

The Geek Shall Inherit the Earth: My Story of Unlearning

Benjamin "Mako" Hill

mako@debian.org

1. Introduction

If I were asked to define and confine myself using only one term, I wouldn't hesitate long before I chose the word "geek."

In choosing this term I am definitely not referring to the dictionary definition of the word. Most modern dictionaries offer a variation on this one from Webster's most recent lexicon:

geek n.

- 1 : a carnival performer often billed as a wild man whose act usually includes biting the head off a live chicken or snake
- 2 : a person often of an intellectual bent who is disapproved of

I do not see myself as a freak, a wild man, an intellectual, one worthy of disapproval, or even a carnivore. Still, I do, first and foremost, identify myself as a geek.

For decades, young Americans on the fringes of youth culture were denounced and condemned as "geeks." Over time, the term served as common ground for these outcasts; it came to define a group of nerds ¹ who fit in together by not fitting in with anyone else.

The Jargon File, a lexicon of technology-related terminology created by the first generation of Internet pioneers, technophiles, and hackers defines "geek" in a way that begins to describe my relationship to the label:

geek n.

A person who has chosen concentration rather than conformity; one who pursues skill (especially technical skill) and imagination, not mainstream social acceptance. Geeks usually have a strong case of neophilia. ² Most geeks are adept with computers...These are people who did not go to their high school proms, and many would be offended by the suggestion that they should have even wanted to.

The Jargon File shows how "geek" evolved from an insult into a term of endearment used by these "losers" and "nerds." Over time, this common ground provided the setting for the creation of a new culture. With each year, geek culture becomes more visible, more defined, and more influential.

Geek culture was formed in critical opposition to mainstream social culture and is defined through rapidly expanding and evolving technologies. Today's geeks are no longer forced onto the fringe of

mainstream culture but have developed a critical perspective and stay on the fringe by choice. A self-actualized geek culture is, by definition, an act of critique and protest.

Geek culture has grown into a deep-rooted critical mentality and willingness to challenge, confront, and build alternatives to deep-rooted social, educational, political and economic institutions.

Also important to geek culture is an obsession with skill, creativity, and an infatuation with new technology. In this way, geek culture couples a critical nature with the tools and the mentality needed to execute real change.

Geek culture is complex. It is enigmatic. It is powerful.

Meanwhile, the number of us, and the influence we have on the rest of society is growing. *Fast.*

While the details vary, my story is one lived out by hundreds and thousands of geeks in every corner of the world. Together, we have created a movement that, in an increasing number of cases, has not stopped at criticizing established technical and social systems; it has provided workable alternatives to use in their place. Over the last decades, groups of geeks, several of which I am proud to include myself within, have created alternative systems like the GNU/Linux operating system and the free software movement (both of which will be described later in this essay) and have begun to mount a powerful challenge to a large group of established technical, economic, and social establishments.

Surprisingly to many, but not to myself and to many geeks, these alternative systems have begun to *win*. Not everyone can, should, or needs to be a geek but everyone can learn from our victories.

2. My Journey To Geekdom

By most traditional forms of measurement, I was a very smart and motivated child. I progressed quickly and easily through first and second grade in the public school system while effortlessly staying at the top of my class. In second grade, I had effectively fulfilled all the goals for the year before the third month of classes. Unable to provide me with personal attention and a custom curriculum, my second grade teacher gave me a seat by the window and a stack of puzzles to occupy myself with. When my parents discovered my daily routine, they appealed to the teacher, the school, and then the district. Unfortunately for me, the hands of all three parties were tied by large class sizes and an inflexible curriculum mandated from above.

Looking for options, my parents enrolled me in a prestigious private elementary school halfway through second grade. The school offered a high amount of personal attention but a very traditional curriculum that allowed little flexibility in the curricular and pedagogical methods; the school offered me the ability to learn as much as I could--but only on *their* terms.

It quickly became apparent that the school's method of teaching and my style of learning failed to mesh. Frustrated by my poor performance, the school referred me to educational specialists who diagnosed me with Attention Deficit Disorder (ADD).

For those that are unfamiliar with the diagnosis, children with ADD often have difficulty paying attention to a single subject for long periods of time. They often have difficulty focusing on a single task or goal-oriented procedure. Children and adults with ADD share a deficiency in a particular neurological chemical and a similar type of physical brain structure. In spite of this evidence, the diagnosis itself is new and remains suspect among many medical and educational experts--although this discussion falls outside the scope of this essay³.

In second grade, I was prescribed Ritalin: a stimulant used to treat ADD. Initially, I was given a low dose of the drug that was to be taken twice daily. In response to positive results and an increased ability to focus in class, the dosage was slowly increased.

By fourth grade, I was alternating between powerful long-acting pills and high doses of the short-term drug taken three times daily. I was given pills before I got out of bed and would feel the drug's effect late into the evening. The use of the drug, in my case, was for purely academic reasons (it is given to many children to correct bad or hyperactive behavior) and it worked fantastically. While, I failed to fit the educational model of the the school, drugs were able to bend my mind into a more receptive and compatible shape.

Ritalin's side effects included hunger suppression and an inability to sleep. I slept very little often reading anything I could get my hands on until well past one in the morning. Additionally, I failed to gain weight in a manner appropriate for someone of my age and height.

Feeling the negative side effects of the drug, feeling behavior changes that I was not comfortable with, and feeling cheated of the opportunity to learn as myself, in my own way, and on my own terms, I had begun articulating my desire to stop taking Ritalin by fourth grade.

My teachers and parents were sympathetic to my desires to free myself from the drug but didn't want to sacrifice the academic progress I had made with the drug's help. My own distractability made me a more distracting student. When my grades slipped, when I was failed to preform to the level I had demonstrated while on the drug, and when I become unmanageable and unmanageably distracting within the context of a class, Ritalin helped me get back on track.

I loved my ability to perform academically with Ritalin and I loved the positive consequences of, and reactions to, this improved performance but I hated the means toward this end. I loved "me", and others positive reactions to me, while I was on Ritalin but hated using the drug to do what I felt entailed becoming another person.

Academically, Ritalin made a step in the right direction simple. Neither my teachers, the school administrators, my parents, nor myself was willing to deal with the step backward that going off the drug seemed to entail. I had good grades, I had academic success, and no one, including myself, could justify sacrificing these things to my desire to "feel like myself."

Little had changed as I transitioned to a new school for seventh grade. Also a private school modeled on a very traditional educational system and curriculum, I again found myself ill-suited to succeed without Ritalin as a crutch. During my early years at my new school, I made several passionate but impulsive attempts to stop taking Ritalin altogether.

The result of these actions were an immediate and sharp decrease in grades and academic performance. While I loved "feeling like myself", It was hard to love feeling as I did as I watched my academics nosedive in the absence of the physcostimulant.

As I began receiving poor grades, my parents and teachers did not need to be to be explicit about the fact that if my grades did not improve, Ritalin, the only consistently successful corrective method, would be employed to fix the problem.

Desperate both to succeed, and to do so on my own terms, I took the drug off and on. In what became a predictable pattern I would go off Ritalin, go a few days or even weeks successfully, flounder and begin forgetting assignments and producing lower quality work. When the next set of grades got back to my parents and administrators, the dosage or frequency of Ritalin would be bumped back up. My teachers recognized my potential while off of the drug but were unable to evaluate my unmediated knowledge,

interest, and passion through their curricula and on their grade-sheets. As a result, I received conflicted quarter comments and consistently good, but no longer stellar grades.

My first year at this new school was also my first year in a new social environment. The transition marked my first experience as a social outcast. Lacking friends and a social life at school, I turned my spare time and attention increasingly toward computers and technology. Working before the Internet had grown far beyond government and educational uses, I used my telephone line to connect to local Bulletin Board Systems (BBSs) where I could trade computer files, post comments in message boards, play games, and most importantly, chat with others online.

Cultivated through computer mediated communication, my best friends during this period of my life included:

- A Vietnam veteran left shattered mentally by the war;
- A twenty year old confined to a wheel-chair with multiple sclerosis;
- A sixteen year old with a passion for an offensive right-wing radio personality;
- Numerous others from equally colorful and vastly different backgrounds.

Through BBSes I was able to virtually meet, interact, and even become friends with poor people, uneducated people, old people, people of minority races, and people with life experiences I might never have come into contact with otherwise in my sheltered upper-middle class suburban life.

I was comfortable and content in my suburban environment but BBSs gave me a window to a wider world. I remember one of my best friends explaining that he was born with a disease that left him without use of his legs and one arm. I remember asking a veteran friend what he did in Vietnam; he answered, "I killed people. I lied about my age so I could kill people when I was sixteen. It really fucked me up." Before I entered high school, I had already considered life without limbs, life without money, life without the comforts of my upper middle-class upbringing, and life clashing with the realities of war; few of my peers could say the same.

Working through a medium that hid superficial differences like age, race, and class, I found people willing to look beyond the surface (something my "real world" acquaintances were unwilling to do); I found people who expected me to do the same.

During my sixth-grade graduation party, I passed up a ride in a limo to a class party to go home and chat with a troubled friend online. I simply preferred the company of these online friends to my classmates who rejected me as a "geek", a "nerd", and a "loser."

Begging transportation from my parents, I would take trips to BBS sponsored Get Togethers (GTs) where I could meet my online acquaintances in the "real world." I remember being shocked when I found out that one close friend weighed 500 pounds (approximately 208 kilograms). I remember my initial awkwardness around my wheelchair-bound acquaintance.

Cast out of my private school's small social world, my experiences with people through BBSs helped me notice the vast and complex nature of my society. As an outcast I was able to look around and see part of the larger world; I was able to see the world I came from in perspective; I was able to come back a better person.

I fell in love with these people and with our method of interaction but, above all, I fell love with--and gained a sense of awe, fear, respect, and understanding for--the technology, the medium itself.

By day, I felt school forcing me into a rigid and uncomfortable mold--often resorting to chemical means to accomplish the feat. By night, I was able to learn, build, explore, create, and expand myself, both socially and educationally--an ability only afforded to me through my use of technology.

Each month I hated school more, hated the terms on which I was being asked, and forced, to "learn." Each month, I threw myself more wholeheartedly at the keyboard and into the arms of technology as my means of escape from school and into an exploration of my own intelligences and concept of intelligence.

I remember reading a short essay titled *The Conscious off a Hacker* by a youth who called himself "The Mentor." A piece now most commonly called *The Hackers' Manifesto*. The Mentor spoke to my world when he said:

Mine is a world that begins with school. I'm smarter than most of the other kids, this crap they teach us bores me. "Damn under-achiever. They're all alike." I'm in junior high or high school. I've listened to teachers explain for the fifteenth time how to reduce a fraction. I understand it. "No, Ms. Smith, I didn't show my work. I did it in my head." "Damn kid. Probably copied it. They're all alike."

The Mentor's tone is self-indulgent, angst-ridden, and ego-centric. At the point in my life when I found his message, my own self-indulgence, angst, and inflated ego helped it mesh perfectly with my own dissatisfaction with school and my own feelings about technology. It's an immature reaction to real problems and valid complaints about a flawed system. The Mentor criticized schools for requiring and rewarding busy-work while they remain ambivalent to many real creative or intellectual achievements; he lashes out at a world that casts him out because he refuses to play its game on its terms. At this point in my life, I felt both the power of the critique and its causation completely.

3. My Introduction to Free Software

One day in eighth grade, I made my up my mind to give up Ritalin forever--and this time I meant it. Within weeks I was well on my way toward failing out of school. I began working closely with organizational tutors to learn tools and tricks that might help me cope in an educational system poorly suited in dealing with students with my educational style and strengths.

Meanwhile, my social situation had been gradually, but consistently improving. As I adjusted to life at my new school, I grew my hair out, began wearing more popular clothes, used popular slang language; and consequently, I increasingly found myself in the company of people willing to call themselves my friend. I was cynical about the process but it helped build up my self confidence.

While my social situation had improved dramatically since I enrolled in the new school, my love for and connection to technology and computer mediated communication remained a strong one. I drew support from my new friends but felt a special connection to the people that loved me with or without brand-name t-shirts and trendy jeans, and to the medium that facilitated these interactions.

In my first years of high school, two inter-related technologies had become particularly important to me: the first was the Internet and the second was the then almost unheard-of project called GNU/Linux.

The Internet was still in the infant stages of the World Wide Web but had slowly begun to replace BBSs. I read discussion boards, engaged in online chat in channels devoted to my favorite movies or books, traded files, and downloaded video games.

In eight grade (1993-4), a school friend with an interest in programming introduced me to a new operating system (first released in 1991) built around a small piece of software initiated and coordinated

by a Finnish graduate student at Helsinki University. The student's name was Linus Torvalds and he called his software "Linux." Linux acted as the last essential piece in an operating system named "GNU" (a recursive acronym standing for GNU's Not Unix ⁴) started 15 years before by a programmer and professor at Massachusetts Institute of Technology (MIT) named Richard M. Stallman (more commonly known as RMS).

Between eight and tenth grade I struggled with school on a full-time basis and was only able to devote a small amount of time to my interest in GNU/Linux.

In tenth grade, two full years after I first learned about GNU/Linux, a friend referred me to the GNU Manifesto, an article that changed my attitude toward GNU/Linux, software, and eventually, the rest of the world.

Already familiar with the GNU project, I read the essay intently. The story described how the project was started when Richard Stallman became disgusted at the proprietization of software in the MIT computer science research laboratories. In his view, the creation of new and better software was a process of learning, sharing, improving, improvising upon, and revamping an idea. He described the way that information and ideas were once shared as freely as air. He described their patenting, privatization, and proprietization as parallel to the theft of the air we breath.

Because, in RMS's opinion, ideas were taken from--and created in, through, and by--a community, they should not, and *could not* be owned. As the profitability of computer software became apparent and the markets for it began to expand, the patentability (and copyright) of computer software was close on its heels. RMS found that his attitude unsupported and unsupportable in the increasingly market-driven technological culture. Each day, more and more software became patented and copyrighted.

In response, RMS founded the GNU project to create a free (free as in the French word "libre", not "gratis" ⁵) operating system that could run a computer using only what he called "free software."

The first step RMS took toward accomplishing this goal was creating the GNU General Public License (GPL) a brilliant piece of legal craftsmanship that combines the power of copyright and contract law to subvert the ability of both to take away people's freedom.

Authors who place their software under the GNU GPL maintain the copyright on their work in order to insure the following freedoms (taken from RMS's *What is Free Software*):

- The freedom to run the program, for any purpose.
- The freedom to study how the program works, and adapt it to your needs. (Access to the source code is a precondition for this.)
- The freedom to redistribute copies so you can help your neighbor.
- The freedom to improve the program, and release your improvements to the public, so that the whole community benefits. (Access to the source code is also a precondition for this.) ⁶

One of the key requirements of this license was access to source code. ⁷ When you buy proprietary software, the lack of source code means you have no ability to change, adapt, or even find out how your application works. ⁸ The results of these licenses are serious and very real. ⁹ Additionally, companies are able to hide security holes, create oppressive standards, and engage in anti-competitive practices--and they do.

RMS's vision for free software was revolutionary in encouraging grassroots community based development. By incorporating more programmers in the development process, his software was able to grow and change faster than its proprietary competitors. By encouraging users to help in their software's development, software more accurately reflected its users' needs and desires.

While it was largely local to MIT at first, the Internet made collaboration on this new type of software possible in a way and on a global scale that even RMS had never considered possible. The GNU project took on global scope as programmers all around the world began adding support for their own languages, applications, and features. In his now famous decision, Linus Torvalds released his "Linux" kernel (a main system command processor) under the GPL and it was immediately embraced and incorporated into the GNU project.

As GNU/Linux grew in popularity, it offered more than just an alternative to more popular operating systems like Microsoft's Windows or Apple's Mac OS. It provided a revolutionary change in the fundamental philosophy behind software and its development--and made it accessible to a growing number of people.

It is a philosophy of critique realized in action. It is a quiet, persistent, and ruthlessly effective challenge of modern software development and the techniques that have defined it.

In these ways, the free software movement came to challenge conceptions of creativity, creation, originality, and intellectual property in a broad based manner. As the central symbol and product of the movement and the ideology, GNU/Linux was born of and actively represented this culture of resistance. Freely available, it was easily accessible to anyone, in any way and for any purpose.

In these ways, GNU/Linux taught me that to win games one could break all the rules. In fact, it was precisely the fact that GNU/Linux had broken the rules that gave the software and its development model its flexibility, adaptability, and strength.

In tenth grade, GNU/Linux and the free software movement was my first exposure to radical social and political ideology and actions--I was transfixed.

Energized, I began looking at my academic problems strategically.

My decision to give up Ritalin was jump-started by this catharsis. My commitment to succeed without the drug was forged in the fire of free software philosophy and the larger culture of resistance that it spawned in me. I worked hard to graduate high school a year early and spent my senior year living in Ethiopia learning the Amharic language and working on technical support issues in the country's first digital recording studio (armed with my GNU/Linux laptop). Technology taught me that the world was bigger than my backyard, neighborhood, city, and country. Free software taught me that I succeed in it on my terms.

In picking a college, I happily disappointed faculty at my pretentious prep school by deliberately choosing a school "below my potential." Because my high school was prestigious, my test scores high, and my grades good, many of my teachers and advisers assumed that by overlooking schools with "better" names and reputations, I was making a mistake. However, technology and the experience it afford me had given me confidence in my own style of learning and I was comfortable picking a college that was very different than my high school. I knew that Hampshire College would provide me with the opportunity to explore ideas that I was interested in on terms that I felt were fair.

Hampshire's unique educational system empowers each student by giving them more control over the direction and nature of their studies than other contemporary higher education models. The model tries to reform or replace the concepts of distribution requirements, grades, classes and majors while emphasizing independent and project based work as a major part of each students education. It is a

dynamic system that attempts to stay current and relevant while evolving and experimenting with its own processes. It was a perfect match for me at this point in my life.

4. Geek Meets World: Applying my geek mentality to the world.

During my first year at school, I became more involved and interested in free software. I became a developer for Debian: a project to make package GNU/Linux and to make more accessible, maintainable, and user friendly.¹⁰

In the second semester of my first year, another experience changed my life. The experience came in the form of a class titled “Cyberlaw” and taught by a fellow at the Berkman Center for Internet and Society at Harvard Law School. One of the major topics of the class was GNU/Linux, free software, and free software licensing.

It was not the class, nor was it the material covered that affected me. It was the fact that once a week, I was immersed in books, essays, articles, and stories by and about technology-driven social change advocates, activists, and zealots living their life doing exactly what I loved.

Before this point, I had only considered free software and my involvement with free software advocacy and development as a tool I might use to accomplish other goals and activities. Before this point I saw myself as writer, a programmer, or a computer scientist. At this point, I was exposed to people who were, first and foremost, activists, idealists, and advocates of a system that I understood. After this point, I allowed myself to be seen--by others and by myself--as an activist and a radical, first and foremost--on my terms and in a way that I felt completely comfortable with.

I quickly reconsidered and recreated my academic concentration around technology and intellectual property policy¹¹ with a strong emphasis on free software advocacy and development. I may now be the first person to graduate with an undergraduate degree in the subject.

In order to give the communities that had provided me with so much useful software, I took initiative and began programming and producing free software. Because my programming skills were still undeveloped, I helped where I could and wrote documentation--writing the major document on managing free software projects.

The growing role of free software advocacy and the culture of critique it cultivated provided the kernel for my continued growth as a radical and activist in non-technical fields as well.

Committed to free software ideology and unwilling to take a job writing proprietary software, my choices for summer employment in the software business were extremely limited. However, I felt confident that if billions of people could earn money and live happy lives without being paid to write proprietary software, so could I.

I was surprised when in late spring of 2000, I was approached by an activist offering me a small stipend to write free software for the web site Protest.Net. Protest.Net, started by a Hampshire College drop-out, acted as an event calendar for coordinating and organizing protests and meetings within the progressive and radical communities.

During the summer that I worked on the site, I was happily distracted by my growing involvement with another exciting new project: the Independent Media Center (IMC). IMC's seek to create a truly grassroots media source where any and every community member is a reporter and can post text articles or rich media like video and audio onto an IMC website and into collaborative volunteer projects that often include the creation of community newspapers, newsletters, movies, radio programs and shows.

IMCs seek to challenge, critique, and provide an alternative for the increasingly corporate controlled media outlets operating under strict (and often questionable) editorial controls. Independent media tries to give *everybody* a voice and then tries to operate with as little (or as democratic) editorial control as possible. IMCs attempt to create an outlet for unpopular and controversial messages that might otherwise fall victim to "self censorship." It tries to create a space for voices operating in opposition to the increasingly heterogeneous voices in popular and corporate media and to work to create the type of common space of ideas prerequisite to real democracy.

Over only three months, I helped create more IMC websites than I can even approximate for dozens of cities in the United States around the world. Additionally, I worked on the websites from the locations of large-scale protests and from the conventions for the two major political parties during the American presidential election season that year.

For me, attraction to indy media seemed natural in that the project applied the same type of "development structure" that the free software movement had already made familiar. While the free software movement sought to create a more fair and democratic type of software, IMCs sought to create a more fair and democratic form of news media. Independent media seeks to challenge the distinction between producer and consumer--editor, author, and reader--in the same manner that free software breaks down the walls between developers and users.

In developing free software for social change, I am able to help further non-technical movements and ideologies while furthering the reach and effectiveness of the free software movement itself. In using the free software model to produce free tools that in turn will be used to produce free media and a more free world, I do not have to compromise the means to achieve a ends.

5. The State Technology and Intellectual Property in a Changing World

I believe that most people currently underestimate the potential impact of technology and the computer revolution--to do both good and bad. While technology is certainly touted as a solution for overarching social ills, this improvement is usually articulated as a way to make things better, faster, more efficient, or more comfortable. However, I believe that the greatest effects of technology, especially in relation to information and communication, stem from the fact that technology can provide the code, the means, and the context by which we learn and express ourselves.

History has taught us, that creating a revolutionary technology is much easier than finding a truly revolutionary use for it. Information technology has helped us communicate faster, more efficiently, and over longer distances. It will take decades or even centuries to develop, but computer technology is already causing fundamental shifts in the *way* we communicate as well.

My history describes a complex relationships to technology. Like other geeks, I place myself at the center of these technologically changes and stay acutely aware of them. I embrace technology but constantly question the nature and extent of my critical perspective toward it. I believe that technology itself is neither good nor bad--it is *only* a tool. Neophiles ignore or dismiss the ways that technology is misused while Luddites stubbornly refuse to acknowledge the democratizing power and potential for good in of the medium. Geeks like myself are like both of these groups--and yet different as well. We embrace technology with a critical attitude that neither of these groups displays.

The invention of the printing press prompted legislation that gave opportunistic writers and publishers the ability to "own" and control ideas and information through copyright in a way that was frowned upon

in their own generation and unthinkable only a generation before.

New technology makes DNA and the genome of human beings and plants accessible to scientists for the first time ever. Can scientists, universities and corporations *own* the results of their research if their results reveal the genetic “blueprints” that are quite literally part of every human being? From a legal perspective, the answer is unclear. However, there are monied interests lobbying hard to ensure that the answer is a profitable “yes.”

In the passage of and amendments to the TRIPS intellectual property treaty¹² (a treaty prerequisite to joining the WTO), in the actions of the World Intellectual Property Organization, in the laws of nations and the decisions of courts, the answer to this, and numerous similar questions are being decided now.

But with technology changing at its current pace, law is no where near catching up. Using free software, the GNU GPL, and GNU/Linux, geeks like myself are doing what we can to answer these questions by taking the power to control technology away from individuals and corporations and placing it squarely and solidly in our communities of users and developers.

While free software won't feed a starving child, it can change the world for the better. If free software can make a significant impact now, its ethical, philosophic, and ideological foundation will act to shape the changes that will be wrought through new computer technology in the coming decades and centuries--changes that will have far reaching effects.

Like it or not, our future and our children's future will be written (quite literally in many case) through, in, and by the software we use.

We have a choice: we can do it on Microsoft's terms or on our own. The correct ethical choice seems clear to me.

As a geek proud to call himself a part of the free software movement, I've made my choice by choosing to realize a more ethical future through my code and advocacy. While we are practical enough to know that free software may not win on ethical grounds alone, we believe that by working as a community we will create, better, more open, more relevant and more reliable software--and that we can use this software to create a foundation and medium for our society's next technological rebirth defined by the concepts community, democracy, freedom, and quality.

6. Lessons I've Learned From Geeks and Free Software Culture

If a system is fundamentally flawed, stop seeking to reform the system--replace with it a better one; redefine the concept of mainstream.

Free software is an alternative to proprietary software because it throws the entire closed software development model out the window. Microsoft and other proprietary software giants have frantically tried to find methods to combat the free software movement. They remain at a loss because they don't know how to combat an “enemy” so unlike themselves. They can't fight GNU/Linux because GNU/Linux refuses to fight altogether.

Like many geeks, I was forced onto the fringes of mainstream culture when I was young. As a result, I've realized that the line between outcasts and rebels is subtle and often purely subjective--at times little more than a difference in attitude. I know the flexibility--and power--that living on the edge can provide. Having been forced out of the game early on, I've come to learn that playing the game is not always prerequisite to winning.

Armed with the power of a community, one can overcome the power of individual or corporation.

RMS reminds us that free software operates around the idea that, “creativity can be a social contribution, but only in so far as society is free to use the result.”

The implications of RMS’s statement are clearly not limited to the development of software. He states that an inaccessible idea is a useless one. An idea that is allowed to grow, develop, and transform itself through and in a community will go further than one that is bridled and restrained. A geek battle-cry says that, “information wants to be free.” While I’m not sure that information *wants* anything, I believe that for human society to realize its ultimate potential, information *needs* freedom to mature and transform in the presence of other ideas.

In most cases, I don’t subscribe to a Romantic conception of creation; I do not believe in divine inspiration. I believe that ideas are born from, through, and in the context of a lifetime of knowledge. Free software’s power lies in its treatment of artistic and scientific knowledge as the process, creation, and domain of a community. By working within a community and by thinking, acting, and reacting as a community, I know I can be successful in tackling problems larger, more complex, and more powerful than myself.

Destroy the idea of producer and consumer.

Another reason behind free software’s success is the way that it shatters the traditional roles of the producer and consumer. With a free software program, every user can step into the role of contributor or creator for their digital tools. The power of free software is the power of democracy--bottom up solutions are always better than those that work top-down.

When I became frustrated with Microsoft Windows, I helped to create my own alternative. When I became frustrated with American corporate media, I helped create independent media as a viable replacement. Free software has taught me that while not everyone need produce everything, consumerism *is* a choice. I consume critically with the knowledge that I can transcend my role; I *am* a producer. Consumerist cultures are cultures of widespread powerlessness. Free software is one way that I’ve realized the power I’ve always had.

Explore, embrace, and be careful with double-edged swords.

Being a geek means knowing what it feels like to be on both sides of a technology: swept ahead and left behind. Geeks know how technology can act as a liberator and as a tyrant. They know that technology is a double edged sword and it’s all too easy to end up on the wrong side of the blade--especially when entrenched interests are pushing hard in that direction.

I believe that being open to novel ideas a prerequisite to victory. While ideas and technologies are not better by virtue of being new, dismissing technology over a distrust of novelty will simply lead to alienation and defeat. Whether we like it or not, the technological revolution is here to stay and the society of the future will be built out of bits and bytes. We must embrace technology if we want a hand in shaping the future.

However, simply embracing technology is not a good answer either. I know that technology is a double-edged sword. Technology can lift people to the stars or fling them down into the mud; one is not more likely than the other. I’ve learned the importance of wresting for the power of these double

edge swords. I've learned to never forget that the sword I am wrestling with can cut me and do as much bad as good.

Integrate critique and action. Win.

Free software is successful because it has no battle tactics, no battle strategy, and no battle ground. Each developer who replaces a proprietary software with a free one is winning.

Many activists criticize theorists for their absence of action while theorists criticize activists for an lack of theoretical foundation. In my free software work, my critique and my action are one fluid motion. I've learned to avoid the concept of a means to an end and appreciate my actions as being a means and an end within themselves. I've learned that when my actions *are* my critique, every successful action--every line of code, every release, every piece of documentation--is a *real* ideological victory.

In these ways, geek culture is squarely at odds with many of the spoken and unspoken doctrines of today's contemporary global society. For me, *unlearning* is as important as learning--it is often an indistinguishable part of the same action. Free software's story, my story, the story of geekdom: all three are stories of unlearning.

Over almost nine years, I've stood by, I've watched, I've learned, I've unlearned, I've written code. With the help of innumerable developers like myself, GNU/Linux is slowly eroding the market-share of Windows and other proprietary "competitors." Free software has a moral and ethical advantage but we will not *win* for these reasons. We will win because we are constantly critical, because we are constantly learning and unlearning, and because we are constantly merging philosophy and action. Free software will win because in these ways we act as, and provide, a solid foundation. Free software will win because it's better--ideologically and pragmatically--directly and indirectly.

7. Epilogue

A previous draft published on my website ended without this final section. I signed off urging my readers toward free software and a world shaped by its philosophy of ethical production and shared access to ideas. I explicitly shaped my piece into a radicalizing one. I tried to avoid self-indulgence. I stepped back to let my philosophy, my community, my larger movement, and the source and direction of my passion take the spotlight.

When my editors and collaborators urged me to make my story more personal, I conceded their points but remained hesitant to make the change. The non-personal sections shrunk but retained their dominant role. The story never returned to my personal narrative in a meaningful way.

I changed my mind after receiving a handful of emails from people who'd stumbled across my story on the Internet. I was emailed by a adolescent geek who'd found my story by chance and saw me a source of advice; his parents, teachers, and doctors were considering Ritalin as a means of remedying a level of academic performance that failed to reflect his proven potential--his ambivalence mirrored mine at his age. I received an email from an older GNU/Linux geek explaining that he also connected with my personal history and that my explanation of the link between free software politics and more traditional activism had radicalized him and motivated him to take a more active political role in his community.

In both cases, any successful political or social radicalization was forged over a connection to the personal narrative. My collaborators were correct; the power is in the personal.

My definition of geekdom can be distilled into something like, “neophilia with a critical perspective.” The story of my life as a geek is the story of my life in relation to this constantly involving critical perspective. For me, unlearning has been the process of focusing this critical perspective on myself. This type of introspection is something that geeks have an easier time doing than more culturally acclimated members of society--but it's certainly not unique.

The young geek who contacted me for advice about Ritalin prompted several days of intense personal introspection. Do I regret Ritalin? Am I angry at my parents, teachers, and doctors for their role in my long relationship with the drug? Will I give my ADD children Ritalin? Will I recommend it to the young person contacting me today? *Can* I recommend it? In all cases, the answer is probably no--but there are no clear answers.

I'm an idealist: I don't like these unanswered or unanswerable questions; I don't like these ambiguous answers. But I draw some comfort from the fact that I'm unwilling to let myself be comfortable.

This state of ambiguity, of constant examination and reexamination, reaffirms my belief that unlearning is not a destination but a process: an exceedingly painful and personal one. Upon reflection, not only does my story fail to imply prescriptive advice I can offer others, it fails to provide me with explicit instruction for living my own life. My successes, my failures, my greatest mistakes and my greatest victories are not a model to emulate or avoid. For me, they are a source of inspiration and hope, a nudge toward the type of critical perspective I find so important. I'm sharing this story in the hope that someone else might be willing to gain similar inspiration.

I hope that an inspirational story need not end with a happy ending because my story has no ending at all. My story of unlearning ends each day with a reaffirmation of this critical perspective--a reaffirmation of my geekiness and all that it represents. It begins again each morning.

Notes

1. “Nerd” is derogatory term for intellectual or intelligent people often used interchangeably with the word “geek.”
2. “Neophilia” refers to an attraction to that which is new. For geeks it usually surfaces as a interest in and a love for technology. Many geeks affectionately refer to it as “technolust.”
3. ADD and Attention Deficit Hyperactive Disorder AD/HD have been called over-diagnosed and the drugs used to treat them have been called over-prescribed. While proponents and many medical experts staunchly defend the diagnosis, science has not yet provided answers to fully satisfy critics.
4. Recursive acronyms are a type of programmers' joke. The acronym is recursive in that the first term in GNU's Not Unix stands for GNU's Not Unix; this process of infinite nesting is “recursion”.
5. The fact that there is only word in English to represent both the presence of freedom and something that has no cost is perhaps one of the greatest challenges or areas of confusion around the concept of free software. One common saying is, “it's free like free speech, not like free beer.” In languages like French where these concepts are distinct (“libre” and “gratis”), this confusion is avoided.
6. However, the GPL does more than just protect these simple freedoms. Modified versions of GPL'ed software must also carry the same license. This creates a viral effect where once a piece of software

is “freed” through licensing under the GNU GPL, it stays free and even requires people who want to incorporate source code into their own software to release their changes as free software.

7. Source code is like the blueprints to a piece of software. Most proprietary software is distributed in only machine code which you can run and use, but which you can not change, modify, or explore.

The common analogy substitutes software with cars. It asks: “Would you buy a car with the hood welded shut?”; “Would you trust a company who made such a car with your life, work or wellbeing?”; “What if trying to open the hood could be punished with prison time?” In purchasing a license for Microsoft Windows, or many other pieces of proprietary software, one is effectively doing the same thing. By agreeing to restrictive licenses, people have no ability to tweak, modify, or even learn about the internal workings of software they own.
8. New legal maneuvers pushed by powerful corporations like the United State’s Digital Millennium Copyright Act (DMCA) makes trying to change, learn about, or adapt proprietary software, through many formerly legitimate means and for legitimate purposes, a crime.
9. Even with its money and influence, Iceland was unable to convince Microsoft to release a version of Windows in the traditional Icelandic language--it was simply not profitable for the corporation--even with the Icelandic government offered to make the changes itself!
10. Of the scores of similar projects--called “distributions”--now active, only Debian has a stated commitment to the philosophy behind free software. A completely volunteer based project with over 900 official members and hundreds of contributors, Debian has little organized structure, no offices, and no real budget. In spite of this (and perhaps because of it), the project has become larger, more popular, more stable, and more respected than competing projects funded and managed by large dot-com corporations.
11. I’m increasingly uncomfortable with the term “intellectual property.” Like many experts and academics in the field, I am of the opinion that many of the greatest problems with patents, copyrights, trademarks, and trade secrets stem from the fact that many corporations, law-makers, and individuals approach these political apparatuses as parallel and similar to more tangible and traditional forms of property. In fact, history and law treats these two types of “ownership” very differently. I think the term “intellectual policy” is a more accurate one.
12. The TRIPS agreement aims to standardize intellectual property law to create a unified global IP marketplace.. Certain sections stipulate a minimum for the nature and duration of protection for certain types of intellectual works. It also seeks to standardize IP by requiring that one signatory country automatically respect the copyrights of other signatory countries.