced herself that her plan was absolutely perfect.

Which meant that for Lily Maru, it was payback time. And Hautboy LeMonde was going to be on the receiving end of that payback. The saying goes that vengeance is a dish best served cold, meaning that while the inclination to get back at someone is usually felt strongest immediately after the cause of that inclination, allowing some time to pass, allowing yourself to wait, and plan, and savor every moment of your vengeance, is better than striking back blindly at the first moment. It's like the anticipation of Christmas that informs all of December, or the planning of a summer vacation begun while the snow is still on the ground. Getting there, to throw in one last cliche, is half the fun. With vengeance, it's even more than half.

Lily, in her planning, had enjoyed every single minute of it.

In addition to her debate life, Lily was an excellent student, and as likely as any at Nighten Day to be valedictorian. She was smart at almost

everything, but she was especially smart in the sciences, a natural inclination that had been apparent even back in preschool. Lily liked to learn how things worked, and why, and then she liked to tinker with the way they worked. Which explained why, when she was introduced to computer science, it was like wet meeting water. The idea that a computer could do almost anything, that it could be applied to any problem if only you used the right means, was an inspiration to her. There was more than a little of the engineer in her makeup. She liked to imagine solutions as much as she enjoyed contemplating problems. And for many an engineer, in many a field, the computer was ultimate tool. Design a bridge, create a wonder drug, map a genome, give birth to artificial intelligence—those were the sort of lures that drove Lily's scientific, engineering side. Coupled with her language skills, she was quite an academic threat. If we were laying odds, we'd cover whatever spread you want on whether she'd get into an Ivy after graduation. We wouldn't even mind covering that she'd get into almost all of them. She was that good, and her talent was obvious to anyone who took the time to notice it. And it didn't take all that much time.

Her goal with the project at hand was simple enough. Make Hautboy LeMonde pay the price for enrolling her at Upper Schmegeggie Community College. And make him pay through the nose.

And now the time had come.

In today's world, every computer has the potential to be connected to every other computer. Millions of computers, in millions of locations, all of them connected. Some of them are at the gates to vast storehouses of data, while some of them are some simple user looking up the capital of Arkansas. Every piece of information, totaling a universe of pieces of information beyond imagining, boiled down to bits of data, zeros and ones strung together in an orderly fashion, able to be transmitted electronically at virtual light speed. Libraries of information as vast as planets accessible to everyone, everywhere. The key thing was knowing what information was where.

Access to the internet, where all this vast universe of information flows wildly seemingly at random, is accomplished via servers that in fact do know what information is where. The connection in your house goes to the

provider of your internet service, who knows who you are by your number. The number of your modem. The number of your computer or whatever other device you're using. Unique, separate numbers. You make a request to find the capital of Arkansas by doing a Google search, and the request travels from your device to your modem to the ISP server, where it now has the entire data universe as a potential goal. But you have requested this information specifically from Google, so your request goes to a server (which is nothing more than a computer) that knows the number, so to speak, at Google. In fact, the number literally. Specifically, your request is directed by a Domain Name Server, or DNS. The request travels from server to server, always aimed at Google, until it eventually gets to a Google server, where the request for the capital of Arkansas, which is now rendered entirely in zeros and ones, is handled in however the server wishes to handle that request. This being Google, the response will be a list of a few million links to other servers that provide the answer. If you had made the request of Wikipedia, the answer would have been found on Wikipedia's own servers, and the response would have been an entry in a wiki. Other servers, at other domains, would handle the request each in their own unique way. In all cases, however the request is handled, the response will be sent back to you directly and not to the other three billion people online at the moment because part of your request included your number as the source of the request. The number of your modem. The number of your device.

The capital of Arkansas is Little Rock, by the way. But you probably knew that already.

A school like Nighten Day operates no differently from every other point of entry onto the internet. Starting point of computers, then modems, servers, end location, back again, through the random path of the internet. But a school like Nighten Day has particular interests that need to be addressed. The access to information can not be universal. Because the computers are being used by minors, the school feels a responsibility for various reasons relevant to minority to block some sites. Sometimes a site is blocked for productivity reasons: allowing students to access Facebook during the school day would result in, for all practical purposes, the total implosion of that school day. If Facebook were an allowed site, no one at Nighten Day would get any work done, ever again, not nobody, not no how.

Simple as that. Much of the blocking, therefore, is sites that are not particularly offensive by any standards, but are distracting by all standards. You can't access your private email at Nighten Day, unless you're a teacher or an administrator, in which case you will be given a school account, for school business only. For educators, it's all about productivity. Blocking sites considered anti-productive is as American as apple pie. Almost all high schools do it. The ones that don't either wish they did, or don't know that they can. But those exceptions are few, and probably won't last much longer, so if you're at one of those schools, enjoy it while you can.

A clever computist can get around much of this. There are ways of tricking servers into believing that you are not who it thinks you are, and that you are not going where you are going. You can create a proxy, an account somewhere totally where you are not, and access banned sites through this proxy. Unfortunately for your casual, elementary computist, your elementary blocking software, knowing that this is possible, blocks your elementary proxy sites. Your dedicated hacker on the other hand, knowing this, outwits the elementary blocking software with proxy sites are far from elementary.

Like, in Lily Maru's case, a little number we'll simply call...Huck.

Huck was Lily's goto site for all business that was private, and much that wasn't. Using Huck as her proxy allowed Lily to go wherever she wanted, whenever she wanted, from wherever she wanted, leaving no trail anyone could follow. She had created it not because it was something of great need to her, but simply because she could. At school she could surf wherever she wanted, but she was the sort of student who never wanted to surf where she shouldn't. While everyone around her might fall into the Facebook mousetrap at the first whiff of cheese, she would rather go to school and work on her studies. She was that kind of student.

She was also the kind of student who could write a proxy like Huck that could take over other machines and pretend to be those machines. Most proxies simply act as a middleman between you and other sites. Huck could *become* those other sites. Huck, given half a chance, could be one malicious hot potato. Normally, in Lily's hands, it was as safe and gentle as a spring breeze.

But when Lily got riled up...

She logged on to Huck, as she always did. Just to be safe, she double-tracked herself, logging in as Huck to Huck, so that even someone watching what she was doing as she was doing it wouldn't be able to see her hand in it.

And then she sent Huck into the computer lab at Nighten Day. She was in her bedroom, and it was eleven-thirty at night, but that didn't matter. She gave Huck the address of the computer that she knew was the one Hautboy had been using that day. Hautboy had stayed after school, doing some research. Normally students researching after school worked out of the library, but everyone just loved Hautboy to death, including the comp sci teacher, who simply told her star pupil to make sure the door was locked when he left. Lily had been walking by when she had heard that exchange, and seen Hautboy at the second desk from the left in the front.

She knew that was his computer. She had already gotten the device number, days ago. She had only been waiting for her opportunity.

Now Huck took over Hautboy's computer, which had not been turned off. Logged out, yes, but not turned off. Nobody ever turned off a computer at Nighten Day, because most of the equipment was so old it took five or ten minutes to cold boot and nobody wanted to wait that long. Huck grabbed the firmware on Hautboy's machine and reset the time; it had to be during the period that Hautboy had been in the room. Next, Huck entered a name and a password—Hautboy's name and password.

How had Lily gotten Hautboy's password? Didn't we say she had gotten his device number days ago? All she had had to do was bury Huck in the background on the Nighten Day network and wait until the user name HLeMonde was typed in, followed by his password...Which, by the way, was "Sondheim."

Yeah, right. Sondheim. In your dreams, Hautboy!

Now, as Lily typed away, Huck became Hautboy, and did a bit of basic research on theater. No big deal. Then Huck took on bigger prey. After all, it was theoretically after school. No one was looking. The Hautboy who was theoretically on the computer was all by himself. He was young. Hormonal. Adolescent.

Huck started surfing porn sites. Nasty porn sites. Hideous porn sites. The kind that not only gave your computer a virus, they gave your brain a virus.

Of course, because porn was naturally blocked by the school's blocking software, poor Hautboy was unable to get to any of his less than saintly destinations. He kept getting the error message, "site not available."

And here was the thing about this blocking software, which Lily had discovered in her research. If you get five "site not available" messages in a row, the software locks up and sends a message to the sysadmin that someone has been up to no good.

Five porn sites. Hideous porn sites, Nasty porn sites. Virus-infecting porn sites. Where people were doing things that most other people didn't even know could be done.

All leading back to Hautboy LeMonde's computer.

Which was now locked up, having sent a message to the sysadmin that the user HLeMonde had boldly gone where no one had gone before, at least at Nighten Day.

The sysadmin at Nighten Day was an Indian corporation known as AidCorp. Normally the folks at AidCorp—who all claimed to be named Scott and Ashley and Gwyneth, which are far from common on the subcontinent—did Help Desk type work, solving simple problems for their long distance users on demand. When a message like this one arrived, the process at AidCorp, established with the owners, in this case the Nighten Day School DIstrict, sent an automated email to the principal of the school involved describing the incident in as much detail as possible.

Meanwhile, a few continents away, slowly, carefully, a high school senior named Lily Maru backed Huck out of himself, and then backed herself out of Huck, and then, just to be extra safe, had Huck self-destruct.

It wasn't as if she didn't have him backed up safely somewhere else.

She looked at the clock. It wasn't even midnight yet. And her work here was done.

Time to check her Facebook account and see how the rest of the world was doing.

“Yeah, hi. This is Hamlet Buglaroni, up at the high school.”

There was a silence at the other end of the line.

“I’m a teacher up here.”

More silence.

“I mean, a substitute teacher. With the debate team.”

The voice that had answered the phone came back over the line.

“Whatdyo mean, debate?” The words were spoken in an accent worthy of deepest, darkest Brooklyn.

“You know. The debate team.”

“You ain’t Ms. Screeds.”

“Well, no I’m not. She’s dead.”

“Dead? Why’s that?”

“Why is she dead?”

“Yeah. Why is she dead? She can’t run a debate team if she’s dead. Not very well, anyhow.” There was a Brooklynian chuckle to go with the Brooklynian joke.

“She’s dead because, well, no one lives forever,” Buglaroni said.

“Well, old lady Screeds almost lived forever. What the hell was she? A hundred and ten? What did she die of?”

“I have no idea.”

“If you don’t know how she died, how can you take over the debate team after she’s gone?”

Buglaroni stared at the telephone. He was calling from the main office, from the desk of one of the admins who had gone off for a few minutes. “It doesn’t matter how she died,” he protested. “All that matters is that I need to find out what buses she had already reserved.”

“She reserved a lot of them. A busload. She never waited till the last minute.” There was a pause. “Maybe because she knew the last minute was almost here.”

“Who am I talking to?” Buglaroni asked, his frustration mounting.

“This is Zeke. Assistant Head Driver. Hold on a minute.”

The phone went to hold, which meant that Buglaroni got to listen to the Nighten Day School District's waiting music, "Single Ladies (Put a Ring on It)." Buglaroni was momentarily taken aback. He hadn't expected Beyonce as the District theme song. Lady Gaga, perhaps, but not Beyonce.

Oh, well. It was better than Cher...

"You still there?" Zeke was back on the line.

"I'm here," Buglaroni replied.

"You got a paper and a pencil?"

"Ready to go," Buglaroni said.

"Okay. Listen up."

And with that, Zeke started spewing dates and times and locations with about the same speed as a varsity policy debater in a practice drill, trying to set the record for the most information transmitted in the least amount of time with the most complete disinterest in the listener's actually understanding any of it.

But, somehow, Buglaroni got more than just the gist. Starting out, he knew that he had a big bus Friday morning at 9:00 heading to the Day's Ramalama EconoCot Express Inn up in New Haven. Which meant that he now knew where the team was staying. And they were being picked up on the corner of George W. Bush Boulevard and Charles Montgomery Burns Avenue at 4:00 on Sunday. That was a start.

"You have an email address?" Buglaroni asked when Zeke was finished spreading the bus schedule.

"Sure," he responded. "Zeke at Nighten Day dot edu."

"Okay," Buglaroni said. "I'll confirm all of this by email then."

"Yeah, sure. What did you say your name was?"

"Buglaroni. Hamlet P. Buglaroni."

"Okay, Hammy. Send me an email, and I'll send you all the itineraries. And meanwhile, there will be a bus up at the school Friday morning at nine o'clock."

"Thanks," Buglaroni said.

"Don't mention it. The debate team is our biggest customer. If you guys went out of business, we'd have to lay off half of our drivers." Zeke let out a big laugh that quickly transformed itself into a smoker's cough that sounded as if he were forcibly expelling his left lung. The phone went dead.

All right, Buglaroni said to himself. At least I've got that. Next up, check the motel reservation. And after that, try, yet again, to get the registration from firmguns.com.

It was slow going, but at least it was going.

Will Hautboy LeMonde be suspended for surfing the websites from hell?

What exactly is on the websites from hell?

If we send in \$5 each, will you tell us the urls of the websites from hell? Or do we have to tell you?

Will Hamlet P. Buglaroni become the best of friends with Zeke the bus guy?

Is Nostrum really back from hiatus, or is this some subtle trick where we click on the link and the next thing you know we're on one of the websites from hell?

The answers, if any, are available in our next episode: “Dearly beloved, things would be a lot nicer here in Nigeria if you sent me your social security number, or, can we get back to those websites from hell for a minute?”