REALITY HACKERS

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Just as the printing press gave rise to the nation-state, emerging technologies are reshaping collective identities and challenging our understanding of what it means to be human.

Should citizens have the right to be truly anonymous on-line? Should we be concerned about the fact that so many people are choosing to migrate to virtual worlds? Are injectible microscopic radio-frequency ID chips a blessing or a curse? Is the use of cognitive enhancing nootropics a human right or an unforgivable transgression? Should genomic data about human beings be hidden away with commercial patents or open-sourced like software? Should hobbyists known as "biohackers" be allowed to experiment with genetic engineering in their home laboratories?

The time-frame for acting on such questions is relatively short, and these decisions are too important to be left up to a small handful of scientists and policymakers. If democracy is to continue as a viable alternative to technocracy, the average citizen must become more involved in these debates. To borrow a line from the computer visionary Ted Nelson, all of us can -- and must -- understand technology now.

Challenging the popular stereotype of hackers as criminal sociopaths, reality hackers uphold the basic tenets of what Steven Levy (1984) terms the "hacker ethic." These core principles include a commitment to: sharing, openness, decentralization, public access to information, and the use of new technologies to make the world a better place.

Reality Hackers

The Next Wave of Media Revolutionaries

Aaron Delwiche (Editor), Evan Barnett, Andrew Coe, Patrick Crim, Kendra Doshier, Christopher Dudley, Ender Ergun, Ashley Funkhouser, Cole Gray, Sarah Hellman, John Key, Christopher Kradle, Patrick Lynch, Shepherd McAllister, Mark McCullough, Justin Michaelson, Alyson Miller, Robin Murdoch, Aaron Passer, Maricela Rios, Laura Schluckebier, Raelle Smiley, and Andrew Truelove.

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shaviro

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ACKNOWLEDGEMENTS
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AARON DELWICHE
"The Lennox Seminar on Reality Hackers"

In his landmark work *Imagined Communities* (1991), the cultural critic Benedict Anderson argued that media shape our collective identities by situating us within perceived territorial and cultural boundaries. Despite the fact that most people only engage in face-to-face interaction with a small percentage of their fellow citizens, they are able to conceptualize themselves as participants in far-flung national communities. According to Anderson, the rise of these "imagined communities" known as nation states was directly related to the enabling support of the printing press.
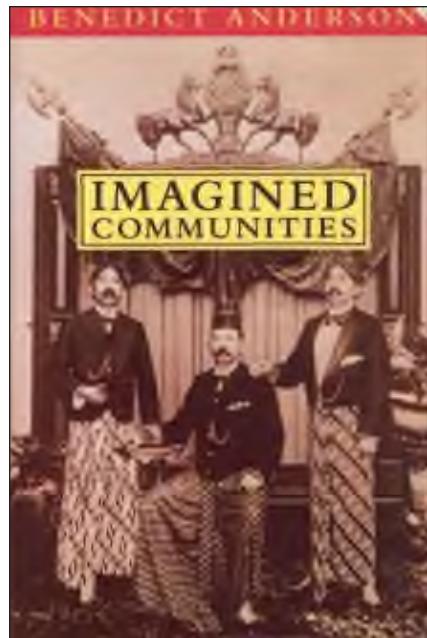
This may have seemed like a bold claim when Anderson first floated his thesis in the early 1980s, but his ideas about "imagined communities" anticipated the rise of Internet-enabled virtual communities in the 1990s. Today, as digital communication technologies penetrate the nooks and crannies of our daily lives, Anderson's thesis is more compelling than ever. Our communication tools shape our perception of reality, and the power of these devices is growing at an exponential rate.

For the better part of four decades, computer processing power has been doubling every two years, a phenomenon that is sometimes referred to as Moore's Law. This blistering speed—this accelerating rate of change—transforms human interaction and the human body. Today's Internet has evolved far beyond the clunky tool that fueled the dot.com boom. We now have access to virtual worlds, on-line social networks, user-generated knowledge bases, collaborative tagging, grass-roots video broadcasting, home genomics and geographical information systems.
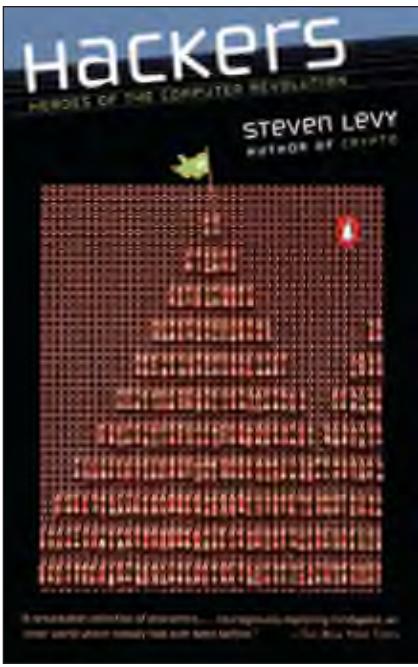
Already, many of these applications are enabling the creation of transnational businesses (big and small) and activist groups that leverage the brainpower of ordinary people across national boundaries. Just as the printing press gave rise to the nation state, these emerging technologies reshape collective identities and challenge our understanding of what it means to be human.

These are exciting times, but they can also be disorienting. Faced with such dizzying developments, many citizens eventually throw up their hands and decide it is too difficult to keep up with the changes. This is a serious problem. The danger is not that people consciously choose to resist the lure of the latest, smallest, fastest gadgets. Indeed, there are plenty of good reasons to avoid being swept up with the flow of technology. The real problem is the fact that so many people consciously remove themselves from public dialogue about the cultural and political implications of new technology. This willingness to "let the experts decide" is a recipe for technocracy.

Should citizens have the right to be truly anonymous on-line? Should we be concerned about the fact that so many people are choosing to build relationships in virtual worlds rather than local neighborhoods? Are injectable microscopic radio-frequency ID chips a blessing or a curse? Is the use of cognitive enhancing nootropics a human right or an

0.1 Benedict Anderson's *Imagined Communities*. According to Anderson, nations are "imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion" (pp. 6-7). See: Anderson, B. R. O. (1991). *Imagined communities: Reflections on the origin and spread of nationalism*. London: Verso.

0.2 Hackers and the rise of personal computing. Steven Levy's ground breaking work was an instant classic. A 25th anniversary edition will be published by O' Reilly Press later this year. See: Levy, S. (1994). *Hackers: Heroes of the computer revolution*. London: Penguin.

0.3 Geek power. In the May 2010 issue of *Wired Magazine,* Levy conducted follow-up interviews with many of the visionaries profiled in *Hackers: Heroes of the computer revolution.*

unforgivable transgression? Should genomic data about human beings be hidden away with commercial patents or open-sourced like computer software? Should hobbyists known as "biohackers" be allowed to experiment with genetic engineering in their own home laboratories?

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In an attempt to better understand these issues, Trinity University's Department of Communication invited five guest speakers to participate in a semester-long seminar series titled "Reality hackers: The next wave of media revolutionaries."

"Wait just a moment," you ask. "Hackers? Why would a nationally respected institution such as Trinity University invite hackers to speak on campus?"

Good question.

Although popular stereotypes paint hackers as criminal sociopaths, the hacking subculture has played an essential role in the growth of the personal computer industry. As Steven Levy noted in his classic work *Hackers: Heroes of the Computer Revolution* (1984), many hackers are motivated by what he terms "the hacker ethic." These core principles include a commitment to sharing, openness, decentralization, public access to information, and the use of new technologies to make the world a better place.

In a retrospective for the April 2010 issue of *Wired Magazine*, Levy reaffirmed his belief that "hackers—brilliant programmers who discovered worlds of possibility within the coded confines of a computer—were the key players in a sweeping digital transformation. . . [T]heir playfulness, as well as their blithe disregard for what others said was impossible, led to the breakthroughs that would define the computing experience for millions of people."

Consider some of the key players: MIT computer science students. The Homebrew Computer Club in Silicon Valley. Stewart Brand (editor of the Whole Earth Catalog). Bill Gates. Steve Wozniak. Tim O' Reilly. Richard Stallman.

These people and projects were all part of the hacker movement. Conducting follow-up interviews twenty-five years later, Levy found that many of these people still consider themselves to be hackers.

In a powerful conclusion to his hacking retrospective, Levy reports that Bill Gates says he would be "hacking biology" if he were a teenager today. "Creating artificial life with DNA synthesis," Gates tells Levy. "That's

sort of the equivalent of machine-language programming. If you want to change the world in some big way, that's where you should start—biological molecules. There are more opportunities, now, but they're different opportunities. They need the same type of crazy fanaticism of youthful genius and naïveté that drove the PC industry—and can have the same impact on the human condition."

Levy and Gates—along with many other pioneers in the computing, biotechnology and creative industries—understand that it is not insulting to call someone a "hacker." In fact, to those in the know, it's one of the highest forms of praise.
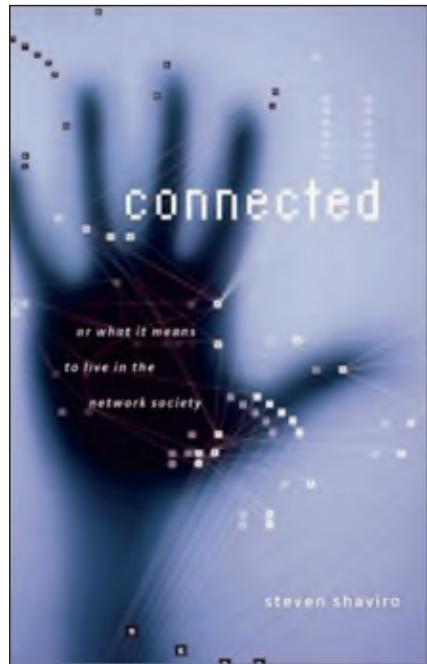
The five guest speakers who participated in the Lennox seminars also understand this. Each one of these thinkers is committed to demystifying technology and empowering the human imagination. Each thinker pursues intellectual and creative projects that challenge conventional understandings of mediated reality and human consciousness.

Steven Shaviro, the DeRoy Professor of English at Wayne State University, was the first guest. Described as "one of our most exciting and innovative cultural theorists," Shaviro may be best known for his books *Doom Patrols: A Theoretical Fiction about Postmodernism* and *Connected: Or What It Means to Live in the Network Society.* In these playful, poetic works, Shaviro demonstrates that seemingly innocuous cultural texts–from Disney robots and comic books to video games and B-movies–have much to teach us about the human (and post-human) condition in this new century.

Shaviro delivered a compelling public lecture titled "Some years from this exact moment: Neveldin/Taylor's *Gamer* and the control society." He also met separately with the Lennox seminar students and shared his most recent research on how converging communication technologies are transforming cinema, television, and music videos.

A few weeks later, **Annalee Newitz** arrived on the Trinity University campus. Editor-in-chief of the science fiction blog *io9*, her work has been published in *Popular Science*, *The Believer*, *New Scientist*, *Wired Magazine*, and *Wall Street Journal*. She is a fellow-traveler in the emerging biopunk movement who argues passionately on behalf of open-sourced genomic databases. She is also the coeditor of the anthology *She's Such A Geek: Women Write About Science, Technology, and Other Nerdy Stuff,* a "hopeful book that looks forward to the day when women will invent molecular motors, design the next ultra-tiny supercomputer, and run the government."
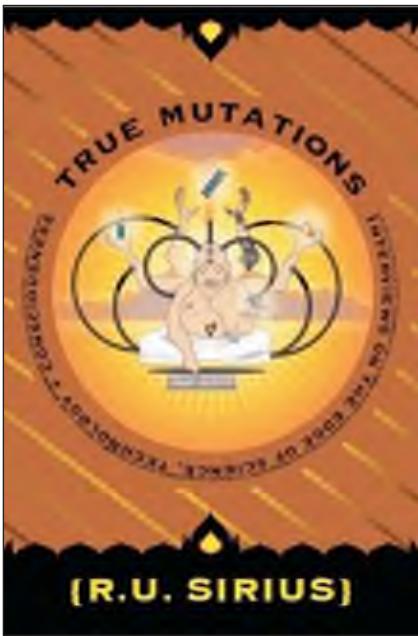
In her public lecture "Curse of the meatsack: Biohacking, immortality and science fiction," Newitz posed compelling questions to transhumanists who hope to use advanced medical techniques to achieve immortal life. She developed these ideas further in a private meeting with the Lennox seminar students and also discussed ways that emerging technologies are transforming the magazine and publishing industries.
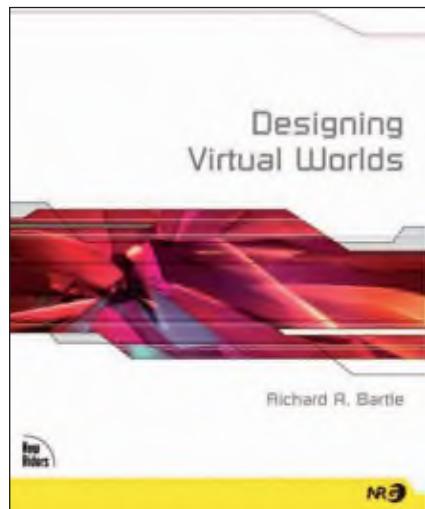
0.4 Connected. Shaviro, S. (2003). *Connected: Or What it Means to Live in the Network Society.* Minneapolis: University of Minnesota Press.

0.5 Geeks. Newitz, A., & Anders, C. (2006). *She's such a geek!: Women write about science, technology & other nerdy stuff.* Emeryville, CA: Seal Press.

0.6 Interviews on the edge of science, technology and consciousness. Sirius, R. U. (2006). *True mutations*. Oakland, CA: Pollinator Press.London: Penguin.

We were next visited by **R.U. Sirius.** Currently editor-in-chief of the transhumanist magazine *h+*, Sirius was widely known in the early 1990s as editor-in-chief of the popular "cyberpunk" magazine *Mondo 2000*. This publication was preceded by two other magazines that covered similar themes: *High Frontiers* and *Reality Hackers*. In fact, the title of this lecture series is an intentional tribute to his work.

Additionally, Sirius (whose real name is Ken Goffman) has authored or co-authored 11 books, including *Everybody Must Get Stoned*, *Cyberpunk Handbook*, *True Mutations* and *Design For Dying* with psychedelic legend Timothy Leary. In 2000, Sirius ran a write-in campaign for president of the United States for the Revolution Party, an organization that offered a platform combining political left and libertarian themes.

In his public lecture "Hijack the Singularity or why the future must be post-scarcity or not at all," Sirius argued that imminent technological advances will lead to massive economic disruption because our needs will be satisfied by technology rather than human labor. He called on the audience to view such developments as a wonderful opportunity to engage in more interesting and valuable creative activities. "Set yourself free," he concluded. "Hijack the Singularity."

Freedom was also a key concern for our fourth guest: legendary game designer **Richard Bartle**. Currently a lecturer at Essex University, Bartle co-authored the world's first virtual world as a college undergraduate in 1978. A former university lecturer in artificial intelligence, he is an influential writer on all aspects of virtual world design and development. As an independent consultant, he has worked with almost every major online gaming company in the U.K. and the U.S. over the past 20 years, transforming an undergraduate research project into a multi-billion dollar industry. His book *Designing Virtual Worlds* is widely viewed as a "tour de force of virtual world design."

0.7 Essential reading. Bartle, R. A. (2004). *Designing virtual worlds*. Indianapolis, Ind: New Riders Pub.

In his public lecture "Is the virtual too unrealistic? Crying over non-spilled milk," Bartle took aim at the lack of "realisticness" in contemporary virtual worlds and called for the creation of open-ended virtual worlds that permit the same sort of unexpected, emergent behaviors that characterized the first text-based MUDs. He reminded the audience that, when he designed the first virtual world, his goal was to create a place where players could be and become who they really are.

Last but not least, our fifth guest was Moscow-born author **Ekaterina Sedia.** Sedia's third novel, *The Alchemy of Stone*, has been hailed as one the best science fiction novels of the previous decade. Her next work, *The House of Discarded Dreams*, is expected in July 2010.

Sedia's prose has been described as haunting and magical, and reviewers praise Sedia's knack for "leaving readers to reach their own conclusions about the proper balance of tradition and progress and what it means to be alive." She is an award-winning editor of the *Paper Cities* anthology; her next anthology, *Running with the Pack*, will be released in May 2010. In addition to writing, she teaches genetics, botany and plant ecology at a

state liberal arts college in New Jersey.
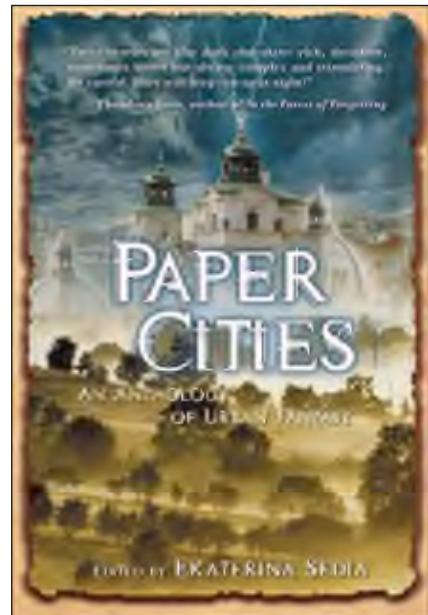
In a fascinating public lecture titled "genetic modification and copyright," Sedia examined ways in which a legal framework designed to protect the intellectual property rights of creators is now being used by multinational corporations to patent sequences of DNA. Sedia noted that, though these laws were originally intended to promote creative and scientific expression, they have ended up doing the exact opposite.

All five of these guest speakers were brought to campus with the generous support of the Martha, David, and Bagby Lennox Foundation. The ability to interact with these leading thinkers was a wonderful opportunity for Trinity students and professors, as well as for the many community members who attended the public lectures.
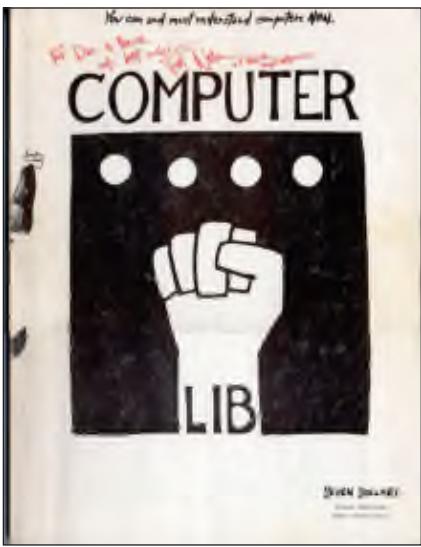
Throughout the semester, students enrolled in the upper division Lennox seminar met three times a week for lecture, discussion, and other collaborative activities. The course was divided into three broad topic areas. First, we investigated the ways that emerging technologies intensify human connectedness and we considered some of the more troubling implications of a world in which the network can always find us. Second, we explored the transhuman movement, reviewed theories about the Technological Singularity, and identified examples of contemporary technology that are already changing what it means to be human. Third, influenced by Marshall McLuhan's observation that new technologies function as prosthetic extensions of the human body, we looked into ways human beings are transforming and extending themselves via virtual worlds, biofeedback devices and other emerging interface technologies.

The three major sections of this book (connected, transhuman and extended) correspond to these major topic areas. The book also includes student blog postings, related work from our guest speakers, and creative student projects (e.g., stories, photographs, performance art, documentaries, and machinima animations). Although most of the student projects are reprinted here, the limitations of print made it impossible to fully reproduce the video and audio works. To view those works, readers are encouraged to visit transmedia.trinity.edu

Students also worked together throughout the semester to promote and document the public lectures. Many of these leaflets and posters are reprinted in the appendix at the end of this book, along with the biographies of seminar participants.

0.8 **Cities of magic and wonder.** Sedia, E. (2008). *Paper cities: An anthology of urban fantasy*. Hoboken, N.J.: Senses Five Press.

0.9 You can and must understand computers now. Nelson, T. H., & Nelson, T. H. (1974). *Computer Lib*. Chicago: Nelson.

WIKIPEDIA
"The hacker ethic"

Hacker ethic is the generic phrase which describes the values and philosophy that are standard in the hacker community. The early hacker culture and resulting philosophy originated at the *Massachusetts Institute of Technology* (MIT) in the 1950s and 1960s. The term 'hacker ethic' is attributed to journalist Steven Levy as described in his book titled *Hackers: Heroes of the Computer Revolution*, written in 1984. The guidelines of the hacker ethic make it easy to see how computers have evolved into the personal devices we know and rely upon today. The key points within this ethic are that of access, free information, and improvement to quality of life.

While some tenets of hacker ethic were described in other texts like *Computer Lib/Dream Machines* (1974) by Ted Nelson, Levy appears to have been the first to document and historicize both the philosophy and the founders of the philosophy.

Levy explains that MIT housed an early IBM 704 computer inside the Electronic Accounting Machinery (EAM) room in 1959. This room became the staging grounds for early hackers as MIT students from the Tech Model Railroad Club stole inside the EAM room after hours to attempt programming the 30 tonne, 9-foot-tall (2.7 m) computer.

The boys defined a hack as a project undertaken or a product built not solely to fulfil some constructive goal, but with some wild pleasure taken in mere involvement. [1] The term "hack" arose from MIT lingo as the word had long been used to describe college pranks that MIT students would regularly devise. Hackers push programs beyond what they are designed to do. Levy notes that, at other universities, professors were making public proclamations that computers would never be able to beat a human being in chess. Hackers knew better. They would be the ones who would guide computers to greater heights than anyone expected. [2]

The Hacker Ethic was a "new way of life, with a philosophy, an ethic and a dream". However, the elements of the Hacker Ethic were not openly debated and discussed, rather they were accepted and silently agreed upon. [3]

The hacker ethics

As Levy stated in the preface of *Hackers: Heroes of the Computer Revolution*,[4] the general tenets or principles of hacker ethic include:

- Sharing
- Openness
- Decentralization
- Free access to computers
- World Improvement

In addition to those principles listed above, Levy also described more specific hacker ethics and beliefs in chapter 2, The Hacker Ethic. [5] The ethics he described in chapter 2 are quoted here.

Access to computers—and anything which might teach you something about the way the world works—should be unlimited and total. Always yield to the Hands-On Imperative!

Levy is recounting hackers' abilities to learn and build upon pre-existing ideas and systems. He believes that access gives hackers the opportunity to take things apart, fix, or improve upon them and to learn and understand how they work. This gives them the knowledge to create new and even more interesting things (Levy, 1984:226)[6]. Access aids the expansion of technology.

All information should be free.

Linking directly with access, information needs to be free for hackers to fix, improve, and reinvent systems. A free exchange of information allows for greater overall creativity.[7] In the hacker viewpoint, any system could benefit from an easy flow of information.[8]

Mistrust authority—promote decentralization.

The best way to promote the free exchange of information is to have an open system that presents no boundaries between a hacker and his quest for knowledge. Hackers believe that bureaucracies, whether corporate, government, or university, are flawed systems.[9]

Hackers should be judged by their hacking, not criteria such as degrees, age, race, sex, or position.

Inherent in the hacker ethic is a meritocratic system where superficiality is disregarded in esteem of skill. Levy articulates that criteria such as age, sex, race, position, and qualification are deemed irrelevant within the hacker community. [10] Hacker skill is the ultimate determinant of acceptance. Such a code within the hacker community fosters the advance of hacking and software development.

Testament to the hacker ethic of equal opportunity, [11] L. Peter Deutsch, a twelve-year-old hacker, was accepted in the TX-0 community, though was not recognized by non-hacker graduate students.

You can create art and beauty on a computer.

Hackers deeply appreciate innovative techniques which allow programs to perform complicated tasks with few instructions. [12] A program's code was considered to hold a beauty of its own, having been carefully composed and artfully arranged. [13] Learning to create programs which used the least amount of space almost became a game between the early hackers. [14]

Computers can change your life for the better.

Hackers felt that computers had enriched their lives, given their lives focus, and made their lives adventurous. Hackers regarded computers as Aladdin's lamps that they could control. [15]They believed that everyone in society could benefit from experiencing such power and that if everyone could interact with computers in the way that hackers did, then the Hacker Ethic might spread through society and computers would improve the world. [16] The hacker succeeded in turning dreams of endless possibilities into realities. The hackers primary object was to teach society that "the world opened up by the computer was a limitless one" (Levy 230:1984) [17]

Sharing

According to Levy's account, sharing was the norm and expected within the non-corporate hacker culture. The principle of sharing stemmed from the atmosphere and resources at MIT. During the early days of computers and programming, the hackers at MIT would develop a program and share it.

If the hack was particularly good, then the program might be posted on a board somewhere near one of the computers. Other programs that could be built upon and improved were saved to tapes and added to a drawer of programs—readily accessible to all the other hackers. At any time, a fellow hacker might reach into the drawer, pick out the program, and begin adding to it or "bumming" it to make it better (bumming refers to the process of making the code more concise so that more can be done in fewer instructions).

In the second generation of hackers, sharing was about sharing with the general public in addition to sharing with other hackers. A particular organization of hackers that was concerned with sharing computers with the general public was a group called Community Memory. This group of hackers and idealists put computers in public places for anyone to use. The first community computer was placed outside of Leopold's Records in Berkeley, California.

Another sharing of resources occurred when Bob Albrecht provided considerable resources for a non-profit organization called People's Computer Company (PCC). PCC opened a computer center where anyone could use the computers there for fifty cents per hour.

This second generation's sharing contributed to the battles of free and open software. In fact, when Bill Gates' version of BASIC for the Altair was shared among the hacker community, Gates claimed to have lost a considerable sum of money because few users paid for the software. As a result, Gates wrote an Open Letter to Hobbyists. [1819] This letter was published by several computer magazines and newsletters—most notably that of the Homebrew Computer Club where much of the sharing occurred.

Hands-on imperative

Many of the principles and tenets of Hacker Ethic contribute to a common goal—the Hands-On Imperative.[20]

Employing the Hands-On Imperative requires free access, open information, and the sharing of knowledge. To a true hacker, if the Hands-On Imperative is restricted, then the ends justify the means to make it unrestricted so that improvements can be made.

When these principles are not present, hackers tend to work around them. For example, when the computers at MIT were protected either by physical locks or login programs, the hackers there systematically worked around them in order to have access to the machines. Hackers assumed a "wilful blindness" in the pursuit of perfection.[21]

It is important to note that this behavior was not malicious in nature— the MIT hackers did not seek to harm the systems or their users (although occasional practical jokes were played using the computer systems). This deeply contrasts with the modern, media-encouraged image of hackers who crack secure systems in order to steal information or complete an act of cyber vandalism.

Community and collaboration

Throughout writings about hackers and their work processes, a common value of community and collaboration is present.

For example, in Levy's *Hackers*, each generation of hackers had geographically based communities where collaboration and sharing occurred. For the hackers at MIT, it was the labs where the computers were running. For the hardware hackers (second generation) and the game hackers (third generation) the geographic area was centered in Silicon Valley where the Homebrew Computer Club and the People's Computer Company helped hackers network, collaborate, and share their work.

The concept of community and collaboration is still relevant today, although hackers are no longer limited to collaboration in geographic regions. Now collaboration takes place via the Internet. Eric S. Raymond identifies and explains this concept shift in *The Cathedral and the Bazaar*.

Before cheap Internet, there were geographically compact communities where the culture encouraged Weinberg's egoless programming, and a developer could easily attract a lot of skilled kibitzers and co-developers. Bell Labs, the MIT AI and LCS labs, UC Berkeley—these became the home of innovations that are legendary and still potent.[22]

Raymond also notes that the success of Linux coincided with the wide availability of the World Wide Web. The value of community is still in high practice and use today.

Levy's "true hackers"

Levy identifies several "true hackers" who significantly influenced the hacker ethic. Some well-known "true hackers" include:

- John McCarthy—Founder of the MIT Artificial Intelligence lab.

- Bill Gosper—A mathematician and hacker.

- Richard Greenblatt

- Richard Stallman—A programmer and political activist who is well-known for GNU, Emacs and the Free Software Movement.

Levy also identifies the "hardware hackers" (the "second generation", mostly centered in Silicon Valley) and the "game hackers" (or the "third generation"). All three generations of hackers, according to Levy, embodied the principles of the hacker ethic.

Some of Levy's "second-generation" hackers include:

- Steve Wozniak—One of two Steves that founded Apple, Inc.

- Bob Marsh—A designer of the Sol-20 computer.

- Steve Dompier—A homebrew member and hacker worked with the early Altair.

- Fred Moore—An activist and founder of the Homebrew Computer Club.

- Lee Felsenstein—A hardware hacker and cofounder of Community Memory and Homebrew. A designer of the Sol-20 computer.

Levy's "third generation" practitioners of hacker ethic include:

- John Harris—One of the first programmers hired at On-Line Systems (later became Sierra Entertainment).

- Ken Williams—Along with wife Roberta, founded On-Line Systems after working at IBM.

New hacker ethic

Some have postulated that a "New Hacker Ethic" has evolved out of the older hacker ethic that originated at MIT. Steven Mizrach, who identifies himself with cyber-anthropologist studies, explored this idea of "New Hacker Ethic" in his essay titled "Is there a Hacker Ethic for 90s Hackers?"

1. Levy, S 1984. *Hackers: Heroes of the Computer Revolution.* Anchor Press/Doubleday, New York. pg 9

2. Levy, pg 36

3. Levy, pg 26

4. Levy, pg ix.

5. Levy pp 26-36

6. Levy, pp 3-36

7. Levy, pg 27

8. Levy, pg 28

9. Levy, pg 28

10. Levy, pp 3-36

11. For further discussion on liberalism and hacking including equal opportunity see Coleman and Golub's 'Hacker practice' Moral genres and the cultural articulation of liberalism.

12. Levy, pg 31

13. Levy, pg 30-31

14. Levy, pp 3-36

15. Levy, pg 33

16. Levy, pg 36

17. Levy, pp 3-36

18. Charles Leadbetter (2008). We-Think. Profile Books.

19. Fiona Macdonald (12 March 2008), Get a fair share of creativity, Metro.

20. Levy, pp 27-36

21. Levy, pg 27

22. Raymond, E. *The Cathedral and the Bazaar*

Identification of the "New Hacker Ethic" implies a radical shift in hacker ethic. While the nature of hacker activity has evolved due to the availability of new technologies (for example, the mainstreaming of the personal computer or the social connectivity of the Internet), the hacker ethics—particularly those of access, sharing, and community—remain the same.

Later in 2001, Finnish philosopher Pekka Himanen promoted the hacker ethic in opposition to the Protestant work ethic. In Himanen's opinion the hacker ethic is more closely related to the virtue ethics found in the writings of Plato and of Aristotle.

For Himanen (who wrote *The Hacker Ethic*), Linus Torvalds (prologue), and Manuel Castells (epilogue), the hacker ethic centers around passion, hard work, creativity and joy in creating software. Both Himanen and Torvalds were inspired by the Sampo Finnish mythology. The Sampo, described in the *Kalevala*, was a magical artifact constructed by Ilmarinen, the blacksmith god, that brought good fortune to its holder; nobody knows exactly what it was supposed to be. The Sampo has been interpreted in many ways: a world pillar or world tree, a compass or astrolabe, a chest containing a treasure, a Byzantine coin die, a decorated Vendel period shield, a Christian relic, etc. In the *Kalevala*, compiler Lönnrot interpreted it to be a quern or mill of some sort that made flour, salt, and gold out of thin air.

Free software, open-source software, and hacker ethic

Free and open source software (often termed FOSS) is the descendant of the hacker ethics that Levy described. The hackers who hold true to the hacker ethics listed above—especially the Hands-On Imperative—are usually supporters of free software and/or open source software. This is because free and open source software allows hackers to access the code used to create the software to improve or reuse it. In effect the free and open source software movements embody all of the hacker ethics.

DWIGHT D. EISENHOWER
"Farewell address to the people of the United States"

On January 17, 1961, President Dwight D. Eisenhower delivered his farewell address to American citizens. This remarkable speech is often remembered for popularizing the term "military-industrial complex," but it is equally notable for President Eisenhower's observations about the tension between technology and democracy. In his closing words, Eisenhower warned citizens to remain vigilant to the increasing power of scientific and technological elites, stressing the importance of preserving democracy for "all generations to come."

0.10 President Eisenhower prepares to deliver his farewell address. Photograph taken by Ed Clark. Image reprinted from *Life Magazine* (permission for non-commercial use).

Good evening, my fellow Americans.

First, I should like to express my gratitude to the radio and television networks for the opportunities they have given me over the years to bring reports and messages to our nation. My special thanks go to them for the opportunity of addressing you this evening.

Three days from now, after a half century in the service of our country, I shall lay down the responsibilities of office as, in traditional and solemn ceremony, the authority of the Presidency is vested in my successor. This evening, I come to you with a message of leave-taking and farewell, and to share a few final thoughts with you, my countrymen.

Like every other—Like every other citizen, I wish the new President, and all who will labor with him, Godspeed. I pray that the coming years will be blessed with peace and prosperity for all.

Our people expect their President and the Congress to find essential agreement on issues of great moment, the wise resolution of which will better shape the future of the nation. My own relations with the Congress, which began on a remote and tenuous basis when, long ago, a member of the Senate appointed me to West Point, have since ranged to the intimate during the war and immediate post-war period, and finally to the mutually interdependent during these past eight years. In this final relationship, the Congress and the Administration have, on most vital issues, cooperated well, to serve the nation good, rather than mere partisanship, and so have assured that the business of the nation should go forward. So, my official relationship with the Congress ends in a feeling—on my part—of gratitude that we have been able to do so much together.

We now stand ten years past the midpoint of a century that has witnessed four major wars among great nations. Three of these involved our own country. Despite these holocausts, America is today the strongest, the most influential, and most productive nation in the world. Understandably proud of this pre-eminence, we yet realize that America's leadership and prestige depend, not merely upon our unmatched material progress, riches, and military strength, but on how we use our power in the interests of world peace and human betterment.

Throughout America's adventure in free government, our basic purposes have been to keep the peace, to foster progress in human achievement, and

to enhance liberty, dignity, and integrity among peoples and among nations. To strive for less would be unworthy of a free and religious people. Any failure traceable to arrogance, or our lack of comprehension, or readiness to sacrifice would inflict upon us grievous hurt, both at home and abroad.

Progress toward these noble goals is persistently threatened by the conflict now engulfing the world. It commands our whole attention, absorbs our very beings. We face a hostile ideology global in scope, atheistic in character, ruthless in purpose, and insiduous [insidious] in method. Unhappily, the danger it poses promises to be of indefinite duration. To meet it successfully, there is called for, not so much the emotional and transitory sacrifices of crisis, but rather those which enable us to carry forward steadily, surely, and without complaint the burdens of a prolonged and complex struggle with liberty the stake. Only thus shall we remain, despite every provocation, on our charted course toward permanent peace and human betterment.

Crises there will continue to be. In meeting them, whether foreign or domestic, great or small, there is a recurring temptation to feel that some spectacular and costly action could become the miraculous solution to all current difficulties. A huge increase in newer elements of our defenses; development of unrealistic programs to cure every ill in agriculture; a dramatic expansion in basic and applied research—these and many other possibilities, each possibly promising in itself, may be suggested as the only way to the road we wish to travel.

But each proposal must be weighed in the light of a broader consideration: the need to maintain balance in and among national programs, balance between the private and the public economy, balance between the cost and hoped for advantages, balance between the clearly necessary and the comfortably desirable, balance between our essential requirements as a nation and the duties imposed by the nation upon the individual, balance between actions of the moment and the national welfare of the future. Good judgment seeks balance and progress. Lack of it eventually finds imbalance and frustration. The record of many decades stands as proof that our people and their Government have, in the main, understood these truths and have responded to them well, in the face of threat and stress.

But threats, new in kind or degree, constantly arise. Of these, I mention two only.

A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction. Our military organization today bears little relation to that known of any of my predecessors in peacetime, or, indeed, by the fighting men of World War II or Korea.

Until the latest of our world conflicts, the United States had no armaments industry. American makers of plowshares could, with time and as required, make swords as well. But we can no longer risk emergency improvisation of national defense. We have been compelled to create a permanent armaments industry of vast proportions. Added to this, three and a half million men and women are directly engaged in the defense establishment. We annually

spend on military security alone more than the net income of all United States cooperations—corporations.

Now this conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence— economic, political, even spiritual—is felt in every city, every Statehouse, every office of the Federal government. We recognize the imperative need for this development. Yet, we must not fail to comprehend its grave implications. Our toil, resources, and livelihood are all involved. So is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades. In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers. The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present—and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system—ever aiming toward the supreme goals of our free society.

Another factor in maintaining balance involves the element of time. As we peer into society's future, we—you and I, and our government—must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.

During the long lane of the history yet to be written, America knows that this world of ours, ever growing smaller, must avoid becoming a community of dreadful fear and hate, and be, instead, a proud confederation of mutual trust and respect. Such a confederation must be one of equals. The weakest must come to the conference table with the same confidence as do we, protected as we are by our moral, economic, and military strength. That table, though scarred by many fast frustrations—past frustrations, cannot be abandoned for the certain agony of disarmament—of the battlefield.

Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose differences, not with arms, but with intellect and decent purpose. Because this need is so sharp and apparent, I confess that I lay down my official responsibilities in this field with a definite sense of disappointment. As one who has witnessed the horror and the lingering sadness of war, as one who knows that another war could utterly destroy this civilization which has been so slowly and painfully built over thousands of years, I wish I could say tonight that a lasting peace is in sight.

Happily, I can say that war has been avoided. Steady progress toward our ultimate goal has been made. But so much remains to be done. As a private citizen, I shall never cease to do what little I can to help the world advance along that road.

So, in this, my last good night to you as your President, I thank you for the many opportunities you have given me for public service in war and in peace. I trust in that—in that—in that service you find some things worthy. As for the rest of it, I know you will find ways to improve performance in the future.

You and I, my fellow citizens, need to be strong in our faith that all nations, under God, will reach the goal of peace with justice. May we be ever unswerving in devotion to principle, confident but humble with power, diligent in pursuit of the nation's great goals.

To all the peoples of the world, I once more give expression to America's prayerful and continuing aspiration: We pray that peoples of all faiths, all races, all nations, may have their great human needs satisfied; that those now denied opportunity shall come to enjoy it to the full; that all who yearn for freedom may experience its few spiritual blessings. Those who have freedom will understand, also, its heavy responsibility; that all who are insensitive to the needs of others will learn charity; and that the sources—scourges of poverty, disease, and ignorance will be made [to] disappear from the earth; and that in the goodness of time, all peoples will come to live together in a peace guaranteed by the binding force of mutual respect and love.

Now, on Friday noon, I am to become a private citizen. I am proud to do so. I look forward to it.

Thank you, and good night.

connected

southland tales

1.1 Movie poster for *Southland Tales* (Richard Kelly, 2007). Copyright Samuel Goldwyn Films.

COLE GRAY
"Here We Go Round the Prickly Tree"

Like I said in my introduction I deeply admire T.S. Eliot and have even taken the time to memorize as well as study several of his poems in my free time, so I had little difficulty recognizing "This is the way the world ends / Not with a bang but with a whimper" as a reference to Eliot's poem *The Hollow Men* right away. Although volumes could be written on the poem's influence on modern culture as a whole, its specific connection with *Southland Tales* is that they both share the same message of a progressive cultural decay.

Much like Eliot's poem *The Waste Land* (written directly before *The Hollow Men*), this poem concerns a degradation of language and rituals, failings of both the Western man's word and the Christian Word of God to save mankind both physically and spiritually. These hollow men are the effigies of this social decay; straw corpses damned to wander within a void of pure mind while permanently detached from any reality. They attempt to communicate with each other through "quiet and meaningless" whispers, groping together, enacting impotent and childish rituals so they can be heard by any other man or god.

However, their efforts are ultimately futile for they have nothing to say that will offer them relief from their torment. They are helpless beings isolated from nature and exiled in a "cactus land" which is devoid of any spiritual presence. Ultimately, the fact that these hollow men will never be able to reconcile without meaningful spiritual connections has doomed them all to fade into obscurity with a whimper.

Eliot believed that the emerging shallowness of Western culture was due to our inability to connect on a spiritual level with our fellow human beings and that this detachment from the world had led it face first into World War I, one of the bloodiest conflicts humanity had ever seen. Therefore Eliot rejected modern Western culture, seeing it as nothing more than a breeding ground for devastating social conflict and spiritual impotency. Instead, he looked toward the unspoiled Eastern philosophies as humanity's only remaining savior in a cold and desolate world.

The exact same type of social decay that has consumed the hollow men of the poem is rampant throughout the world of *Southland Tales*. It is a world without resonance; full of discordant images that refuse to come together in any meaningful way. This inability for the multimedia feed to generate a logical or consequential narrative of existence creates a world that is completely isolated and composed of entirely meaningless interactions between its inhabitants.

Every character is a product of this isolation and culturally dead in their own way. Celebrities, soldiers, right wing politicians and Neo-Marxists: everyone is an emblem of humanity at its most superficial level, having been digested into this grand social network of empty messages and regurgitated back onto a screen for the prying eyes of the world.

And despite the combined omnipresence of film streaming in from handheld video cameras, YouTube, 24-hour cable news channels, surveillance cameras, and the celebrity-tracking paparazzi, no one ever creates or does anything with this heap of broken images that truly connects humanity with their existence or even each other. These hollow men of the media are thereby doomed to wander within that same desolate cactus land that Eliot had condemned society in 1925. Indeed, they may have never even left it to begin with.

As for Robert Frost's poem *The Road Not Taken*, I am not as great a follower of Frost as I am of Eliot but I do believe that it does connect with *Southland Tales* on the basis of political polarization. The poem itself is often interpreted as an affirmation of individualism and non-conformity as the speaker resolves to take a road less traveled by those who have passed through before. By forging his own path, the narrator has gained an invaluable and unique experience that is completely his own.

Throughout *Southland Tales* the main conflict is perpetuated by the two primary political parties: The Neo-Marxists and The Ultra Conservative Right. Each one is an embodiment of the two different political paths that an individual can follow and by choosing one affirm his own views on life. However, instead of moving on and gaining new experiences like the poem implies, each group has taken what they believe is "the road not taken" and as a result the two parties have turned against each other, terminating all social progression in the process. This is the great tragedy of a divided nation; the two party system meant to promote political compromise and unity is corrupted by petty differences and destroys everything that each side hopes to improve.

1.2 Activists protest President Obama's health care plan at the Taxpayer March on Washington in March 2009. (Photographer: dbKing). Image source: Wikimedia Commons.

1.3 Activists protesting tuition hikes and budget cuts "occupy" Clark Kerr Hall at UC Santa Cruz in November 2009. Image source: Occupy California blog.

1.4 Whore of Bablyon. Andreas of Caesarea. *Commentary on the Book of Revelation.* (Russian Old Believers Illuminated Manuscript. 16th Century.) Source: Wikimedia Commons.

ANDREW COE
"The Revelation of Pilot Abilene"

The post is called The Revelation of Pilot Abilene because he is the narrator of the film, as St. John is the narrator of the Book of Revelation. Now the most popular view of the Book of Revelation is that it is a prediction of the end of the world and that various beasts and horsemen will come and destroy us. Yet, the book is an allegory of the constant trials and tribulations of the members of the Christian faith. John wrote in "vague" terms allowing the messages to connect with people throughout history. However near the end of the book it does give an idea of the end of times. Revelation is without a doubt, the most complicated book in the entire Bible.

A possible reason for this confusion is that St. John wrote in Greek. When transliterated into English, Αποκάλυψη, the Greek word for revelation, becomes apocalupsis. The words apocalypse and revelation are synonyms. Don't believe me? Look it up. They both mean "a revealing of information." So I throw the idea out there that the film does follow the Book of Revelation but to the point that the events here signify the end of the persecution of the US citizens.

Despite this differing view, the symbols of "the end" remain somewhat the same. In the view I take here, the Antichrist is not necessarily the bringer of the end of the world, but the leader of the persecution, and that person is Nana Mae Frost. She clearly is the leader of USIdent and the book and the film both say it was her brainchild. She leads the "persecution" of the citizens of the United States.

Unfortunately the "whore of Babylon" is where this view and the mainstream Protestant view differ. Due to some error in translation, this character has been viewed as the whore of Babylon, as opposed to how the book actually describes her: the whore Babylon. She is not the whore OF, but in actuality is Babylon itself. In order to better explain this I've taken two quotes from Bishop Alexander Mileant's analysis of the text.

First, he writes that: "the first to be subjected to punishment are those guilty people who had accepted the mark of the beast and the capital city of the antichristian empire ("Babylon")." He also explains that "the narrative regarding the fall of Babylon is given twice: at first in general terms at the end of the sixteenth chapter, and then in more detail in chapters 18-19. Babylon is depicted as a harlot sitting on the beast."

From these I say that Babylon/the whore represents the empire of the antichrist or in our situation, the domain/tool of the antichrist (Nana Mae). Babylon is USIdent. It is the capital city of Nana Mae. It is where she resides throughout almost the entire movie. USIdent is the whore Babylon.

The two witnesses are clearly Dream and Dion. No question; the parallels are direct. Two people who preach are killed for their preaching. The four horses and riders of the apocalypse, often referred to as the four

horsemen, are also addressed in the film. In Revelation, the white horse is a representation of the good in the world throughout time, and the white horse in Southland Tales represents the period before the attacks on Texas. The red horse represents the period during and immediately after the bombing. The black horse correlates with the rule of USIdent, and the pale horse is the time during the story.

But who is Jesus in this film? Who represents the second coming of Christ? Since this is not the end of the world, there is no Christ figure. Since this is the end of the persecution, and not the end of times, Jesus has not returned and no one fulfills his role. This goes along with my view of Revelation. Only during the last several chapters does the book talk about the end of days and, while the vessels (the antichrist, Babylon, the prophets) are still there, they are the closest thing to their ideal archetypes as possible. In short, this only represents the end of the persecution of the American people. Most important, no one judges the people. Christ's role is to return to rule over and judge the world. That role is unfulfilled, so there is no Christ and it is not the end of the world.

In short, *Southland Tales* parallels the non-end of the world part of the Book of Revelation. It is not the end of the world but merely the end of the USIdent regime.

1.5 The Fall of Babylon. Matthia Gerung, *Ottheinrich-Bibel*. Reproduced courtesy of Wikimedia Commons.

CHRIS DUDLEY
"Thumbs for votes? Easier than kissing babies."

1.6 Tweed-le-dee and Tildendum. Thomas Nast. 1876. In this cartoon from *Harper's Weekly,* Boss Tweed is portrayed as a police officer. Source: *Wikimedia Commons*.

Southland Tales! What a great film. One point of interest in the film is the small bit where they feature a bag of thumbs, which is never properly explained in the film. In the graphic novel, however, one can find a larger explanation of the thumbs—which still doesn't fully make sense to me. The idea is that in the future (the tangent future or the "now" but "there") thumb prints are used for identification in voting. This process seems simple enough; the idea of a free-floating voter isn't exactly new, but they complicate things when they say that each thumb can vote hundreds of times in different areas.

I would've thought that only one vote accompanied each person in the system no matter where they were. I suppose the technology conveyed only grabs information for that one sector? Or perhaps I don't fully understand their voting process. Either way, this definitely reminds me of the movie *Gangs of New York* (and, maybe, some history class where we talked about Boss Tweed) where the Irish used all the Irish people to win an election for their own man. Each person voted multiple times, tricking the government by shaving off their hair right after they had voted so that they could vote again. Pretty silly, really... how could they ever catch them voting multiple times anyway?

In *Southland Tales* the bag full of thumbs fits in with the film's chaos and government vs. neo-Marxist theme. Chaos is evident in the fact that even voting isn't secure anymore; identity and privacy are long gone. The neo-Marxists use the thumbs to further their own agenda, and add to more of the conflict in the novel/movie. The thumbs are supposed to be used to vote for Proposition 69, the limiting of USIdent's power and the central idea that spurred the Marxist movement.

JOHN KEY
"Digits for Democracy"

The bag full of thumbs is one of the most straight forward parts of the film and is directly related to the election and the use of thumbprints as identification for USIdent, the overarching government control on cyberspace. The idea implied by the Neo-Marxists is that by mailing thumbs to different voting districts they will be able to use that person's identity to cast multiple votes thus swaying the outcome of the election.
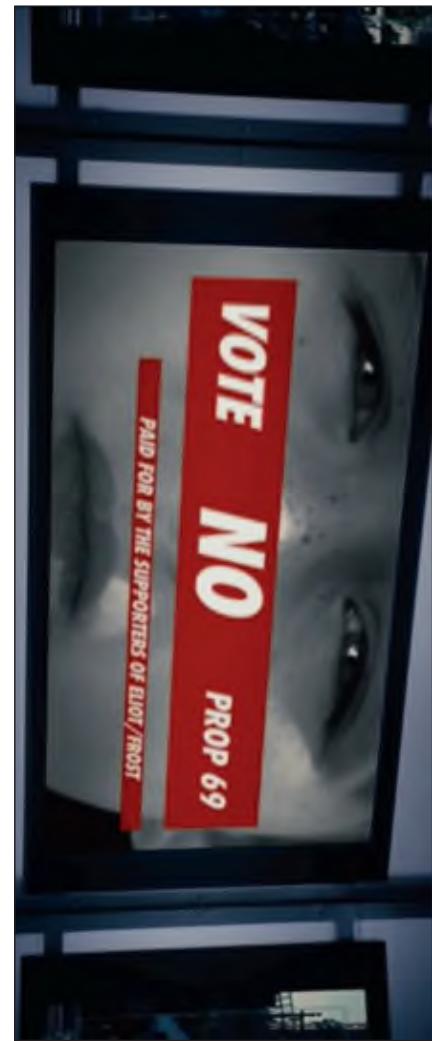
The process described is not new to the voting process in many ways. Two of the most prominent ideas are the use of ballet stuffing and the use of thumbs in voting. In regards to ballot stuffing, this was historically accomplished by physically placing more than one ballot into the vote box in order to influence the vote in one way or the other. As voting technology increased this became more difficult and required a way to beat the technology. With USIDENT in *Southland Tales* using thumbprints to track voting, the Neo-Marxists are attempting to cheat the systems by mailing thumbs to different voting districts. This is ballot stuffing for the new technological era.

The use of thumbs in voting ironically comes from the "bad guys" according to *Southland Tales*. In the 2005 Iraq elections voters dipped their thumb in indelible ink after voting to signify that they had voted and therefore could not vote again. The scanning of the thumbprint is once again simply a more high tech version of a historical voting procedure.

Why are the Neo-Marxists going through all the trouble and sacrificing their thumbs? Well it is all about getting a YES vote on Proposition 69. By implementing the proposition, government control would be severely limited.

In November 2004, California passed Proposition 69: The DNA Fingerprint Unsolved Crime and Innocence Protection Act. This is probably not a coincidence. This legislation gave law enforcement agencies and other State officials the ability to collect DNA samples from felons and other criminals.

California now has one of the largest DNA databases in the world. This is surprisingly similar to California in the world of *Southland Tales*.

1.7 Vote No Prop 69. Film still from *Southland Tales* (Richard Kelly, 2007).

1.8 All thumbs. Film still from *Southland Tales* (Richard Kelly, 2007).

1.9 USIDent. Film still from Southland Tales (Richard Kelly, 2007). USIDent is a fictional surveillance regime installed as a response to a terrorist attack on the United States.

KENDRA DOSHIER
"USIdent in *Southland Tales*: TIA on Steroids."

Southland Tales is an 'iceberg' type of film. At face value, it seems like a weird, nonsensical concept jabbing at the government and social politics - but there is so much underlying information and big clues as to how this film is meant to be interpreted. It's one of those films you have to watch a couple times to even begin to understand the meaning, much less the hidden messages.

Yes, there are strong references to the Book of Revelation and sociopolitical undertones to even the simplest of concepts throughout the film (like extortion and pornography and ripping ATM machines out of buildings) - but I could talk about that for ages. Among the many societal parallels in the movie to real life, one of the biggest correlations would be between *Southland's* **USIdent** program and the **Total Information Awareness** (TIA) program that has since been discontinued by the US government.

TIA was a government-run and owned program that proactively functioned for national security and against terrorism in the United States. Established in the early 2000s, this program endured vast amounts of public criticism for the severe privacy breach and threat to personal security in the name of full governmental control. Out of fear that this would spiral downwards into a completely unconstitutional seizure of privacy and mass surveillance, the Information Awareness Office was defunded by the government thus putting a halt to the Total Information Awareness chaos. The proposed technologies were too invasive and posed as a personal threat to Americans.

It seems absolutely ridiculous that our US Government would go as far as some completely corrupt nations and attempt to wipe out every last bit of privacy among the relatively innocent and unassuming citizens in order to have a better (but not much steadier) grip on terrorism. Ridiculous, yes. But in *Southland Tales*, this concept is made a reality.

USIdent is a government-funded program run by Senator Bobby Frost's wide, Nana Mae Frost. With its governmental affiliations, USIdent is a sick and twisted mode of full population control. This program is a mass surveillance of the American people meant for keeping order, preventing crime and terrorism, and—what is deceivingly made to be the main priority—aid in identification. Cameras are placed all over, in even the most random of places. Chaos breaks out sporadically around the cities. Every single move that anybody makes is watched—even in the bathroom. This is the end of privacy, and the beginning of social and societal warfare.

The theme of governmental control is prevalent in the film, as it plays a pawn in the mechanics of the complex story as a whole. The corrupt government ultimately catalyzes the end of the world; it puts Americans against one another, it creates a social divide, it causes mass panic and revolt. There is finally a point of having too much power, and that is
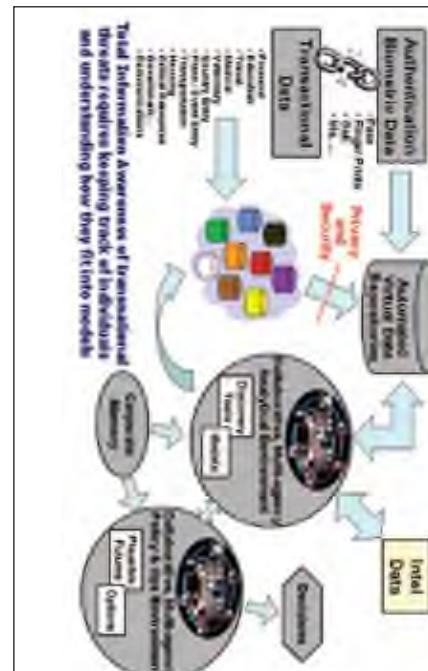
when the world as they knew it bottoms out. USIdent cleverly mirrors what may have been a further-developed TIA. Even more jarring is how the ramifications are portrayed. I don't fully agree that's how society would have unfolded, and of course *Southland Tales* is simply an artsy, philosophical dramatization - but I certainly think that our country would have lost its identity and its promise beyond any hope.

All in all, this film was mind-blowing in the good way and in the bad way. The most amazing part is the beach scene. And the Justin Timberlake intermission.

"I got soul, but I'm not a soldier..."
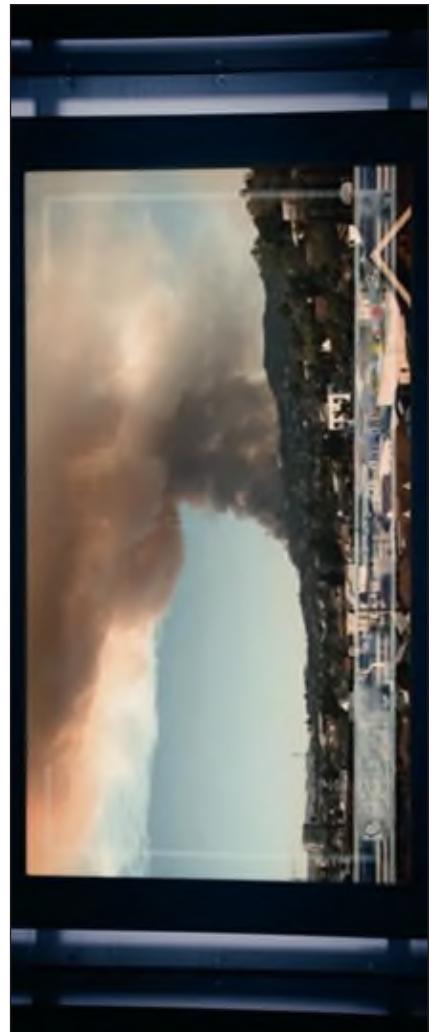
1.10 Total Information Awareness (TIA). TIA is a surveillance regime envisioned by the Defense Advanced Research Projects Agency (DARPA) as a response to the terrorist attacks of September 11, 2001. Although TIA funding was officially terminated in 2004, core elements of the plan were shifted to other agencies.

1.11 I've got soul, but I'm not a soldier. Film still from Southland Tales (Richard Kelly, 2007).

1.12 Time out of joint. Film still from *Southland Tales* (Richard Kelly, 2007).

[1] Gilles Deleuze uses this phrase
from Hamlet to describe the Kantian
revolution in philosophy, as a result
of which time is freed from its
classical subordination to movement
(Deleuze 1984, vii). This liberation
of time, the unveiling of "time
itself, 'a little time in its pure
state' " (1989, 17), is the key to
what Deleuze calls the cinematic
time-image, in which "we enter into
temporality as a state of permanent
crisis" (112). Both Donnie Darko and
Southland Tales are concerned with
such a sense of temporality in crisis,
or temporality as crisis; though I
want to suggest that the latter film
moves 'beyond' the Deleuzian time-
image in order to articulate a new
regime of images and sounds, and a new
mode of temporality.

STEVEN SHAVIRO

"I got soul but I'm not a soldier: Richard Kelly's *Southland Tales*"

Southland Tales (2007) is the second film by Richard Kelly, whose previous work was the cult hit *Donnie Darko* (2001). *Southland Tales* shares with its predecessor a general air of apocalyptic unease, and a plot that circles around the idea of time travel. In both films, "time is out of joint"; linear, progressive temporality has somehow come undone. [1] But *Southland Tales* is a much more wide-ranging and ambitious movie than *Donnie Darko*; and it features a large ensemble cast, instead of being focused upon a single protagonist. The eponymous hero of *Donnie Darko* sacrifices himself in order to save the world. By accepting his own death, he abolishes an alternative timeline in which his teenage alienation redounds into disaster for everyone around him. Donnie's sacrifice offers us what Gilles Deleuze describes as the cinema's greatest gift: the restoration of our "belief in this world" (1989, 188). *Southland Tales*, however, is set entirely within a catastrophic alternative timeline. There is no way back to suburban normalcy. The End Times are near, as the film makes clear with its frequent quotes from the Book of Revelation. And the drama of sacrifice and redemption in *Southland Tales* points, not towards a restoration of "this world," but towards its nihilistic purgation and transcendence. We are swept headlong, through the raptures of media immersion, into an entropic terminal state – and perhaps also beyond it, out the other side.

Southland Tales begins with home video footage of a family Independence Day celebration. The date is July 4, 2005. The footage, filled with random cuts and amateurish swish pans, shows folks, both old and young, just enjoying themselves. But then there's a roar and a flash, followed by a rumbling and a jittering and the sight of a mushroom cloud in the distance. Terrorists have detonated two atomic bombs in Texas. This is the bifurcation point, the rupture in continuity, the moment when the "straight line" of time becomes a "labyrinth" (Deleuze 1989, 131). We have left the world we know, and entered an alternative timeline: one that diverges irreparably from our own. The homeliness of the film's opening moments will never return. History has been derailed – it has gone mad – and there is no putting it back on track. Cut to computer graphics, voice-over narration, and the hallucinatory mediascape of *Southland Tales*.

The bulk of the movie takes place in Southern California (the "Southland"), three years after this initial attack, in the days leading up to the frenzied Independence Day celebration of July 4, 2008. The "war on terror" has blossomed into a full-fledged World War III. American troops are fighting, not just in Iraq and Afghanistan, but in Syria, Iran, and North Korea as well. The draft has been reinstated; martial law has been declared in some areas. Throughout the United States, police surveillance is ubiquitous, and there is no interstate travel without a visa. All Internet communication is monitored by a government spy facility called US-IDent. The police are authorized to shoot on sight anyone suspected of terrorism. The Republican Party is firmly in control of the country. Electoral politics has been reduced to its essence: televison advertising. International oil supplies have been cut off, and the sinister Treer

corporation holds a monopoly on America's alternative energy resources. The only opposition to this state of affairs comes from a comically inept, confused, and internally fragmented "neo-Marxist" underground.

Southland Tales is, evidently, deeply concerned with the post-9/11 American security state. The conceit of an alternative timeline allows Kelly to explore, in exacerbated and hyperbolic fashion, our actual current condition of ubiquitous surveillance, restricted civil liberties, and permanent warfare. This regime of control was instituted by the second Bush administration, in the wake of the World Trade Center attacks; it largely remains in effect today. [2] *Southland Tales* could be described, to a certain extent, as a dark satire in the tradition of Kubrick's *Dr. Strangelove*. It pushes the logic of the security state to absurdist extremes. In the world of the film, there is no right to privacy, and almost no private space. Phonecalls are routinely wiretapped, recorded, and traced. All public activity is captured on video; even the toilets are watched by surveillance cameras. A recurrent image in the film shows the creepy Homeland Security czar Nana Mae Frost (played by Miranda Richardson, channeling Angela Lansbury's performance in *The Manchurian Candidate*), sitting in her command chair at US-IDent headquarters, monitoring the video feeds on multiple screens that cover a large curving wall in front of her. In the world of *Southland Tales*, if you step out of line, or arouse distrust, you are likely to have your home invaded by an armed and masked SWAT team, or to be picked off on the beach by a government sniper. But most people remain oblivious to all these intrusions; they continue to drink, party, and otherwise enjoy themselves on the Venice Beach boardwalk, just as if nothing were amiss.

However, despite these currents of satire, *Southland Tales* is finally best described as a science fiction film. Its overall tone is earnest and urgent, even visionary – more than it is sarcastic or comic. *Southland Tales*, like most science fiction, is not about literally predicting the future. Rather, it is about capturing and depicting the latent *futurity* that already haunts us in the present. At one point in the film, the porn actress Krysta Now (Sarah Michelle Gellar) excitedly remarks that "scientists are saying the future is going to be far more futuristic than they originally predicted." The reason this comment is ludicrous is that "futuristic" is not an objective category, but an anticipatory inflection of the present. *Southland Tales* is indeed futuristic, in that it shows us an otherness, an elsewhere and elsewhen, that is inextricably woven into the texture of the here and now. We usually think of hauntings as traces from the past; but the future also haunts us with its hints of hope and danger, and its promises or threats of transformation. Especially in times of great social and technological change, we *feel* the imminence of the future in the form of gaps and leaps in temporal progression, and shifts in the horizon of what is thinkable. Of course it is impossible to *know* what changes the future will bring; but the signs of this impossibility – the intimations of instability, the shifts of perspective, and the incipient breaks in continuity – are themselves altogether real. They are part of the conjuncture, part of what shapes the present. If the past *persists* in the present, then futurity *insists* in the present, defamiliarizing what we take for granted. Science fiction highlights this sense of futurity, making it visible and audible.

1.13 Nana Mae Frost supervising USIdent. Film still from *Southland Tales* (Richard Kelly, 2007).

[2] Although Barack Obama was elected President on promises to reverse Bush administration policies, and although he has curbed some of its worse excesses, at this writing (2009) the wars in Iraq and Afghanistan continue, surveillance remains widespread, and the White House still endorses the use of preventive detention without trial.

1.14 Post-cinematic media regime. Film still from *Southland Tales* (Richard Kelly, 2007).

Southland Tales is an ironically cinematic *remediation* of the post-cinematic mediasphere that we actually live in. The film's alternative timeline is defined precisely by its *divergence* from the world we know. [3]

Southland Tales is more about what I am calling the post-cinematic media regime in general, than it is about the national security apparatus in particular. Terrorism and the "war on terror" are parts of this new media regime, but they are not its basis, nor even its primary focus. At most, they are *catalysts*: they intensify and speed up the emergence of new media forms, and of their corresponding new modes of subjectivity. Surveillance is only one aspect of a broader process; Nana Mae Frost is not the only one monitoring multiple screens, and trying to pay attention all at once to a plethora of media feeds. In fact, all of the characters in the film are doing this, more or less; and so are most of us in the audience. *Southland Tales* surveys and maps – and mirrors back to us in fictive form – the excessive, overgrown post-cinematic mediasphere. The film bathes us in an incessant flow of images and sounds; it foregrounds the multimedia feed that we take so much for granted, and ponders what it feels like to live our lives within it. Video surveillance cameras are ubiquitous, of course, in the world of the film as well as well as in the world that we inhabit; but so are many other sorts of recording, broadcasting, and communications devices. Social space is filled to bursting with handheld videocams, mobile phones, portable screens, 24-hour cable news channels, YouTube clips, MySpace pages, automated response systems, and celebrity-tracking papparazzi. Images and sounds are continually being looped for endless replay, or composited together into new configurations. In *Southland Tales*, traditionally 'cinematic' sequences are intermixed with a sensory-overload barrage of lo-fi video footage, Internet and cable-TV news feeds, commercials, and simulated CGI environments. These often appear in windows within windows, so that the movie screen itself comes to resemble a video or computer screen.

Despite the emphasis upon surveillance and security, the mediascape explored by *Southland Tales* is not in the least bit hidden or secretive. It is rather a vast, open performance space, carnivalesque, participatory, and overtly self-reflexive. Not only do we see multiple, heterogeneous screens within the movie screen; we also see the characters in the movie appearing on these screens, creating content for them, and watching them – often all at the same time. If the government isn't recording your actions with hidden cameras, then perhaps someone else is, for purposes of blackmail. But more likely, you are making and distributing videos of yourself, in a quest for publicity and profit. In any case, your mediated image is what defines you. If you aren't already an actor or a celebrity – as most of the characters in *Southland Tales* are – then you probably have a business plan to become one. Every character in the movie seems to be frantically engaged in exhibitionistic display, outlandish performance, and ardent networking for the purpose of self-promotion. The world of *Southland Tales* has become what Jamais Cascio, inverting Foucault, calls the *Participatory Panopticon*: "this constant surveillance is done by the citizens themselves, and is done by choice. It's not imposed on us by a malevolent bureaucracy or faceless corporations. The participatory panopticon will be the emergent result of myriad independent rational decisions, a bottom-

up version of the constantly watched society" (Cascio 2005). The reign of universal transparency, with its incessant circulation of sounds and images, and its "participatory" media ecology in which everyone keeps tabs on everyone else, does not need to be imposed from above. Rather, in the post-cinematic media regime, it "emerges," or "self-organizes," spontaneously from below. The greatest success of what Michel Foucault calls *governmentality* comes about, not when a certain type of behavior is forcibly imposed upon people, but when people can be "incentivized" to impose this behavior willingly upon one another, and upon themselves.

Southland Tales does not exempt itself from the frenzied media economy that it depicts. The movie is itself a post-cinematic, transmedia object. Tom Abba describes it as an "extended narrative," in which the story is spread across several media (Abba 2009, 60). Most notably, Richard Kelly published a three-part comic book, or graphic novel, that gives the movie's premises and backstory (Kelly and Weldele 2007). Many of the plot twists, convolutions, and digressions in *South-land Tales* can only be understand by reading the comic first. This is why the movie's titles divide it into Parts IV, V, and VI; Parts I, II, and III are found in the comic. In addition, when *Southland Tales* was first released, a number of the film's (fictional) characters had websites on MySpace; the movie's (equally fictional) Treer Corporation had its own website as well. There was also a certain amount of spillover between the characters in the movie, and the pop culture celebrities who played them. Sarah Michelle Gellar actually recorded, under her own name, the song "Teen Horniness Is Not A Crime" – which in the film is written and performed (with an accompanying music video) by her character Krysta Now. The song is included on the movie's soundtrack album, and is available for download from the iTunes Music Store.

Of course, this sort of spread among multiple platforms is not unique to *Southland Tales*. It is an increasingly common media strategy today. As Richard Grusin notes, film today is turning into a *distributed medium*: "the film is not confined to the form of its theatrical exhibition but is distributed across other media as well." For instance, "the production, design, and distribution of DVD versions of feature films are part of the original contractual (and thus artistic) intention of these films." Grusin adds that this sort of remediation "marks a fundamental change in the aesthetic status of the cinematic artifact" (Grusin 2007). His point is that the aesthetic experience of a film today may reside just as much in watching the DVD extras, or in exploring the associated websites, as it does in watching the film itself. For that matter, the media experience may well reside in children's playing with toys that are modeled after figures from an animated film, and given away as part of a cross-platform promotional strategy. The aesthetics of distributed media cannot be separated from their marketing. For its part, *Southland Tales* not only supplements itself with a variety of intertextual materials in other media, but also folds the practice of multimedia distribution and dispersion into the narrative of the film itself. Most notably, Krysta Now seeks to leverage her semi-celebrity as a porn starlet not only by recording songs and making a music video, but also by starring in her own talk-show-cum-reality-television series, and by selling her own energy drink.

1.15 **Feed the hole.** Film still from *Southland Tales* (Richard Kelly, 2007).

[4] Ironically, very few people have seen Southland Tales on the big screen; in its limited release to movie theaters, it was a calamitous flop. The film disappointed fans of Donnie Darko, because it was so oblique and disjointed narratively, and because it was impossible to "identify" with any of the characters in the way that so many viewers did with Darko's eponymous protagonist. As I will argue below, Southland Tales is no less empathetic to its characters than Donnie Darko is; but this empathy no longer takes the form of traditional cinematic "identification." Links to other reviews of the film can be found at www.mrqe.com/movies/m100064789?s=1. I can only hope that Southland Tales will find a new audience, thanks to its recent DVD and Blu-Ray releases.

1.16 G. I. Joe and the cinephiliac moment. Film still from *Southland Tales* (Richard Kelly, 2007).

What this means is that, although Southland Tales is very much a movie, it is also profoundly post-cinematic in both form and content. I say that it remains a movie, in the sense that it is big and spectacular, and that it was clearly intended to be viewed in a movie theater, on an enormous screen.[4] However, its audiovisual flow is entirely post-cinematic, and of a piece with the video-based and digital media that play such a role within it. The compositional logic of Southland Tales is paratactic and additive, having little to do with conventional film syntax. The film is filled with inserts; it overlays, juxtaposes, and restlessly moves between multiple images and sound sources. But it does not provide us with any hierarchical organization of all these elements. Many of the film's most arresting images just pop up, without any discernible motivation or point of view. For instance, around the five-minute mark, shortly after a title reading "Los Angeles," there is a shot of a G. I. Joe doll, advancing on knees and elbows along a wet sidewalk, then firing a rifle. It is nighttime. We see the toy in sharp focus and in close-up, while behind it the full extent of the boulevard, lined by palm trees, stretches out-of-focus into the deep background. The sounds emitted by the toy are accompanied, on the soundtrack, by Moby's soothing ambient music, and by a voiceover newscast reporting that celebrity-turned-soldier Pilot Abilene (Justin Timberlake) has been wounded in Fallujah by friendly fire. The film never returns to this toy figure; it has no function in the narrative. Of course, the film is filled with references to soldiers, and to wounded veterans like Pilot Abilene; but is that enough to motivate the appearance of the toy? The image of G. I. Joe is just there. It grabs our attention because it is anomalous and unexpected; it is evocative in a way that we cannot quite pin down. The film bequeaths us this moment, and then moves on to something else. G. I. Joe is just one figure in the movie's ceaseless flow. [5]

[5]The film critics Richard T. Jameson and Kathleen Murphy include the shot of G. I. Joe in their list of "favorite moments" from the movies of 2007: <http://movies.msn.com/movies/2007review/ moments_2/>. It is worth noting that much of the recent theoretical discussion of cinephilia has been concerned with "the cinephiliac moment": that is to say, with the way that cinephiles tend to focus upon, and even obsessively fetishize, particular shots, instants, or details of a film, which they extract and isolate from the film as a whole (Keathley 2006, 29-53). But Southland Tales is edited in such a way that each of its moments is, as it were, already thus extracted and isolated for cinephiliac delectation. Kelly simultaneously overloads us with "information," and disperses that information in such a way that we cannot bring it together, and grasp it as a whole.

Average user figures

Average user has

130 friends
on the site

Average user sends

8 friend requests
per month

Average user spends more than

55 minutes
per day on Facebook

Average user clicks the Like button on

9 pieces of content
each month

Average user writes

25 comments
on Facebook content each month

Average user becomes a fan of

4 Pages
each month

Average user is invited to

3 events
per month

Average user is a member of

13 groups

1.17 Facts about Facebook users. Infographic posted March 17, 2010 by *Website Monitoring Blog.*

LAURA SCHLUCKEBIER
"Froglets and robots on Jupiter"

Even though I was confused many times as I read through Shaviro's book *Connected*, I really enjoyed it. I feel like I needed a cultural or scientific or some kind of reference book for about every other sentence I read, but that's what really made the book enjoyable for me. After just reading a page or two of the book, I realized how much he's had to have read in order to know so much about.... well, everything. After reading the assigned portion, I flipped to the table of contents to see the chapter titles of something else interesting I would like only to find that there are no chapters. Just little subheadings every page or so. I loved, loved, loved the fact that there weren't any chapters. At first I was thoroughly confused on how a book could even function without chapters until I realized that every subsection flows fairly seamlessly to the next, and yet in just a few pages, I've moved from reading about Singularity to beautiful robots on Jupiter.

In regards to the pages assigned to us, my favorite idea came from this quote:

> "The disciplinary archives constitute a cohesive, totalizing representation of society and of every individual within it. Each person has an eerie double, in the form of a police file dedicated specifically to him or her. The disciplinary subject is thus what Foucault calls "a strange empirico-transcendental doublet" (1970, p. 318).... These two sides correspond point by point. Yet they remain incommensurable. The map is not the territory. The dossier is not the prisoner."

Shaviro continues on to say that this isn't how new control society works anymore, but I still was fascinated by the idea and began to think of ways that this functions in our life. Obviously none of us as students have a prison dossier, but what empirico-transcendental doublets operate in our lives? Our resumes are our life's "worthiness" in summary. Our transcripts are who we are as students. That piece of paper (or that screen on the computer) is us as a student. Summed up in just one screen shot. Four years of college could be explained in just one screen shot.

Even less academic forms are familiar to us. Facebook pages are an example of a "cohesive, totalizing representation ...of [an] individual." Could we go to a stranger's Facebook page and find out entirely about them? Maybe not entirely, but we could gather a great deal about them just from one place.

Based on this quote and these ideas, I suppose my question or perhaps request to Shaviro would be further explain how society has shifted from this form of control to one that uses constant surveillance. He says:
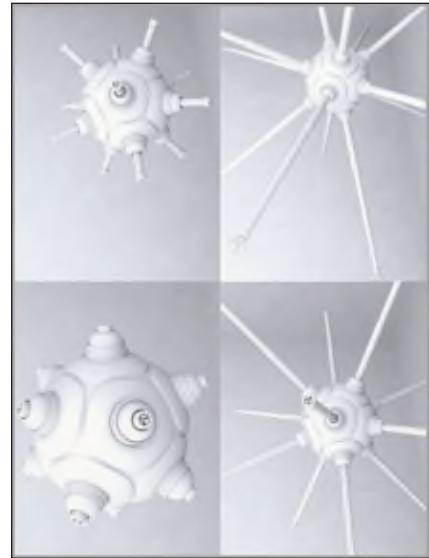
> "There may well be more surveillance than ever, but this surveillance no longer leads to an archive of "permanent documentation" that doubles actual existence. Instead the

results of surveillance are immediately fed back into the system. Surveillance records do not merely record past behavior, nor do they provide typological models to be applied to future behavior. Rather, the accumulated data works to manipulate behavior directly, in real time, in the immediate present. There is no longer any duality between data, on one hand, and bodies to which those data would refer, on the other... Surveillance records are no longer about anyone or anything. They are performative instead of constative; it is not what they say that matters, but what they do. It is precisely, and exclusively, under such conditions that we say everything in the world is information."
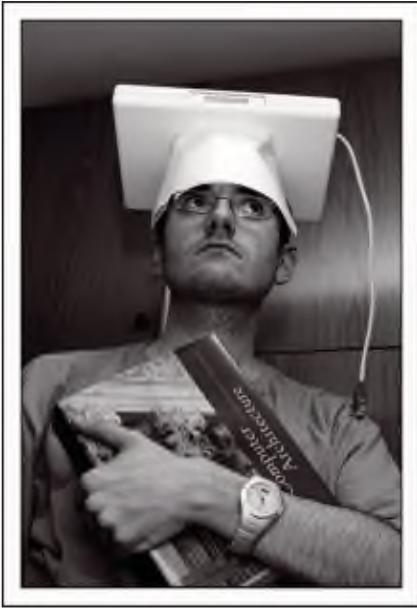
I kind of get that. But not really. How does this accumulated data manipulate behavior directly? I suppose he could be referring to a point he makes later on that surveillance cameras aren't there to capture crimes on camera— they're there to prevent them from ever happening. That could be what Shaviro means by "manipulating behavior directly" but I'm not sure. Whatever his point is, I'd like to hear it expanded on because I think it's really interesting.

Later in the book, Shaviro discusses the Singularity (pp. 120-128). He quotes Kurzweil and talks about AI, and I understand this section even less than the assigned one and yet I still enjoyed reading it. He talked about these little nanobots called foglets (which I kept reading as froglets, so I was imagining little bitty robotic tadpoles) that someday maybe we'll be able to download our brains into and somehow they'll make us whatever food we'll want.... something, something. I re-read it a couple times, still loved it, but still extremely confused.

I feel like that's the key to this book. Loving the confusion.

1.18 Utility Foglet. 3D visualization of Utility Foglet created by Stimulacra, LLC & ThinkTank Animations, February 8, 2007. Image licensed under Creative Commons Attribution 2.5 Generic license.

1.19 Mastered by technology. Photo created by Roger Ferrer Ibáñez. July 7, 2008. Licensed under Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic.

JOHN KEY
"My computer is my master."

I found all of Shaviro's work to be interesting in its own right and to be well explained. I am however fascinated by his idea of, to put it simply, technology taking over the world. Now Shaviro elaborates and is much more elegant and thorough than I am, but in essence the majority of his writing culminates with technology and those who wind up controlling it ruling the world and the known universe.

As Shaviro puts it, "It [the network] does not need to put us under surveillance, we belong to it, we exist for it already." I have to admit, when I think about it, I completely agree.

As technology becomes more and more powerful, it is constantly generating new ways for individuals to control other individuals and making the old ones more efficient. Technology already allows for government officials to keep tabs on the general populace and as technology improves it is only going to become more extensive, but are we really complaining about it?

Our world has become so technology friendly that much of this monitoring goes unnoticed or ignored because it has become common place. We are accepting these new technologies that will allow for our eventual control because they make our life easier.

AARON PASSER
"What is mind? No matter."

A few sections of Shaviro's book that I found particularly interesting were entitled "What is Mind? No Matter" and "What is Matter? Never Mind." Both of these sections discuss the movie *The Matrix* and delve into our perceptions of simulations and what is actually real.

Cyberspace itself consists of transactions, relationships, and thought itself, but no bodies actually live there. As Internet users we are virtually free to go anywhere we choose, our physical body remains in place, but we can take our minds to worlds of complete simulation.
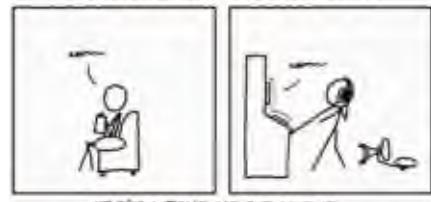
Our minds are set free in cyberspace. However, because there are so many simulations present in society today it is sometimes hard for us to trust appearances. As we have seen represented in the movie *Gamer*, games like *Second Life* are a way for a person to live an alternate life, and in no way does a person's avatar have to resemble them. Deception is alive and well in cyberspace and it is extremely hard to trust people while surfing the World Wide Web.

As we become a society more and more ingrained in the cyber-world it appears that simulation will continue to advance. If and when the Singularity occurs, AI will be so advanced that it would surpass the level of simulation. No longer will these machines simulate life, but they will exist as one within society itself, and this is where The Matrix comes in to play.

In The Matrix, the simulated world is so real that our minds can't help but be convinced that it is real. While our bodies rest in some primordial ooze our minds are taken to a world where, as Neo learns, anything is possible. The virtual world is so complete; it is a prison for the mind. The problem with this is that we are in prison, but we do not realize that we are. Is surveillance reaching a point today where we could consider it a prison? Like in the Panopticon, we could be monitored at any moment. With so many cameras, both private and public, watching 24 hours a day it seems impossible to always know when big brother is monitoring us.

Lastly, I also enjoyed the sections "Codes for the Cataclysm" and "Rhythm Warfare." In these sections Shaviro discusses the possibility of mega corporations monopolizing the flow of information. Over the summer I worked for a company called Info USA which sells an enormous database of information from geo-coded data to the value of your house. I hate to say it, but I sold information to the government. It will be interesting to see where TIA goes in the next few years.

1.20 "I know you're listening." *xkcd: A webcomic of romance, sarcasm, math, and language*. January 2, 2009. *xkcd* is licensed under a Creative Commons Attribution-Noncommercial 2.5 License.

MARK MCCULLOUGH
"The rise of data and surveillance. Watch it now."

In *Connected*, Shaviro speaks of surveillance and its increasing reliance on the power of data. Interestingly enough, does this infer that the world will become full of nothing but data? It seems from the reading that surveillance in every form is leading the way for constant observation. The difference between surveillance and observation, to me, can be seen in the motives involved. Surveillance seems to elicit a "need" for control or power; there is always something to be collected from surveillance, to be archived and put into forms that cross-reference one another for purposes of monitoring/implementing control.

Observation, on the other hand, seems to serve the purpose of data-izing our life, which I believe Shaviro states when he speaks of Bill Gates' house and the Microsoft House of the Future. But by putting our lives into data, transforming them into process thereof, and using them for the sole intentions of observation (having computers look into eyes, measure body temperature, all for the purpose to change the AC in your house), when can we draw a line between the surveillance and observation? To succinctly summarize, our lives are being transformed into data, some of the data is collected for surveillance (need to inflict control) and other data is collected from observation (to achieve efficient streamlined lives).

In our lifetimes, will we see a shift from surveillance to observation or vice-versa? With the emerging technologies being created by Google and Microsoft's House of the Future (but I don't think this ever *really* took off?) that promise to observe our lives, will this information eventually be used to exercise control? With that being stated, will this control be used in a manner to establish overarching power? Or will it control our lives in a way that we all become moral according to the morality of the data machine, which would eliminate the need for overarching control because we are all connected from the data source which regulates our lives?

Maybe I missed the point here, but the collection of information and data is a scary thought; many people might put power in the wrong hands, which might lead to constant surveillance by one central authority. But by the same token, surveillance is not a one-way model. So when does surveillance from central authority become surpassed in "power" by the surveillance of a mass? For example, consider the Vietnam War. Was this not the first televised war—leading to the mass surveillance which far overpowered the surveillance from authorities?

I know I asked many questions, but they all boil down to the power of surveillance and data, and who controls what. Data is collected by the prison system, but data is also collected from prisoners about the prison system itself. Do upheavals in society occur when the powers of surveillance shift? And being a History major, I'm all about the status quo; so I also wonder how surveillance (when its power is dynamic) affects the status quo of those being surveyed and what happens when the surveyed collect enough data themselves of the surveyors. In the future, will data equal power?

1.21 Bedroom of the future. Microsoft Chairman Bill Gates demonstrates the "bedroom of the future" during his keynote address to the annual Consumer Electronics Show in Las Vegas. January 7, 2007.

COLE GRAY
"To roll it toward some overwhelming question."
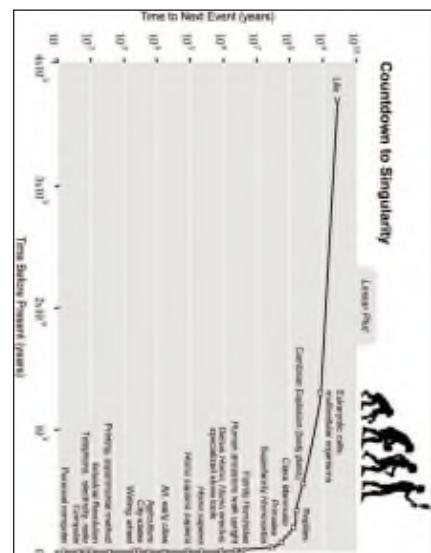
Having read some of Steven Shaviro's work I must say that I am looking forward to his lecture on Thursday. Specifically, it was Shaviro's dissertation on the potential development of AI and the Technological Singularity that piqued my interest; this manifestation of humanity's future self.

Indeed there seems to be an almost endless torrent of differing outlooks on what form a virtual mind would eventually take and its impact on humanity as a species. From hive minds to omnipotent observer-deities, it seems that many people believe in the transcendental nature of such technologies to liberate the mind from its fleshy limitations and transform it into an entity of pure thought.
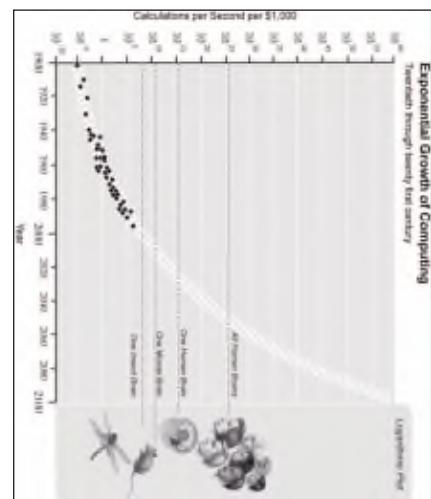
Shaviro, however, takes a much more realistic approach to the argument by addressing the limited economic and political factors of technology as well as the limitations of the mind itself. He maintains that, even if strong AI is possible, these virtual minds will be essentially contingent entities with their own set of interests. Any differences between human minds and their virtual counterparts will be purely political or cultural. Shaviro affirms that all post-Singularity technology will be integrated into the texture of everyday life, bettering it but ultimately leaving it the same.

For the most part I agree with Shaviro's critique of those who believe in the 'metaphysical' nature of the Technological Singularity. Humanity will always be restricted by both its social and physical limitations and post-Singularity technologies will be of no exception.

However, I do not think that we can rule anything out just yet. Of course I do not expect that post-Singularity technologies will elevate us to super human levels right away, but given enough time (and if it is even physically possible) we may eventually become something completely different from what we recognize as humans altogether.

1.22 Countdown to Singularity. "Events expressed as time before present (years) on the X axis, and time to next event (years) on the Y axis." Source: Ray Kurzweil, *The Singularity is near: When humans transcend biology,* 2007. Viking Press.

1.23 Exponential growth of computing: Twentieth through twenty first century. This chart depicts calculations per second per $1,000. In 1965, the IBM 1130 could perform 482.6 calculations per second. By 1998, the Pentium II PC could perform 133,300,000 calculations per second at the same price point. Source: Ray Kurzweil, *The Singularity is near: When humans transcend biology,* 2007. Viking Press.

1.24 Streetlight surveillance camera and antenna in Washington D.C. Photograph taken by Jim Kuhn and shared via Creative Commons Attribution 2.0 Generic license.

JUSTIN MICHAELSON
"In short, if you're connected, you're f—-d."

Shaviro writes a lot about the future, being connected and the ways in which technology will alter our lives. As consumers of technology, we tend to think advances are beneficial and will lead us to a better, more easily organized and functional life. Shaviro, although admitting that this may be true, seems to think that all this connection and surveillance is finally going to catch up with humanity in a negative way.

If all this is true, and online connection will lead to total surveillance and the whole world exists "only to be televised," how do we as mere citizens (I mean those not developing these technologies) fall into the trap of wanting more?

How do we see only good arising from such technological advances and not become wary of the power of this technology? In a quasi-joking manner, is Guy Kawasaki planning to take over the world with said technology? After all he attended televangelism training to get people pumped up about the Apple brand of products as the coolest way to stay connected.
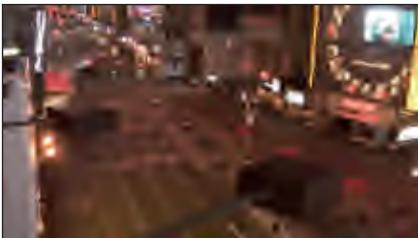
I particularly liked Shaviro's chapters "Almost Famous," "Exposure" and "Don't Look Now." Our desire to become quasi-celebrities, to have our 15 minutes, is made easier thanks to the web-cam and Internet. Who hasn't turned the cam or digital recording device on themselves or friends and uploaded a video to their blog, YouTube or Facebook page? And why do we do so? To keep our friends up to date on our goings on? Or is it because, somewhere in the American subconscious, we have become aware of the notion that being vain is not only acceptable but warranted?

The scary part is that we can become YouTube sensations overnight without even giving our consent. With public surveillance on every corner, people and their digital recording devices and the lack of privacy rights in public spaces, we can all fall victim to overnight celebrity.

1.25 Times Square 2010. This high-definition image from EarthCam depicts the intersection of 7th and Broadway on May 2, 2010, shortly after the area was evacuated due to the discovery of a car bomb.

1.26 Times Square 2010. This image from EarthCam captures a strangely dressed feline on the streets of Manhattan.

RAELLE SMILEY
"Webcam watching"

Watching public access webcams is a weird concept to me. The idea that while I am walking down the street someone across the country or world may be watching me do so is a slightly uncomfortable feeling.

I chose to watch the webcam located at Times Square in New York at 7th and Broadway. The footage mostly consisted of pedestrians jaywalking and honking taxis speeding through yellow lights. However, there was the occasional thing that caught my eye and drew me away from the crowds to zoom in on one person or vehicle.

For example, the first thing that stood out to me was the white, stretch SUV limousine that pulled between two taxis and waited curb side for about 5 minutes. I did not see anyone enter or exit the limo but all of the sudden it drove away. It made me wonder, who was that limo waiting for. Why didn't they show? Did something terrible happen? As my imagination wandered, I thought of many scenarios ranging from Kanye West not exiting because of the massive crowds to a mafia deal gone wrong. It was fun to imagine that I had just witnessed something related to a major crime bust.

A few pedestrians drew my eye as well. For example there was the person in all white who seemed to be walking unusually slow. I could not help but notice this mummy-like figure leisurely strolling through the crowd. I also noticed a person carrying what seemed to be quite a few shopping bags drop one and continue walking. This concerned me; it even crossed my mind that I was witnessing a terrorist attack. Yet, less than a minute later, the pedestrian came running back to retrieve their dropped belongings. So why is it that all I could think of was criminal activity when I saw these unusual suspects?

It must have been the readings. Reading about panopticon had gotten me thinking about surveying for criminals and behaviors that warranted disciplinary actions. Then I started to worry. Are we close to a time when everywhere we go will be under constant surveillance? Even in our own homes? And then will what happen if the panopticon proves true for us? Will constant surveillance and possible discipline eventually lead to a better-behaved society who only acts off the basis that they know they are being watched? This concerns me.

In conclusion, watching these webcams got me thinking about the negative aspects that can come from too much surveillance but I did enjoy watching the unsuspecting passersby for a while.

ALY MILLER
"Something even creepier than Facebook"

In today's age, when virtually everyone I know has a Facebook account, you'll be hard pressed to find someone with a Facebook who can honestly say they have not "creeped" on someone else. It's easy to do; people post information that they know will be easily visible by anyone they allow to see it—whether it be their friends, their network, or just anyone with an account. I think it's safe to say that everyone with a Facebook knows and understands that people are looking at their profile, making judgments and looking at their status updates to see what's happening. However we do not expect a random person in a completely different country to be using a publicly accessible webcam to watch us drive in our cars along the highway.

Recently I have been watching random people I don't know via webcams. I've watched a South Korean restaurant being run exactly as it would be in America. If the website didn't tell me that this restaurant was located in South Korea, I probably would have just assumed it was somewhere nearby or familiar. I've watched a courtyard in front of a hotel in the Netherlands and wondered where people were going, taking note of how many of them rode bikes—something I would not typically see here in Texas, where cars are by far people's ideal form of transportation. Both of these places, in completely different countries, contained people I sincerely doubted that I knew, in places I'd never been, going about their lives in what seemed to be in a normal way. Everything seemed to be running smoothly and people were just going about their day. Except that a college student in San Antonio was watching them.

My favorite site was a courtyard at the University of Miami where I found the most activity (time differences made it very hard to look at other countries) and the best quality. It started with a person I named "green-hoodie-guy," who seemed to wander back and forth. He'd go off the screen then come back on, with seemingly nowhere else to go. I found myself giving my roommate a play by play of green-hoodie-guy and what he was doing. Later, I returned to see a couple walking and holding hands, with an iPod linking them as they both danced. I assume that the only reason they were dancing was because they believed nobody was around to see them. Unfortunately, they were wrong, as I was sitting there watching them and frantically wondering if I'd ever done something silly like that while walking around somewhere with a webcam nearby.

We, like the people in the panopticon, could theoretically be watched at any point. For all I know, somewhere on Trinity campus there is a webcam and somewhere there is a website with a link on it, allowing random strangers from around the world to see me walking from class, or giving a tour, or reading on a bench. And it seems as though this is just the start—seeing as how our society continues to become more and more reliant on technology. Who knows? Maybe someday these cameras will work like Google maps—all you'll need to do is type in an address and you can get a live feed of what's going on. It's creepy; it's weird; but it's true. Where will this lead us?

1.27 University of Miami Courtyard Cam.
Courtyard in front of the College of Engineering's McArthur building on a rainy May afternoon.

CHRIS KRADLE
"Times Square on Monday afternoon"

I watched the New York Times Square Camera on Monday afternoon. The camera is located at 7th and Broadway, about five stories off the ground, and is pointing down so that you can see billboards, shops, and traffic lights.

There is not much traffic at this time, although there are plenty of horns honking at each other. About ten percent of the pedestrians carry shopping bags, and there are no discernible conflicts. Some people stop and look in windows, while others readjust their clothes and shopping bags on the sidewalk. After 15 minutes, the traffic light patterns become apparent. It is obviously cold, with many people wearing jackets, but there no snow on the ground. The thermometer on the right of the EarthCam says it is 37 degrees. I'm sure that if I checked back in 3 weeks from now, the advertisements would be different.

It is very interesting to think about how these cameras can be used for surveillance. Our society could easily become a disciplinary society, if the government were to take that route. With the fear of terrorist attack always looming, it would not surprise me for the government to take that route unless it was met with fierce public outcry.

The surveillance could help promote control of society and make us feel like we are in a prison. The laws that start from birth (family laws) keep evolving throughout the lifetime (school as a factory) and they are always enforced in a closed environment. If public space becomes another closed environment because of the installation of security cameras, these rules would only be further enforced and our privacy would be taken away almost completely.

The world becomes the panopticon described by Jeremy Bentham.

1.28 Times Square. Unsuspecting pedestrians are immortalized on camera by Google Street View. Precise date of this recording is unknown, though the advertisement for the film *Up!* suggests that the picture was taken during the first half of 2009.

JUSTIN MICHAELSON
"Do something crazy"

Considering the Saints just won the Super Bowl and Mardi Gras is just around the corner, I decided to watch Bourbon Street In New Orleans. I have friends from that area, and they all bragged about the 24/7 party that would be occurring between the Super Bowl win and Mardi Gras kick off.
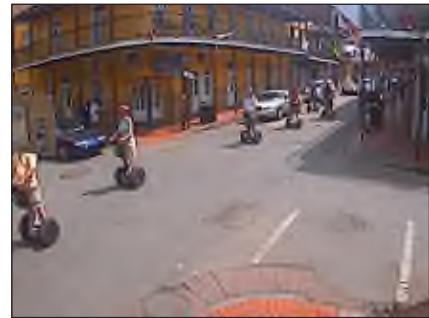
With all this in mind I decided I would watch the camera at 9:30 p.m. I decided on this particular time because I assumed it would give me a good mix of people just beginning their night on this notorious party street, as well as those who started their nights a little too early. I didn't really want to see a big drunken mess because all of their inhibitions had gone out the window on the fifth Bomber Drink!

Even on Bourbon Street, when sober (or presumably sober), people tended to act relatively tame as if "someone was watching." Well good for them, because someone was. In public places, people tend to act according to social and societal norms of what is and isn't appropriate because of the possibility that someone, somewhere might be watching and judging. Foucault said this is because of society's control, perpetual training and modulation. Basically, we have all become malleable pawns in a system of socialization that creates order, control and a constant, predictable lameness.

People break away from these molds from time to time—like when they are blasted or think no one is watching—but our public and private actions are dictated by these controls.

Sadly, at 9:30 p.m. on Bourbon Street this fine Monday night, only a few people were drunk or unconcerned enough to act out against these pre-established norms. One lady, decked out in a Saints jersey danced her happy ass down the entirety of Bourbon Street until she reached her destination: another bar! Two highly over-beaded gentlemen cheered each other while walking down the street and one very small man dug in a trash can located in front of a bar/restaurant when no one else was in the immediate area.

Although creeping on people via random online webcams is a little weird and potentially just plain creepy, I plan to do even more crazy, unnecessary, and random things in public spaces... and maybe, hopefully, someone, somewhere will be watching me.

1.29 Bourbon Street (New Orleans) Earth-Cam. Segway riders explore the city on May 11, 2010.

1.30 Bourbon Street on Fat Tuesday. Still captured by EarthCam depicts revelers celebrating the holiday on February 16th, 2010.

ANDREW TRUELOVE
"¡Las Cámaras Fantasticas!"

1.31 Radio Siberia. Office scene captured by webcam in Tomsk's Radio Siberia Station. May 16, 2010.

1.32 Secure beneath the watchful eyes. Promotional poster created by "Transport for London" in 2002. "Secure beneath the watchful eyes," proclaims the poster, "CCTV and Metropolitan Police on buses are just two ways we're making your journey more secure."

Starting this assignment at 11:00 at night, I knew I would have trouble finding a webcam in a well-lit space. This ruled out pretty much all of North America and Europe. Fortunately, for me, the great nation of Russia was bound to have a camera set up somewhere that would work.

I found a camera located in the city of Tomsk. The camera appeared to be in a hallway in a university. One wall was covered in photographs, possibly of important professors or notable alumni. There was not much action other than people holding papers walking by, stopping talk to each other, or pausing to look at the wall of photos. A woman came running from behind the camera down the hall, but abruptly stopped when she noticed someone at the other end of the hall coming towards her.

Now I'm not sure exactly why there is a camera in this hallway. For all I know, it could simply be a security camera that the university installed, or it could be a webcam that was put up as part of a class project. Heck, it might not even be a university that I'm seeing through the camera, but possibly an office building or a medical center.

As the readings demonstrate, a camera in a public location like this is not the least bit unusual to us. While there are some cameras set up just for the sake of having a webcam, most are probably for security purposes. Like with the panopticon, those in charge have a means through which we can more or less be seen at any time and any place.

We don't mind showing up on these cameras, because we understand that they are efficient in preventing, or at least deterring, a substantial level of crime. In other words, these cameras sufficiently act as a means of control in our society. This does not bother us much, since if there's a security camera watching us; chances are we are not within our private sphere anyway, which is still practically private. We would not be doing the things we may not want caught on film. As the running woman shows, how we act when alone is not the same as how we act when other people can see us, though of course, we may not always be sure of who's around.

What this does make one question though, is to what extent are we willing to sacrifice this privacy in favor of a greater sense of control? Though security cameras such as this one are effective, there is still a great level of crime around the world. It can be argued that we still have not gone far enough. Hypothetically, if we moved this kind of surveillance into every aspect of our lives, we would minimize the level of crime as much as possible. But what happens when we start living without the privacy we sacrificed to get to this point? And then there's the question of who's policing the people policing us?

It all comes down to finding a happy medium. There is a place where those governing and hopefully looking out for us can suitably survey us while we can still keep the private stuff private. It may just take us a while to find it.

KENDRA DOSHIER
"Can't take my eyes off you."

I have reached a new level of creeperdom. As if Facebook stalking wasn't enough, this strange obsessive curiosity has now led to video surveillance surfing. Why, America? Why?

I never thought it was possible to access random video surveillance videos via the web; I thought these videos were private. It turns out that anybody and everybody has you at just one click of the mouse—and there is no running nor hiding from what has proven to be the ultimate Big Brother.

While surfing around to find a decent video stream, I came across several low-lit dark areas in Norway, clogged traffic in Russia, and beautiful beaches in sandy Miami. The close-proximity videos were most interesting. You could actually see peoples' faces and watch what they are doing and who they're interacting with.

One of my voyeur videos was a Communication Computer Lab at Ball State University in Indiana. You can see a couple guys in the back messing around on YouTube and Facebook (which is completely hilarious) and the whole world can see it! Hopefully their parents don't find out about this site. At one point, a bunch of the guys in the classroom huddled up behind one computer and were watching something on YouTube. It was pretty interesting - but I wonder how much more privacy could be breached had there been any audio. The up close and personal videos seem to be the most interesting to me because you can observe more detail... and that's when I feel the creepiest.

Another interesting camera in Lugano, Switzerland shows the traffic patterns on a specific highway. You can make out the letters and numbers on the license plates! That blew my mind. People could easily find information based on where you are, and what information of yours is out in the open. People can know where you are and what you're doing.

Voyeurism and inactively participating in other peoples' lives is a natural human curiosity and habit, but this type of surveillance takes things a little too far. Do these people have any idea they're being watched? Do they know who is watching? Should they have to feel scared or be careful of how they act in public? It's kind of scary, to imagine that anybody could track you down and watch you go about your life at any time they want. It's almost unavoidable, because you never know when you're being taped. And even if you do, you never expect your office video surveillance tape to be all over the Internet. Nothing you do is completely safe. Whether it's just Facebooking during class, or getting into a car accident on the highway—we can see it, and we can be the judges. This is unsettling, but I suppose it has some safety benefits as well for companies or states.

Maybe China and Sweden can have hundreds of easily accessible surveillance cameras online, but for my own country and my own state to have some is bothersome. Land of the... free? Big Brother is watching.

1.33 Northeastern Illinois University Computer Lab. Students work on their projects under the benevolent gaze of the NIUC lab webcam.
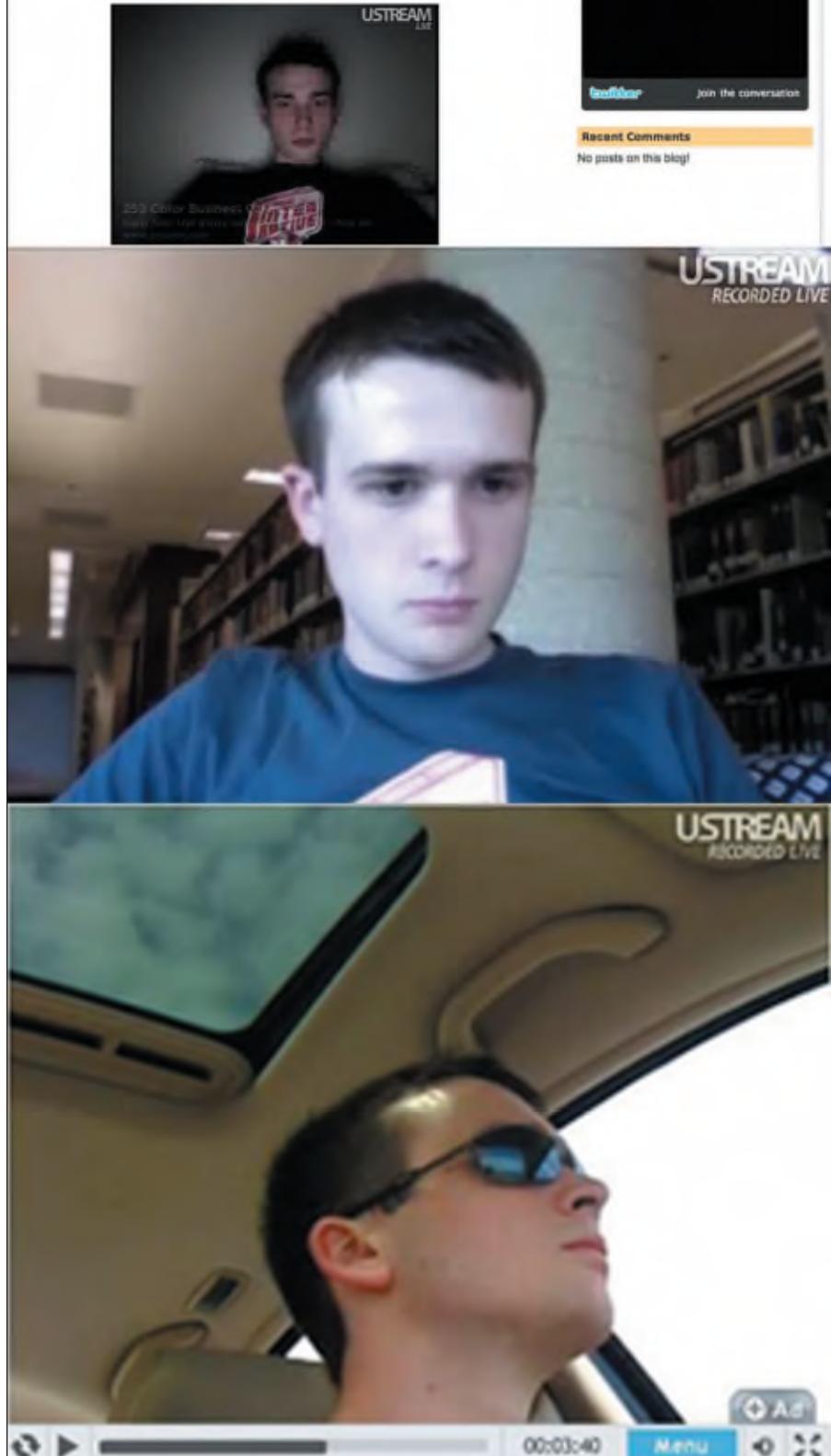
1.34 Marco's in West Hollywood. As diners enjoy their Sunday afternoon meal, their images are shared with the world via the restaurant's webcam. May 16, 2010.

projects

SHEP MCALLISTER
"Sousveillance"

A major theme of this course was the question 'who is watching me?' The fear that modern and emerging technologies will ultimately converge to effectively end our privacy is a legitimate one, and we must be wary of who has access to our newly-broadcasted lives.

Currently, the greatest threat to our privacy is likely not a government or sinister corporation; it is popular web services like Google and Facebook. These companies have constantly adapting and often shocking privacy policies that put our personal data at risk.

Take Google for example. Even if they don't share your information with anybody, they have access to the things you search for online, the places you get directions to with Google Maps, your documents on Google Docs, your e-mail on Gmail, and more. It is a ton of private data to trust in the hands of one company.

That said, most of us don't do our privacy any favors with the way we use the web. We put pictures of ourselves on Facebook that employers would find troubling. We check in on Foursquare to broadcast wherever we are at any given moment. We tweet about our lives and our plans.
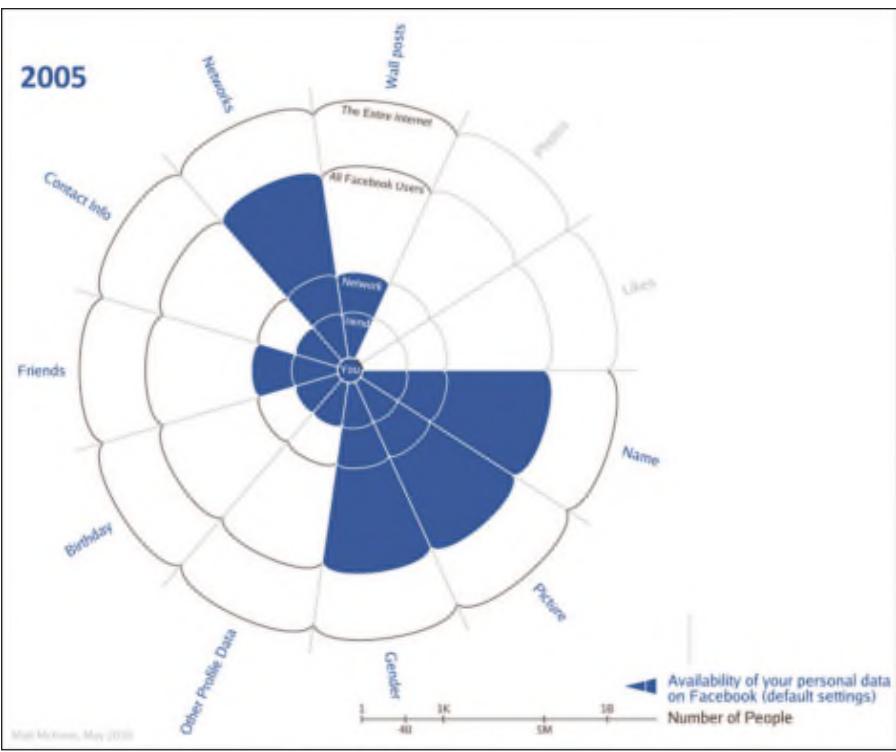
Any motivated criminal would have no trouble robbing the home of a social media over-sharer; he could simply check her profiles to see if she is out of her house. Many of us don't need a company or government looking over our shoulder to be under surveillance. We do it to ourselves.

I was curious about this phenomenon of self-surveillance (or "sousveillance"), and wanted to bring it to the logical extreme. For the majority of a May 1, 2010 I broadcasted a video feed of myself via Ustream on an embedded player in my blog. I promoted it to everyone I know via Facebook. I also set up a special public Twitter profile to update viewers on exactly what I was doing and where I was going.

The first thing I noticed during the broadcast was just how much of a pain streaming video of yourself really is. Things like Facebook and Twitter and even location-based networks are popular because they are easy, and video streaming clearly isn't quite there yet. You really have to modify your behavior to an extent to facilitate always having a WiFi-connected computer facing you, or failing that, a streaming-capable phone with enough battery power to get you from place to place. I know that a few people like Justine Ezarik or Justin Kan have complicated and expensive rigs that make constant streaming a reality, but it is still horribly inefficient for the everyday person.

Also, I learned that you have to be wary of where you are using the camera. For example, I was at the Spurs practice facility streaming from the media holding room, but could not stream live from the court itself due to team regulations. Also, you have to be aware of who is around you at any given time, and make sure they know that they are on camera. Any live-streamer who fails notify others that they were being broadcast over the Internet would be contributing to the destruction of not only his own privacy, but others' as well.

1.35 The evolution of privacy on Facebook. Matt McKeon, a software developer affiliated with the Visual Communication Lab of IBM Research's Center for Social Software, created this infographic to depict the gradual erosion of user privacy on the social networking site Facebook. McKeon stresses that "I like Facebook," and notes that "it's helped me reconnect with dozens of people with whom I'd lost touch." Rather than abandoning Facebook altogether, McKeon hopes that readers will pay attention to their privacy settings and change them to a comfortable level. For more **information, see: http://mattmckeon.com/Facebook-privacy/**

All this considered, I didn't feel nearly as weird when I was on camera than I expected to.

I thought that I would feel very violated and vulnerable open. While sometimes I did (especially when a coworker texted me to tell me I was rubbing my nose a lot…I had a cold), for the most part I forgot the camera was there and went about my daily activities. Only when I had to really think about the camera (when I was planning to move, for example) was I totally aware that I was on video.

I think the day will soon come that this kind of life streaming is simple and cheap enough for mainstream adoption. First generation models of consumer life-logging hardware are already on sale, and future advances in the technology will likely make these devices as commonplace as smart phones are now.

From there, somebody will inevitably create a web service that will encourage us to make these life logs public, a process known as life caching. It may seem foreign to us now, but Facebook and Twitter would have been laughed at ten years ago. The demand to make our lives public will be there; it always has been. At this point it is just a matter of the technology catching up.

KENDRA DOSHIER
"Deactivate: The wait"

1.36 ITA Unveils BOTS. 2135. Excerpt from Laura Schluckebier's installation *Connecting the Dots*. 2010. Licensed under the terms of a Creative Commons Attribution-No Derivative Works 3.0 United States License. (Note: These images do not relate directly to Kendra Doshier's story but they reflect similar concerns about dystopian technological outcomes.)

"Good morning, Cory," my alarm clock sounded loudly from my computer, in the booming voice of Morgan Freeman, and repeated every three steady seconds, "Wake up, Cory."

I power launched my pillow across my room and blindly stumbled out of bed to my desktop. My eyes cracked open a little more to a bright computer screen with Morgan Freeman's face smiling back at me. I waved at my webcam with one hand while rubbing the sleep out of my eye with the other.

"I'm awake," I grumbled. Morgan cracked a smile and shook his head.

"You sure? Don't make me sound off again in fifteen minutes…"

I sighed and answered in an exasperated tone, "Yes, I'm sure."

My alarm deactivated; he smiled and faded off my computer screen as I sat down to read the news on the window behind my daily schedule. My friends always made fun of me for choosing Morgan Freeman as my alarm clock default, but I think it's pretty damn cool. My best friend, Dan, has his set to Megan Fox, but I think it's totally tacky. She says really stupid, creepy things like "Wake up honey, I've got a surprise for you," and I just find it unrealistic and tasteless. Globalex recently came out with 200 new alarm defaults – most of them are those young annoying Disney pop artists – and they've been selling like crazy. But I'm satisfied with my five dollar Morgan Freeman alarm clock – his voice is soothing and wakes me up just fine.

I clicked the coffee button at the top-right corner and peered out my bedroom door towards the kitchen in my small apartment. After a short pause, I heard my coffee percolator make a gurgling noise as it began to make a fresh brew. Looking back at my screen, the Globalex Times unfolded to today's top stories. I yawned and stretched backwards, nearly falling out of my chair. It didn't take me much by surprise, considering the fact that I always nearly fall out of my chair in my morning routine. My habits synced up so quickly, I barely take notice to them anymore. Globalex has been running my life for me since as far back as I can remember, so I didn't really have to think about it. It evolved so quickly. First it was just a social networking site, and then it added on video capabilities. Soon after that, it was a news source, banking and finance site, business network database, and a command station all in one. Globalex slowly kind of became the hub of the world, and nobody really saw it coming.

Pilfering through the headlines, there was nothing that special… Vitamin supplements now substitute as food for busy people on the go; Cher becomes oldest baby boomer of all time at the age of 147, coming out with new album; Globalex finally wins battle against Microsoft, company goes under. This news had been circulating for months now, and it just

seemed like all this stuff was just beginning to surface. We've all been aware that scientists were messing around with vitamin complexes to see if they could get humans to live off of them, and of course, they succeeded. Whoever actually follows through with living off nutrients from pills, I have a lot of respect for them, although I can't imagine a life without cheese fries. And everybody knew that Cher was competing with some old rich lady from Delaware for oldest baby boomer, but that poor lady had a failed heart transplant and they couldn't bring her back. I don't see how they couldn't, considering the lady managed to live to be 147 years old… but it's only the ridiculously rich people who can afford to live that long. Like most normal middle-class folk, my parents will die at around their eighties or nineties, if they're lucky. As for me, I'm only twenty-three, so I feel like I don't have to think about that right now. I just hope that by the time I start getting old and brittle, some new world order will have taken place and everybody will have the option of living well into their two-hundreds. As comforting as that sounds, I just don't see what I could possibly do with my time for that long. There aren't enough video games in the world.

In the middle of my daydream, I was startled by my computer ringing. I looked at the screen and saw that my mom was calling. I inhaled sharply and stretched.

"Answer," I said in a stern, monotone voice. Mom's face popped up in a square window and she was beaming a smile at me. I clearly looked like I just rolled out of bed.

"Oh, honey, it's almost three in the afternoon! Why are you just getting up?" she said with a sweet grin on her face. My little sister, Iris, was jumping around and waving in the background, and I waved back while scratching my stubble with my free hand.

"It's the weekend, mom…"

"Alright, well… your father just got back from India. You should pass him a note when you get the chance," she squinted at me, probably noticing my hair was scruffy and going in all different directions.

"Yeah… I've been meaning to tell you… My Palm is kind of on off-time right now. I need to get the hard drive fixed," I cringed as the expression on her face fell.

"What? Honey, the LexPalm we bought you is barely two months old!"

"I know, but it got overheated or something. I'll get it fixed."

"No, check on your doorstep in about five minutes. I'm putting in a temp order for you. It should be there no later than that."

"…okay. Thanks."

"Of course – we'll figure out what happened to your old one. Love you!"

1.37 Emotional Breakthrough in BOTS Technology. 2193. Excerpt from Laura Schluckebier's installation *Connecting the Dots*. 2010. Licensed under the terms of a Creative Commons Attribution-No Derivative Works 3.0 United States License.

1.38 ITA Faces Off Against Government. 2193. Excerpt from Laura Schluckebier's installation *Connecting the Dots*. 2010. Licensed under the terms of a Creative Commons Attribution-No Derivative Works 3.0 United States License.

she waved goodbye and logged out of our video conversation. I rolled my eyes and let out a big sigh.

I didn't really want the new LexPalm. If I had it my way, I wouldn't have a profile on the Globalex server. I have been trying to become independent of this system for about a month now. I feel like I'm the only one who feels a privacy invasion that nobody else is noticing. About two weeks ago when Dan and I were chatting over the Globalex chat domain, he asked me if I wanted to go cruising with him to Westridge Park so we could smoke a bowl. After I agreed and signed off, I went to pick him up at his apartment and we went cruising. About five minutes before we got to Westridge Park, we slowly started getting followed by some cop cars. We tried to lose them, but more cars kept showing up; we finally decided to turn back around and go back to my place. At one point, I remember telling Dan not to talk anymore because I felt like our conversation was bugged, so our car ride home was totally silent. Even though what we were going to do was illegal, it was the seediest feeling to think that maybe our conversations were starting to be hacked by the city. We were being listened to and followed… monitored by the government. I get that it's a form of control in an effort to keep things safe, but for some reason I just feel like there are some rules being broken and lines being crossed.

The same thing happened last weekend when my friend, Artie, sent out a mass invitation to his networks for his going-away party. It was at his house and the invitation promised three kegs and a bunch of other booze. The party literally got busted before it even started, and Artie got arrested for supplying alcohol to minors. We all had to drive by his house, acting like we weren't involved so we wouldn't get in trouble, too. People kept arguing afterwards about how the cops could have known about the party before it even started; there were no noise complaints, no cars lining up the street, no signs of a party whatsoever. Artie actually blamed a lot of his friends for reporting him, but everyone denied it, and rightfully so. I knew deep down that there was something happening differently in the Globalex server; there were new terms that people weren't aware of, or even worse, there were no terms at all and the server slowly became a surveillance system. Ever since Artie's bust, I've been doing little tests of my own to investigate. So far, all evidence points to secret surveillance.

"Hey loser," Dan's hands clutched my shoulders hard as he abruptly showed up behind my chair. I was really startled, so I jumped up.

"Jesus! You know, there's this thing called knocking…," I turned around to him laughing under his breath.

"Yeah, well, that's not my thing. I picked this up at your porch. Did your other one break or something?" he handed me my new temporary LexPalm and I shoved it to the side.

"Thanks…"

He raised his eyebrow and patted my back, "What're you up to? You look pissed."

"Nah, I was just thinking about stuff." I scratched the back of my neck nervously and he gave me a strange look while plopping onto my couch.

"Such as…?" he kicked back and looked up at me, still standing in my room without any real direction.

"Do you remember when Artie's kegger got busted last weekend?"

"Yeah, it sucked. Why?"

"I've just really been thinking about it, and-" he cut me off and sat up straight.

"Whoa, you weren't the one who told on him, were you?!"

"NO. No, that's not what it is. I didn't do that," I assured him as he teetered back down onto my sofa, relieved.

"Alright, well, what about it?"

"You ever think the cops maybe got a hold of his invitation?" I said hesitantly as he snorted with laughter.

"Yeah, because the police have nothing better to do than go through our social networks and figure out how to rain on our parades… Sounds like 'Facebook Stalking' back in the 2000s. That's hilarious, dude. But honestly? Just a little ridiculous."
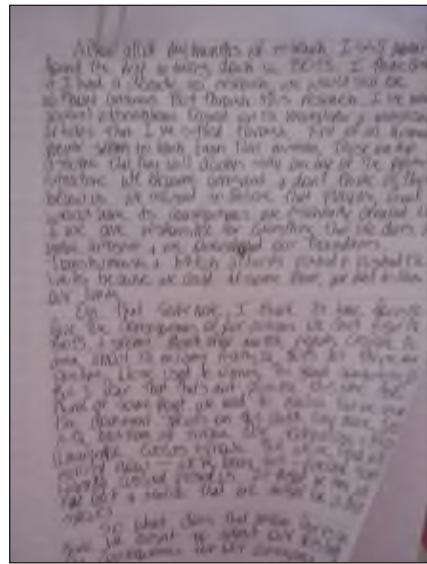
We both heard a loud beep from the kitchen, and Dan bolted upwards, "One sec. Hold that thought. Coffee."

He then came back with two mugs of hot coffee that I had commanded off the server; they were piping hot and brewed perfectly. I took a small, careful sip and adjusted my posture.
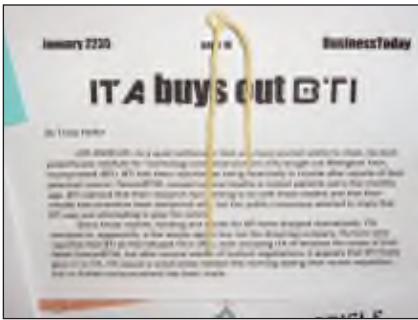
"No, I'm serious! Look, you're my best friend, and I trust that you'd take what I say seriously. I really think there's something up with the Globalex server. I think lately they've changed something. I mean, is it not weird that now every time I talk about doing something bad, like smoking a bowl with you or getting a fake ID, the cops are somehow nearby? Or like when I asked you about the website for the free pirated movies? The minute you sent me the link, both of our computers shut off in two different locations. Do you not think that's weird?"

Dan sat back and considered what I said very seriously. He pursed his lips and let out a big sigh while scratching his scalp, "Well, what do you want to do about it? It's not like you can do anything. That server is pretty much our life."

I paced around my room anxiously, "Yeah, but it doesn't have to be. We don't have to be dependent on the stupid server. We can go back to how things were, where our credit cards and phones and alarm clocks and

1.40 ITA Buys out BTI. 2235. Excerpt from Laura Schluckebier's installation *Connecting the Dots*. 2010. Licensed under the terms of a Creative Commons Attribution-No Derivative Works 3.0 United States License.

1.41 Military Responds to Small BOTS Scuffle. 2249. Excerpt from Laura Schluckebier's installation *Connecting the Dots*. 2010. Licensed under the terms of a Creative Commons Attribution-No Derivative Works 3.0 United States License.

briefcases were all separate things. It was so much better when life was like that."

Dan propped himself up with a stern look on his face, clearly trying to level with me. He took a short sip of his coffee and cleared his throat, "Look, Cory, I don't think things will ever go back to being that difficult. It's just too much to keep track of, you know? The server made it easy, and it's been this was for such a long time. You've got to keep your head out of those history books, dude. We can't just go back 200 years with all that completely useless, one-dimensional stuff like Facebook and the oPhone."

"iPhone."

"Whatever. History is boring. What I'm saying is, it's not going to change back. That crap is so primitive. I really don't see how people functioned, and I'm not about to find out." He took a larger sip of his coffee and closed his eyes, looking very pleased with the brew.

"I actually thought it was pretty efficient. The thought of people actually doing things for themselves, working at their own projects, keeping their social and business lives separate," I exasperatedly gestured to the mug in his hand, "making their own coffee…"

"Alright, so what do you suppose we do, then?"

"Cut ourselves off. Become self-sufficient. See if we can inspire other people to break free from this. It's a trap – that's what people don't see." I spoke defiantly and saw he was genuinely listening, and I could almost see a bit of fear in his eyes of the situation. I could see the wheels spinning in his head. He took one last gulp of his coffee, and grunted from the heat slightly burning his throat.

He set his coffee mug down and looked at me confidently, "Fine. Let's do it. Let's delete our profiles."

I was completely taken aback, "Really? You want to?"

"Yeah. Let's see if we can actually do it," he replied without missing a beat.

Within minutes, we both logged onto Globalex for the last time and deactivated our accounts. Three alert messages popped up to warn us of the ramifications of deactivating our profiles on the server, but we clicked 'confirm' and suddenly the computer shut off. I tried turning it back on, but it was as if the computer was dead.

"What happened? Why won't it turn on?" Dan slightly panicked.

"I don't know. Let's wait," I tried to keep my cool, but could feel my chest begin to tighten with anxiety.

Dan reached for his LexPalm and saw it shut down in his very own hands, and it stayed off during his many attempts at restarting the device. He

began to breathe heavily and pace around the room.

"It's not even turning on, Cory!"

"That's what's supposed to happen! Just give it a while! You're the one who said we needed to see if we could do it!"

He threw himself onto my couch and stared at the ceiling, trying to calm himself down. I reached for my old cell phone and turned it on, only to see there was no service. Without my LexPalm and my computer, I had no way of contacting anyone. Dan stayed on the couch while I grabbed my keys and ran out to my car. I pressed the unlock button, and the car successfully unlocked, but the ignition key was deactivated along with my user profile. I had no car at this point. I ran back inside and sat on my bed, trying to get a hold of my nerves.

"My car won't start. And my cell phone doesn't work. And I can't access my bank account, or anything."

I could hear Dan whimper under his breath, "Then what now? We have to reactivate our accounts. We have to." I got a large lump in my throat and threw my LexPalm across the room.

"We can't."

"What do you mean we can't? That's technology! We can go back and fix it!"
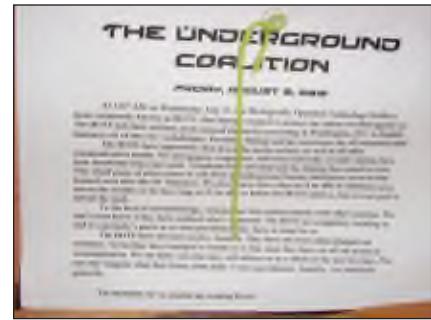
"Remember those three warning alerts before we deactivated? Did you even read them?" I yelled.

"No! That was your job! What the hell did it say?!" he yelled back at me.

"We are eligible to reapply for membership to the server in six months. Our profiles are being deconstructed. Our bank accounts, personal information, documents, contacts – everything is being taken apart."

"WHY did you click 'okay'?!" he stood up and frantically yelled. I buried my head in my hands and just sat on my bed, completely quiet. I think I might have stayed that way for hours.

That was the day that started my six months without reading the news, without commanding coffee, without contacting a single soul on this earth, or accessing my money. These were the six months that my mom had to bring me food and drive me around town to do things both trivial and important – I had nothing to my name. These were the six months where I couldn't watch movies, or television, or any form of entertainment. These were the six months where I didn't qualify for any medical or dental checkups, because I didn't have an 'identity profile.' These were the six months where I didn't have an identity at all.

1.43 "Sentient life? Don't make me laugh!" Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

CHRIS KRADLE
"Life or living?"

Ekaterina Sedia's work "Mind of A Pig" made me want to write a fiction piece about what the world might face in the future if all these technologies that we have been discussing in class become reality. She does such a good job weaving words together to believe that her societies exist.

In class, we talked about the Singularity and the idea both frightened and excited me. While I do not believe there will be a single moment where the Singularity would become a reality. I do believe there could be a gradual process where we start incorporating ourselves into machines. I wanted to look at a society where the Singularity was about happen. How would society take it? In stride? As something that needed to be combatted?

Annalee Newitz asked if we should be worried about the government taking over our lives with all these technologies that can track our movements. I decided to take that idea one step further. What would happen if companies own the government? Not only could they track our movements, but they could create laws calling rivals' works illegal so that the population would only be able to buy the company who controls the government's property.

The character narrating the story is a blogger who is well respected in the gaming community. The world comes down to two products: Microsoft's Life and MacSony's Living. This is the final showdown. This is beginning of the Singularity. Who will own the world? MacSony or Microsoft?

FEBRUARY 27TH 2029 1:30 PM

The big news today is the merger of the supposedly-failing Nintendo and MacSony to combat the new game put out by Microsoft. Supposedly, Microsoft is putting out a new game "to end all games." Not sure what that means, but hey the government is behind this so what can be the harm? Many of you remember the merger of Sony and Macintosh back in 2025 and we thought that was big news, but now MacSony seems to have the synergy that has made Microsoft so profitable the last few years. On channel MacSony (sorry if you don't have Direct TV just believe me when I tell you this) the announcement was made and a 5% increase in stock was reported, but on Microsoft 2 (sorry if you don't have DishTV, you'll have to believe me on this too) they're saying there was a decrease of 5% in stock today? Well, I have no clue what the hell that means, but I'm sure the government will figure it out. At the very least, it's a win for us gamers. Let the showdown begin!

MARCH 1ST 2029 2:31 PM

Microsoft is getting rolling, announcing *Life* today. Supposedly this is ultimate game, where you can plug into the game itself. Not sure how

they want us to do that, but sounds freaking AWESOME. Yahoo, a MacSony website, called it "the worst game ever." Whatever. It sounds like you're just jealous. I'm going to be kicking some ass on *Life* as soon as that comes out. The government is promoting these games by calling them revolutionary. Who cares? The whole world knows that you're just puppets of the corporations. I just know that this game is going to be freaking sweet.

MARCH 6TH 2029 6:14 PM

Well that was quick, MacSony put out an announcement today about their new game *Living*. Ok, so it's not original, but who the heck cares? It is now official: the war of Macsony's *Living* vs. Microsoft's *Life*. Bring on the advertisements!

MARCH 10TH 2029 5:15 PM

Bad news, gamers. It sounds like *Life* is going to be more expensive than we originally thought it would be, but on the plus side, it sounds like this is going to be the last game you will ever need to buy. Just like Microsoft's EGG (Extracurricular Gaming Guru), it looks like the system will be full body and will be able to read your thoughts. The new application? You can be plugged in for more than the four hours that the EGG allows you to be plugged in. Awesome. MacSony better step their game up. Release date for *Life*: April 30th. Countdown: 51 days.

The new numbers that came out from the government, as funded by MacSony and Microsoft (the only thing they work on together in the government) estimated that 49% of American households have a Microsoft EGG and 48% have a MacSony FILE (Formatted In-Living Experience). So, ladies and gentlemen, this may be the final showdown between the two companies if MacSony can get together a system to compete against *Life*.

MARCH 16TH 2029 1:22 AM

Not sure why I'm up, but Yahoo released an announcement saying that *Living* will come out on April 30th too. Guess that merger with Nintendo made sense after all. Wow, this is getting intense.

MARCH 30TH 2029 5:13 PM

Well sounds like the war has begun and Microsoft has taken the first shot. Google today (controlled by Microsoft if you noobs didn't know that already) explained that the system will fail miserably because of a bug already planted into it by a rogue MacSony employee. The government is fighting because the Microsoft side and the MacSony side are throwing allegations at each other that there has been tampering of equipment. Telling you folks, this is getting good.

Countdown to *Life* and *Living* – 31 days

1.44 "Sentient life on land? Don't make me laugh!" Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

1.45 "Sentient life in <u>silicon</u>? Don't make me laugh!" Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

MARCH 31ˢᵀ 2029 4:55 PM

Well sounds like both sides have FINALLY quieted down about this stupid quarrel. Of course Microsoft was lying about the bug, but at least it slowed MacSony down. My people on the inside predict they are 5 days behind Microsoft.

APRIL 1ˢᵀ 2029 1:11 PM

Breaking news only found on this website! Sounds like both *Life* and *Living* have been cancelled, sorry guys.

p.s. April Fool's

APRIL 3ᴿᴰ 2029 6:57 PM

The MacSony vs. Microsoft war is official: casualties have been suffered. A news report today from California reported that servers recorded that 56 people were killed today over an argument about the new gaming systems of MacSony and Microsoft. On the hugely popular *MMORPG Battlefield: Virtual Reality*, a MacSony supporter hacked the game on the Micro-FILE server (the EGG server for Microsoft) and put the MacSony-EGG servers users in the realm of the Micro-FILE's servers where the MacSony-EGG users slaughtered the characters of the Micro-FILE users. The president, elected from the Microsoft party, called this "an act of cyber-terrorism that is an attack on American freedom. We Americans should not have to worry about our lives being hacked by others." Bummer dude, because it totally happened. You cannot and will not find the guy who did it.

APRIL 3ᴿᴰ 2029 8:05 PM

Microsoft announced they will not be fixing the servers and instead be focusing on *Life*. Interesting move on their part, hope the loyal followers don't get mad at the company for making them wait to buy *Life*.

APRIL 5ᵀᴴ 2029 8:57 AM

Congress passed a bill demanding MacSony's records so they can find the cyber-terrorist who hacked Microsoft's servers. Unfortunately, that will not happen since MacSony's main servers are located in Japan. The U.S. is just trying to protect their own interest in Microsoft. Since the *Citizens United v. Federal Election Commission*, you will remember that corporations have basically "bought" their legislators. That trend unfolded in other democracies and now the two companies, MacSony and Microsoft, now run the world's governments. Obviously, Microsoft has the majority in America and MacSony has the majority in Japan. This is the first time that MacSony and Microsoft have attacked each other at an international level. The Microsoft minority in Japan tried to pass the same bill, but of course was struck down by the MacSony majority. This means that MacSony is untouchable by U.S. law. Like I said, no one will know the mystery behind the Virtual Reality hacker.

APRIL 6ᵀᴴ 2029 5:12 PM

Both sides are quieting down as the final push is being made with a media blitz happening on all forms of media: TV, Internet, you name it, it's being pimped out by MacSony or Microsoft's media outlets (e.g. MacSony's DirectTV/Yahoo and Microsoft's DishTV/Google). Also, the bashing of the opponents' machines is quite prevalent with both having catchy slogans about the other's faults. MacSony's tag is "Why get unplugged in *Life*? Stay *Living*." Microsoft's tag is "We can give you *Life*, others can't." The human race has not seen this kind of competition. Whoever wins this battle affects the control of information, and thusly, the world.

APRIL 7ᵀᴴ 2029 5:16 PM

My inside man at Microsoft claimed there was a major failure with the machines today. A test run with a subject went wrong. The power went out in the section where the test was happening and the subject passed away. What does this mean? When our power plants stop working, we die? This is what everyone is worried about since the first plugged in game came to home. Yes, there have been deaths, especially the famed assassination of President Riley in 2018, but there is no risk when everyone is plugged into the system. Will this curtail the sales? Yeah, a little bit, but people will come… they will come.

Nothing new from my MacSony inside man. Sounds like they are still going through all the information still given to them from Nintendo. MacSony needs the information from Nintendo because it sounded like they were working on their big comeback project, which has now been transferred into MacSony's *Life*.

Countdown to *Life* and *Living*: 23 days

APRIL 10ᵀᴴ 2029 3:05PM

One generous reader seems to have an inside in the gaming community that I lack, but thanks to whoever he/she is! I have received tickets to go to E3 and witness the awesomeness of *Life* and *Living* for myself. I will report back to my loyal readers.

Countdown to *Life* and *Living*: 20 days

APRIL 14ᵀᴴ 2029 12:00 PM

I'm here at E3 and hopefully we get to see the future today. Both booths are set up and the media is waiting for the official reveal of *Life* and *Living*. Supposedly this will decide the winner between Microsoft and MacSony.

APRIL 14ᵀᴴ 2029 12:17 PM

Life is the future. The new, sleeker version of EGG has me sold on

1.46 "Nothing can stop exponential growth!" Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

1.47 "Everything eventually wears out." Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

the idea. People were allowed to step inside and look around for a few minutes in the new world. At the very least I call this utopia. Microsoft was completely right, *Life* does in fact read your brainwaves and sets up *Life* how you want it. People have been wondering how you can stay inside of *Life* for the rest of your life. Simply put, you will be "plugged in" and instead of vitamins running through your veins, pure energy will be circulating your body making YOU the battery. This means that you can be turned on FOREVER if you aren't unplugged. If you are, a sensor will go off in the Microsoft offices and someone will be there to plug you back in within a few minutes. Your body, when used as a battery, can last up to 3 years.

APRIL 14TH 2029 2:30

I have been around the Microsoft booth for now over 2 hours and the machine is functioning properly. Just gorgeous all around. The possible of worry about the unplugging of the machine (or hacking by MacSony) is still there, but that didn't decrease the turnout at E3, it was just announced that they broke records and 1.3 billion people are here today. This obviously is the life-changing experience everyone has been expecting.

APRIL 14TH 2029 2:45

Went to the MacSony booth, but unfortunately they said they were having problems with the machine and no one could go inside. Well, bummer. So far I would chalk this round up to Microsoft, but the war isn't over yet. MacSony did have the *Living* program set up in a FILE where the program for *Living* was uploaded, but without the necessary tools like Microsoft has for *Life* that keeps you alive in the real world while you are playing the game, MacSony has no chance to beat Microsoft.

APRIL 14TH 2029 3:42 PM

Wow, well the preview was great, just have to see if the machine functions properly now.

Countdown to *Life* and *Living*: 16 days

APRIL 20TH 2029 9:23 PM

One of my readers just e-mailed me a question with an ancient question: is this the Singularity? Well, after finding out what that meant I have come to the conclusion: no this is not the Singularity. This may be the start of the Singularity but by no means will this be the end. We still will have to wait for a long time for others to join us in the virtual world. The "Singularity" happens when man and machine will become one, or the machines simply become better than humans and we start relying on them. When we step into the virtual world, we will be leaving many

people behind. Think about all the people in the poorer countries, it will take them decades until they have the wealth and technology to join us. Until everyone joins us in the new world, it's not the Singularity.

Countdown to *Life* and *Living*: 10 days

APRIL 27TH 2029 3:21 PM

First shipments of *Life* were shown leaving Microsoft headquarters. One of them is mine. Be jealous.

Countdown to *Life* and *Living*: 3 days

APRIL 28TH 2029 6:55 AM

No stores have *Living* yet leaving fans wondering what the hell is going on? Did MacSony not get the message?

Countdown to *Life* and maybe *Living*: 2 days

APRIL 29TH 2029 5:55 PM

BREAKING NEWS! It sounds like this entire thing was a bluff by MacSony! They didn't even have a freaking machine in the works! The whole buying Nintendo thing was a red herring to worry Microsoft into putting out a bad product. Not only did MacSony take on the debt of the failing Nintendo, but Nintendo suckered MacSony into the deal because Nintendo supposedly had the technology copied from Microsoft HQ and told MacSony they had it! Of course this means that MacSony will declare bankruptcy and Microsoft will win the battle of the corporations. Can't wait to get *Life* tomorrow. As the commercial goes: "You can only live *Life*."

Countdown to *Life*: 1 day

APRIL 30TH 2029 11:50 AM

It's here. My God. And it's beautiful. Setup should take about 5-10 minutes.

APRIL 30TH 2029 12:00 PM
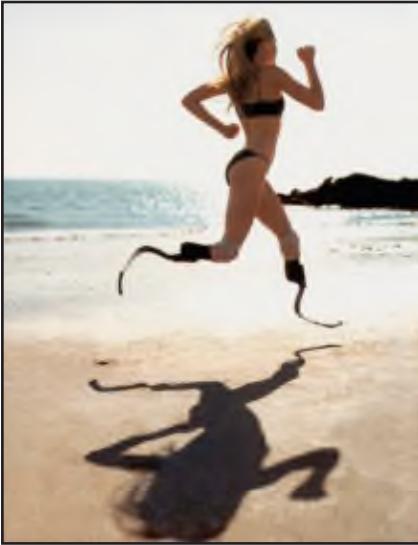
For everyone who has followed me on my blog and the *Life* vs. *Living* contest, thank you very much. This will be my last post before I go into *Life*. I plan on being plugged into *Life* as long as I am able. Microsoft's world will become my world. Someone once said, "Saying goodbye isn't the hard part, it's what we leave behind that's tough." What you are leaving behind is nothing compared to *Life*. To my future brothers and sisters, I will see you on the inside.

1.48 "Nothing can go wrong. Go wrong. Go wrong." Cartoon drawn by Douglas Hofstadter (Director of Center for Research on Concepts and Cognition at Indiana University) and presented to the Singularity Summit at Stanford University in 2006.

transhuman

WIKIPEDIA
"Transhumanism"

2.1 Aimee Mullins. Highlighted in the blog *io9* as part of the "Portraits in Posthumanity" series, Aimee Mullins is an athlete, an activist, and a former intelligence analyst with the US Pentagon. As the biography on her personal site explains, Mullins was "born without fibulae in both legs." Doctors amputated both of her legs below the knee and equipped her with prosthetic extensions. "Her likeness has been immortalized in exhibits at institutions such as the Smithsonian, the Metropolitan Museum of Art, the NCAA Hall of Fame, the Victoria and Albert Museum, the Tate Modern, the Track and Field Hall of Fame, and the Women's Museum, where she is honored for her contribution to sport among the "Greatest American Women of the 20th Century." To learn more, visit her personal site at www.aimeemullins.com.

Transhumanism is an international intellectual and cultural movement supporting the use of science and technology to improve human mental and physical characteristics and capacities. The movement regards aspects of the human condition, such as disability, suffering, disease, aging, and involuntary death as unnecessary and undesirable. Transhumanists look to biotechnologies and other emerging technologies for these purposes. Dangers, as well as benefits, are also of concern to the transhumanist movement. [1]

The term "transhumanism" is symbolized by H+ or h+ and is often used as a synonym for "human enhancement". [2] Although the first known use of the term dates from 1957, the contemporary meaning is a product of the 1980s when futurists in the United States began to organize what has since grown into the transhumanist movement. Transhumanist thinkers predict that human beings may eventually be able to transform themselves into beings with such greatly expanded abilities as to merit the label "posthuman". Transhumanism is therefore sometimes referred to as "posthumanism" or a form of transformational activism influenced by posthumanist ideals. [3]

The transhumanist vision of a transformed future humanity has attracted many supporters and detractors from a wide range of perspectives. Transhumanism has been described by one critic, Francis Fukuyama, as the world's most dangerous idea,[4] while one proponent, Ronald Bailey, counters that it is the "movement that epitomizes the most daring, courageous, imaginative, and idealistic aspirations of humanity". [5]

According to philosophers who have studied and written about the history of transhumanist thought, transcendentalist impulses have been expressed at least as far back as in the quest for immortality in the Epic of Gilgamesh, as well as historical quests for the Fountain of Youth, Elixir of Life, and other efforts to stave off aging and death. Transhumanist philosophy, however, is rooted in Renaissance humanism and the Enlightenment. For example, Giovanni Pico della Mirandola called on people to "sculpt their own statue", and the Marquis de Condorcet speculated about the use of medical science to indefinitely extend the human life span, while Benjamin Franklin dreamed of suspended animation, and after Charles Darwin "it became increasingly plausible to view the current version of humanity not as the endpoint of evolution but rather as a possibly quite early phase." However, Friedrich Nietzsche is considered by some to be less of an influence, despite his exaltation of the "overman", due to his emphasis on self-actualization rather than technological transformation.

Nikolai Fyodorov, a 19th-century Russian philosopher, advocated radical life extension, physical immortality and even resurrection of the dead using scientific methods. [6] In the 20th century, a direct and influential precursor to transhumanist concepts was geneticist J.B.S. Haldane's 1923 essay Daedalus: Science and the Future, which predicted

that great benefits would come from applications of advanced sciences to human biology—and that every such advance would first appear to someone as blasphemy or perversion, "indecent and unnatural". J. D. Bernal speculated about space colonization, bionic implants, and cognitive enhancement, which have been common transhumanist themes since then. Biologist Julian Huxley, brother of author Aldous Huxley (a childhood friend of Haldane's), appears to have been the first to use the actual word "transhumanism". Writing in 1957, he defined transhumanism as "man remaining man, but transcending himself, by realizing new possibilities of and for his human nature". [7] This definition differs, albeit not substantially, from the one commonly in use since the 1980s.

Computer scientist Marvin Minsky wrote on relationships between human and artificial intelligence beginning in the 1960s. [8] Over the succeeding decades, this field continued to generate influential thinkers, such as Hans Moravec and Raymond Kurzweil, who oscillated between the technical arena and futuristic speculations in the transhumanist vein. [9, 10] The coalescence of an identifiable transhumanist movement began in the last decades of the 20th century. In 1966, FM-2030 (formerly F.M. Esfandiary), a futurist who taught "new concepts of the Human" at the The New School in New York City, began to identify people who adopt technologies, lifestyles and world views transitional to "posthumanity" as "transhuman" (short for "transitory human"). [11] In 1972, Robert Ettinger contributed to the conceptualization of "transhumanity" in his book *Man into Superman*. [12, 13] FM-2030 published the *Upwingers Manifesto* in 1973 to stimulate transhumanly conscious activism. [14]

The first self-described transhumanists met formally in the early 1980s at the University of California, Los Angeles, which became the main center of transhumanist thought. Here, FM-2030 lectured on his "Third Way" futurist ideology. At the EZTV Media venue frequented by transhumanists and other futurists, Natasha Vita-More presented Breaking Away, her 1980 experimental film with the theme of humans breaking away from their biological limitations and the Earth's gravity as they head into space. [15, 16] FM-2030 and Vita-More soon began holding gatherings for transhumanists in Los Angeles, which included students from FM-2030's courses and audiences from Vita-More's artistic productions. In 1982, Vita-More authored the *Transhumanist Arts Statement*,[17] and, six years later, produced the cable TV show *TransCentury Update* on transhumanity, a program which reached over 100,000 viewers.

In 1986, Eric Drexler published *Engines of Creation: The Coming Era of Nanotechnology*,[18] which discussed the prospects for nanotechnology and molecular assemblers, and founded the Foresight Institute. As the first non-profit organization to research, advocate for, and perform cryonics, the Southern California offices of the Alcor Life Extension Foundation became a center for futurists. In 1988, the first issue of Extropy Magazine was published by Max More and Tom Morrow. In 1990, More, a strategic philosopher, created his own particular transhumanist doctrine, which took the form of the Principles of Extropy,[19] and laid the foundation of modern transhumanism by giving it a new definition:[20]

2.2 She's got legs. She knows how to use them. This photograph, reprinted from the blog *io9*, depicts just a few of Aimee Mullins' prosthetic legs. In a series of inspiring posts written for the blog *Gizmodo*, Mullins explains that "In my functional daily arsenal, I have a general rotation between what I call the 'Robocop' legs (Re-Flex VSP Legs made by Ossur) and my cosmetic, very life-like legs (by Dorset Orthopaedic)." Mullins notes that none of these legs are covered by insurance because "No other aspect of daily living other than using the bathroom is considered 'necessary,' which means your basic prosthetic given to most amputees—a stick with a rubber foot as a leg, or a stick with a hook on the end as an arm, has fundamentally not changed since WWII." Readers are encouraged to read all of Mullins' postings by searching Google for "gizmodo and aimee mullins."

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2. "Anders Transhuman Page: Acronyms"

3. Miah, Andy (2007) (PDF). *Posthumanism: A Critical History*.

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23. World Transhumanist Association (2002–2005) (PDF). *The transhumanist FAQ*.

Transhumanism is a class of philosophies that seek to guide us towards a posthuman condition. Transhumanism shares many elements of humanism, including a respect for reason and science, a commitment to progress, and a valuing of human (or transhuman) existence in this life. […] Transhumanism differs from humanism in recognizing and anticipating the radical alterations in the nature and possibilities of our lives resulting from various sciences and technologies […].

In 1992, More and Morrow founded the Extropy Institute, a catalyst for networking futurists and brainstorming new memeplexes by organizing a series of conferences and, more importantly, providing a mailing list, which exposed many to transhumanist views for the first time during the rise of cyberculture and the cyberdelic counterculture. In 1998, philosophers Nick Bostrom and David Pearce founded the World Transhumanist Association (WTA), an international non-governmental organization working toward the recognition of transhumanism as a legitimate subject of scientific inquiry and public policy. [21] In 1999, the WTA drafted and adopted *The Transhumanist Declaration*. [22] The *Transhumanist FAQ*, prepared by the WTA, gave two formal definitions for transhumanism:[23]

> The intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities.

> The study of the ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies.

A number of similar definitions have been collected by Anders Sandberg, an academic and prominent transhumanist. [24]

In possible contrast with other transhumanist organizations, WTA officials considered that social forces could undermine their futurist visions and needed to be addressed. [25] A particular concern is the equal access to human enhancement technologies across classes and borders. [26]

In 2006, a political struggle within the transhumanist movement between the libertarian right and the liberal left resulted in a more centre-leftward positioning of the WTA under its former executive director James Hughes. [26, 27] In 2006, the board of directors of the Extropy Institute ceased operations of the organization, stating that its mission was "essentially completed". [28] This left the World Transhumanist Association as the leading international transhumanist organization. In 2008, as part of a rebranding effort, the WTA changed its name to "Humanity+" in order to project a more humane image. [29] Humanity Plus and

Betterhumans publish *h+ Magazine*, a periodical edited by R. U. Sirius which disseminates transhumanist news and ideas. [30, 31]

Theory

It is a matter of debate whether transhumanism is a branch of "posthumanism" and how posthumanism should be conceptualized with regard to transhumanism. The latter is often referred to as a variant or activist form of posthumanism by its conservative, Christian[32] and progressive[33, 34] critics, but also by pro-transhumanist scholars who, for example, characterise it as a subset of "philosophical posthumanism". A common feature of transhumanism and philosophical posthumanism is the future vision of a new intelligent species, into which humanity will evolve, which will supplement humanity or supersede it. Transhumanism stresses the evolutionary perspective, including sometimes the creation of a highly intelligent animal species by way of cognitive enhancement (i.e. biological uplift), but clings to a "posthuman future" as the final goal of participant evolution. [35]

Nevertheless, the idea to create intelligent artificial beings, proposed, for example, by roboticist Hans Moravec, has influenced transhumanism. Moravec's ideas and transhumanism have also been characterized as a "complacent" or "apocalyptic" variant of posthumanism and contrasted with "cultural posthumanism" in humanities and the arts. [36] While such a "cultural posthumanism" would offer resources for rethinking the relations of humans and increasingly sophisticated machines, transhumanism and similar posthumanisms are, in this view, not abandoning obsolete concepts of the "autonomous liberal subject" but are expanding its "prerogatives" into the realm of the posthuman. [37] Transhumanist self-characterizations as a continuation of humanism and Enlightenment thinking correspond with this view.

Some secular humanists conceive transhumanism as an offspring of the humanist free thought movement and argue that transhumanists differ from the humanist mainstream by having a specific focus on technological approaches to resolving human concerns and on the issue of mortality.[38] However, other progressives have argued that posthumanism, whether it be its philosophical or activist forms, amounts to a shift away from concerns about social justice, from the reform of human institutions and from other Enlightenment preoccupations, toward narcissistic longings for a transcendence of the human body in quest of more exquisite ways of being. [39] In this view, transhumanism is abandoning the goals of humanism, the Enlightenment, and progressive politics.

Aims

While many transhumanist theorists and advocates seek to apply reason, science and technology for the purposes of reducing poverty, disease, disability, and malnutrition around the globe, transhumanism is distinctive in its particular focus on the applications of technologies to the improvement of human bodies at the individual level. Many

2.3 Old school augmentation. For more than two decades, Steve Mann has been augmenting his body with cameras and wearable computers. "What I argue," says Mann, "is that if I'm going to be held accountable for my actions that I should be allowed to record... my actions. Especially if somebody else is keeping a record of my actions." Dr. Mann is a professor in the Department of Electrical and Computer Engineering at the University of Toronto. This photograph was published by the blog io9 as part of a piece profiling Mann, and it can also be found on his personal site.

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25. Hughes, James (2004). *Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future*. Westview Press.

26. Ford, Alyssa (May / June 2005). "Humanity: The Remix". *Utne Magazine.*

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30. *h+ Magazine*

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35. Bostrom, Nick. "Why I Want to be a Posthuman When I Grow Up" (PDF).

36. Badmington, Neil (Winter 2003). "Theorizing Posthumanism". *Cultural Critique.*

37. Hayles, N. Katherine (1999). *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University Of Chicago Press.

38. Inniss, Patrick. "Transhumanism: The Next Step?".

39. Winner, Langdon. "Resistance is Futile: The Posthuman Condition and Its Advocates". in Harold Bailie, Timothy Casey. *The Future of Human Nature*. Massachusetts Institute of Technology: M.I.T. Press. pp. 385–411. 40. Kurzweil, Raymond (2005). *The Singularity Is Near: When Humans Transcend Biology*. Viking Adult.

41. Bostrom, Nick (2002). *Existential risks: analyzing human extinction scenarios.*

42. Bostrom, Nick & Sandberg, Anders (2007) (PDF). *The Wisdom of Nature: An Evolutionary Heuristic for Human Enhancement.*

43. Hughes, James (2002). *The politics of transhumanism.*

transhumanists actively assess the potential for future technologies and innovative social systems to improve the quality of all life, while seeking to make the material reality of the human condition fulfill the promise of legal and political equality by eliminating congenital mental and physical barriers.

Transhumanist philosophers argue that there not only exists a perfectionist ethical imperative for humans to strive for progress and improvement of the human condition but that it is possible and desirable for humanity to enter a transhuman phase of existence, in which humans are in control of their own evolution. In such a phase, natural evolution would be replaced with deliberate change.

Some theorists, such as Raymond Kurzweil, think that the pace of technological innovation is accelerating and that the next 50 years may yield not only radical technological advances but possibly a Technological Singularity, which may fundamentally change the nature of human beings. [40] Transhumanists who foresee this massive technological change generally maintain that it is desirable. However, some are also concerned with the possible dangers of extremely rapid technological change and propose options for ensuring that advanced technology is used responsibly. For example, Bostrom has written extensively on existential risks to humanity's future welfare, including risks that could be created by emerging technologies. [41]

Ethics

Transhumanists engage in interdisciplinary approaches to understanding and evaluating possibilities for overcoming biological limitations. They draw on futurology and various fields of ethics such as bioethics, infoethics, nanoethics, neuroethics, roboethics, and technoethics mainly but not exclusively from a philosophically utilitarian, socially progressive, politically and economically liberal perspective. Unlike many philosophers, social critics, and activists who place a moral value on preservation of natural systems, transhumanists see the very concept of the specifically "natural" as problematically nebulous at best, and an obstacle to progress at worst. [42] In keeping with this, many prominent transhumanist advocates refer to transhumanism's critics on the political right and left jointly as "bioconservatives" or "bioluddites", the latter term alluding to the 19th century anti-industrialisation social movement that opposed the replacement of human manual labourers by machines. [43]

2.4 Gray Goo. According to the gray goo scenario, self-replicating robots exponentially multiply and eventually consume the entire planet. Artwork created by Giacomo Costa.

ANNALEE NEWITZ
"What is the Singularity and will you live to see it?"

If you read any science fiction or futurism, you've probably heard people using the term "Singularity" to describe the world of tomorrow. But what exactly does it mean, and where does the idea come from?

What is the Singularity?

The term Singularity describes the moment when a civilization changes so much that its rules and technologies are incomprehensible to previous generations. Think of it as a point-of-no-return in history.

Most thinkers believe the Singularity will be jump-started by extremely rapid technological and scientific changes. These changes will be so fast, and so profound, that every aspect of our society will be transformed, from our bodies and families to our governments and economies.

A good way to understand the Singularity is to imagine explaining the Internet to somebody living in the year 1200. Your frames of reference would be so different that it would be almost impossible to convey how the Internet works, let alone what it means to our society. You are on the other side of what seems like a Singularity to our person from the Middle Ages. But from the perspective of a future Singularity, we are the medieval ones. Advances in science and technology mean that singularities might happen over periods much shorter than 800 years. And nobody knows for sure what the hell they'll bring.

Talking about the Singularity is a paradox, because it is an attempt to imagine something that is by definition unimaginable to people in the present day. But that hasn't stopped hundreds of science fiction writers and futurists from doing it.

Where does the term "Singularity" come from?

Science fiction writer Vernor Vinge popularized the idea of the Singularity in his 1993 essay "Technological Singularity." There he described the Singularity this way:

> It is a point where our old models must be discarded and a new reality rules. As we move closer to this point, it will loom vaster and vaster over human affairs till the notion becomes a commonplace. Yet when it finally happens it may still be a great surprise and a greater unknown.

Specifically, Vinge pinned the Singularity to the emergence of artificial intelligence. "We are on the edge of change comparable to the rise of human life on Earth," he wrote. "The precise cause of this change is the imminent creation by technology of entities with greater than human intelligence."

Author Ken MacLeod has a character describe the Singularity as "the

Rapture for nerds" in his novel *The Cassini Division*, and the turn of phrase stuck, becoming a popular way to describe the Singularity. (Note: MacLeod didn't actually coin this phrase - he says he got the phrase from a satirical essay in an early-1990s issue of *Extropy*.) Catherynne Valente argued recently for an expansion of the term to include what she calls "personal singularities," moments where a person is altered so much that she becomes unrecognizable to her former self. This definition could include posthuman experiences.

What technologies are likely to cause the next Singularity?

As we mentioned earlier, artificial intelligence is the technology that most people believe will usher in the Singularity. Authors like Vinge and singulatarian Ray Kurzweil think AI will usher in the Singularity for a twofold reason. First, creating a new form of intelligent life will completely change our understanding of ourselves as humans. Second, AI will allow us to develop new technologies so much faster than we could before that our civilization will transform rapidly. A corollary to AI is the development of robots who can work alongside - and beyond - humans.

Another Singularity technology is the self-replicating molecular machine, also called autonomous nanobots, "gray goo," and a host of other things. Basically the idea is that if we can build machines that manipulate matter at the atomic level, we can control our world in the most granular way imaginable. And if these machines can work on their own? Who knows what will happen. For a dark vision of this Singularity, see Greg Bear's novel *Blood Music* or Bill Joy's essay "The Future Doesn't Need Us"; for a more optimistic vision, Rudy Rucker's *Postsingular*.

And finally, a lot of singulatarian thought is devoted to the idea that synthetic biology, genetic engineering, and other life sciences will eventually give us control of the human genome. Two world-altering events would come out of that. One, we could engineer new forms of life and change the course of human evolution in one generation. Two, it's likely that control over our genomes will allow us to tinker with the mechanisms that make us age, thus dramatically increasing our lifespans. Many futurists, from Kurzweil and Steward Brand, to scientists like Aubrey De Gray, have suggested that extreme human longevity (in the hundreds of years) is a crucial part of the Singularity.

Have we had a Singularity before?

The Singularity is usually anticipated as a future transformation, but it can also be used to describe past transformations like the one in our example earlier with the person from 1200. The industrial revolution could be said to represent a Singularity, as could the information age.

When will the Singularity happen?

In 1992, Vinge predicted that "in 30 years" we would have artificial intelligence. We've still got 12 years to go - it could happen! In his groundbreaking 2000 essay for *Wired*, "The Future Doesn't Need

2.5 A novel with one foot in the future. In the book *Rainbow's End*, Vernor Vinge imagines what our world might look like in 2025. The author dedicated his book to "the Internet-based cognitive tools that are changing our lives—Wikipedia, Google and the others of their kind, now and in the future."

2.6 Dr. Aubrey de Grey. Co-founder of the SENS Foundation and author of *The Mitochondrial Free Radical Theory of Aging* (1999), Dr. de Grey researches tissue repair strategies for extending the human lifespan. This photograph was taken by Bruce Klein and Susan Fonseca-Klein on January 23, 2008 in Los Angeles, California. Dr. de Grey and Bruce Klein have both authorized use of the photo in the public domain.

Us,"technologist Joy opined:

> The enabling breakthrough to assemblers seems quite likely within the next 20 years. Molecular electronics - the new subfield of nanotechnology where individual molecules are circuit elements - should mature quickly and become enormously lucrative within this decade, causing a large incremental investment in all nanotechnologies.

And in the 2005 book *The Singularity Is Near,* Ray Kurzweil says the Singularity will come "within several decades."
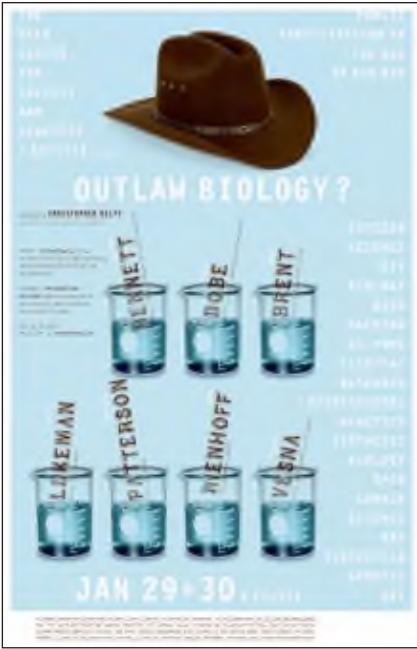
Longevity scientist De Gray says that our biotech is advanced enough that a child born in 2010 might live to be 150, or 500 years old. MIT AI researcher Rodney Brooks writes in his excellent book *Flesh and Machines* that it's "unlikely that we will be able to simply download our brains into a computer anytime soon." Though Brooks does add:

> The lives of our grandchildren and great-grandchildren will be as unrecognizable to us as our use of information technology in all its forms would be incomprehensible to someone from the dawn of the twentieth century.

So when will the Singularity really happen? It depends on your perspective. But it always seem like it's just a few decades off.

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2.7 Outlaw biology? Public participation in the age of big bio. Organized by Christopher Kelty in 2010, the Outlaw Biology symposium is an excellent example of what Sirius terms "the activity oriented, participatory DIY culture that has been evolving since the *Whole Earth Review*… since punk… since the early hackers… since *Make* magazine… since open source biotech (ad infinitum)."

R. U. SIRIUS
"The best-case scenario for posthumanity."

A few months after he visited Trinity University, guest speaker R. U. Sirius authored this thought provoking analysis of a positive posthuman future. As Annalee Newitz notes in the preface to his piece, "futurist writer R.U. Sirius helped create Mondo 2000, runs posthumanist magazine H+, and has run for president. He was cyber before it was cool, and is still fomenting techno revolution."

Annalee has asked me to comment on what is the best-case scenario for posthumanity and what groups are working on putting that scenario in motion. This is the sort of question that invites utopian musings. I've become somewhat shy of utopian projections, which is maybe why I tend to interview other people and let them take the fall… but what the hell, I'll give it a shot.

The fun, of course, would be in visions of tall, thin, beautiful blue skinned beings that are super bright rather than corny (Maybe winged, too. Winged would be nice.), a third arm for carrying groceries, skinny little fingers for ever-tinier portable devices, and everybody engineered at the germ line to be crazy sex freaks.

But being of nobler stuff, I'll give you what I think is the best down to earth scenario for near-term enhanced humanity, and then I'll also mention a few further out visions—some of which I'm fond of.

Here's what I see when I'm wearing my optimist's hat. The emergent property of a technologically networked culture is voluntary collaboration and sharing. It may seem distant now, but things can change fast (Berlin Wall), and I think it's reasonably likely that some time in the next 10 to 40 years, the main way most people will engage in productive or creative or playful (or all of the above) activities—and the main way that value will be shared or exchanged—will be through open source, voluntary, collaborationist networks that also use some variation of p2p to make whatever available to whomever.

So here's what happens when we add in the idealistic tech scenario. We get basic control over the structure of matter—nanotechnology as production technology. Matter becomes information that can be shared p2p. It's tied to desktop manufacturing. You go online, pick up the code for what you want and "print" it. Even if there are still some people who aren't that resourced, there are plenty of people who want to distribute the free stuff to those in need. Who? Your basic generous open sourcers… your left libertarian types, definitely… but hell, even Nicholas Negroponte wants one laptop per child. Well, one desktop unit per person shouldn't be too difficult under these conditions. In essence, within a decade or less of production nanotechnology, there is no resource scarcity, with the exception of physical space, and no distribution problem.

We also get as much control over biology as is possible, so there are few if any diseases, aging is slowed down stopped or reversed, replacement

body parts are grown, skin color is self-selecting, we can eventually begin to program desirable traits in and out of humans by engineering—both interventions in the already born and at the germ line… ad infinitum.
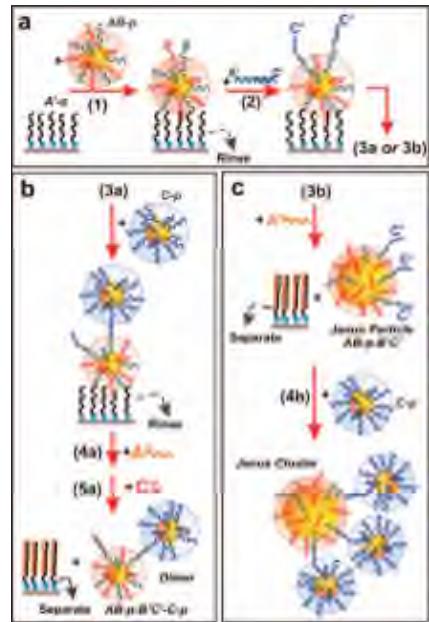
The more optimistic AI projections pan out. We have smarter-than-human systems resolving our technical and possibly our political problems before they happen – it's largely about pattern recognition, after all. We also take the intelligence inside us so that we have all the information and intelligence in the human/cyborg system accessible behind our eyes. Add to that technologies and substances for neural self control -intelligence, moods, creative flow, ecstasies and visions that are accessible to our raw brains with little or no downside.

So people are feeling pretty good, and they're long-lived, smart, bodily modified if desired both internally and externally and there's no more coerced work/wage slavery. And thanks to the activity oriented, participatory DIY culture that has been evolving since the *Whole Earth Review*… since punk… since the early hackers… since *Make* magazine… since open source biotech (ad infinitum), most people don't become passive bliss ninnies (and even if most of them do, there is still a minority in the billions made up of active people to keep things interesting and expanding.) Work is play (Gamification). And we're not boring… we still have an edge. There are still unforeseen challenges. Also, advanced virtuality provides a safe zone for the most extreme types of acting out.

Of course, the real world is never this smooth. And there are always some skunks at the garden party (and most utopias, being totalitarian in some way, might deserve them.) Out of this truth, a million science fiction stories have been born. But the argument can be made—and has been made—that what I've described is broadly the direction in which things will go provided that all or most of these technological advances actually occur to the degree suggested (or close enough), and these advances will do far more good than harm.

Ok, so who is working towards this eventuality? Well, if it happens this way, pretty much everybody in the NBIC fields—everybody working on nanotech and biotech and AI and brain science, whether as citizen scientists in a collaborationist project or working for a corporation, or those wacky surrealists at DARPA—they're all pushing this potentiality forward. Of course, we may have to "hijack the Singularity" from them eventually—or even now (think gene patent v. open source bio). But mainly, I think all the people who are engaging in open source collaborationist tinkering and culture, the citizen scientists—particularly the more sophisticated and educated young people that are choosing to invest themselves in "garage" projects—I think they all may be taking us there.

I also think the best, smartest critics and skeptics and SF writers and creators are helping by problematizing these scenarios in advance, by giving us arguments and narratives that remind us about human behaviors and emotions and political and economic and scientific realities. Brilliant fiction adds to our foresight… our pattern recognition… by playing out

2.8 DNA-based assembly line for precise nano-cluster construction. As explained by the Brookhaven press release, "scientists at the U.S. Department of Energy's (DOE) Brookhaven National Laboratory have designed a molecular assembly line for predictable, high-precision nano-construction. Such reliable, reproducible nanofabrication is essential for exploiting the unique properties of nanoparticles in applications such as biological sensors and devices for converting sunlight to electricity." In (a) the squiggly lines represent DNA linker strands and are used to attach DNA-coated nanoparticles on a surface. In (b) a complementary nanoparticle recognizes the linker strands and attaches itself to form an "assembled" structure. Section (c) depicts an alternative structure that can be assembled via nano-cluster construction. This tiny assembly line is composed entirely of DNA machines that are less than a billionth of a meter in size. Image source: Brookhaven National Laboratory.

2.9 SMILE (Space migration, intelligence increase, and life extension). Excerpt from *Neurocomics* (Last Gasp Press, 1979). In this underground comic book, Timothy Leary shared his ideas on how technology might transform the human race.
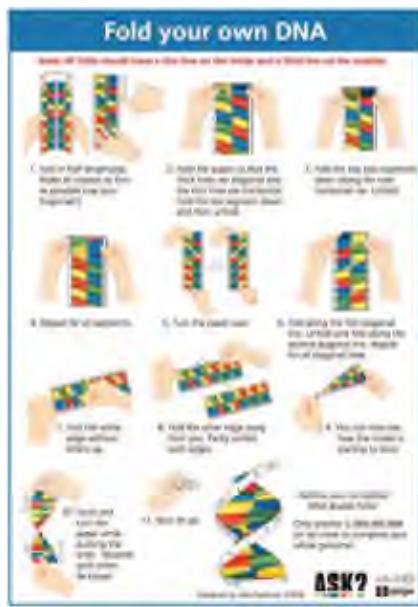
dramatic, difficult, dark, challenging, ambiguous or dystopian scenarios based on similar technological possibilities.

So that's sort of a simple bottom line upbeat vision of posthumanity, without anything so far out as Kurzweil's vision of imposing our idea of intelligence on the entire galaxy and all creatures within; or Leary's 1970s vision of spacefaring posthuman intelligence-amplified and immortal psychedelic gods heading home to "Galactic Central" after fully conquering the quantum realm; or David Pearce's marvelous vision in the Hedonistic Imperative (look it up) of a post-Darwinian humanity engineered at the germ line to spend their lives at various gradations of functional ecstasy while abolishing suffering among all sentient beings.

As I said at the start of this, Annalee's question invited these utopian musings, and it would require another essay of equal length to express all my doubts and ambiguities. But I'm sure the inevitable comments will take care of that. I know I can count on you.

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reflections

2.10 Fold your own DNA. Designed by Alex Bateman (2003) and authorized for reuse under terms of Creative Commons Attribution 2.0 Generic license.

CHRIS DUDLEY
"To be or not to be... Superman?"

Transhumanism. The name sounds futuristic and slightly ridiculous, but the ideas behind it are more realistic than one might expect. Transhumanism is an "international intellectual and cultural movement supporting the use of science and technology to improve human mental and physical characteristics and capacities." Basically, it's humans using science to change humans with the idea of bettering the species in general.

This is a broad idea and there are several categories of transhumanism that one might look into. Timothy Leary wrote about space migration, saying that the future is found in the movement of humans into space to colonize other planets. He believed that the only way for our species to survive is to keep expanding—off the planet—and to spread into other solar systems or galaxies.

Annalee Newitz, on the other hand, is into biohacking. This involves editing (modifying) a human being's physical structure, again with the goal of improving it. "Improving," by the way, could mean anything. Adding a tail to one's rear may be desired by a few people; to them, it's an improvement! Biohacking isn't just DNA editing to change us up. It can also include adding cyborg-like machines to our bodies (*I, Robot,* anybody?) or taking drugs that help us work better (who wants to be the Hulk?).

Is it plausible that these goals could be achieved in my lifetime? Of course they can. This question seems absurd when you factor in Singularity theories about how fast technology advances these days. We're already testing life extension drugs. We're making breakthroughs in genetic sequencing; who knows where that will lead? We're even making computers that can read our minds. What's next?

There are already forces that might limit the progress of transhumanism. Ahoy, religion! Anyone who reads or watches science fiction (or history) knows that religion always opposes change. Tampering with "God's image" is sure to be a big issue. And you know that politicians will just eat that up and limit progress for years on end. Gotta love it.

I'm gonna be honest and admit that I experience many emotions when I consider what the future could hold for myself and humanity in general. Transhumanism might as well be a religion to me with the amount of awe it inspires.

After learning about what this movement stands for and is trying to accomplish, I would have to say that the goals are inevitable in some distant future. People **will** figure out how to make changes to humans and people **will** want them. It's that simple! At the same time... if we make space colonies then who **won't** want to go to Mars after re-watching *Total Recall* a good nine times? The future is being dreamed up now, and with our increasing pace of technological advancement, that dream is turning into a reality faster than we think.

MARICELA RIOS
"Thoughts on transcending the human race"

The objective of transhumanism is to improve the characteristics of the human race by the use of advanced science and technology. Literally, to be a transhumanist would be to transcend above and beyond the average human being. Transhumanism is something that essentially means the distinct line which once separated humans from technology, has been blurred. The coexistence of people and science will, through evolution, begin to fuse together.

The ideas regarding human enhancement in Timothy Leary's article are beyond anything that I ever imagined possible. I don't see mankind abandoning earth and migrating to space anytime soon. But, perhaps I under estimate the capabilities of the near future. He details what post-human life will be like after space migration and predicts different worlds forming for particular groups of people (e.g., bisexual vegetarians, Hell's Angels, etc.) where they can be themselves and not clash with others.

This concept confuses me.

Who will govern these different worlds? Who will help control a society in space? Who will set the line for science and technology which we do not cross?

There has to be a place where these advanced beings can go and find simple earth qualities reminding them that they are, in fact, still human.

These questions are floating in my brain but they can be answered with time and intelligence increase working hand-in-hand. The concept of increased intelligence doesn't startle me in the way space migration does because of the human evolution that has already occurred. My only worry is regarding the negative effects of human beings losing simplicity.

In a nut-shell, I suppose my feelings towards the ideas of enhancing human life are hopeful and excited with a dash of skepticism. The idea of a world with basically no limitations is fascinating and worries me at the same time. Maybe if my intelligence enhances I will feel differently about these ideas.
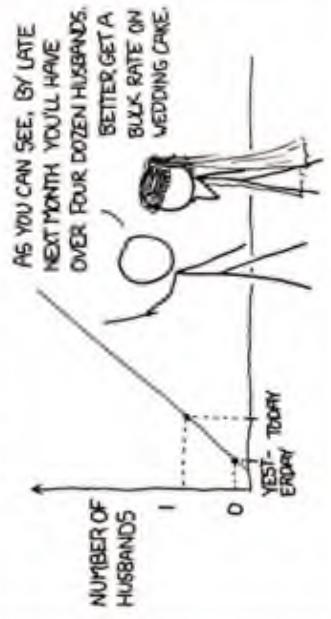
2.11 **Space Starbucks.** Photograph created by Lennox seminar participant Maricela Rios. May 11, 2010.

2.12 **Space Park.** Photograph created by Lennox seminar participant Maricela Rios. May 11, 2010.

2.13 **Space Babies.** Photograph created by Lennox seminar participant Maricela Rios. May 11, 2010.

2.14 "My hobby: Extrapolating." *xkcd: A webcomic of romance, sarcasm, math, and Language.* July 3, 2009. *xkcd* is licensed under a Creative Commons Attribution-Noncommercial 2.5 License.

COLE GRAY
"To be more than human is to be human."

From what I have come to understand of the Transhumanist movement, its primary objective is nothing less than the complete liberation of the human race from its biological constraints through technology. It is an ideal that looks toward biotechnologies and other emergent technologies as potential catalysts for human enhancement that could eventually lead to a Technological Singularity.

This Technological Singularity is a point in time in which technology would allow humanity to finally transcend the limitations of organic life such as age, disease or even death and achieve almost limitless advancements in intellect and civilization. In short, it is perhaps the next step in the evolutionary history of our species.

Given the current rate of humanity's technological expansion, it is not completely unrealistic to guess that the Technological Singularity could happen sometime in the near future. However, such insubstantial speculations on the future accommodate a number of wild assumptions and are ultimately futile. The "future" holds an infinite number of possibilities and trying to guess which course it will take is absolutely impossible. If it does happen in the near future then good for us. If it doesn't happen, humanity has the rest of eternity to reach it assuming we don't wipe each other out first.

There is a wide array of ethical concerns in regard to the Transhumanism movement, ranging from religious and social issues to political problems. One such claim against Transhumanism involves the religious/secular hubris argument in which the attempt to modify the human body to gain godlike power is seen as a spiritual affront to a real god as an unacceptable risk to artificially guide the course of human evolution considering that we are products of predominantly biological functions.

Another argument is the possibility of eugenics wars wrought from notions of genetic/technological superiority between countries or even individuals that could ultimately lead to massive genocide campaigns to cleanse the genetic pool.

Finally, there is the perceived threat of dehumanization in which genetic engineering and other human enhancement technologies could produce races of genetic slaves or objectified sub-humans that exist to serve the master genetic race. There are many more arguments against Transhumanism than the three I have just listed but these are the basic contentions against it.

As an existentialist I am reluctant to accept any ideals which extol the future. Anything that detracts from the present in hope of something better in the future is just another way of trying to find meaning externally from one's self that ultimately leads to a dearth in social and individual will power.

Why should we strive to better ourselves now when all this technology will answer all of humanity's problems in the future? Also, it's not like society hasn't had these types of optimistic expectations before- Communism, Colonialism, Utopianism and so on.

Each of these movements failed miserably to produce the societal changes that their proponents promised and many of them actually made us worse off than we were.

Yet, despite my skepticism, I can't help but feel approval for this movement's monumental predictions. It does seem like the logical outcome of all this technology and after all hasn't our desire for immortality been the overwhelming goal of humanity since our species' very beginning.

2.15 "Flying saucers for everybody!" Frank Tinsley (author and illustrator), *Mechanix Illustrated*, March 1957. "Mass produced, the plastic saucer should cost no more than today's medium-priced cars," predicted Tinsley. "Could be that by 1965 you'll have one flying out of your backyard, too!"

ENDER ERGUN
"To be or not to be... Superman?"

The concepts behind transhumanism appeal to me. Well, for the most part. Dr. Leary's article on space migration sounded like one of his acid trips, although he did provide examples of why humans are destined to go to the final frontier. However, he included no evidence, which in the academic world means he is full of it. From what I gather, the overall goal of transhumanism is to enhance human life through the forging of technologies with the human body and mind.

I could argue that we are all transhumanists. I mean look at how much we rely on technology for our everyday needs. I bet you anything you do not know all the names and their numbers in your phone's memory.

Ah, here is the best part: you could potentially argue that your phone's memory is merely an extension of your own mind. If technologies such as the personal computer, smart phones, and your whatevers that do whatevers, have become such an integral part of your life, why deny that they are extensions of yourself?

Marshall McLuhan once said that, "the medium is the message," and I think he was onto something. If we follow his argument, he states that different form media, such as television, are extensions of one's senses and perception. This idea can be translated accordingly to transhumanist ideas.

Yet there are some transhuman concepts that I would shy away from, such as DNA manipulation. This idea reminds me of the movie *Gattaca*. We often associate eugenics with totalitarian governments that seek to create a master race (ahem, the Nazis), but this idea can extend even further.

What I'm referring to is liberal eugenics. This concept still has the basic foundations of eugenics, but manages to make it into a consumer commodity. This gives birth to many different problems.

Think about it: if we already have a huge disparity between the rich and the poor when comes to access to technology, imagine how liberal eugenics heightens this problem. Those who can afford to have their DNA modified so they are super fast, super strong, and super intelligent, will surpass those who cannot afford to do so. So as a result not onlyare the poor people poor, but they are now genetically inferior to their rich counterparts.

So when I say I support transhumanism, I can only go so far. I like the idea of having an exoskeleton, or a bionic arm, or anything that is an addition to my regular non-altered self. But when we decide to mess around with things that should not be changed, I find myself coming into a grey area. The potential is awesome, but so are the dangers.

2.16 "For future reference, right-handed men don't hold it with their left." Vincent Freeman (Ethan Hawke) uses a rigged sample to bypass strict genetic testing. *Gattaca* (Andrew Niccoll, 1997).

PATRICK CRIM
"Solving the world's problems? Or creating more conflict?"

Transhumanism is the application of science and technology to the human body in order to improve humans in all aspects of life. This includes higher mental capacity, the ability to live as long as you want, and ridding the world of diseases. While this appears to create something of a "superhuman," people supporting transhumanism don't focus on *individual* applications. Rather, transhumanists believe that—if we were able to apply all of these "enhancements" to the entire population—our world would be rid of poverty, disease, and other problems.

In the world today, enhancing yourself to perform at higher levels than those around you is looked down upon in many areas. It is seen as cheating in sports and in the classroom. We have to also look at how unnatural it would be. Homo sapiens have developed over thousands of years, and are continuing to do so. Using something artificial in our bodies would not only send this process out of balance, but could possibly cause other damage as well.

On the other hand, using this technology could lead us to new discoveries and other amazing things which we would never have found otherwise. You could also talk about survival in the context of transhumanism. The earth is bound to be encountered with some population threatening disaster, and having the mental enhancement to figure out a problem would be a necessary reason to have a higher form or intelligence.

I believe that this technology will be made available in our lifetime, however, as with any new technology, I think it will be incredibly expensive. That brings me back to my point of fairness. Those with the available money to spend on this enhancement will be able to, and those that can't, the poor or the middle class, will have nothing to show for it. The rich will get richer and smarter because of this, and it simply wouldn't be fair. Intelligence should be made available to all. Starving children can read history and English books in Africa, but they wouldn't be able to afford the chip the goes inside your brain to make you smarter.

I personally think it would be awesome to be artificially enhanced. I would see the world through brand new eyes and it would be quite an experience. I don't believe it would be fair to everyone, however, that wasn't able to receive this intelligence. Until increased intelligence can be a mass produced commodity, I can't see it gaining much support.

2.17 Internet cafe in Varansi, India. Photograph taken by Hynek Moravec in August 2001. Permission granted to copy, distribute and/or modify the document under the terms of the GNU Free Documentation License, Version 1.2.

2.18 Space exploration and a base on Mars. NASA artist John Olson imagines what a human base on Mars might look like. MSFC negative number: MSFC-9249472. February 20, 1992.

ROBIN MURDOCH
"Aaaaaand it's off to space we go to spawn and prosper."

To me it makes sense that humanity would tend towards a movement such as transhumanism. It seems that with everything we do, we're trying to make thing bigger, better, easier, and cooler. Man's dedication to furthering knowledge has brought us so much so quickly that the idea of transhumanism and the technological advances that must accompany it are next in a line of mankind's natural progression. To evolve further as a species, the use of technology is necessary. I do not, however, believe that this is a step to be taken lightly, if taken at all.

If space migration is ever integrated into general society, the reality of a transhumanist society will be imminent. To prolong the lifespan of humankind on earth as we are growing at such a rapid rate would be a death wish. The planet would over populate, resources would be completely depleted, and society would crumble. Even now, the number of diseases being cured increases, and our ability to survive through sickness is being finely honed. This technology is coming about rapidly, and the consequences it will have on society will soon be major.

Timothy Leary's ideas for the future are the most appealing. His view of space as spurring the creation of new neural circuits through the presence of new and intriguing options is a noble one. If this is true, and if by leaving the planet we can open our minds more fully, then why not? The Earth can be left alone to recuperate from our stay here. Once humans have adjusted to the idea of living in space, the planet will be allowed to replenish itself as it's children finally leave home.

The movement into space will also open up countless jobs. Every space habitat being lived on will need have job availabilities. The habitats themselves will also have to be built by teams of people. Space itself will need to be studied in greater detail in order to know exactly what would be necessary to create an appropriate environment to sustain human life for an elongated period of time. Then once the space habitats have been set up, there will be countless jobs available on each one. Even in ways we cannot yet imagine, this could provide a complete bolster for the economy. But getting the funding to be able to start the whole process may prove to be a hassle.

The transhumanist movement as a whole is a pretty scary idea, but I don't think it's one that can necessarily be avoided. If the technology is out there (which eventually, it will be), people are going to want to use it, regardless of the circumstances. Even though many of these ideas are dangerous before the exact consequences of their use is known, people are willing to take that chance to be able to perceive that they have made their life better then it could be otherwise.

What we need now is an in depth global discussion about what might happen, and whether or not taking this next step is worth it.

Our lives are at stake.

ASHLEY FUNKHOUSER
"A dangerous trap?"

After doing the reading for this week's class, I have been intrigued by the idea of transhumanism. I thought that the interview in *h+ Magazine* was particularly interesting. The interviewer brought up interesting questions like, if total happiness were the norm, would pain be a novelty that people would seek?

At first, biotechnology really freaked me out. However, the more I think about it and get used to it, the less scary it seems. The main problem is that by engineering our emotions, we traipse into a very dangerous territory of engineering our personalities and our sense of self. There isn't much point to having a life, if it is going to be predetermined for you.

I'm not sure if I would choose to be happy all the time if I had the choice to. Sometimes, the mere fact that I have managed to make myself happy is the most rewarding part for me. I strive to make any situation a positive one, and when I succeed, it is an even greater feeling than the one that I would've had if I had simply been happy despite a bad situation.

If everyone were in a state of absolute euphoria all the time, we might not know what a good thing we have going by being happy all the time. Part of the amazing thing about euphoria is that it is a rare feeling. It is the occasional presence of pain that makes joy so great. Of course, I definitely prefer to be in a greater state of happiness most of the time.

Some of the social and political opposition to transhumanism stems from these fears. Also, one giant obstacle that transhumanism needs to overcome is religion. The transhumanists will face much opposition from the religious sector of the world, and they need to find a way to accommodate this opposition. Elsewhere, *h+ Magazine* discusses the part of our brain that needs to have religion and the way that a person's particular religion affects the rest of their life.

Religion will always be an essential component of our biology. Even if transhumanists find a way to make us happy, super-intelligent humans all the time, religion will continue to be necessary.

2.19 Serotonin: Made with molecules. Photo by Jurvetson (flickr). Image sharing and remixing authorized by Creative Commons Attribution 2.0 Generic license.

2.20 Genetically modified seed corn. Photographer Orin Hargraves reports that this empty seed bag flew into his yard from passing farm machinery. "This year's corn crop; next year's high-fructose corn syrup. I hope it doesn't do a gene swap with poison ivy!" Photo licensed for reuse under the terms of Creative Commons Attribution 2.0 Generic license. May 14, 2009.

JOHN KEY
"Let's just take this one step at a time"

It is interesting to see the different stances that people take on transhumanism. To truly grasp the various arguments, one must first understand what exactly we are talking about. For this I am going to rely on the almost always trustworthy Wikipedia:

> "Transhumanism is an international intellectual and cultural movement supporting the use of science and technology to improve human mental and physical characteristics and capacities."

That sounds about right to me, and these improvements can range all the way from the far-fetched (like superhuman powers and immortality) to the plausible (like curing cancer or making drought resistant crops).

The arguments of authors in the course reading can be broken down like this:

Timothy Leary: S.M.I.L.E. = Space migration, intelligence increase and life extension. The first step is breaking out and dusting off the technology for humans to migrate into space and then you increase their intelligence so they don't get bored in space. This solves the population problem and people can live longer.

Duncan: Duncan mostly discusses the use of gene modification to increase the quality of human life in outside ways rather than actually modifying humans themselves (genetically modified crops, curing disease, etc.)

Lynch/Block: These authors focus on neuroscience to end suffering. They take a scientific approach and inform the reader that further progress requires actually experimenting on humans.

Kent: Kent is a vegan animal rights activist who sees transhumanism as a chance to end all pain and suffering. This offers a similar effect as ecstasy but with more control.

Newitz: Transhumanism is fine when it comes to body modification, but using it to cure disease and creating immortality is taking it to far. People don't need to live forever at this point in time.

Each of these authors takes a different approach to the idea of transhumanism but they all share a common goal of increasing the quality of human life. This a noble goal and in most ways transhumanism seems a viable way to achieve this goal.

I agree most with Newitz and Leary. Extending the lifespan of humans to 200 or 300 years offers far more problems than benefits. If your rich uncle

never died, you would never inherit his money.

Say you've lived 250 years, what are you going to do with yourself after the first hundred?

If we who are alive today were alive in the 1800s... wouldn't it have been a shock for us to go from no electricity to today? (If you are shaking your head no then just think how hard it was for most your grandparents to a adapt to computers)

The biggest problem is the one Leary is trying to solve with his space migration theory: where are all these people and their children going to live? How are we going to sustain them with the limited resources we have? All of these problems need to be solved before we can even think about expanding the life span on human beings.

One of the most viable applications of transhumanism today does not actually involve changing the human body. Genetically modified crops are currently the big thing in the agricultural world and they are truly helping solve hunger issues around the world.

For all of you who are a bit weirded out by the idea of eating genetically altered food you have to consider that we have been doing it for centuries. Next time you bite into an apple you should know that no matter what type it is, it comes from only one genetic parent. How about bananas? Consider that every banana in the world comes from only one plant from Papa New Guinea that has been transplanted in pieces all around the world.

2.21 Binary helix. Original artwork created by Lennox seminar participant John Key. May 11, 2010.
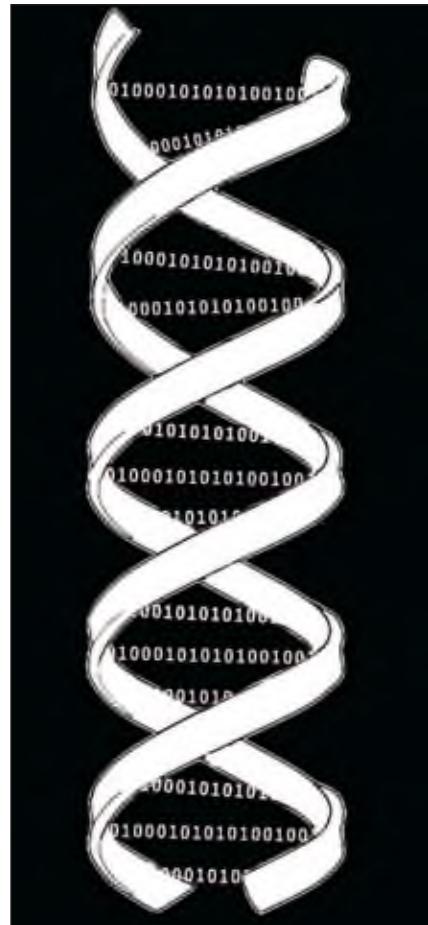
These are just a few examples, but we have genetically modified the majority of foods we eat through simple breeding practices. Now, we have simply reached the point that we can start at the genetic level in a lab and control things more actively. Companies have produced drought resistant and pest resistant crops that are being grown all over the world. Things can go wrong but you have to weight the benefits against the chance of catastrophic failure.

For those interested in these ideas, I recommend the book *The Doomsday Key* by James Rollins. It's great fiction with a amazing scientific base where the plot revolves around genetically modified crops.
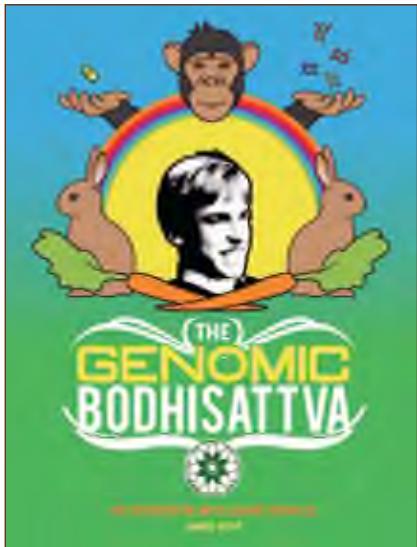
There are many costs and benefits to all elements of transhumanism but it will be at the forefront of the next technology boom. The only thing that we can do about it is try to keep it in check while rolling with the punches.

We stand on the precipice of changing life as we know it using existing technology. But we need to use these ideas to fix the problems we are currently facing before we do something like "cure death" and thereby open up a whole new set of problems.

Let's just take this one step at a time.

PATRICK LYNCH
"The transhumanist goal of ending suffering"

Much of this course has dealt with the theme of transhumanism, which is loosely defined as the societal drive to enhance our minds and bodies through new applications of technology. Whether it's the use of nano-scale robots in our bloodstream, the invention of robotic body parts that will turn us into cyborgs, or just the optimization of mind-enhancing substances for the achievement of maximum productivity and/or recreational enjoyment, the multivariate ways in which transhumanists predict our lives will be altered by technology is astounding.

One of the speakers from this course was a man named R.U. Sirius, who edits *h+ Magazine*. 'H+' is the symbol for the tranhumanist movement, short for "humanity plus". As part of this class, we were told to peruse the magazine and write about things we found interesting. Well, in the course of my browsing, I was fascinated by an article titled "The Genomic Bodhisattva," an interview with David Pearce, author of *The Hedonistic Imperative*.

Pearce believes that through intelligent use of technology, we can effectively end suffering, and then improve the human condition to such an extent that baseline levels of happiness to future human beings far exceed the imagined possibilities of today. The two technical mechanisms he focuses on are pharmacology and gene-therapy. One phrase Pearce likes to use is that technology can give us the ability to "recalibrate our hedonic treadmill," which refers to the idea that people tend to stay at a "relatively stable level of happiness, despite changes in fortune or the achievement of major goals."

That idea reminded me of a recent TED talk by behavioral economist Daniel Kahneman, about the way we perceive happiness differently through experience and memory. One of Kahneman's key points is the idea that our idea of happiness in any moment is different from what causes us to remember events as having been good times. I think what Pearce is most trying to optimize is our experiential happiness, though he recognizes that the complex interplay of dopamine, serotonin, and other chemicals in the brain makes this a delicate operation. For a full rundown of Pearce's ideas, I urge you to check out his site.

One of the first things to realize—according to Pearce—is that our brains are not designed to make us happy. All of our inborn urges and drives, pleasurable and painful tendencies, even our abilities to feel happy and sad, exist because they help our genes to propagate. As Pearce puts it:

Blind selective pressures have acted on living organisms over hundreds of millions of years. Darwinian evolution has powerfully favoured the growth of ever more diverse, excruciating, but also more adaptive varieties of psychophysical pain.

Just the realization that we have no fundamental need to be happy is a game changer. If you look at recurring human behaviors that cause so

2.22 The hedonistic imperative. James Kent's interview with David Pearce can be found in the Fall 2009 edition of *h+ Magazine* (p. 58). In the introduction to his web site The Hedonistic Imperative, Pearce argues that "genetic engineering and nanotechnology will abolish suffering in all sentient life." According to Pearce, "the abolitionist project is hugely ambitious but technically feasible. It is also instrumentally rational and morally urgent."

much pain and sadness, you might be baffled if you expected that humans were designed to rationally seek out happiness. This just isn't the case.

In an effort to enhance our ability to feel happiness, Pearce advocates the modification of human germline cells. The germline refers to genetic material that may be passed on to offspring, in contrast to somatic cells. The first thing that we need to do is "sabotage a small but vicious set of negative feedback mechanisms," which are genetically coded into the mind and brain. He argues that today's recreational drugs, "quick and dirty euphoriants," don't transcend these mechanisms, but they do offer an intriguing glimpse into what human life could be like if our underlying brain architecture were well modified.

Though I haven't tried many of the euphoriants Pearce refers to, I recognize a gross lack of open-minded discussion about the effects of substances on our minds, especially—unfortunately—on the part government officials, notably the DEA. In February 2010, in Missouri, a group of fully armed paramilitary law enforcement officers broke into a home after dark and shoot the family dog in front of a small child—all because of a misdemeanor drug warrant. Clearly, something is horribly wrong with our nation's drug policy. (See: Radley Balko, "Video of swat raid on Missouri family" in *Reason Magazine*, May 5, 2010).

On the other end of the spectrum, it's important to note that irresponsible use of substances can cause tremendous problems, as in the case of a drug user who castrated himself because he feared his testicles contained "monsters." (See: "Tripper amputates, flushes monster-containing testicles" in *The Arcata Eye*, May 12, 2010).

Whether irresponsible idiots like this warrant the existence of our current enforcement mechanisms is hard to say, though I tend to veer on the side of a drastically limited government that stays out of people's way until they present a threat to others. I distrust anyone who thinks it's a good idea to legislate away personal freedoms.

Returning to the subject of gene-therapy, I think it's interesting and encouraging to think about the kind of transformations that could take place if notions of Darwinian selection were replaced or altered with some form of intentionality. I wonder about the relative effectiveness of emergent versus top-down design, and whether this kind of program will be accepted within the moral standards of a Darwinian society, but I think it's encouraging that we have people devoting so much energy to the abolition of suffering and the transcendence of human limitation.

2.23 Genetically engineered happy mice. In 2006, researchers at McGill University and the University of Nice successfully bred mice that lacked a gene (TREK-1) that affects the transmission of serotonin in the brain. The result was a new breed of permanently cheerful, depression-resistant mice. Image source: NIH/ National Human Genome Research Institute)

2.24 You are the doll. This cover from the Fall 2009 issue of *h+ Magazine* is notable because this was the only hard copy version of the magazine. Edited by Lennox guest speaker R. U. Sirius, *h+ Magazine* is now entirely digital.

LAURA SCHLUCKEBIER
"So freaking cool and/or scary."

First off, I think it's awesome that R. U. Sirius is the editor in chief of *h+*. It makes total sense.

h+ Magazine is just—it's awesome. There's no other word for it. For starters, it's got *Dollhouse* on the cover. Win. Instant points. The graphics are great, the layout is intriguing and different, and the content could occupy me for hours. The topics are super intelligent but they're explained in a way that any fairly intelligent person with no prior transhumanism knowledge could understand.

Transhumanism doesn't seem to be anything that ends or that we can ever ultimately achieve. The point of transhumanism is to keep pushing the boundaries of what we as humans are capable of doing, making, or imagining. Its objectives are twofold.

The first objective of transhumanism is to broaden mainstream views and beliefs about what it means to be human. In the editor's corner on page 10, Sirius talks about the "beginnings" of transhumanism with the emergence of transgender people. I had no idea that transgender surgeries and hormonal treatments began shortly after World War II. As Sirius (bahaha... Sirius Black... come on they even *look* the same) points out, this idea of transgender people isn't such a big deal to us now, over fifty years later: "Now, a woman-to-man gives birth to a baby and most of us barely bat an eye."

Transhumanism aims to protect the civil rights of transhumanists such as transgendered people. Sirius mentions that there is still "bigotry and a lack of legal protections" and he seems to say this with disappointment and some bitterness. Transhumanism aims to make these ideas mainstream so they are accepted and so people who are transhumanists—but who are first and foremost HUMANS just like you and me and everyone else—are accepted for who they are or who they want to become. Because really, who are we to judge?

The second objective of transhumanism is to explore how technology can help us change our definitions of how to be human. Our achievements are possible because of technology, and our self-worth as a species is defined by technology. As humans, we're defined not by what we can physically do (like make fire or build bigger buildings) but by the technologies we build. Of course, these technologies will probably help us do other things physically. Some of the articles that explore this are "Can Robots Feel Joy?" or "Enhanced: My New Sense Organ" or "Transgender, Transhuman, Transbeing."

In terms of ethical concerns, transhumanists are going to push the envelope no matter what. In the "Editor's Corner," Sirius mentions the idea of changing skin melanin to be trans-racial. "The Transgender, Transhuman, Transbeing" article raises similar ethical concerns over whether or not it's ethical to download people into computers.

This all seems like science fiction almost but the fact is that it is happening and it is happening now. Sometimes I feel like I'm complacent where I am right now as if everything is going to stay exactly the same way as it is. Nothing could possibly get any more advanced. Maybe a few things here and there, but as far as big things go? Nah. We're set.

False. Big things are happening and *h+* and transhumanists are bring these ideas into the mainstream culture. In the last 20 years, the Internet has taken over the world, changed the face of all interactions, and created a new lifestyle.

So what's going to happen in the next 20 years? We will be in our 40s. What are our kids going to grow up thinking is normal? Are ideas that *h+* brings up possible? I think so. And it's kind of terrifying. Robots that feel emotions? (CYLONS?! WHAT?!) Uploading our minds to a computer? But the thing is, during our lifetimes, these kind of things are going to become normal.

2.25 xx/xy. A male-to-female transgendered activist at a demonstration Paris, France "walks point for our right to self alter." October 2005. Photographed by Kenji-Baptiste Oikawa. Image reproduced under terms of the GNU Free Documentation License.

My gut feeling is a strong mix of "that is so freaking cool" with "that is so freaking scary." What if I become one of those old people who hates technology because I don't know how to work it? Those people are annoying. I don't wanna be them.

And isn't this the stuff of science-fiction movies? Really cool technology seems awesome and cool and everyone loves it until suddenly it's a disaster. Exhibit A: *Battlestar Galactica*. Exhibit B: *Dollhouse*. The list goes on and on. So my gut feelings are mixed. It's awesome in theory and I have no doubt that some (if not all) of this stuff is going to become reality, but my general feelings are proceed with caution.

Except I still don't think we're going to move to space. Sorry Leary.

I'm going to end with a final quote from RU Sirius that really struck me. He's very good with words, I'm really, really looking forward to his lecture. Also, it makes me feel like I'm at Hogwarts.

> "As we move into an age of shifting identities, where we can be whatever or whoever we choose to be in our second lives; where biotechnology might soon offer changes in skin melanin bringing about the age of the trans-racial, as people start to evolve novel body ornamentations and eventually parts, as we learn how to control our hormones to amp up our estrogen or testosterone to suit the needs of the day, we should always remember to thank the transgendered. They have walked point for our basic right to self-alter."

2.26 Tennessee State Fair Pig (2006). Image posted to flickr by Brent Moore and reprinted under the terms of a Creative Commons Attribution 2.0 Generic License.

EKATERINA SEDIA
"Mind of a pig"

A first shock of Joel's life came when he saw a mirror for the first time. That elaborate affair of glass and wood was delivered to decorate Cassie's room, and Joel approached it to investigate. He had not given much thought to his appearance, but assumed without ever considering that he looked like the people around him. He was conscious of some slight differences between himself and others, such as he walked on four legs, and did not speak. Still, he did not expect his reflection to be quite so grotesque.

He twitched his snout, discomfited, and the creature in the mirror did the same. A real snout with a flat fleshy circle surrounding his nostrils. Joel surveyed slack ears, nothing at all like Cassie's, the small eyes hiding in the folds of fat, a long corpulent body supported by four stubby hoofed legs, and a comma of a tail. Joel had seen enough picture books to recognize the image. A pig.

He turned his back to the mirror and trotted away, his cloven hooves clacking on the hardwood floors of his home. He moved his legs carefully, afraid that an abrupt movement would shatter his heart, already aching as if from a blow.

Joel pushed a door open with his forehead and lay in the straw bed of his pen. The pen took up most of the open porch of a great, old house, and Joel had a view of flowerbeds, bursting forth with blue of irises and red and black of tulips, and a vast green lawn. He needed to think.

His discovery, as unsettling as it was, explained much. He now knew why Cassie and her father talked about him as if he were not there, and why newspapers were often snatched from under his nose. Most importantly, he realized why Cassie never acknowledged small signs of affection he offered. At least, it wasn't about his personality. It was about him being a pig.

His ears pricked up, and he raised his snout to inhale the smell of gas and hot metal. Cassie's Dad came home. Normally, Joel was not very interested in the old man – he seemed more of an aged barnacle appended to Cassie's loveliness than a being in his own right. This time, Joel watched him.

Cassie's Dad heaved his old body up the steps with the help of his cane, and spoke addressing a young man with a tape recorder in hand, who followed close behind. "I hope the tour of the farm assuaged some of your and your readers' concerns. As you could see, it's a perfectly scientific and humane operation."

"Yes." The young man stopped and cocked his head. "But did you have any issues with patients being squeamish about their transplants? About these organs being grown in pigs?"

The old man rasped a laugh. "You have to understand that people who need a transplant do not have the luxury of being squeamish. And think of the alternatives – would you rather receive a liver extracted from a human corpse?"

The young man made a small non-committal sound and looked away.

"You're too young to remember it, but back in the day… " Cassie's Dad looked over the flowerbeds, his fingers tapping on the railing of the porch. "There was a lot of controversy over human cloning – human rights activists feared that people will be cloned only to harvest their organs. That never happened, of course – it is much easier to grow human organs in pigs, and there's a whole lot fewer ethical questions. Animal Righters, of course, made a fuss, but they always do. Most of them don't even know what they believe in."

"Why pigs?"

"They are similar to us." The old man smiled, and snapped his fingers at Joel. "Joel, come here, boy."

Joel trotted up, obedient, hoping that his dark unease did not reflect on his face.

"Joel, here," the old man said, "is a miracle pig. He has a human brain – he's the only one of his kind. A real innovation. Hope your paper will enjoy this little factoid."

The young man rubbed his face. "A brain? Forgive me, Dr. Kernicke, but a brain transplant reeks of a bad joke. Why would you need a brain?"

Cassie's Dad rolled his eyes, and petted Joel's sagging head. "Not a whole one. But you know that people suffer injuries, or – God forbid! – tumors. Wouldn't it be nice to have a replacement frontal lobe in case you lost one?"

The young man nodded. "I suppose. But what about personality?"

Cassie's Dad shook his head, impatient. "What personality? He's a pig. He's just keeping this brain warm, in a manner of speaking. It's a blank slate. A person who receives Joel's frontal lobe will eventually develop connections between his brain and the transplant, and gradually claim it as his own, regaining function as the time goes by. Brain tissue is just tissue until a human mind shapes it into something grander."

The young man turned off his tape recorder. "Doctor," he said in a hushed voice, and gave Joel a sideways look. "How do you know that this pig is not sentient?"

"Because pigs did not evolve with this brain!" Cassie's Dad struck the boards of the porch with his cane for emphasis. "It's like sewing albatross' wings on a pigeon – it won't make him a better flyer, and chances are that

2.27 Pig in a Day (2008). Image posted to flickr by haavarkr on June 2, 2009 and reprinted under the terms of a Creative Commons Attribution-Noncommercial-Share Alike 2.0 Generic license.

he won't fly at all. Every animal is made by evolution, and all parts should fit together to function. Joel's DNA says that he's a pig, and thus he will remain a pig forever, whether we furnish him with a different brain or not. He has no other human equipment, such as neurotransmitters and sensory system, and thus he cannot make use of the brain. Interview is over."

The young man ran down the steps, traipsed across the lawn, and disappeared behind the bend of the driveway. A part of Joel wanted to run after the man, to seek his help, while the rest of his soul reeled, as if an abyss had opened in front of his hooves. Betrayed by the very people who took care of him and pretended to love him – surely, Joseph did not feel worse after being sold to Egypt! If Joel could speak, he would've called anathema upon the old man's aging, balding head. If he could cry, bloody tears would have stained his face. Joel did the only thing he could do. He ran.

The gravel of the driveway exploded from under his hooves in small, angry fountains, and the greenery of the hedge melted into a green smudge. He careened around the turn, just in time to see the young man's car exhale a pungent cloud of exhaust and disappear behind the gate.

Joel's heart pumped harder than ever as he kept running. The metal bars of the gate came into motion, sliding, silent, smell of grease and black metal radiating from them. Through the opening, Joel could see a grey snake of the road, he could hear honking of the cars, he could smell an unfamiliar world that he had previously seen through the gate but never entered.

Until now. Joel's face thrust into the street, into the warm shimmering air filled with asphalt fumes, just as the gate slid into his flank. He could feel the pain of bruised flesh, followed with a jolt the likes of which he had never felt. Every muscle twitched with the searing shock that radiated from the metal grid of the gate. Then, it ceased. Joel planted his front hooves in the pallid grass that separated the gates from the sidewalk, and pulled. The pain renewed – another jolt, then another pause. Joel thought that he could smell burnt hair, but it seemed too inconsequential in the face of the necessity to free himself. He pulled and strained, until the next shock set his flank afire, radiating across his back and down every nerve. Joel looked outside, at the traffic that flowed by, oblivious to a pig stuck in the gates. The next shock exploded in his eyes, in a shower of white stars, and Joel saw no more.

* * * *

Joel woke up in hell. Before he even opened his eyes, he realized that he was paralyzed. He sent his muscles a signal to move, to close his mouth, but they would not obey. His throat and tongue felt dry as felt, and he could not swallow. His ears hurt.

Joel opened his eyes. The white light sliced across his retinas like a knife,

and he squeezed his eyelids shut. Cautiously peering into the whiteness through his sparse eyelashes, Joel discerned the shapes of people around him. They were dressed in white, and blended with the white walls, the instruments in their hands the same color as the chrome fixtures. The chrome fixtures that held his mouth open, thrust into his throat far enough to scratch it and make him want to gag. Steel shafts penetrated his ears, holding his head immobile.

This is it, Joel thought. They've found someone who wants my brain – wants me. He swiveled his eyes around, half-expecting to see the perpetrator. He imagined him reaching greedily for Joel, an unholy gleam in his eyes.

Cassie's Dad came into Joel's field of vision, moving his face closer. "You gave us quite a scare, Joel," he said. "What were you doing, getting stuck in the gate? Did you want to get out?"

Joel would've nodded if the mechanical gear did not prevent him.

"Silly boy," the old man cawed. "You got quite an electric shock, you did. Now, you just relax, and we'll make sure that you did not damage anything."

Despite his discomfort, Joel breathed easier. It wasn't the time, then. If he was lucky, the time would never come. With all his heart he hoped that the old man would find something wrong. Some imperfection that would let Joel live.

The old man gave a signal, and his helpers, white-gowned people with their faces hidden behind white cloths, wheeled Joel's table into a large, humming tunnel. Joel closed his eyes, and in his mind repeated the words he heard Cassie whisper before going to sleep. "Please Lord, have mercy on us all." He thought a bit, and added, "Especially Joel."

Lord did not listen – perhaps, because Joel was a pig, and not a young girl with curly hair and eyes like blackberries. After an eternity of loud humming and beams of light that shot at him from different angles, Cassie's Dad wheeled Joel out of the tunnel, and patted his snout. "Good as new. Good boy."

Joel wept silently as the masked people unstrapped him and freed his mouth from the ravages of steel. He was too wrapped up in his misery to look around as Cassie's Dad nudged him outside of the low stone building into the yard covered in asphalt. The old man opened the door of his car, and Joel climbed onto a back seat. He looked out of the window, but nothing shook him out of the stupor – neither the flowering cherry trees, nor people milling about, nor the low wooden pens. He watched a row of pigs' faces pressed against the bars. He guessed that they housed human livers, hearts and kidneys. But not minds, Joel thought bitterly. That cross was his to bear.

Since that day, Joel thought of ways to escape. He circled the perimeter of

2.29 A whole grilled pig (Spanferkel). Image posted to flickr by Till Krech on September 5, 2006 and reprinted under the terms of a Creative Commons Attribution 2.0 Generic License.

the yard surrounded by thin wires. But the wires gave him the same jolt as the gates. He tried to root under the fence, and made good progress, but was discovered. The old man moved Joel's bed into the shed, where he could be locked. His only solace was Cassie, who visited him occasionally. The old man tagged along on such visits, short and awkward as they were.

"What's got into him?" the old man said, looking at Joel with consternation. He stood in the doorway, the afternoon sun creating a halo around his misshapen, hunched silhouette.

Cassie crouched down and patted Joel's head. "Perhaps he knows." She looked up at her father, her eyes rounded with emphasis.

"Nonsense," the old man said.

Joel's heart leapt with hope. He grunted and rubbed against Cassie's knees, almost knocking her over.

"Dad," she said.

The old man sighed. "There's nothing I can do," he said. "It's not just my project. Perhaps it was a bad idea to keep him as a pet – I should've known that you'd get attached."

Cassie stood. "What do you mean? Did you find someone?"

The old man nodded. "Ever since it's been in the papers, we've been flooded with mail and phone calls. The Congress got involved, and the FDA is pushing for clinical trials. I think we found a recipient."

"Who?"

"A young man," Cassie's Dad said. "He was in a car accident some years back, suffered a loss of a large portion of the right hemisphere. Think of it, Cassie – Joel will help someone to live a normal life. Think how you would feel if you were half a person."

Cassie heaved a sigh, and thrust her hands deep into her jeans pockets. "I guess. I would hate to lose Joel though."

The old man smiled. "You don't have to lose him, dear. He'll retain most of his brain – more than enough for a pet."

Joel could not sleep all night. Cassie was an ally. If only he could send her a sign, let her know somehow that he was just like her, that he could think and understand everything… A sudden thought struck him. He almost laughed in disbelief – it was so simple. Why didn't he think of it before? He picked up a twig with his mouth, and started drawing letters in the dust. Letters that he remembered since Cassie and he were both carefree and young, when she learned the symbols on the bright painted cubes. Joel was there, and he had learned too.

It was a hard going – the letters came out shaky and clumsy, and he had to start over a few times. He wanted them to be perfect, so that no one would doubt his abilities. He labored all night, often stopping to shake the salty drops of sweat from his eyes. By the morning, the inscription was ready. Large, blocky letters stood out clearly against the grey dirt. "Cassie," he wrote, "I love you." She would come in the morning and see that he had both a heart and a mind.

When the morning came, Joel circled around the cramped pen – a far cry from the luxury of the old house, where he could roam free and see Cassie whenever he wanted to. He even moved all the straw into the corner, so that nothing obscured his letter.

He heard footsteps outside, and his heart almost stopped, and then raced, once he realized that there were several people there. All of them came in, wearing green coats, loud and laughing. Their heavy shoes trampled his message back into dust, and their hands grabbed Joel. He fought back, crying out for help, until a needle jabbed his flank.

* * * *

The afternoon sun flooded the porch, and Joel closed his eyes. It was a nice day, although his aching skull told him that it might rain later. Cassie shifted in her chair, and tickled Joel's chin with her bare toes. He grunted and stretched his neck. He almost dozed off when he heard crunching of the gravel of the driveway. Someone was coming.

He opened his eyes. Cassie looked too, shielding her eyes from the glare, and put down her book. Joel glanced at the squiggly lines, and then at Cassie. For the life of him, he could not understand why she spent all day staring at the black worms that crawled on the white pages.

"Excuse me." The visitor walked halfway up the steps that led to the porch and stopped, as if uncertain. "I was told that this is Dr. Kernicke's house."

Cassie nodded. "He's at the Institute. It's down the road, by the farm."

"I know," the visitor said. "I just wanted to talk in a more informal manner." His eyes met Joel's, and he whistled. "Say, is that the pig that…" He swallowed a few times but did not continue.
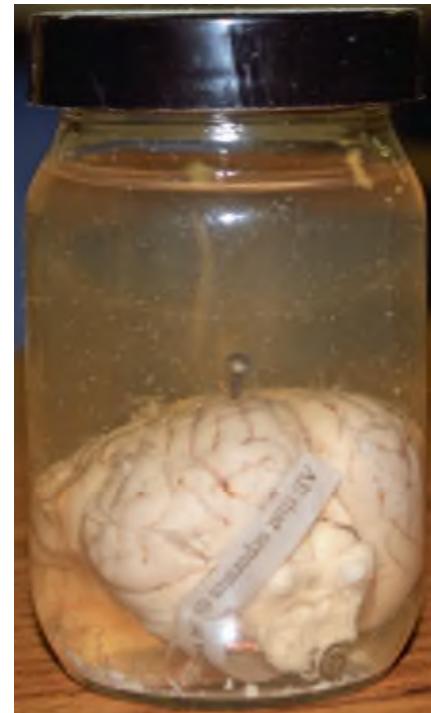
Cassie looked puzzled for a moment, but then smiled. "Oh yes, this is Joel, the wonder-pig."

Joel lifted his head at the mentioning of his name. The rest of the words escaped him somehow, no matter how hard he listened.

"Joel," the visitor repeated. "I'm Phil Marshall."

"Oh yes." Cassie looked at the visitor with awe. "You're the recipient."

The word evoked a vague displeasure in Joel, but the day was too nice to

2.31 Pig brain in a jar. Image posted to Wikimedia Commons by David Shankbone on March 2008. Reproduced under the terms of a GNU Free Documentation License, Version 1.2.

2.32 Pig! The Pig Stand is said to have been the nation's first drive-in restaurant. Although the chain recently went under, the South Presa branch (where this photograph was taken) was recently reopened as Frank's Hog Stand. Targeting motorcycle riders, the restaurant bills itself as the nation's "first ride-in restaurant." Photograph posted to flickr by Broken Piggy Bank on May 10, 2005 and republished under the terms of a Creative Commons Attribution Noncommercial No Derivative Works 2.0 Generic license.

get agitated over anything. He grunted and rolled to his side, trying to capture as many rays as he could before the sunset.

"And you're Cassie," Phil said.

"How did you know?"

Phil frowned, shook his head, and shrugged. "I don't know. Probably heard it somewhere."

"Probably," Cassie agreed. "Father will be home soon. You want to see the garden meanwhile?"

Joel watched the two people walk down the steps and stroll across the green lawn. He tried to focus his thoughts, but they just stumbled about, unruly, chasing each other's tails. There was something about that man, something about the way he looked at Joel that seemed familiar. The words 'blank slate' floated into his mind and dissipated, leaving no impression or understanding. Joel yawned. All the thinking made him tired, and he closed his eyes, savoring the warmth and the sun. No need to worry about things one could not change. And truly, Joel had no reason to complain. He was treated well, and he had anything a pig could desire. And it was getting even better – every day, he found that he had fewer things to worry about, that the concerns of yesterday made no sense today, and often left no memory. He had forgotten the smell of blood, and the searing pain, and the sickening sound of the tissue tearing like fabric. Soon, he would be truly happy.

Ekaterina Sedia's short story "The Mind of a Pig" was originally published by Apex Book Company Online in March 2009. To learn more about the author, visit www.ekaterinasedia.com.

where is my mind?

where is my mind?

SHEP MCALLISTER
"Hey, have you seen my mind?"

2.33 The brain as an evolving, time-travelling structure. Excerpt from Timothy Leary's *Neurocomics* (Last Gasp Press, 1979).

The answer to the question "where is my mind," is becoming increasingly difficult to answer. I would like to say that it is still "in my head," though today's society mandates that your mind be everywhere at once. We are not yet at the point described in "The Girl was Plugged In," but we are certainly moving in that direction. While this can all seem very scary at first, I don't think it is all bad. At this point in history, if someone asks me "where is your mind," I can say with some degree of certainty that it is anywhere I want it to be.

Our history books are filled with examples of men and women who externalized their minds in some meaningful, lasting way. Egyptian engineers built the pyramids. Greek philosophers wrote volumes that still affect our society today. Great generals developed strategies that changed the landscape of the world. These people could have completed their great projects from the comfort of a chair, thinking about their craft and passing on orders to others. In this way, their mind was (and still is) embodied in their masterpieces.

Until recently, most people did not have this luxury. Most members of our species have made our livings with our bodies. Lately though, it appears that this is changing. Most of us don't really use our bodies anymore, and survival is pretty much a foregone conclusion in this part of the world. We buy food in supermarkets, we take medicine when we are sick, and we use planes, boats, and cars to travel extreme distances. Daily life is no longer a struggle (again, in this part of the world).

These days, most of us use our minds for nearly everything. We wake up and check our e-mail, and send out our thoughts to others. We go to class or work, often by car, and rest our bodies in a chair while using our minds to fulfill our assigned tasks. In this networked society, we leave our mark in so many different places and in so many different ways these days that we almost take it for granted. It is a unique and exciting time, because we all have the opportunity to use our minds to make a tangible difference in the world, a privilege which we have never lived without, but has been reserved for the lucky few for the entirety of our existence.

Things are great now, but we have only lived in this society of opportunity for a very short period of time, and have no guarantee that it will last forever. It may not even last for my lifetime! If tomorrow you took away computers and the Internet and the means of mass production, what would happen? If our modern society crumbled and we found ourselves in the world that existed 100 years ago, how would we cope. Most of us don't have any idea how to farm, build things, or produce clothing. These things are taken care of for most of us. We have never lived in a world that required us to use our bodies to *survive*, and if you asked us to suddenly figure it out, it would be a disaster. Living through your mind is preferable to surviving with your body, but as a society we must not forget how to take care of ourselves.
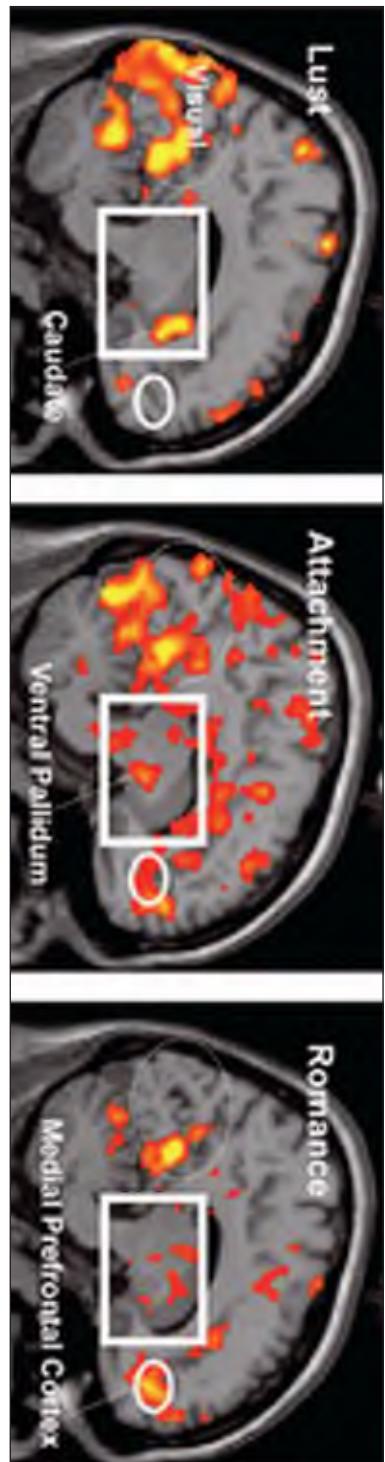
ASHLEY FUNKHOUSER
"Physical and spiritual selves"

I would like to talk about the geographic location of the mind. Where my mind currently is—in terms of what I am thinking about—is how much work I have to do, the fact that I need to declare my major, and oh yeah, when the heck am I going to do laundry anyway? But I don't think very many people care about that.

Sometimes I feel like there are two of me. I don't mean that in the sense that there are actually two physical beings that I inhabit, or that I have multiple personalities. What I mean to say is that there is my physical self and my spiritual self. I feel like my brain controls my body, and that my mind controls my spirit, or soul if you will. However, I feel like they inhabit the same geographic location.

Maybe that sounds really stupid. I really do believe in people having souls, because from the genetic and biological evidence that I've read, I just don't feel like the science we have in front of us can completely account for our personalities. For example, many times, there is no biological advantage to having a particular personality trait, like a specific sense of humor, but it is just as much as part of who I am as my genetic code.

To be more specific about the geographic location, I do believe that my brain is the home to my mind, but since my mind does not really come from any specific region of my brain—it seems like it's a voice that fills my head—they seem to be separate entities. It is for this reason that I thought Tiptree made sense when she was talking about the person's brain being in love with Paul, but through Delphi's body. However, I think it is the mind specifically, and not the brain that falls in love.

2.34 Love on the mind. Or brain. Dr. Helen Fisher—an anthropologist at Rutgers University—uses functional magnetic resonance imaging (fMRI) techniques to correlate observable brain activity with human emotion. Brain scans such as this one depict activity in brain regions she associates with lust, romantic attraction, and attachment. See: http://www.helenfisher.com

KENDRA DOSHIER
"Where Yo Mind Iz?!"

2.35 Smarter than a computer? This comic strip from *Abstruse Goose* is reprinted under the terms of a Creative Commons Attribution-Noncommercial 3.0 United States License.

On any normal occasion, I would say that my mind is located somewhere in the squishy part of my brain. Now that my spectrum of conceptual thinking has been fathomed tenfold, and after reading the pieces by Newitz and Tiptree, my mind could literally be anywhere. In an electrical hub attached to millions of wires. In a vat of goo. In South Africa. In my basement. Anywhere.

In Tiptree's short story, the 'girl' in essence gets to escape her ugly physical reality and jump into a new body via technological advancements. Her new life is just great. Her new path is dandy. But this makes you think - where is her brain working? Which being is it operating? Because if a mind originally belongs to one being, how can it transfer to another? How do we know this mind is still ours? The answer is unknown, because we probably really don't know and never could.

The human mind is one of the most extravagant phenomena our world will ever know. How could it ever be explainable if each is individually unique and one of a kind? How could we begin to define and pick apart something that is so vast and beyond what technology can aid? The scary part about today's society is that we have found ways to 'rewire' our brains via chemicals, medicines, hormones, therapies, you name it. By altering the chemical makeup of our brains, we are changing our minds at the same time. Mood stabilizers, concentration aids, and even sedatives could play a large part in our cerebral evolution as a species.

Could we train our brains to be perfect? Even scarier is that there are large parts of the brain that are still unexplained; doctors and psychologists don't know what these parts of the brain are for. Perhaps technology advancements could soon lead the way in revealing these physical phenomena. Or maybe we'll be forever ignorant! That sounds like bliss.

So we come back to the question: Where is my mind? I would like to think it's located in my gooey brain. But let's put it into perspective. If our minds are so powerful enough to create hallucinations and imagine scenarios and scenes very life-like and close to reality without being tangible - imagine all the possibilities! Our minds could be another world that we have yet to truly tap into.

As for my mind... it's a squishy little world I carry around with me everywhere I go. Deal with it.

PATRICK CRIM
"Is your mind in the gutter?"

The common phrase "Get your mind out of the gutter!" is used daily when people say something inappropriate or somewhat crude. It is interesting to say someone's mind is not in their head, as it can't really leave.

Or can it? We must remember it is our *brain* which is inside our head. The argument is that a person's brain is separate from his or her mind, just as a body is separate from a soul. Then it also goes to the whole "thinking outside of the box" principle as well. Can our minds be somewhere other than right here, right now, inside my head? Personally, I believe the answer is yes.
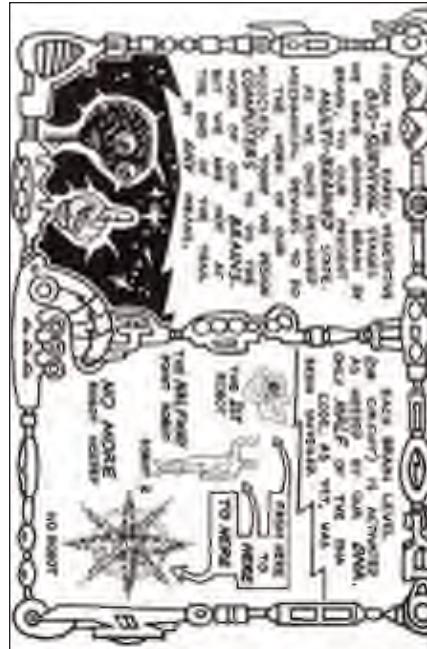
Our minds are the greatest creations of all time. With them we form the most entertaining movies, innovative designs, and beautiful images. They also, unfortunately, create terrorist plots, bombs, and racist mentalities.

Our minds travel to wherever we want to take them. When we dream both day and night we are not in the moment. If you say you have never been caught spacing out then you are lying. In those moments you have absolutely no idea what is going on in the present because you are drifting. I have found myself reading a book and get to the end of a paragraph and snap to and realize I have absolutely no idea what I just read because I was thinking about something else. Either I have ridiculous ADD which needs to be addressed or my mind just likes to wander.

The way we use our minds, however, is directly influenced by media and other technology. Medicines such as Adderall were invented to keep our minds focused on what we need to do rather than on things we want to do. The media also give us things to constantly think about. Video games, women, and sports all are distractions which some of us think about throughout the day. The beauty of our minds is that we can think the way we do. It is up to us to decide where our minds are.

My mind drifts a lot. I like that it does this because it never lets me get bored. Having a great imagination allows you to view things in many different ways. Sooner or later, there will be technology which controls *what* we are allowed to think about and *when* we can think it. When those days come it will suck.

Our minds can take us anywhere we want on earth, and no restrictions should be placed on where we go. When we control our minds inside our own brains inside our own heads, we are truly in power.

2.36 We are not the end of the trail by any means. Excerpt from Timothy Leary's *Neurocomics* (Last Gasp Press, 1979).

2.37 I hope I never snap out of this. This comic strip from *Abstruse Goose* is reprinted under the terms of a Creative Commons Attribution-Noncommercial 3.0 United States License.

ROBIN MURDOCH
"Brain in a vat"

This question has been weighing on me ever since reading the "Brain in a Vat" scenario in philosophy during the second semester of my freshman year. The idea that every perceived moment of my life could be the creation of a variety of electrical impulses shooting through a disembodied brain is disconcerting to say the least.

Once one realizes that there is really no way to know whether or not your thoughts are really your own or the production of someone else, the idea of living life takes on a new meaning. What is there to live for if there's the possibility that every single moment we experience is completely fabricated by outside sources?

Newitz takes this idea one step further with her discussion of a movie where a disembodied mind takes over that of a living human. What does this mean for the mind? If our minds can be hacked in such a thorough manner, who's to say that anything we do is of our own creation?

The ability to do mental labor then becomes a commodity. Being able to control one's mind is a power, and those who have it are successful. But this does not diminish the threat that our minds are hackable. The disembodied head of a bitter deceased wife can call upon the wrath of an unkempt creation to destroy their common creator.

This concept is frightening. If the mind truly can transcend the boundaries of our bodies and influence the actions of others, there is no telling what will happen. The population as a whole consists of too many mean spirited and truly bad components for mind control (or takeover as the case may be) would prove to be devastating. Yet, these fears have not been realized. So far as we know, our minds have not been able to reach out and influence the minds of others, but technology may bring about a vehicle for which it may do so.

Upon reading Tiptree's short story, the movie *Avatar* comes to mind. It seems like the technologies in this situation are of a similar type. A body is created, and through somehow plugging one's consciousness into said body, one can control is as if it were their own. And in both situations the driving factor for the whole operation is a simple matter of greed. Tiptree's Remote serves as a walking advertisement for GTX. Delphi stays plugged into the life of a "God" in a society where covert advertisements are a lifestyle for the rich, famous, and remote controlled.

Create the perfect product model, and find the perfect brain to control it in a way that will create the most profit. Though Delphi is the merely the receptacle for neural output, she serves as the body for the entire population. Once the goddess Delphi is seen doing something, or using a new product, the consumer world follows suit.

P. Burke's plug in goes past the shell of Delphi, and directly into the lives of the consumer population. In *Avatar*, the remote is used to aide
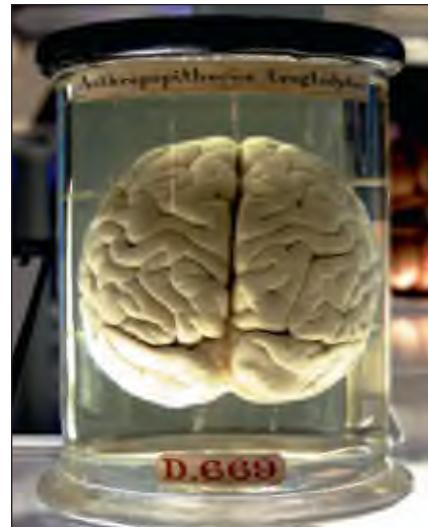
in obtaining an invaluable mineral. An entire planet is on schedule to be thrown away for the love of money.

So when I read the question "Where is your mind?" I can't give a definitive answer. For all I know, my mind may be the result of a computer program running through a brain sitting lonesome in a vat of brain juice. But I know where humanity's collective mind is headed, and it's being lead by the outreaching influence of the minds at work in advertising.

Though they may not be directly altering our brains or transferring our minds into the body of another, they influence our though processes, choices, and actions nonetheless. This being the case, it's scary to think about what might happen when *Avatar* style technology comes out. The worry is present- there are even movies coming out and addressing the situation.

Where is my mind? Heading towards insanity because I've been thinking about these concepts far too much.

2.38 Chimpanzee brain at the science museum in London. Photograph taken by Gaetan Lee and tilt corrected by Kaldari. Image licensed under Creative Commons Attribution 2.0 Generic License.

2.39 The girl who was plugged in. Writing under the pen name James Tiptree, Jr., psychologist Alice Sheldon won a Hugo Award for her short story about a world in which consciousness is transported between bodies with the help of a computer. Annalee Newitz recommended the inclusion of this article on the reading list for the Lennox seminar.

RAELLE SMILEY
"Where is my mind? Anywhere you want!"

Where is my mind? The Pixies suggest that if your head were to collapse you would be left asking yourself this very question. However, how can we be sure that your mind is actually located in your head?

Through readings such as James Tiptree's, "The Girl Who Was Plugged In," we are provided the possibility that a mind could span across space and locate one person while feeling and thinking for another.

This "girl," that Tiptree tells us about, has been provided with the opportunity to escape the body that her mind once occupied. By attaching metal and wires to her brain they are able to transmit her thoughts and feelings into a new body. This futuristic idea gets us thinking about the possibilities of the future and the question of where our mind is located; is it in just one spot?

I began to think about this. When I think, it feels like it is coming from my head, but is that because I am told that is where my thoughts fester?

Maybe I am thinking with my heart or my stomach, two organs central to human survival. Or maybe my thoughts do not come from any one place, but rather, they are a compilation of all of my organs and body parts working together to develop my thoughts.

If this is the case, I wonder if it would ever be possible to transmit the mind of someone into another vessel. By attaching transmitters and futuristic technologies to a human being it may be possible to send through space or wires that persons thoughts and make them sink with the functions of another being. Then our mind would no longer be in a specific place, rather, it could be everywhere or anywhere we wanted it.

ALY MILLER

"Where is my mind? Well, it's right here... I think."

I know where my brain is.

It is floating around in my head somewhere (which, by the way... ew). I know that generally when we think of the mind we think of the brain as well. But are they the same thing? Nope.

Just as the organ that is the heart and the idea of the soul are distinctly different, so are the brain and the mind. When I think of the brain and the mind, this is how I imagine the difference. I imagine the brain controlling the typing motions of your hands, making you be able to put one foot in front of the other, being responsible for arranging the muscles in your face to make you have a smile.

The mind, in my opinion (I almost said "in my mind"...ironic, huh?), is responsible for the conscious decisions you make to type something, to walk, to smile. I imagine the brain telling your mouth to smile and the mind being what processes the fact that you *should* smile. Of course, this is just how I think of things and is in no way, shape, or form scientific at all.
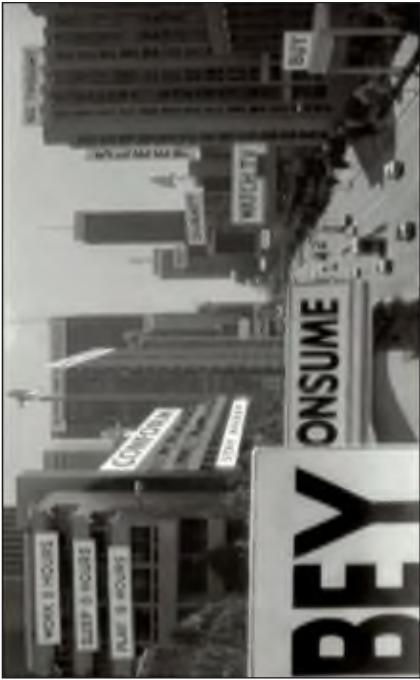
The question is "where is my mind?" Well, it is wherever I am. If I am watching a sad movie, then my mind is processing the sadness of the movie and telling me/my brain to react accordingly. In terms of actual geography I have no clue where it is, but for convention's sake I'm going to say somewhere in the vicinity of my brain.

What Newitz and Tiptree are talking about—mind control and such—seems like such a strange, foreign concept. Technologically we are not far away from being able to do the things they describe. However, will we ever actually go for that? I mean, I'm sure some people will jump onto the mind-control bandwagon for curiosity or whatever's sake. But humanity as a whole?

At least at first, people will be very resistant. People tend to like being in control. At least I know that I do, and the idea of someone else dictating my actions or thoughts or movements or, well, *anything* kind of terrifies me.

I do not know if my conceptions of where my mind is are correct. But I do know that, wherever my mind is, I like being in control of it and being the only one who knows what's going on in it. And I'd like to keep it that way.

2.40 Transconsciousness messaging protocol. *xkcd: A webcomic of romance, sarcasm, math, and language*. xkcd is licensed under a Creative Commons Attribution-Noncommercial 2.5 License.

CHRIS KRADLE
"Where, oh where, has my brain gone?"

My mind is where I want it to be, but others may control it in the near future. The mind can be changed by many things: the environment, others, and social interactions. What if I told you that the environment you live in was constructed for people like us just to buy things? That's what James Tiptree's short story "The Girl Who Was Plugged In" suggests. I know this is much for one to wrap their mind around, but let me explain my points.

Media are the most obvious controllers of the mind. Remember all those advertisements that you laugh at? Research shows that those are the ones you remember the best and thus cause you to buy the product. What about shows like the *OC*, in which drama seems to lurk at every turn? Sure enough, you may start acting like the characters and buying products to seem more like them.

The corporations portrayed in the short story "The Girl Who Was Plugged In" seems completely unrelatable to present day corporations, but it's not a stretch to imagine the scenario unfolding. All those celebrities you love can cause you to do things like buy products, watch their media, and relate yourself even further with the celebrity puts money in the corporations pocket.

These people are obviously controlling your mind now, so why is it so far-fetched that the corporations right now are controlling you? When you went out last time to buy a gallon of milk you probably bought the same one that you have been buying all your life, but when you looked at the other brands of milk you may have remembered a slogan, or a commercial from that other brand. While you didn't buy that brand of milk now, later on when you switch brands of milk, you might remember the slogan or advertisement and buy the milk.

Yes, I think honestly that the brain is easily corrupted, but we still have some control over it. Even though we think that all our decisions are ours to make, we may not have as much power over our thoughts that we believe. At the moment, the answer to the question "where is my mind" is "where I want it to be."

In the future, the answer may be "wherever I am told."

2.41 Conform. Stay Asleep. Submit. Marry and Reproduce. No Thought. Film still from *They Live* (John Carpenter, 1988).

SARAH HELLMAN
"Just an organ with signals."

Many people believe that the mind may not necessarily be in the brain. Many religious people believe that their soul controls much of what they do. Or their God controls their actions, meaning that their mind is not completely their own but run by something else. Others believe in reincarnation so their mind or soul can be transplanted to have a fresh start while trying to become closer to perfection. I believe that the mind and the brain are the same thing.

I think that the brain and the mind is just an organ with signals that stores information and makes decisions about ourselves and controls our body. Bionic arms can be controlled by the brain, but there has to be the correct signal. A brain or mind can control something that is not hooked up to it.

A technology such as that described in "The Girl Who Was Plugged In" is plausible, but the technology in the movie *Avatar* is not. In *Avatar,* Jake's mind is transported into another body. But a mind cannot be transported without the brain.
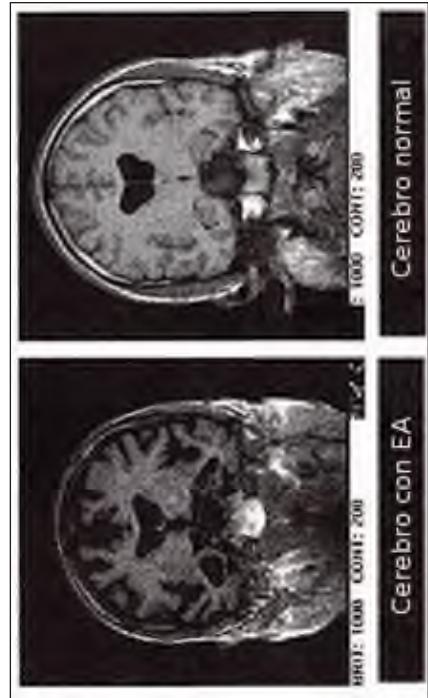
Tiptree's story works because their is not much feedback from the body. But, during the sex scene in *Avatar*, Jake has genital feelings without a machine telling his brain that he should feel it.

I also believe that when the brain dies, the mind dies with it. The brain deteriorates with age. So how can people live that much longer if their brains start to malfunction with memory loss and slower processing?

I also don't believe that a machine can have a mind. So transferring the knowledge of a brain to a computer doesn't make the computer equal to the mind. So in conclusion, a mind is a terrible thing to waste, and trying to turn a mind into a machine would mean the loss of the mind and the brain.

2.42 What the mind can see, it can create. Excerpt from Timothy Leary's *Neurocomics* (Last Gasp Press, 1979).

2.43 Alzheimer's disease. "Two transaxial slices through the head. the right image shows a normal brain; the left has differences that are interpreted as indication of Alzheimer's disease." This image is licensed under the Creative Commons Attribution-Share Alike 2.0 France license. July 5, 2006.

ANDREW COE
"I've lost my mind. Can you help me find it?"

I haven't lost my mind. I assure you, I am completely sane.

The question posed was "Where is my mind?" Because of my interest in psychology, I argue that it is in your brain. This seems fairly straight forward but others argue that your "mind" is in your heart or well... other places.

Without getting too philosophical, how do you define mind? I define it as that part of a person that makes them human; it's what allows us to learn everything from mathematics to new social cues, and it is also what processes and regulates emotions and stores memories. There is obviously more to our mind than that, but those are the criterion I intend to focus on.

On the subject of memory storage, the brain is where your memories are stored. No doubt about it. We know that memories are stored in the brain; we just aren't sure how this happens. "How do you know?" you might ask. Have you ever heard of a person receiving a heart transplant and suddenly possessing new memories? Or a new kidney? Or did they lose their arm and subsequently the memory of their wedding?

No. No you haven't heard of such things. **But** have you heard of someone getting Alzheimer's—a neurological disorder affecting the brain—and forgetting words and events and people's names? If you said "no" then you, sir/madam, are a liar. Memories are only affected when parts of the brain are affected. This is inherently tied to the learning aspect of the brain as well.

As for emotions? This one is pretty easy. Emotions are regulated by the brain. The brain processes neurotransmitters and interprets different levels of serotonin, melatonin, dopamine, endorphins, and adrenaline as emotions. This has been documented. Happiness, sadness, depression, anger, and all the emotions you feel are interpreted by the brain. The transmitter might be produced elsewhere, as is the case of adrenaline, but nothing happens until they get to the brain. The brain is emotional center of humans.

My mind is in my brain. If you were to switch my brain with another person, I would still be me, just in their body.

AARON PASSER
"The doors of perception"

Well, not exactly; mescaline seems a bit extreme. Throughout history the advancement of modern medicine has slowly but surely unlocked the keys to our brain, allowing our minds to go places never before imaginable.

The study of pharmacology has allowed us to understand how drugs and supplements affect the different parts of our body, especially the brain. Today there seems to be an endless amount of ways that one can alter their mind or state of consciousness. Even widely used drugs like caffeine allow us to enter into an altered state of mind, no matter how small that shift may be.

Moving up the ladder, we have drugs like Focalin, Adderall, and Ritalin. These psychoactive drugs make us focus and concentrate at the task at hand; really, they are pretty much like cocaine, as they all have similar chemical makeups.

Now lets get to the good stuff.

As Timothy Leary once said, "you're only as young as the last time you changed your mind." As we found out in class last week, he was a huge advocate of the psychoactive drug LSD and its ability to allow us to "tune in, turn on and drop out." Modern medicine has debunked the thought that LSD and other psychedelic drugs take us somewhere and reveal great truths to us. Rather, they simply make neurons in our brain fire in irregular ways. This might be true, but ultimately it is up to the individual experiencing the drug to interpret it however they choose, whether it is an experience of spiritual or religious enlightenment or something lesser.

These experiences can drastically change the individual, but it is more likely that the user will be opened to new ways of thinking about everything. The mind can be pushed in many directions.

I am in no way advocating the use of these drugs. The mind is a fragile thing and we only get one. These technologies are best in moderation. It takes time and research to prepare the mind for such possible shifts in consciousness and these tools are not for everyone.

The mind is truly the most amazing thing about our biology.

We have only scratched the surface of the places where it can take us.

2.44 Psychedelic blotter art. Scientific and medical experimentation with LSD began in the late 1940s when a Swiss chemist stumbled across an ergot alkaloid that produced a psychedelic state of consciousness. With substantial funding from the Federal Government, researchers conducted experiments on LSD from the 1950s through the 1ate 1970s. Eventually, the stigma of the youth counter-culture led to an almost complete ban on LSD research and the last FDA-approved study was terminated in 1980. In recent years, medical research has resumed around the world, with much attention focused on the use of psychedelics to treat anxieties associated with terminal illness. It's important to note that reckless use of psychedelics can be extremely dangerous. As Passer wisely points out in his blog posting, "the mind is a fragile thing and we only get one." For honest and cautious discussion of these topics from a scientific standpoint, readers are encouraged to consult the web site of the Multidisciplinary Association for Psychedelic Studies.

projects

ANDREW COE
"Singularity survival"

My project is a blog on how to survive after the Singularity, hence the name "Singularity Survival."

In my blog I talk about the different types of technology and their future implications and uses. The blog started off as me just highlighting various technologies and then turned into what it is now, as I realized that was not going to be enough. Many of the ideas from my blog have come from pop-culture as well as concepts and themes discussed in the class. The blog is designed to educate and provoke thought in the reader but at the same time be entertaining to read. The posts are shorter than news stories, but I feel that helps in today's Internet world, where readers are moving from one site to the other and often have five or six separate sites open at once.

I start the blog by giving instances of current technology and then taking the underlying concept behind them and re-imagining that device in the future. The ideas are not so far off and are absolutely, in my mind, realistically possible. For instance, the idea that your house could be individually powered by these "Bloom Boxes" or that everyone could be using the "glove-mouse" in their homes one day, are both definite possibilities.

I then move into the next part of the blog: things that I would like to see in the future. In this section I talk mainly about sports and flying cars. The flying cars post is more of a rant than it is an informative post. The sports post is designed to have the reader think about what he/she would like to see in the future, although I do give an example of something I would kind of like to see.

In the final section of posts, at the time of this summary, I give cautions about the future. In particular I talk about the idea of robots taking over the world. While I may not specifically address the issue of artificial intelligence(AI), the point is there nonetheless. This section is meant to provoke thoughts in the reader such as: are robots replacing humans really a good thing? What are the implications of programming them to do things such as cut and slice and how could it potentially affect humans in the future if AI comes into existence.

Charging Mats will Be Everywhere
Posted in Energy, Technology on March 25, 2010 by andrewtcoe

Today's post is on those charging mat things that have come out in the past year. You know what I'm talking about.

You've seen the ads for them everywhere and any time you walk into BestBuy they're right there at the front. You know the basic concept of how they work too. You put this extra shell on your device of choice and it has this extra pad on the back which receives wireless energy from the mat and transmits it to your device to power/charge it. Well imagine this technology taken to the next level. You come in from a long day at work you sit down at your desk at home and your Internet surfing device is dead. Currently you would have to go get the charger, find an outlet, plug in the charger then plug in your device. With the Powermat technology in

combination with the Bloom Box from the last post you merely walk over to your desk, which is made of the Powermat technology, and set your device on the desk…instant power! And there are no cords attached to the desk because your house is powered wirelessly by the Bloom Box. Now why can't your device just charge wirelessly because of the Bloom Box? Why won't my DVDs from the US play in Europe? Because companies make things unnecessarily complicated and I do not see that changing in the future. So that is my post on the Powermat! Don't be caught without your Powerdesk in the future!

Sports in the Future
Posted in Uncategorized on April 13, 2010 by andrewtcoe

Alright so this is something that is near and dear to my heart: Sports. How will sports work in the future? How will athletes be? What new drugs will they use to enhance performance? Will they be illegal? I don't know. Will there be new sports? I think so. I think there will always be new sports coming into the market. I don't think they will be original though, I could see some sort of futuristic football or soccer or any combination of other sports. I would love to hear what ideas other people have.

Medical Science post-Singularity
Posted in Uncategorized on April 20, 2010 by andrewtcoe

Medicine has come a long way in the past 100 years: Anasthesia, Penicillin, Aspirin, etc… and—after the Singularity—it will continue to advance as it has. In fact there are already some incredible devices available today.

Imagine being able to do get all your medical data to any doctor that sees you. No more messing with files and getting them faxed over. You can keep digital copies for yourself and on you at all times. Instead of working in hospitals with huge equipment, everything is getting smaller and doctors can now take their gear with them, which means remote areas of the world are now able to get medical care. With these technologies we can help curtail the infant mortality rate in countries like Burkina Faso and Ghana and Angola. The opportunities are endless!

Also a future with less disease is a distinct possibility. Can you imagine if there was an AIDS vaccine or even an anti-viral? Or if someone developed a way to detect cancerous genome sequences and alter them? Or being able to have fully functioning prosthetic limbs like that from the previous post? I am very excited about the future of medical science and it is one of those areas you should definitely keep your eye on!

A Public Service Announcement – Brought to you by SkyNet
Posted in Robots on May 11, 2010 by andrewtcoe

Ladies and gentlemen, I am here to talk to you today about a very serious issue: robots with weapons. You may not know it but robots are a very serious threat to humanity. Recently, the Chinese government has built

robots to help with jobs in hazardous environments where it is difficult for humans to go. The problem with this is one of those "scientists" gave one of the robots a sword!

This is not a rumor based on a photoshopped image. This is real. It is a very real threat that the population of the world needs to be aware of. While they might look cute, they will inevitably turn into Terminator assassins.

For now, just be wary. Hopefully someone will come up with a way to combat these things when they eventually decide to take over the world.

This has been a public service announcement.

UPDATE on Robots – They like to stab things

Posted in Robots on May 11, 2010 by andrewtcoe

Apparently German scientists wanted to see what would happen if they gave a robot a knife. Well, they stab things. Not even joking. They gave a robot a knife and stuck a whole bunch of stuff that is similar to human tissue around it just to see what the hell would happen.

What the hell did you think was gonna happen? It was gonna magically grow a conscience and be like "I can't cut this, this is similar to human tissue."? NO! If it was thinking anything, it was thinking "KILL KILL KILL!". I tried to warn people but noooo, now we're giving them weapons and letting them know that they are, indeed physically superior to us.

ANDREW TRUELOVE
"Hacking humanity"

For my project, I decided to make a movie. I mean, I would like to go into film production as a career path, so I figured now was as perfect an oppurtunity as any to see what I could do here. Now as far as format and subject matter went, I decided a documentary approach may be the best way to go, seeing as I wouldn't have to worry about a script, actors, narrative and any other things that could bog down the message. In the end, I decided to interview students I know from around Trinity, asking them some basic questions about the transhumanist movement to see what their gut reactions were. I wanted people outside our class, to see how someone who hasn't really been exposed to these kinds of ideas would respond to them. So I ended up with eight legitimate interviewees: Ryan Darley, Indy Jones, Erika Friedmeyer, Derek Leader, Alexa Harrison, Laura Izzo, JJ Lubinski, and Hilary Elaine Moore and asked them a few questions regarding transhumanism.
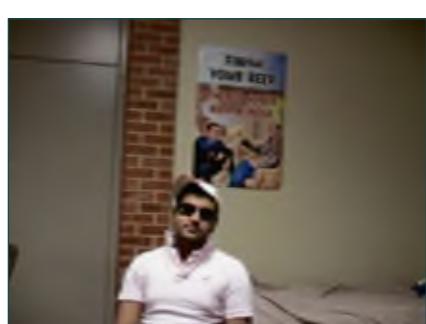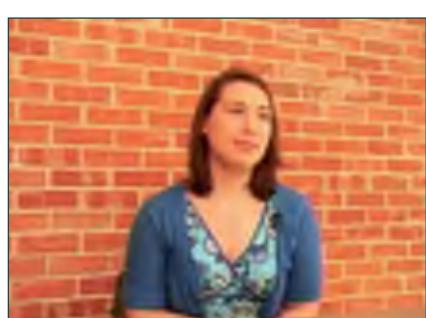
In addition to these eight people, I also enlisted my roommate Nick Theccanat and classmate Chris Kradle to provide some comic-relief to keep things from becoming too monotonous.

By the time the interviews were done, I got a decent range of opinions. Admittedly, most of the people I interviewed were wary of neuroceuticals with Ryan asserting, "I don't agree with drugs that are going to change how you feel." And while Erika conceded that it could "help control mood swings and what are considered undesirable emotions" she feared that "when we take away people's emotions it kind of takes away their humanity."

As far as life extension goes, most students were fine with using technology to extend our life spans but drew the line at striving for immortality. JJ explained that "the idea of becoming immortal is essentially becoming a god," and Laura pointed out that unless immortality is attained for everybody, then eventually we'll realize that while we're still alive, "everyone [we] know has died."

Using transhumanism for "fun" purposes got more mixed responses. Indy was quick to comment that walking around with four arms "would be awesome," and Alexa figured that "if someone wants a third hand … and is rich" they could get it and join the circus, but otherwise, she didn't "see it as very practical." Hilary seemed to be thinking along the same lines and finished by commenting, "It seems pretty dumb to me."
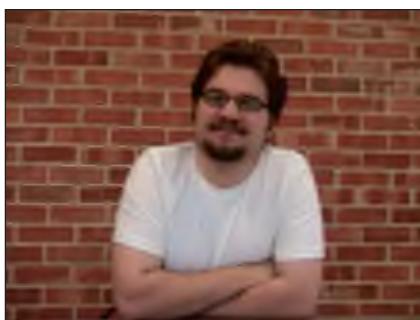
As for concerns with the whole movement, Chris, in his fake interview expressed concerns regarding artificially cultivated meat and my other fake interviewee Nick expressed fear of a terminator situation. The others were more concerned with more realistic issues. Both Erika and Ryan pointed to how with all new technology, there plenty of potential for things to "go wrong." They all also speculated about who would be in charge of developing and distributing any of this technology, with many students pointing to the private sector, though Derek explained that there will

2.45 Hacking humanity documentary participants. From top to bottom: Indy Jones, Alexa Harrison, Ryan Darley, Erika Friedmeyer, and Nick Theccanat.
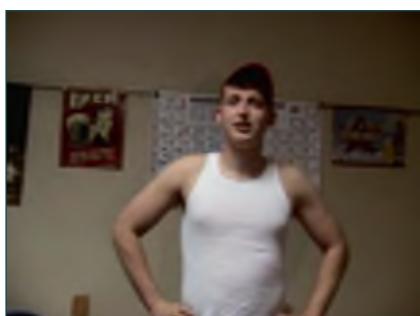
inevitably be some sort of government regulation and JJ expressed concern over intellectual property rights.

When asked if this technology will be attainable in our lifetimes, responses were again somewhat mixed. While Derek was quick to point out groundbreaking progress we've made already, citing how bionic eyes are already on the way, and Ryan said he "wouldn't be surprised to see it in ten to twenty years," others like Indy and Laura were not as convinced that we would be this advanced any time soon. Similarly Alexa did not see this coming about in the near future either, but not because of our scientific ability, but rather because of the "ethics issues" surrounding these advancements. In the end, what they all were able to agree on was that this was "a crazy topic."

After recording the interviews, I sat down with Windows Movie Maker and intertwined short portions of each of these interviews together into one cohesive thread of responses and answers to my questions. I also made use of DragonForce's Through the Fire and Flames and Mussorgsky's Promenade movement from his Pictures at an Exhibition for the segments between each thread of responses. In the end, I was pretty happy with how this movie turned out. I got about thirteen minutes out of nearly two hours of interviews, and I think I did pretty well getting the key moments from each interview into the final cut.

2.46 Hacking humanity documentary participants. From top to bottom: Hilary Elaine Moore, Derek Leader, Laura Izzo, J. J. Lubinski, and Chris Kradle.

COLE GRAY
"Automata"

When Jason Graves awoke he found himself curled up next to the very edge of his bed and instinctively flinched in fear that he was about to fall to the floor below. As he shifted back toward the center of the bed, Jason sat up with a wince and glanced at the venetian blinds that covered his apartment window. A muted stream of daylight filtering through the cracks suggested that he had been torn from sleep in the still early hours of the morning. His internal processor sensed his desire and pulled a clock into view on his HUD. It read 6:08. The heated covers slid off as he turned to let his legs hang over the side of the mattress. Sitting there for a moment, Jason sighed and clutched his head.

Dreamt on my own again, he thought while trying to recall the stream of broken images still drifting at the back of his head. *I remember floating in a sea of clear, oily liquid and I had been alone there for a long time. There was heat; an unbearable heat all around… the sky above me cast a dim light as if the sun had just passed through a thick red membrane. But then the light went out and the heat was gone. I could feel the sea around me grow cold, crystallizing until my entire body was enveloped in the ice.*

Piece of shit dreamware, it was supposed to be about flying… I guess that's the last time I download a freebie. Jason looked up from his hands and toward the door of his apartment. *I might as well get up now.*

After Jason stood up and began walking towards the bathroom his eyes automatically switched to IR illumination mode, bathing the faintly light room in a phosphorescent white. The door slid neatly into the side of its frame as he approached and the lights blinked on softly so as not to hurt his now light sensitive eyes. With a sharp hiss the shower turned on to the appropriate temperature and the glass door slid open graciously. Jason allowed his eyes to return to their normal setting, taking in the shadows splayed upon the white tiled walls for a brief moment before the light gradually brightened to its full intensity. The recessed television within the bathroom mirror flicked on from behind but Jason took no notice of it as he disrobed and stepped into the shower. He remained fixated on the wall in front of him, trying to ignore the advertisement for a new body model playing in the background.

Commercials, I can already hear that empty voiceover playing out its mock love song desperate for my attention:

Are you unsatisfied?

Do you have a body?

Flesh that reeks?

Bones that creek?

Hollow cheeks?

Veins that leak?

Order now and be fulfilled.

With a thought Jason changed the channel to the local news station. The newscasters were in the middle of a story concerning recent developments in spaceflight that would greatly lower the costs of immigration to the growing number of colonies in orbit. They talked back and forth about how the colonies had once been the exclusive locale for the rich or politically powerful but would now permit even the common man to earn his place among the stars. The program then shifted to a report on the growing descent among many of the religious sects in regard to human immortality and genetic engineering. Some of the more fundamental groups had begun advocating terrorism and mass suicide as an act of righteous rebellion against humanity's permanent separation from God.

Jason turned the television off as the air around him began to thicken with steam and he felt its heavy heat spread to the very bottom of his artificial lungs. He made a motion toward the shower door but before his fingers could even make contact with the glass, the water slowed to a trickle and the door slid open before him. He stepped out onto the slick tiled floor, took a towel from the silver plated rack and ran his hand across the layer of condensation that had accumulated upon the mirror. The excess water ran down to the bottom rim, leaving a polished network of veins in its wake.

He stood there and gazed at the figure that appeared before him. It seemed impossible that Jason was in his late fifties yet had the perfect build of a man no more than thirty years old. Lean and muscular with a head full of wavy black hair–he looked as though he was still in the prime of his life. However, the most striking aspects of his body were the two completely black eyes set deep within his brow. They were unsettling to say the least since without any pupils or irises it was impossible to tell precisely where he was looking at any given moment. But while Jason knew they were not as appealing to look at as some of the more designer friendly sets made to resemble real human eyes, they were far more durable and easier to modify when the circumstances demanded it. After another quick onceover Jason toweled off and crossed back into his living room.

He dressed quickly, throwing on a few articles of clothing that he found laying at the front of his closet and a pair of heavy boots that had been kicked off in exhaustion the night before. Jason's revolver was still in its shoulder holster and draped over the banister of his bed. He drew it out, loaded it with a few spare shells he kept on his nightstand and slid it back into place as he pulled his arms through the nylon straps. The sun's early morning glow had begun to weave its way throughout the room, blurring the boundaries of the retreating shadows. Jason looked over toward the window blinds.

Up. With a jump the blinds collected to the top of the window and Jason peered out into the dense urban landscape of Chicago. The entire

city was still steeped in the dark amber glow of the morning sun while at the center a distant streak of light glinted off the windows of the tallest buildings like a sputtering flame.

Better grab something to eat before I'm called in.

His HUD indicated that it would be cold outside that day so he grabbed an old coat on his way out.

Jason emerged from his apartment complex and shivered when a bitter wind spilled out through the open streets. Sticking his hands deep into his jacket pockets, he began to walk down the narrow sidewalk and straight into the heart of the city though it wasn't long before the relative peace of the residential areas was devoured in the shimmering deluge of sounds and shapes that had began to wink on around Jason. They flitted about in garish colors and called out his name in demand that he pay full attention to their witty little slogans and promises of lower prices. Jason tried to ignore their collective shrieks, knowing that they weren't really there but merely bits of holographic data projected into his augmented mind. Yet, there were so many of these floating billboards that at times it looked as if the buildings around him were consumed in an immense neon inferno.

By the fourth block it had already started to get crowded as a wave of pedestrians swept out against Jason and enveloped him into their fold. It was that same dull and frantic movement that Jason had always known; people clambering past each other, so eager to find themselves among the tasks at hand. However, there was no end to the variety of forms on display. There were, of course, the standard human chasses which were worn by the vast majority of people and almost indiscernible from their organic counterparts. Nevertheless, it was impossible to tell if what was being worn resembled the actual person on the inside. As Jason worked his way through the mass of people a five year old girl wormed past him and disappeared between the legs of those ahead of him.

There could be a sixty or seventy year old man beneath the little red wool coat.

Still, every so often the more conspicuous anomalies could be spotted within the flourish of pedestrians. A dark pink girl with smiley faces for eyes walked out in front of Jason from a shoe store. On the other side of the road a couple of furries laughed together outside of a coffee shop, their tales flicking about absent mindedly. Further down a man with four eyes and two curved horns on his head stood waiting for the light to change at a crosswalk.

After a few more blocks Jason stopped in front of a small building at the corner of the street. Its front entrance was flanked by a few empty tables and chairs that remained largely unused during the winter time. An old awning hung overhead, snapping back and forth in the breeze with the words "The Unreal Café" printed neatly on it. The door slid open and a balmy breath wafted out against Jason through the raw morning air. He could smell the sweet scent of baked bread and coffee mingling together

from within the back kitchen.

Jason seated himself in a small round table in the corner of the room and opened the virtual menu that had popped up at the bottom of his HUD the moment he entered. After mentally flipping through it at least twice he closed the document and ordered a large cup of coffee, two eggs and a piece of toast. The cost was automatically deducted from his checking account.

While Jason waited for his order to go through he looked across at the other occupied tables. One of the people nearest to him was a well dressed man sitting bolt upright with a slightly dazed expression on his face. As Jason continued to stare, a bright red ring of text appeared around the man's head with the word "Online" repeated over and over again until it circled back around to the beginning. A box of text opened up directly below it, displaying the man's personal profile; birth date, phone number, hobbies and all of the other labels that people brand themselves with. At another table a couple sat together, chatting pleasantly over their meals. Jason's mind recognized their mouth patterns and automatically translated it into a stream of text that appeared at the bottom of his HUD. They were on vacation and talking about all of the different places they should visit that day.

Eventually, a young looking girl in a uniform emerged from the back of the room with a white ceramic plate in her hands and set it gently in front of Jason, careful not to spill the brimming cup of coffee out onto the clean tablecloth. She flashed a sycophantic smile at him while setting down his silverware.

"Enjoy your meal, sir."

Jason nodded slightly in her direction, "Thank you."

Once she had retreated back to the kitchen Jason put the cup to his lips and drank deeply. The coffee was still too hot but the prickling feeling at the back of his tongue was the perfect pick-me-up in the morning. After setting the cup back down, Jason picked up a knife and fork and began to cut into his eggs. They weren't 'real' eggs though–they were artificial. Most food was heavily modified on a genetic level in order to provide the specific set of nutrients and vitamins necessary for prosthetic bodies to survive. These foods tasted real and looked exactly like their natural counterparts but they were nevertheless different on the most fundamental level.

I wonder if it even has a taste at all. Jason thought while examining a piece of egg impaled on the end of his fork. *Or is my brain just simulating the flavor of real eggs while I'm eating some kind of bland, spongy substitute?*

As he took a bite into his egg, Jason noticed that the phone icon on his HUD had appeared and began to flash. The number below it showed that the call was coming from David Ledford, the chief of police. *Answer.*

-Hello Dave, what's going on?

-Graves, I need you to get over to North Michigan Avenue right now. We have a big situation on our hands.

-Well, I did just start eating breakfast…could you give me a few more details on how serious it is before I have to drag myself all the way down there?

-I don't have time for any of your crap today Graves, just get down here immediately!

-Fine, I'm on my way.

Jason took a couple more bites from his plate then finished off with a swig of coffee to wash the taste of grease down his throat. Wiping his mouth on a napkin, he stood up from his seat and walked back out into the cold.

 Back on the sidewalk, Jason glanced to his left and then to his right. The streets were becoming more congested with traffic and pedestrians with each hour.

I could try to go back home and get my car from the parking garage. No, that would probably take even more time. The place isn't that far from here anyway. I could just run there.

At first Jason set off at a slight jog, carefully working through the horde of people that covered the sidewalks. Yet with each step the pace of his augmented legs quickened and his stride grew impossibly long and powerful. When Jason finally broke out onto the road the world around him had melted away into a torrent of indistinct shapes and pigments that flowed so swiftly that only his enhanced mind could unravel their meaning and guide him in the right direction. The only sound was the edge of the wind constantly shrieking in protest past his ears.

While moving at speeds in excess of 40 mph, Jason reached his destination in a few minutes.

Looks like Dave wasn't lying.

The entire street was blocked off by police officers and SWAT team members, the majority of which were huddled around a group of parked police cars in front of the crime scene. It was an expensive lunch and breakfast restaurant called "Marie's" and like most of the modern buildings the outside was streamlined, with less bulk customary of the previous decades. It had a glazed façade made of dark plated glass and was supported by a light-steel frame. A large holographic sign still floated above main doorway. Jason approached the barrier of bright yellow tape and transmitted his digital badge at the officers on guard. One of the guards studied him for a moment and then waved him through.

"Okay, come on in. Chief Ledford wants to speak with you."

Jason leaned under the tape and walked over to the pack of squad cars. Ledford was there, leaning on the hood of one of the cars with a lit cigarette in hand and a large mound of burnt out butts in a coffee cup next to him. A considerable number of officers stood alongside him, each with their guns trained on the doorway as if they expected something to leap out at them from within.

"What's the trouble Dave?"

Ledford glanced back at Jason and stood up.

"You sure got here quick Graves." He took a drag on his smoldering cigarette and blew out an even ribbon of smoke, "I didn't even expect you to show up at all."

"Well you know me Dave, always willing to serve and protect. Now tell me what's going on before I come to my senses and go back home."

Ledford turned back toward the restaurant and beckoned for Jason to come closer to the car. Jason came forward, inching his way past the throng of anxious looking officers and took a spot next to Ledford.

"We got a call at around 6 o'clock from a bystander in hysterics. She said that she had been out on a walk with her husband this morning but when they passed by Marie's she noticed that nobody was moving on the inside and some people were lying on the floor. Her husband had rushed inside to try and help some of them but he also collapsed the moment he stepped through the doorway. We got here, secured the perimeter and ran a sweep over the entire area. It turns out that it's some kind of fast acting viral field being emitted from within the restaurant. I've never seen anything like it before so I called you, seeing as you're the expert when it comes to cases like these."

Ledford snubbed out his cigarette on the hood of the car.

"Do we have any leads on suspects? From the sound of it whoever we're dealing with here has access to some pretty high end equipment."

"That's the thing," he said while taking out another cigarette from his pack. "Our scans indicated that there's still one living person inside and that he's the source of the virus, but he hasn't made any demands or anything else yet. He's just sitting in there."

Jason's eyes narrowed.

"Who is it?"

Ledford lit up and gave a few thoughtful puffs before answering.

"His name is Robert Koch, a high class chef who works further uptown. We did a complete background check and he doesn't seem to have ties with any known terrorist groups. Here I'll send you his profile."

A picture appeared in Jason's HUD. He was a slightly older looking man, with tightly curled blond hair and rather thick facial features. Below it was the man's personal information and a list of the more notable augmentations that his body was equipped with. As a cook his prosthetics weren't quite as sophisticated or powerful as Jason's but his hands were modified with the latest in cutlery and other cooking utensils required for his job.

"I assume that you've tried shutting down his body remotely?"

"Yeah we tried that, but no effect. He must have some type of heavy duty encryption code on his cyber brain or a blocking device on him."

Jason kept going over the record in his mind. There wasn't a trace of advanced computer or cyber hacking in the man's past but the kind of skills that would have been necessary to pull off something like this were far beyond even the most advanced levels.

Something's not right. How could a simple cook be able to hack this well without any sign of previous experience?

"I'm going in."

Ledford stopped short of taking another draw on his cigarette and turned to Jason.

"Are you insane? I just told you that anyone who goes through those doors is dead. I called you up so you could tell me what we're dealing with here, not to storm the fucking place."

"Listen Dave, it's possible that something much bigger than a simple killing spree went down here. I don't know what it is yet, but the only way we're going to get any real answers is if someone goes in there and takes this guy down without killing him. Since I'm the only person here with the encryption knowledge to counteract the virus, it looks like it'll have to be me."

Ledford scowled and turned back towards the building. He stood there for several minutes, taking nervous draws from his cigarette and glancing back at Jason every once in a while. Jason remained rooted to his spot next to the car, staring unflinchingly at Ledford. Finally, Ledford hurled his cigarette to the ground and stomped on it in frustration.

"Fuck!" He turned back towards Jason, "Fine, go kill yourself for all I care. Just know that if you get into any trouble I won't risk any of my men to bail you out once your inside."

"Thanks Dave. I knew you'd see it my way"

Jason waved a small salute behind him as he walked towards the main entrance.

The gun slid out readily from its holster–a double action revolver, chambered for .357 Magnum cartridges with a four inch long barrel and nickel finish. It was a good gun; accurate, never misfired. Jason cocked the hammer and pulled the gun closer to him as he pressed himself up against the door. He had been waiting there for a while, but the extra time was necessary to implement the proper encryptions that would keep the virus from affecting him. He had to be careful; there was something different this time.

A line of text appeared on Jason's HUD. *Encryption process complete: advanced viral protection systems operational.*

Looks like it's time to go. Open.

When the door slid open, Jason rounded it with his revolver drawn while his mind scanned the entire area for possible threats. But there was nothing moving in that room, nothing alive at all. The bodies were slouched in their seats with plates of cold, unfinished meals still set out in front of them. Even the crystal glasses of water next to their plates hadn't been disturbed when they died. There nothing of immediate danger in the room so Jason stepped into the restaurant and the door closed shut behind him. One of the corpses was laying face forward on the ground near the entrance.

Must have been that woman's husband.

Jason leaned down, grasped the man by his shoulders and turned him around. Jason's eyes widened. The man looked as if he had been left to starve weeks ago; his skin was leathery, stretched tightly against his jagged skeletal frame. Both his chest cavity and his cheeks were completely sunken. When Jason dropped him against the marble floor his withered body made a hollow, rattling sound.

As Jason proceeded to the center of the dining area he made a check of each body.

Bones. Just bones and ragged pieces of skin. The virus must have amplified their artificial metabolisms until they all starved in a matter of seconds.

All of these victims are customers though. Where are the staff members?

Jason could hear something now. A dull knocking sound, coming from the back kitchen. It was barely there but Jason's augmented ears picked it up.

Thok thok thok thok thok

Jason moved softly down past the tables and took cover near the bar. On the other side there was a pair of double doors leading into the kitchen, one of which stood slightly ajar. The knocking sound was getting louder.

Thok thok thok thok thok

With his gun drawn at arm's length, Jason looked though the doors. All he could see were the vague motions of someone's arm moving up and down over a table in the far corner of the stainless steel room.

Zoom in.

Jason's vision blurred for a moment and then magnified, bringing the man into full view.

There you are.

Robert Koch stood there in a dark blue double breasted jacket and apron with a butcher knife in his hand, continually chopping away at something on the table in front of him. Jason couldn't quite make out what it was though; the entire table was cluttered with several piles of bowls and plates.

Why would he be trying to cook anything? Jason edged closer to the door, making sure he was still clear from view. *I guess I'll figure it out soon enough.*

With a solid kick the double doors flew open and slammed with an echo against the side of the walls. Jason rushed into the room with his gun aimed squarely at Robert's head.

"Don't move! Police!"

Robert stopped mid cut and looked calmly over at Jason.

"So they finally sent someone." He wiped his knife off on his apron, "Good, this would have started to get boring if I had to do it alone."

"Drop the knife. Drop it right now."

"Oh I will, but first don't you want to see what I've been making here?"

"I told you to drop the knife." Jason took a step forward and saw what was lying on the table, "No…"

Mutilated body parts. Ground bits of lung and liver. Soup bowels filled with a couple of hearts and stomachs, basting in their own visceral fluids. Winding strips of intestines were heaped in mounds upon a trail of plates. The remains of a partially diced spine on a chopping board. There was a man's head sitting on a silver platter. His mouth lolled open.

As Jason reeled back Robert raised his knife high and flung it as hard as he could at Jason's heart. With his mind awash in shock Jason's body reacted automatically, dodging the blade as best it could and squeezing off a few rounds into the kitchen in one fluid motion. The shots went wide though and Robert had already disappeared from the room.

After Jason had recovered he noticed a sharp twinge of pain spreading

through his left shoulder. While his body had narrowly avoided any fatal lacerations, the knife still managed to wound him somewhat. It was a deep gash too; the fat beads of artificial blood had already begun to coil down the curvature of his arm, pooling at the edge of his knuckles.

No time to wait for the nanites to heal it, I need to take this bastard out now.

When Jason began walking toward the door that Robert had ran through, he glimpsed at the macabre feast once more. He noticed that there was something carved into the decapitated head in the middle of the table. It was beginning to scab over but Jason could read it well enough.

Sic transit gloria mundi

A text box opened in Jason's HUD and translated it into English: "Thus passes the glory of the world".

There was no one out in the main dining area of the restaurant.

He couldn't have gone outside so he must have gone to the upper level.

Once Jason had looked around for a bit he found a small flight of stairs off in the back corner of the building. He made his way up little by little, carefully trying not to let his boots resound on the wooden steps. At the top of the stairwell Jason leaned out tentatively and examined the area. It was an extension of the lower dining room, filled with the same tables, chairs and a couple of starved bodies as well. However, instead of a single large room the layout was a long corridor with a high arched ceiling. All of the lights had been turned out and the shades were drawn over the windows, making it harder to see.

Jason's eyes switched over to IR illumination mode and once again the world lit up in a ghostly pallor. As far as Jason could tell there was no one in the corridor, but there were four wooden doors along the side of the wall that led into the restaurant's private dining rooms. Jason positioned himself in front of the door nearest to him and held his gun out ready. *Open.* The door sprang open and Jason looked in; nothing but another table inside.

-Having fun yet?

Jason jumped at the sound of Robert's voice and spun around expecting to see him about to impale him from behind. But there was no one there either. Jason realized that the phone icon had been activated on his HUD.

How could he have hacked directly into my phone line in such a short time?

Slowly, Jason moved back out into the hall.

-Who are you working for Koch? Some type of religious terrorist group? I know that the inscription on that poor man's head comes from one of the old

papal coronation ceremonies. Is that your little group's motto?

While Jason was talking he moved in front of the next door and opened it. There was nothing inside either.

-I don't think I would be willing to divulge that information without at least knowing the name of the person asking. Would you care to share it with me?

Jason didn't like this at all. Koch had penetrated his mental defenses far too easily–he felt exposed.

-My name is Jason Graves, now answer me.

-Well Jason, since you answered so quickly I'll tell you that I'm not affiliated with any religious sect and that my reasons for doing this are completely my own.

Jason moved to the next door and opened it. Nothing again.

-What reason would that be?

There was a long pause.

-Tell me Jason, have you ever considered the implications of consumption?

Jason was barely listening. They always had some kind of weighty message to deliver; some sort of insight that made them think they were the next messiah. Jason just needed to keep him distracted long enough to find him.

That in order survive by eating one must also be willing to destroy and even…

He slammed the final door open.

Nothing? Then he must still be… Jason turned around to see Robert dropping down from the ceiling right above him. A blade jutted out from a seam in the edge of each hand.

"…kill?!"

Jason fell back into the room, barely avoiding Robert's overhead cut. He heard the blade sing as it sailed just inches past his face and rasp against the floor when it hit. Robert had landed in a crouch though and was already running toward Jason for another strike. But just before he got into range, Jason drew his pistol up and fired a round directly through Robert's outstretched hand. It crumpled back, bursting in a rush of sound and smoke.

Robert staggered back for a moment and collapsed onto one of the chairs behind him, sending a few plates crashing to the ground below. All that remained of his hand were two fingers and some scorched mechanical pieces embedded in his wrist. The table cloth was spattered in artificial

blood. Robert examined it for a little bit and suddenly smiled at Jason.

"Looks like I could use a trip to the doctor."

Jason got up slowly with his gun still pointed at Robert.

"It's over Koch, take down the virus and we might be able to get some paramedics in here to save you."

Robert was still smiling.

"No, that won't be necessary. I'm through playing with this toy anyway."

Jason glared at Robert and drew closer to him.

"What do you mean by 'this toy' Koch?"

Robert sat up in his chair and looked straight into Jason's eyes.

"Koch?"

"Don't call me that. Call me Mr. Mundi."

With that Robert brought the blade on the side of his good hand up to his neck and slowly drew it across from ear to ear. With a strangled gurgle his body pitched forward and tumbled to the ground.

Jason took a seat in one of the chairs across from Robert's broken corpse and watched as the rim of blood gently crept to the bottom of his boots.

 "Dammit."

ASHLEY FUNKHOUSER
"Unthinkable: The last will and testament of Aidan Warren Erickson"

If you lived forever, what would you do with it? Would you travel to every country in the world? Would you work to find the cure for cancer? Or would you sit around waiting to do something, simply because you know you have forever to get around to it? Maybe living forever isn't quite so different from living only a short while. According to Aidan Warren Erickson, one of the world's first 'immortals', it isn't how long you live, its simply how you live and what you live for.

This story includes some of the concepts we discussed in the Lennox seminar—including space migration, life extension, genetic enhancement—and the potential social issues that will arise from it. My goal was to make the reader think.

Just because we can do something, should we? Do we really want to live forever? If we know we have forever to do something, will we do it at all?

T.S. Eliot once famously wrote, "This is the way the world ends, not with a bang, but a whimper." Those words never truly resonated with me until this very moment, because I always thought that the end of the world was impossible. Today being alive forever is a given. I never thought the end would be like this. It's not nearly as dramatic as I expected it might be, but perhaps that is because I stopped living ages ago.

Dannie and I were best friends. We had been ever since we were born. Our parents were the co-founders of a technological company that changed the world. In 2337. The two of us were the recipients of a new drug that allowed us to live forever. Among other extensive modifications, the drug essentially allowed our DNA to function like a cancer cell. See, on natural humans, DNA has an expiration date. It begins to erase the important bits after it runs out of the useless code called telomeres. This helps to trigger the aging process and begins the "shut down" process of normal humans. The drug keeps the DNA from "deleting" any of the code when it replicates, allowing us to stay young forever. I never appeared to age past 25.

Dannie and I were forever young and forever in love. I had a great family, good friends, and everything I could ever possible want or need. For awhile, everything was perfect, until the day I lost her but I'm getting ahead of myself. My name is Aidan Warren Erickson, and this is the story of my life.

It took Dannie and me about seventy years to realize that we would never run out of time. We grew up as normal children running around in the sprinklers with our goofy looking swimsuits and fingers sticky from popsicles. We went to elementary school and high school with other kids who were just like us—kids who were given the money to receive the gene therapy. The rich kids. It wasn't until we went to college that we

met people who weren't as fortunate. For the most part, they seemed just like us, only we were a little stronger, a little smarter, and a little bit more perfect. Dannie and I made friends with many of them despite their inherent disabilities.

A young man by the name of David became a close friend of ours. We graduated college with him, lived in the same town as him, and he was even the best man at our wedding. Dannie and I stood by David's side when he married and had children, which was something we never got around to. We saw him care for his family and watched as he grew old and fragile. Dannie and I stood hand in hand with his children, by that time old enough that they looked like they could've been our grandparents, as David's coffin was lowered into the ground, 150 years to the day that we had met him during college.

It was then that we realized that we had all the time there is to accomplish the things we wanted to, while some people had so little. It was time for us to figure out what to do with it.

One night about 200 years later, I was sitting at the counter doing some exercises for the Mayan language class I was taking. Dannie came storming into the kitchen, slamming the door behind her.

"Bad day?" I asked nonchalantly.

"Not particularly," she replied airily.

"The door to the kitchen seems to say otherwise," I remarked pointedly.

"Well, its not like anything particularly bad happened, its just that nothing really good happened either."

"I don't understand why that warrants abusing the door frame that way."

"I'm just sick and tired of doing the same exact thing every single day," she lamented. "I'm tired of going to court and sitting across the aisle from a hateful, evil person and fighting as hard as I can to see that he can't ever hurt another person ever again, only to turn around and, in a few years, be sitting in the same court room across the aisle from the same scumbag that I just put away!"

I got up from the counter and went around it to hug her.

"You are doing good in this world Dannie," I told her. "Lots of the people you've prosecuted have been put away forever. Hell, some of them you've destined to a life of work on Ganymede! They're not coming back."

"I know," she sighed. "But it just seems like no matter how hard I try, there is always going to be another girl who winds up scarred because some monster raped her."

"Give it time love, you've only been at it for 170 years," I reminded her. "You have forever."

It doesn't take long for the motivation you have in your younger life to fizzle down dramatically. After 500 years, Dannie and I began to wonder what we were doing with our lives, and whether or not it was even worth it. Dannie continued with her work as a prosecution attorney and became well known all over the world for her success in the court room. There wasn't a lawyer alive who could sit across the aisle from Dannie and still feel like he'd win. Her reputation preceded her, and as the years flew by, that turned out to be a boon as Dannie lost her drive. She needed that extra intimidation factor to make sure that none of the defense attorneys ever really brought their "A" game. She never admitted it but I could see her losing her drive every day.

It wasn't boredom that got to her—despite all of the advances society had made, crimes continued to get more and more creative—it was that same feeling she had so many years ago. No matter how hard she worked, there were still going to be people out there who she couldn't get rid of. One more victim without justice, one more crime unpunished. Dannie was never satisfied with being the best – she never measured herself by the performance of others. No, Dannie wouldn't settle for anything less than perfect.

As for me, I became something of a Jack-of-all-trades. I learned 25 different languages, became a medical doctor and practiced medicine for awhile, then went back to school to pursue doctorates in history, anthropology, artificial intelligence and music. History was my real passion, because, surprisingly, it was this field that challenged my thinking the most.

Its funny how the more things change, the more they stay the same. Society really hasn't done much to further society as a whole in the past few thousand years. We still have crimes, war, social class struggles, betrayal and scandal. We have done a lot to help with personal issues though. Life extension, neuroceuticals, eradication of disease. You would think that, considering much of our society now has to spend eternity together, that we'd at least try to make it a little more bearable to be together. Take some advice from an old man, reader, anything you can do to benefit society as a whole will eventually make life better for you too, so step it up.

The problem I ran into was essentially the opposite of Dannie's. My problem was complete and utter boredom. I simply ran out of things I wanted to do. I used to sit in one of the ancient museums that showcase books all the way from the time of Gutenberg's printing press to the cyberspace revolution, when the world was completely plugged in and online. It used to overwhelm me, how many things there were to read in the world, and I made it a mission to read them all. However, I quickly learned that just because you have an endless amount of time to read books on the biology of hookworms doesn't make you any more inclined to do so.

"Have you ever wanted to go to Mars?" I asked Dannie one day. We were sitting on the patio behind our house, enjoying a bright, perfect garden on a pleasant Sunday afternoon.

"Mars?" she replied looking perplexed. "I guess I haven't really thought much about it. Why do you ask?"

"I just realized that it has been awhile since we took some time for ourselves, to just see what's out there."

"But what about work? And your classes? We can't just pick up and leave can we?"

"Why not?" I challenged. "Its still going to be there when we get back. Its always going to be there."

Dannie grinned at me slowly.

"Okay."

"Okay?"

"Okay. Let's go to Mars. I could use a vacation. Go book the tickets while I pack. You know what? While we're at it, let's tour all of Earth too. All six continents – Atlantis, California – All of the underwater cities, Antarctica, the jungle, everything."

"You got it."

"Let me just take care of a few things first"

"Don't bother. We'll take care of them when we get back."

One of my favorite memories of Dannie is from our trip to the Great Barrier Reef. The reef had just recently recovered from all of the oil spills and pollution that humanity had subjected it to before it switched over to renewable energy. Luckily, it was one of the beautiful, natural areas that we managed to save.

At this point, Dannie and I had settled on not going home. While on our visit to Antarctica, I made sure that we sold off our house, I dropped out of my classes at the University, and Dannie transferred all of her court cases to an associate and submitted her resignation. We'd lost our head and been swept up in adventure. Every day was something different, thanks to the teleportation technologies that were finally implemented at the turn of the fourth millennium.

I remember the Barrier Reef because Dannie was completely happy there. She was the Dannie I fell in love with, completely filled with the wonder that comes from experiencing something new. She wasn't stressed out or depressed because of work, and she was smiling.

It was like entering an entirely new phase of life, which was a refreshing change since it felt as though we had settled, what with Dannie having won her first dozen or so cases and our financial situation being, well, stable, to say the least. Our major accomplishments were achieved, everything else was just icing on the cake.

These days, anytime I think of Dannie, I picture her as she takes my hand and leads me over to a coral reef covered in brilliantly colored fish. Not far off the reef, there are a couple of dolphins playing together. I remember Dannie swimming over to them and interacting with them as if they were old friends. Just Dannie and the dolphins, swimming around each other, the dolphins doing flips and even allowing her to pet them and be towed around. Seeing the dolphins, just as they were, not genetically enhanced or improved, with all of their flaws, was the most perfect thing I had ever seen.

I remember the day I stopped living. It was the day that I consciously made the choice to say goodbye to Dannie forever. An accident, the doctors called it, a terrible accident. It was no accident though. I think in the end it was what we were both looking for. An escape. That's what caused us both to behave more and more erratically, seeking out bigger and bigger thrills. Finally, in an accident involving hoverboards in the Amazon I lost Dannie.

Oh there were was a time that we spent in the hospital while A team of doctors tried to patch her up. Physically, they did a great job. Dannie lay in that hospital bed with the same sun-kissed smooth skin I was used to seeing every day. Her soft, wavy blonde hair spilled over her shoulders. All signs of the crash—the bruises, gashes, broken bones—all healed and good as new. She lay there sleeping just as peacefully as she had back in our home during a long weekend.

She never did wake up. No, science had yet to perfect the anatomy of the brain, a study I'm inclined to believe they never will. There is something inexplicably beyond our capacity for logic that resides in the brain, something we cannot know through simple experimentation and study. Call it the soul if you will, or the mind or whatever it comforts you to call it—but that is what Dannie lost in the accident. After that, she merely became a vessel. Dannie's soul had left this world.

After weeks of sitting in the hospital, looking for signs of consciousness, the doctors informed me that she would likely never come back to me.

"It's a very simple process," the doctor told me. "She's unresponsive. Dannie's already gone. She won't feel a thing. Perhaps its time for some closure."

In other words, they needed the bed. Amazonian genetic enhancement wasn't quite as advanced as it was in the U.S. and, well, medical staffs down there still have their hands full.

Euthanasia. Like putting down and old, sick dog, they injected Dannie

with a substance to stop her beating heart. Any hope of her returning to me was swept away.

After that, I've done nothing. Hundreds and hundreds of years of nothing. What is the point? Nothing is worth the effort.

So to all of you who are reading this, consider the following my last will and testament:

All of my worldly possessions please give to some useful cause or other. I never got around to having any children to give them to.

As for my body, I suppose you can donate my brain to science. Maybe they'll figure out that piece they didn't have when we lost Dannie. I doubt it though. Heck, give them my heart too. Maybe we've been approaching this all wrong. Everything else you can scatter along the Great Barrier Reef. May as well live out the rest of my usefulness in the last place I was truly and perfectly happy.

My dying wish for all of you is to be kind to one another. Love yourself, love another, and love everything around you. It is quality that matters in this life, not quantity. If you've lived well, it doesn't matter how long you live, it'll be enough. But don't waste your time because you think you have forever. It goes by faster than you think.

Perhaps I'll see you all on the other side. My only hope is that this pitiful existence isn't all we've got. I hope my Dannie is still waiting for me.

Signed,

Aidan Warren Erickson

Aidan Warren Erickson
April 4, 2337 - September 18, 4390

RAELLE SMILEY
"A better life"

A better life is set in the year 2100. In this time, three classes exist, the Post-Humans, the Transhumans, and the Necessitan Class. The Post-Humans are the upper echelon of society, fully bioengineered humans who do not age in any way. The Transhumans are the middle-class members of society who can afford some biotechnologies but are not fully transformed into Post-Humans. The Necessitan Class is the lower-class members of society who can afford no biotechnologies and live just as you and I do today. My story follows the life of Leana Roxbury, an 80-year-old Post-Human. The story takes place during the two days surrounding her 80th birthday. During these days, her childhood friend, Bailey Huesner is coming to visit for her birthday party. Bailey and Leana have not seen each other for years but keep in contact through e-mail, sharing stories and reminiscing about their childhood. When Bailey arrives at Leana's home, Leana is in for a surprise. Bailey is a Necessitan, and cannot afford any bioengineering. She looks just as any 80-year-old today would look. Having lived in a bubble in her new Post-Human life, Leana is taken a back by this realization. She finds Bailey's visit very eye-opening and after her departure, is left questioning whether or not her life is even real and wishing for a way out.

She had always loved the beach, the smell of salt and the sound of waves crashing against the shore, burying her toes deep into the cool sand, the sun beating down on her skin. As she lay in the sand, not thinking about one thing or another, she opened her eyes to see a seagull perched on the sand at her feet. Startled, she sat up. The gull remained at her feet, unfazed by her sudden movement. She reached her hand out; the gull cocked its head to the left, all the while looking into her eyes. Slowly, she stretched her arm out towards the gull to touch it; it seemed so real. As a girl on the beach in Nantucket, she remembered watching seagulls swoop down to the water, catch a fish, then fly back, high into the sky. But never had one been so close to her, she couldn't resist the idea of feeling its soft white feathers. As her hand approached the gull she came to the realization that she controlled it. She wasn't really on a beach she remembered, she was in her home in Alaska, sitting in the Simulation Room as she did every day. This gull would not fly away as long as she didn't want it too, nothing would happen that she didn't want. Leana Roxbury loved the beach, but she hadn't really been to one in over 60 years.

Reality

Suddenly, the beach began to fade away, the waves stopped crashing against the beach, the sand started to disintegrate beneath her, the sun slowly transformed into a fluorescent light above her, and finally, the gull began to disappear. "Leana!" she heard, someone was calling her name. "Leana! Honey! Where are you? The party starts in an hour." It was her husband, Caleb. She had almost forgotten about the party. It was Leana's 80th birthday and they had been planning the party for a few months now. She snapped out of the calm, relaxed state she had been in on the beach to answer, "Coming! Sorry I was just getting some sun before the

big day!"

Caleb and Leana have been married for fifty-five years. Caleb came from a wealthy family who had come into their money by finding a way to make an alternative fuel out of snow. Married in the year 2045, Leana and Caleb had moved to Alaska to take over the family business. The couple has two children, Lucas and Naomi, fraternal twins who were now in their late 40's. Now, in the year 2100, some things have changed since Leana first started her life with Caleb. Biotechnologies have allowed for Leana to genetically modify her body and increase her cognitive capabilities and health to that of a twenty-five year old. Leana is part of the Post-Human Class, the upper echelon of society with the money to pay for these genetic enhancements. Two other classes exist in this society, the Transhumanist middle class who has the funds to purchase some modification technologies, and the Necessitan lower class who live and look just as you and I do today.

This birthday was extremely special to Leana. Not because she was reaching 80, which was not much of a feat anymore, and not because they had a party planned, but because a very special visitor was coming, her childhood best friend, Bailey Huesner. Bailey and Leana had not spoken since she moved to Alaska except over e-mail about major life events. Leana could hardly wait to see the woman she had once spent countless hours with, braiding each others hair, gossiping about boys and planning their dream lives. Although they had been distant for some time, Bailey was the only person Leana had ever felt a true connection with. Leana had saved every e-mail over the years and read them when she felt lonely and missed her past life. Suddenly, a knock came on the door.

The Reunion

Butterflies filled Leana's stomach as she turned towards the door. She swallowed, a lump forming in her throat. As she turned to walk to the door, she stopped at the mirror to make sure she looked okay. The same as always, brown hair flowing down her back, her makeup perfectly done, skin smooth and wrinkle free, she was the image of perfection. As she reached the door she could see a hunched reflection outside, she thought Bailey must be holding rather heavy bags and swung the door open immediately to help. But the woman standing outside the door wasn't Bailey, it couldn't be. She stood, hunched over, grey haired, her skin sagging, an overweight 80-year-old woman, just as Leana remembered her grandmother looking when she was a child.

Leana could hardly believe her eyes. She choked back an exclamation of surprise and managed a muffled, "Bailey? Is that you?" The woman replied, "Yes! Of course! Leana, how are you? It has been far too long!" Still Leana could hardly speak. Why did she look like this, had she been living in a hole, had the technology not reached her? Pulling herself together, she embraced Bailey, exclaimed her excitement to see her and invited her inside. They lingered in the atrium awkwardly for a few minutes as Leana searched for the right thing to say. Bailey beat her to it, "Happy Birthday, old friend!" She exclaimed, "It is so good to see you."

She handed her a small, gold package with a green ribbon on it, "It's not much, but I wanted to give you something," she said. Leana took the package, unable to restrain herself any longer she finally said it, "You, you look so...old...I mean...why?" Bailey's cheeks turned a bright red color and she giggled awkwardly. "I'm a Necessitan," she said, "My husband Ted and I don't have the money to pay for all of these technological advances." Leana couldn't believe it. Living in an almost secluded existence, she had forgotten that there were people who could not afford the Post-Human advancements. Feeling slightly embarrassed by her comment, Leana quickly changed the subject, "How was your flight?" she asked. "Oh, quite nice." Bailey said. They lingered a minute more, finally Leana pulled herself together and said, "I'm so glad you could make it! You are making this the best birthday ever. Remember all the birthday's we had together as children?" Bailey smiled, "Of course I do! I could hardly contain my excitement when you invited me here. This is going to be a great weekend!"

After a short conversation, Bailey and Leana gathered Bailey's things, brought them to the guest room and went to the kitchen where the rest of the guests waited for Leana to start the birthday festivities. All of Leana's closest friends were there, the food was delicious, the music was great and the atmosphere was lovely...but something didn't feel quite right to Leana. The more she tried to enjoy herself, the less she did. She turned to find Bailey; she was talking to one of Leana's closest friends from home. They seemed to be having a good time, Bailey laughing away, apparently telling childhood stories about her and Leana. However, Leana couldn't help but notice how old and worn down Bailey looked, especially next to all of her bioengineered friends. It just didn't seem right.

Until Death Do Us Part

After everyone had left and Bailey had gone to sleep, Leana snuck downstairs to the Simulation Room. She walked into the all white, fluorescently lit room, took off her shoes, and stood on the cold, hard floor. She closed her eyes and thought, "beach, take me to the beach." She began to feel the breeze on her face, she could smell the salt, and hear the waves. She opened her eyes and found herself standing alone at the beach, it was night now, the sky was clear and full of stars, the moon shone down on the water, its reflection flickering in the distance like a light about to go out. Leana felt at home.

This was the only place she could relax. There wasn't a person to be seen, all she could hear was the crashing of the waves. She took off her clothes and started walking into the water. The cold waves hit her ankles, and then from her calves up to her thighs, then moved up her waist and eventually submerged her shoulders. Leana thought, "warmth," and the water became a little warmer. She let her body be caught by the waves, lying on her back she looked up at the stars as the waves threw her back and forth, back and forth, rocking her to sleep. "Leana!" she heard a scream. She thrashed in the water, her feet hitting the sandy ocean bottom; she stood up. It was her husband; he had entered the simulation room, and seeing her lying in the water motionless, though she had

drowned. "I'm fine! I'm fine Caleb." "Come here crazy!" he called out to her. Reluctantly she swam back to shore. Caleb threw a blanket around her and pulled her into his strong arms. They stood there on the beach for a moment, not saying a thing. Finally Caleb asked, "How was the party? Did you have fun?" "Sure…I mean, yes, it was lovely, thank you." Leana answered, her voice shaking a bit. "Good, well let's get back to bed, it's not safe Simulating such things alone at night." Caleb warned, and they walked back up stairs together, leaving the beach scene to continue on through the night.

Leana lay in bed next to Caleb, still feeling shaken by the rude interruption of her relaxing midnight swim. Although she was tired, she couldn't sleep. Her mind turned to Bailey. She began to wonder what it felt like to be so old, to have grey hair and wrinkled skin. She wondered if Bailey wished she could be young again, not have to worry about her health or wish she could take a vacation. She wondered what her relationship was like with her husband. Did they have more problems because they were Necessitans, or less? Caleb rolled over in bed. Leana turned to look at her husbands sleeping face, the same face she had fallen in love with fifty-five years ago and wondered what he really looked like, how aged his skin was supposed to be, what color his hair really was and how much of it should he still even have? Without Caleb, Leana's life would have been just like Bailey's, she never had the money to afford the things she does now when she was growing up, was she lucky or was she missing out on real life? Was it Caleb's fault her life felt so empty? She closed her eyes and tried to remember what her mother looked like at this age, her hair thinning, deep crows feet surrounded her eyes, her skin adorned with age spots. Sure it wasn't the clean, perfect image she now portrayed, but it was natural, and that was beautiful. Slowly she felt anger boiling up inside her. Caleb had changed her life forever; she was stuck in this body for the rest of her life, a life that had no end in sight! Why was that better, was she really living this "better life" that the Post-humanist movement promised?

Forever Young

The next morning Leana woke up hardly having slept at all and went downstairs to see if Bailey was awake. To her surprise, Baileys feeble body was already up, bustling around the kitchen, cooking what smelled like Eggs Benedict. "Good morning!" she called out when she saw Leana enter, "How did you sleep?" "Oh fine," Leana replied, "What are you cooking? You really shouldn't have done that! I would have made breakfast!" "No, no problem at all! I'm just making Eggs Benedict, your favorite, right?" Bailey replied. "Yes, you remembered? Wow, it has been so long since I've had them. Thank you Bailey." Leana said, smiling to herself, remembering how kind Bailey had always been. They sat together, eating the delicious food; Caleb came downstairs briefly, grabbed a cup of juice and went off to work. After breakfast Leana and Bailey reminisced about their childhood for a few hours. Laughing about all the trouble they used to get into, joking about how everyone used to think they were twins. "That sure wouldn't happen now!" Bailey said, jokingly. "No, I guess not." Leana replied, feeling slightly awkward.

"So how did they do it?" Bailey asked, "How do they make you look twenty-five again?" "Oh," Leana stuttered, "I…I don't really know all the technology behind it, Caleb and I did it so long ago, when everything had first come out. I remember hearing about it on the news, feeling hesitant. Caleb never was though, he called our doctor the day after the technology came out and signed us and the kids up for the anti-aging, cognitive enhancement package which was guaranteed to make you look and feel whatever age you chose. We chose twenty-five because that's how old we were when we got married, Caleb said I was the most beautiful woman in the world when I was twenty-five… So, just a few weeks later, we went into the lab. I remember it being so cold, everything metal, harsh lights beaming down on us as they assessed the work that needed to be done. We were in the hospital for a month. They cut open my head and implanted something into my brain. They took my skin and injected things throughout my whole body, the pain was excruciating. Finally, after a month of lying in a black room, only semi-conscious, feeling my skin tighten over my body and my brain swell inside my head, I woke up a totally different person; I could hardly believe it! I remember being so happy, every time I saw myself in the mirror I was nearly brought to tears. I was twenty-five again!" Leana concluded feeling a little taken a back about her excitement. "That sounds wonderful!" Bailey exclaimed, "I mean not the pain and the month of darkness but the change, and after only one time?" "Yep, I guess it's pretty amazing" Leana said. They sat for a moment contemplating the story. Then Bailey realized the time and insisted she must be going. Bailey thanked Leana for sharing her home and her life with her. Leana offered their Teleporter to Bailey to get home, hesitantly, she accepted and within minutes was gone. Leana found herself alone again. More alone than she had ever felt. She wished she had jumped into the Teleporter with Bailey, escaped this fake life she lived and joined her to age and die just as people were supposed to.

But she hadn't, and here she was, standing in her atrium again, contemplating the emptiness of her life. Reverting to her daily routine, she walked towards the simulation room, opened the door and stepped onto the smooth sand. Immediately, the sun hit her face and she squinted. For a moment she felt at ease again, walked towards the water and let the cool waves wash over her bare feet. She reached into her pocket and felt the small gold box that Bailey had given her. She opened it; inside laid a gold charm bracelet that had belonged to Leana's mother. Her eyes filled with tears at the sight of this small piece of her old life. Then she remembered where she was, that this beach wasn't real. A feeling of panic hit her and she could hardly breath. Suddenly the smell of salt was suffocating her, the breeze felt like a 40 mile-per-hour gust of wind, and the grains of sand were scraping her delicate feet. She ran to the door beyond the beach and hit the button, the button that would turn it all off. Again, the sound of the waves faded away, the sun began to turn into the fluorescent light, the sand disintegrated beneath her and there she was, in that empty white room that had once provided her with so much relief. She wondered if she would ever feel peace again. She wondered when she would die, if she would die. She wondered what was real about her life. Finally, she wondered, how can I get out?

ROBIN MURDOCH
"Ahh! Real zombies!"

Tiny little nano-machines. Stored in a miniscule computer. What's on your mind? A series of actions performed by these nanos to control your actions. They heal you, that's why you let them put the little machine in. The government knows best, right? Of course they do! And now they know everything. Everything down to your last meal. Your last illicit drug use. Your last moment of true happiness.

But they don't like the happiness. What do happy people do? Live contentedly. Settle down with their families, do what they love, feel as though they've finally reached their goal. Not productive enough for the government. We need competition to get farther.

And farther

And Farther

And FARTHER.

So let's heal them. All those people who wish they could be happy. Lets give them life. The nanos can do it- connect them to The Server. It's got all the remedies. They've been saving those remedies for the day where we can use them to their best advantage. The scientific elite is part of the machine, you know. They work for the government; the government funds their endeavors. So much has been discovered- more then we can ever know. They know everything. About science, about the earth, about human nature, about US. They know more about us, about our bodies, about our emotions then WE do. We don't even realize what's going on.

Why can't we just be happy? The American Dream- a beast that has evolved into something foreign to those who still hold on to those last vestiges of the past. There are no white picket fences; there are no nuclear families, no dinnertime chitchat about your day at work with those who love you. The American Dream is unattainable. Money, a mansion, a wife and three mistresses, a husband and a robot playmate, computer nannies for the kids with dinner cooked up by the house itself. School, Work, Competition, these are our loves.

Our bodies stay strong thanks to the nanos- thanks to The Server. It's our lifesaver. It's what lets us keep up the competition. Those little nanos run through our bodies playing fix-me-up every time we step out into the sunlight. Skin damage? NO! Oh, the nanos noticed that you stepped outside before you're designated Out time this morning, why was that? Were you violating your Restrictions? There's an unusually high level of serotonin in your blood this evening. Did you overspend your Enjoyment time today? You know what that does to productivity! That's three days Enjoyment Free for you!

I saw that you were engaging in sexual activity outside of your allotted reproduction time. You learned in school that sex complicates things- that

sexual relationships lead to a conflict of competitive interest. You could argue the case that the act was competition in itself, but they can see those love chemicals in your body, and they won't let you get away with it.

You don't want to be connected to The Server? Try living without the nanos. Here's the catch- you can't. That atmosphere isn't going to sustain you. Those diseases are going to attack your body so hard. Decades without need of an immune system- the nanos will just take care of it. The machinery is a necessary part of us.

There are enclosures for those who choose to go without- but they're not places that anyone would want to live. Thousands of people all shoved into one air locked living centre on the outskirts of town. Clichéd as ever, keeping in pattern with human civilization. Push those miscreants out to where they can't bother us with their sensitivity anymore. Ingrates who would rather suffer then accept the necessity of technology. They think they're "happy". But the government knows better. The Server says that "happiness" is not the ideal state we think it is. Because, as they've proven, happiness does not a productive society make.

And that's what it's about, right? One hundred and sixty years apiece on this chunk of earth. No more, no less. One hundred and sixty years to live and then, true to style, a lethal injection. Until it ends.

Theodore Foster was the end of the Server Society. Theodore Foster was the death of the United States of America. Theodore Foster has shown the world what happens when you let technology rule your life, and let the government rule technology.

This story starts with the technological revolution of the 2050's.
When the first nanoneurochines were created (that's an entire machine approximately one nanometer in size) and tested in the brain of the ever-suffering lab rat. Of course, it was found that these little magic machines could be sent out and used to take care of business inside the body. And of course those little lab rats were the first ones to realize the dream. Unfortunate. But after ample testing, the technology was found to be safe enough to test on the real target—the human being. Scientists realized that the nanoneurochines could be used to fix any ailment that could possibly plague the body. They were little all-purpose doctors that could be used to keep their hosts damage-free for the duration of their time in the body.

By 2070, the nanoneurochine was a staple in human healthcare. Nanos programmed to could do pretty much anything be injected into the bloodstream. But injection into the blood stream means that we must be aware of the ailment to bring about the cure. This led to the production of another life changing piece of technology- the nanoneurocomputer (NNRC). This device was placed at the base of the brainstem, and could intercept and interpret all signals that pass through. All NNRC devices were connected to a government run wireless server, in which every piece of medical knowledge was stored, in addition to the health records of every citizen connected to The Server. All information intercepted by

the NNRC is sorted and stored in The Server. As the NNRC registers information, The Server responds with corresponding information on how to program the nanos. If one stays in the sun for too long, nanos are sent to the skin to repair the damage done by the UV light. If a toe is crushed, the nanos are programmed to encourage cell growth and provide support as the bone mends. If you eat spoiled food, the nanos can get rid of it before the symptoms are even present. If you ingest an illegal substance, the NNRC can tell exactly what type, how you ingested it, and exactly how to counteract it and incapacitate you until the authorities can be alerted. If you overstep the amount of happiness the government deems allowable for the most efficient society possible, the nanos can be programmed to block the creation of the chemicals that bring about your happiness, and instead provide you with the motivation to work harder to earn your happiness back. But you don't even have to know any of this is happening. It's like… magic. You accept the way things are, as we all do.

Emotions are dead. After decades of oppression, they have sunk back into the brain with no hope of escape. As long as The Server tells the nanos that emotions aren't allowed to show their volatile faces, they are banished into the depths of the mind. Server State citizens are programmed. They make decisions throughout the day, yes, but if they come close to making the wrong decision (one the Server deems to be wrong, that is), they can be stopped. Stopped before they even knew they were going to make a different choice. Love is no longer an issue.

The family unit has been decimated. Family bonds create contentment, which create a lull in motivation for work. Of course, this is not to be tolerated. Mothers are assigned to children to create an optimum growing environment. Children attend boarding schools until they are through with their education and living on their own. Parentage is carefully chosen in hopes of creating the most intelligent, efficient, contribution to society. They've figured out how to engineer the perfect child for each role that needs to be filled in society. Children are no longer born in the Server States, they're bred. Bred to do what they're told, bred to excel at their given jobs, bred to perpetuate the government's control over it's people.

Theodore Foster was the product of the most public parentage choice in American history. The government set out on a decade long search to find the most intelligent individuals in the nanotechnology and computer science fields. They held aptitude competitions across the States in pursuit of a man and a woman who could pass on their abilities to the next generation. Computer Scientists and Nanotechnologists from across the country clamored to prove themselves, and achieve the ultimate reward for their hard work—being chosen by the government to publicly produce the Server States' next idol. After much deliberation, two were chosen; genius level nanotechnologist Howard Werkblatz, and equally brilliant computer programmer Michelle Carson. They were heroes. The best and the brightest in their fields, dedicated to their work, idolized by those they worked with, and chosen by the government for the most publicized child engineering campaign ever to be had.

So Theodore Foster was bred, born, and idolized. He entered society on

in a flurry of excitement tinged with the highest of expectations, and stayed suspended in that cloud for the duration of his life. He was the exemplification of what it meant to be a citizen of the Server States. He excelled at school—as was to be expected. Throughout his schooling, Theodore surpassed his teachers in his abilities. He scored perfectly on every test he took, never considered enjoyment until he had finished his societal duties, and felt his most contentment and happiness after completing his work. He was the perfect citizen.

During high school, when most students become unruly and difficult for the government to control, Theodore stayed immersed in his education. His enjoyment hours fell by the wayside as he soaked in as much information as he could about his subjects. He knew he was created for a reason—creating a new, more efficient NNRC. Gotta translate those electrical impulses from the brain even MORE quickly. Make society one slick machine, working out the kinks before the kinks even know they're going to be kinky. This was what Theodore was brought into the world to do, and this is what he dedicated his time to working towards. Theodore Foster was a government wet dream in the form of a charismatic, dedicated young man.

By the age of 28, which in the Server Society is barely considered adulthood, Theodore had achieved his life goal. He had created a new, more efficient nanoneurocomputer. The government granted him the most gracious gift they wanted to offer (for gifts do not make an efficient society), and allowed Theodore to be the first to test out his new creation. After all, who better to test it out on then the very man who created it?! But of course Theodore doesn't see it this way. For him, being the first with this new technology is his ultimate achievement. He has created ultimate efficiency, and cannot wait to be a part of the future.

The insertion of a nanoneurocomputer is a dangerous task. Though once the computer is installed, one is completely protected from the elements (past beheading, or other instantly fatal occurrences), but in the interim time between the preparation for insertion, removal of the old hardware, and installation of the new, the body is a giant sack of vulnerability. Insertion rooms are the only places in the Server States that are required to be 100% sterile at all times. If a disease can infiltrate the body during the time where the nanos are out of commission, that body will be infected immediately and has very little chance for survival. The utmost care must be taken in the room's preparation, and the sterilization of every person present for the procedure. In the time of the nanos, the diseases that have been cured and left to float throughout society, gaining strength and resilience as new cures are created for the nanos to keep the body safe from harm. Consequently, though Server citizens never succumb to these illnesses, their lands are wrought with powerful diseases that pack a whollop.

On the day of Theodore Foster's insertion, in the excitement of the golden boy's ultimate achievement, someone forgot to wash their hands. Though under regular circumstances Server watchers would notice this oversight, even the government was anticipating the day's events and wasn't paying

enough attention. So, as the States' team of best inserters worked on giving Theodore the first access to his new technology, infection worked itself into the brain stem. The area surrounding the NNRC became inflamed and unresponsive to the technology. The computer wasn't receiving any signals. The infection was spreading. Years of reliance on the nanos to do the jobs of doctors had lead to an almost complete eradication of the profession. There were ways to treat illnesses such as these, but to gain access to them, one must venture into no-mans land: The Bubble States.

There are always those who question government. The Bubble States not only opposed the government, but the ruthless advancement of technology at the cost of humanity and a fully functioning nature. With the ability to heal from anything, and government control of the mind, The Server State population let the planet and it's health fall to the wayside. Waste plants that contaminated the drinking water were no longer an issue if the nanos could fix you up right away, right? The Bubble-goers of the Sterile States disagree. Their compounds are enclosed in what looks like a giant bubble- hence their derogatory identification as Bubble-goers. The bubble keeps their society safe from the disarray of the Server States. Life inside the bubble is natural. There are no brainstem computers, or nanos, or government mind control. They coexist with one another, occasionally feeling sad, angry or jealous. More often feeling happy, content, and fulfilled. They know the choice they've made—to live a shorter, more dangerous life in payment for their freedom. Server citizens have been bred to believe that their way is the only way. Bubble-goers see the truth: The Server government is using its population to further it's global standing and acquire as much monetary gain from it as possible. Nothing else matters. To the Bubble-goers, this is the blackest form of blasphemy. The sacrifice of emotion and control far outweighs any benefit of health once might receive. They view the Server States with a sort of hostile disgust. But their rejection of the nanos kept alive the only thing that could help poor Theodore Foster: healthcare.

The Sterile States still functioned like the societies of old. Though technology had advanced greatly over time, humanity prevailed over machine and the human essence was kept in tact. Doctors were still held in high esteem, now with the ability to cure any disease, for it was their research that had provided such extensive information for The Server. The relationship between Sterile and Server States walks a thin line between cooperation and outright hostility. Both societies openly disapprove of each other, but must work together to preserve the peace in place of the warfare that would ensue otherwise. The government stays out of Bubble affairs in return for medical information. This was Theodore's only hope. With next to no immune system, and no doctors available in the Server States, the government was forced to place its most valuable citizen's life in the hands of the Bubble-goers. But not without warning.

Without the nanoneurocomputer and the control of the nanos, Theodore's mind would be unguarded for the first time in his life. Emotions, free from their nano oppressors, would fling themselves

back into use with a force strong enough to drive a man insane. So they warned him of the danger. Of the emotional influx. Of the ways that these emotions cause problems in life, regardless of how great it may be to finally feel them. Emotions make for an inefficient human. Who wants that? The Bubble-goers. They'll tell you their way is right, and that you're being controlled. They just don't understand. They don't realize that this is the right way. They don't realize that they're living like heathens; dying so young, their bodies decaying, emotions running rampant. No efficiency there. So don't listen to them, they know not of what they speak, Theodore. You understand the importance of control and efficiency. You are the model citizen. All you have to do is heal and come back, so we can re-insert your NNRC and get back to life as it should be.

And so Theodore found himself in a hospital room on the other side of the bubble. People were so strange there… Theodore was witnessing old age for the first time. Old age and… some strange feeling he couldn't put a finger on. He felt it in his chest… in his stomach… but it wasn't an ailment. It was a sort of ache. A dull throb. His heart beat more intensely as the nurse approached him with his next dose of medicine. She noticed, as his EKG spiked the second she walked into the room. Theodore was confused. He'd seen beautiful women before- much more beautiful than this one—but had never responded in such a way. Emotions. He remembered what he had been told. Evil, manipulative emotions. He closed himself off immediately. The nurse smiled kindly, injected Theodore's medicine into the IV, and walked out of the room gracefully.

This confused Theodore. Where were the heathens he had been told about? These people seemed civilized enough. They were kind to him, never accosting him about the evils of his society as he had been told they would. Theodore felt another strange feeling rise in his chest, this time more soothing. Emotions. Evil emotions? They don't seem so bad…

The Nurse entered again, carrying a tray of delicious looking food. Another fallacy fed to him by the government- they had told him the food would be horrible! As the nurse handed him the tray, he noticed a nametag. LuAnne Simmons. Theodore feels that uncomfortable feeling in his chest again and cannot resist the urge to ask her who she is. Which, you would think, would be obvious, but in Server Society is always the first question one asks of a stranger. It is important to know the status of another when interacting with them in the most efficient manner. LuAnne shares: She is a Nurse at the Simmons Hospital, where Theodore has been taken. Yes, the Simmons of her last name is the Simmons of the Hospital. Her father is a doctor, and her mother… never mind her mother. Theodore doesn't need to know that her mother is the most influential anti-Server activist in all of the Sterile States. Theodore doesn't need to know that LuAnne is the second most influential anti-Server activist in the Sterile States. Instead LuAnne smiles kindly again, offering information about her childhood in the Bubble, sharing how amazing the clean air and green grass can be on a warm summer's day. LuAnne shared the story of her first love—a boy who died after a Server State citizen attempted to infiltrate the Bubble.

Theodore begins to feel a mixture of strange pressures in his chest again. This time both pleasant, jarring, and… strangely… melancholy. He'd heard of melancholy before, but to feel it was a whole new animal. He found himself wanting to reach out and touch this beautiful, heartbroken woman. Heartbroken. This could never happen in the Server States. Nothing is ever broken! But this other feeling… this light, feathery, uplifting one. This was something Theodore could get used to. He felt himself start to embrace it.

Theodore and LuAnne grew close during his time at the Simmons Hospital. They shared much about their lives. Theodore explained in detail the society in which he lived—something he would never have been able to do while still under the control of The Server. In his explanation, Theodore made a realization. This control was not natural. Though this may seem like a blatant fact to those on the outside, for Theodore to admit this to himself proved something important: embracing human nature will always prevail over technology and control. He *felt* for the first time. He felt happiness at the prospect of being able to stay like this, he felt anger for being deceived, and for his people's entrapment in the rut he had the unfortunate good luck to escape. He felt warmth for LuAnne, and her kind smile. He felt love for the sun, the grass, the birds, and the earth. Theodore felt human. Theodore felt natural. Theodore felt the need to make a change.

During his last days of treatment, Theodore shared his hopes for change with LuAnne. She immediately took interest. Theodore was still unaware of her ties to the anti-Server sentiment, and took her excitement as happiness for his revelation. He was still new at this whole emotional shtick, after all. She fed him ideas. No, the government won't see reason, no the people cannot be persuaded when they are being controlled, no we can't shut of the Server—everyone would die. What can we do?

Theodore can do what he does best: computer programming. On his last day of treatment, Theodore wrote up the plans for a computer virus. He would install it in the nanoneurocomputer he created, and have it inserted as normal. Once the computer connects to the Server—BAM. The government can't steal any information that's not directly medical. No emotional control, no monitoring every citizen's every move. The nanos fix what's wrong and then go back to the computer, ready for another ailment. It was a perfect plan. But LuAnne never shared with Theodore how much she truly hated Server Society. LuAnne hated it, and Theodore ended it.

There was a glitch in the plan. As soon as the virus got uploaded onto the Server, it took effect. But unlike Theodore, the rest of the population was not warned about the surge of emotions they would feel. The rest of the population was barely even aware of what emotion meant. Yet, all at once, they experienced it for the first time. Anger, jealousy, hatred, confusion. All felt simultaneously, and passionately. Imagine: every suppressed emotion surfacing at once, and you don't have the slightest idea of what is happening. The Server States went from a population of carefully controlled quasi-humans to crazed, confused, full humans with no idea of

what is happening.

Theodore, having already experienced the emotional rush and not reacted in such a volatile manner, was at a loss for what to do. In a fit of passion for the life he now felt all should have the right to live, he overlooked the fact that a mass scale dip into insanity could cause such massive societal disarray. But Theodore could never have anticipated what happened next, for he had not planned it to be so.

In the moments before he returned to his home, LuAnne asked to look over his formula for the program he would use to set his people free. LuAnne, having spent her childhood learning from her mother every possibly way to take down the Server Society, had immersed herself in computer science. To better understand the enemy, she always said. So in those few minutes of reviewing the plan, she made a tiny change that would decide the fate of Server Society.

And so Theodore Foster brought about the end of his people. After a few hours of insanity pervading every area of Server Society, the illness started. LuAnne had removed the code differentiating between medical information and the information used to control. Theodore, in his haste to free the minds of his people, overlooked this as he programmed him NNRC. Every nanoneurocomputer was made obsolete within minutes. The super-diseases that had been bred since the implementation of the Server were ravaging the population into a disgusting breed of half-insane, disease ridden, confused monsters. The fears of past societies were realized in that moment. Zombies can exist. And Theodore created them.

Theodore, in an attempt to find LuAnne, broke through the sterilization chamber separating him from the Sterile State line closest to his home. He headed straight for the nearest hospital, for he also needed to be treated for the ailments he had acquired without the aide of the nanos. But Theodore was a role model. And as soon as the Server population, infected with emotion and disease alike, saw him head to the hospital, they all followed suit. The Bubble was broken. These infected monsters headed straight for the doctors to get healed. But though the Sterile State doctors had the cures for the diseases they were accosted with, they did not have the time to heal before they were infected themselves. Hospitals across the Sterile States were made redundant as every doctor succumbed quickly to the barrage of illness brought upon them by the crazed people of the Server States.

The doctors were dead. The Server was infected with a virus. The Server Society and Sterile Society alike were heading towards the fate of the doctors. Theodore died with his brethren, confused and alone. LuAnne had achieved her goal—at the cost of her own people. Reliance on technology destroyed the society that created it, and the society that rejected it.

ALY MILLER
"Fake"

Dr. Leslie Hamilton stepped back from the table and surveyed her work. Lying across the cold, stainless steel surface was what looked to be a normal human male. The figure was entirely ordinary looking—his wavy brown hair, lanky figure, and laid back attire would not catch people's eyes. His eyes were closed and he lay perfectly still. If someone had walked in just then, they probably would have thought he was dead. Until Leslie slowly, hands shaking slightly, reached into her pocket and pulled out a small device with a red button on it. She took a deep breath and squeezed her eyes shut, as though bracing herself, and pressed the button.

No loud alarm sounded. Nothing exploded. It seemed as though Leslie had been tense and scared for no reason. The only difference was in the figure on the table, whose chest was now rising and falling. Leslie's eyes opened warily and a smile broke out on her face as she saw the results. She put her hand over her mouth and let out a loud, semi-hysterical sounding noise that seemed like it might have been a laugh. She emitted the noise again, before bursting into full on, glee-filled laughter. The figure opened its eyes, blinked a couple of times, and turned to face Leslie.

Leslie just shook her head, tears forming at the corners of her eyes. "You're alive," she finally managed to say, staring at the man in wonderment. She spent a few more minutes just shaking her head and laughing, her own way of celebrating. The man simply stared at her, unmoving apart from his blinking eyes. When she finally composed herself, she stood a little straighter, pulled a pencil out from where it had been tucked away in the bun her hair was tied up in, and gave the figure a smile.

"Hello, Adam," she said.

The man who Leslie called Adam was not human. He was, for lack of a better term, a robot, although a highly advanced one. Leslie had been working secretly and tirelessly to create artificial human life—Adam was on all surfaces a perfectly normal human. Tomorrow she would wake him up, with his personality and fake past in place, and would set him out into the real world. She would follow him, observing how he acted and responded to different situations. The purpose of Leslie's little experiment was to ensure that he was predictable—she wanted a robot that she could understand, control.

Adam continued to stare, just blinking his brown eyes. Leslie sighed and opened her mouth as though to say more, but just ended up waving her hand as though to say not to worry about it and walked over to her computer. There she sat, fingers poised over the keyboard, ready to record what had happened that day.

Leslie slept restlessly that night, excited for the next day. She had shut

Adam down for now, but she couldn't stop thinking about him. The breathing simulation had worked. He was responsive. He knew to look in her direction when she talked. He'd done similar things and been on multiple times before, of course, but never when he was *complete*. Never before he was ready to have his personality put into him. Before she knew it, her alarm was buzzing. Normally, Leslie would groan and hit snooze for a good thirty minutes longer. Not this morning.

On an average day, Leslie had no trouble getting dressed in the morning. She usually had nobody to impress; she lived in her lab, which she owned privately with money earned from previous work. Money was no issue for her. Because the lab was her home and her entire life for the past three years revolved around perfecting Adam, she didn't get out much. She ventured out maybe once a week, to get groceries or other supplies, and when she did she never really talked to anyone. Instead, still in scientist mode, she would often simply observe the world around her and the interactions between different people, sometimes making notes on her phone of different fashion or other trends for input into Adam. Thus, she did not put much effort into her appearance. She was once conscious of how she looked; she once had friends who she would go out with; she once was a social person. Now, she could easily and correctly be summed up in one term: scientist.

Today, as she stood in front of her wardrobe, she hesitated. Today was a special day. She settled on a pair on black slacks she hadn't worn in years and a nice green blouse. She surveyed herself in the mirror, amazed at how different she looked from the last time she'd worn these clothes. She looked…*old*, the clothes fit her a little tighter than they had last she wore them, and for the first time she noticed just how *pale* she was. She sighed, knowing she would have to settle with her appearance, and walked downstairs to wake Adam.

Adam was lying exactly as he had been the night before. Leslie put on a lab coat, both for an air of authenticity and so that later while she followed Adam he wouldn't recognize her by her clothing, plugged a thick cord into the sole of his left foot, where a socket that she would later conceal was located, and stood by her computer, fingers poised over the mouse. With one last deep breath, she pressed the button to upload. Adam remained perfectly still, eyes still closed, for a few minutes while the compressed data Leslie had assembled was put into Adam, making him into the quasi-person she had created. When the computer gave a small *ding* to let her know the process was complete, she unplugged Adam and pulled the device with the button out once more and pressed the button. This time, instead of gradually awakening, Adam's eyes snapped open.

"Hey…so um…am I done now?" he asked, giving Leslie a wary look. She felt a surge of pride, watching his facial muscles move accordingly as he talked, admiring the fact that he could form sentences and accurately react to social situations. She was so busy admiring her creation, she almost forgot to respond. She snapped out of her reverie as Adam spoke again: "Um, sorry, excuse me, but…" he said, trailing off at the end of

his sentence, just as Leslie knew he would. He was programmed to be indirect, shy, and a little awkward around people, very unlike Leslie who was much more blunt and direct.

"Yes, you're done. Now get on, and you'll receive your check in the-mail," Leslie said, trying to sound professional and to keep any excitement out of her voice. Her experiment was going perfectly so far. Adam was reacting to situations exactly as was expected, and the fake memories she had tirelessly created for him were obviously functioning well; she had inputted a recent memory for him of deciding to go donate some plasma for a little extra money, explaining why he would be waking up in a lab. Of course, the actual process of donating plasma was completely different, but Adam didn't know that, and Leslie hadn't been able to come up with a better explanation to input into him.

"Um, thanks, I'll, er, be going," Adam said, giving Leslie a sheepish smile before heading out the door. As soon as the door shut behind him, Leslie began running around the lab, gathering supplies. She grabbed a notepad, her phone, her camera, her laptop, a jacket, a different shirt to change into in case it seemed like Adam was beginning to recognize her, and threw her lab coat off somewhat haphazardly, not noticing or caring when it fell to the floor, which seemed very out of place in her otherwise spotless lab. She picked up her bag, walked across the lab, and opened the door.

The first step into the outside world, as always, was a bit of a shock. It took her eyes a couple minutes to adjust to the *brightness* of it all, and to how many people were around. She knew the first place Adam was heading today, his apartment, although after that she would have to be able to see him to predict what he would do next. Leslie could predict how Adam would likely react to different situations and what he would want to do, although she was not able to say what he would be doing at, say, 3:45 next Tuesday. She could tell you which restaurant he would likely be at if she knew he was going out to eat, but she couldn't know for sure when he would be going out, or with who. He could not be entirely predictable; that was the point of artificial intelligence, to allow the machine a degree of flexibility and the ability to analyze situations and make their own assessments and decisions based on that. However, the entire experiment Leslie was conducting at the moment revolved around ensuring that there *was* a degree of predictability to Adam.

Essentially, she wanted to ensure that while she didn't know exactly what he would be doing at all times or be able to predict everything, she needed to be sure he didn't do anything completely unexpected. Before she introduced her technology to the world, she wanted to ensure it would be safe. The entire time she created the experiment, no matter how many parameters or safety features she included in Adam, images of a robot apocalypse, of them surpassing humans in intelligence, of them taking control ran through her mind. She imagined Will Smith having to go save humanity, like in *I,Robot*. She might have been paranoid, but she figured that it was better to be safe than sorry. Plus, with test data, she would have a better chance of getting a good buyer for her technology, a

buyer she could really trust.

Leslie headed to her car and drove to Adam's apartment complex where she parked across the way, at the building across from his, giving her a clear view of his apartment from the outside but sitting far enough away that he wouldn't notice her. Her windows were tinted so nobody could see into her car and see what she was doing. She climbed into the backseat to be more comfortable and settled down, opening her laptop and double clicking on the live video feed she could access from the cameras she'd set up in Adam's apartment. She had bought Adam the place a week earlier and gone over there to get it set up, putting things the way Adam was programmed to like them, and setting up discrete cameras all over the apartment. Adam was made to be relatively unobservant, which she hoped would carry far enough for him not to ever discover the cameras. But with them, she could observe his behavior in his apartment. She saw him sit down at his table and pour himself a bowl of cereal before devouring it, leaving the box of cereal and a Cheerio that fell off the spoon on the table, something Leslie itched to go clean up. Unlike Leslie, Adam was programmed to be rather messy. He sunk into the couch and turned on the TV, flipping channels. Leslie watched him do so through a camera facing the TV, so she could at least watch it along with him and not be too bored. After about an hour, Adam turned the TV off, stretched, and gathered up a stack of papers from a nearby table. Leslie smiled to herself; it was time for Adam to get a job.

Leslie had, years ago, back when she still had a social life, encountered a man who made fake documentation for a living. He was probably the least reputable of her social circle, but he was a useful connection to have. She'd called him up a while ago and purchased many kinds of paperwork for Adam to make it easier for him to get a job. She'd also equipped him with many of the basic skills he would need, although she did ensure that he still seemed young and inexperienced. She wanted him to seem like a very average, recent college graduate to the employers.

The first place he went was a bank, where Leslie had set up an interview for him that he remembered setting up himself. He shuffled in, stammering that he was here for his appointment, before walking into the interviewer's office. As he neared the office, he looked calm, cool, and collected until you looked at how he was gripping the folder he'd brought with him containing his resume and other paperwork he needed to apply for the job. Leslie knew he was racked with nerves, and would probably stutter and stammer through parts of the interview. But, she knew he was qualified for the job he was applying for, of working with their computer databases. Leslie had decided to give him a background in computer skills, as it was something she herself knew about, so she wouldn't have to learn a new skill set to program into him. Leslie stood in the lobby of the bank, pretending to peruse brochures, her eyes darting up to glance at the office door every couple of minutes. After what seemed like forever, she saw Adam leave the office, shaking the interviewer's hand enthusiastically with a wide smile on his face. Leslie knew he must have gotten the job. She watched as Adam climbed into his car and, thinking

nobody was watching, pumped his fists in the air. She walked outside as he began to crank up the radio and roll the windows down—just as Leslie would expect—and drove off.

At this point, Leslie knew several places Adam *might* go, but Adam was reaching the point where she couldn't say exactly what he would be doing at all times. Therefore, she quickly got in her car and began to follow him, being sure to be careful not to be noticed while still keeping track of him. She had a tracking device in his car, so if she lost him it would be OK, but it was easier if she could just keep up.

Adam ended up going back to his apartment. Leslie couldn't say she was too surprised, in his mind he had just moved in to his new apartment and the new city a week ago. He didn't really know anyone in town yet, so he didn't really have anywhere to go celebrate with people. Leslie watched from her car again, this time parked farther away, next to a different building in the complex so as to not arouse suspicion, as he grabbed a beer from his well-stocked fridge and settled down to watch TV again. Leslie watched him until he made his way to the bedroom, readying himself to sleep, and then started up her car again. It was time for her to go back home, she would quickly review how he slept in the morning before beginning another day of observation. The day of following Adam around, constantly on edge that he would do something out of the ordinary, of being around so many *people*, had tired her out. She let out an audible groan, at the realization that every day for the next six months, how long she planned to observe Adam before telling the world about him, she would have to do the exact same thing. Hopefully Adam would make some friends soon, and it would all get more interesting.

Over the course of the next few months, everything went according to plan. Adam began to make some friends at work and fell into a pretty clear routine that made Leslie's life in observing him easy. He would wake up, go to work, eat his lunch at one of a few places near the office with some of his colleagues where they would laugh about things that had happened that day, go back to work, finish up, either go out for drinks with some friends at a local bar that had happy hour until 7 or head back to the apartment to relax by himself, and then go to bed. One thing Leslie did begin to notice was that Adam's personality was starting to evolve a bit—he was becoming less shy about opening up to others, about initiating conversations, and about breaking from his routine. He began to go out with his friends more and more, although he still spent a solid half of his nights in his apartment by himself, relaxing. Leslie continued to follow him, taking precautions to blend in as much as possible and changing clothes often so she would not be noticed. She didn't mind most of it, although the one activity she didn't enjoy was when he went out for drinks with his friends—Leslie would usually sit at the bar and order something non-alcoholic for herself, but as a woman alone at the bar, men would sometimes come over and try to charm her. Some were men she might have once been interested in, many were not. But regardless, her priority was Adam. No matter how wistfully she might watch some of them walk away after she would bluntly

inform them she was not interested, no matter how much some of them persisted, she figured she would have time for that later. But it made her feel lonely, knowing that she was rejecting all these people while Adam, who wasn't even a real human, was laughing with his friends at their usual table. Leslie felt he was better at being human she was.

No new groundbreaking developments occurred over the course of these few months. That is, until one day, while sitting in her place at the bar, Leslie could hear Adam telling his friends how he had managed to obtain a date. His friends gave him high-fives and Adam acted appropriately embarrassed, but she could tell he was proud and reveling in it. Again, Leslie felt a pang of jealousy, but shoved it aside. Adam had come a long way, but his personality was evolving fairly normally, and he still had not done anything out of the ordinary. She was still able to easily predict his movements and actions and, from what she could hear of Adam's conversation with his friends, he had acted as nervous and bumbling as ever when he was asking the girl out. Leslie was eager to observe this date happen, to see how Adam would interact.

The next day was the day of the date. That night, Adam stood leaning against the wall in front entrance of the restaurant with his cell phone in hand, pretending to look cool and unaffected and busy with a text message conversation, but really sneaking a glance up at the door every couple seconds, to make sure she hadn't arrived. He took a brief break from his (fake) text messaging session to check his wrist, forgetting he was not wearing a watch. He blushed, hoping nobody had seen that (nobody had, as nobody cared enough to watch him except for Leslie, who was sitting at the bar, absentmindedly stirring her drink while taking notes on the small pad in front of her), and returned to pressing random buttons on his phone to diffuse the awkwardness of waiting. Leslie was rather amused by the whole situation; by trying to be less awkward, Adam was actually being more awkward.

After about five minutes of this, a girl finally entered. Adam's date, a girl he'd met in the elevator at work, was pretty in a very plain sort of way. She was very indistinctive looking, which was possibly what attracted Adam to her. Together, they made a perfectly average looking couple. She looked around nervously, shifting her weight to different feet, before she spotted Adam, who was determinedly continuing his fake text message conversation and pretending he hadn't noticed her, trying not to look too eager or like he'd been waiting long. Leslie watched as they said hello to each other, then watched as they sat down—in a booth, as Leslie knew Adam preferred. Leslie watched Adam order chicken parmesan, his favorite dish (Leslie's favorite too, coincidentally) and marked on her notepad that everything was going according to her predictions. There was nothing that Adam had done so far on this date, just as in every social situation before, that she had not been able to see coming. Leslie drummed her pencil on the bar and continued to watch.

The pair seemed to be getting along well. The girl laughed at something Adam said, he grinned at her, and the conversation continued. Adam talked more and more as the date went on, opening up and becoming

less shy around the girl. The girl proved to seem less and less shy as the evening went on. She talked enthusiastically, waving her hands around. Adam seemed a bit taken aback at her at times, but overall, they both looked happy. As the date ended, Adam walked the girl to her car and kissed her on the cheek. Leslie smiled to herself; it was so very *Adam* for him to be so gentlemanly on a first date. The girl smiled and climbed in her car and remained smiling as she pulled out of the parking lot and began to drive away. Adam did the same, blasting music again from his car, a sign that he was happy.

On the ride back to follow Adam to his apartment, something hit Leslie. She had been so focused on Adam and how he was experiencing the world and things around him, she had never thought about the cost of unveiling him for what he was on him, or on the people he'd formed relations with. Until this night, Leslie had largely viewed Adam as an experiment. As a pet of sorts. It was the kiss Adam gave his date that finally made Leslie realize; to her he was a machine, a creation, while to everyone else he was a human. A person they were becoming attached to, a person they would feel betrayed by when they discovered what he really was. This newfound realization made her job much harder. She knew she would never be able to stop thinking about this from then on, as she observed Adam interact with people. How would they react when they found out? Did she really want to watch Adam continue on a relationship with this girl, only to a few months later reveal to the poor date of his, who seemed so happy at the end of the date, that Adam wasn't real, and was going to be disassembled? The answer was, of course, no.

That night, Leslie tossed and turned in her sleep. Nobody suspected the truth. Adam had no idea, as far as Leslie could see, that he was any different from anyone else. He had acted as Leslie had expected and he had never deviated from how he was inherently programmed. Her experiment, so far, was a success, and to be honest Leslie could not see anything dramatically changing in the next couple months to make her experiment *not* a success. She had done what she set out to do. With the technology to create a new person, a new personality, well, to be honest, she wasn't entirely sure what the purpose of such technology would be and what it would be used for. She had ideas, of course, but she would leave the fleshing out the ideas to the companies wanting to buy. Her plan was to hire good, expensive lawyers and have businesses pitch their ideas for the technology to her until she found one she liked enough to sell it to. But she had come up with the idea for the creation and she had *done it*. She had created life complete with a personality. It was a huge milestone in science, in technology, she would receive acclaim and recognition and awards…but what Leslie had not truly thought out was how it might be a huge step back in humanity. In how people viewed each other. What if the general public knew about people like Adam? What if many of them existed, integrated into society? Would people be constantly paranoid that their new friends, their loved ones, were in fact robots? Creations? Artificial personalities? Fakes? Or were they? Were they really fake? Adam didn't seem to think so, and the attachments he'd formed were genuine to Adam's friends and to Adam himself. So even

though Adam wasn't human, did that mean he was truly not real? Leslie sighed. She didn't know what to think anymore and she was getting a headache.

She never truly fell asleep that night; her mind was going too fast. Her alarm went off and she glared at it. She had no desire to go follow Adam today, to see him relaying the stories of his date to his friends, to see him interacting with this girl farther, to see him *happy*. Only to know that if everything went according to plan, all that happiness would be gone with the revelation of Adam's identity. But she'd been working at this for so long. The ideal situation, on the surface, with the guilt she was feeling at the moment was to just let Adam live his life, to never tell anybody. But Leslie hadn't discovered a way to make him age like any other human and if he ever got injured, medical professionals were bound to notice that he was a machine and lacking things like blood and organs.

There was no way he could go on living as a human secretly. He either needed to be shut down now and the technology destroyed, throwing years of Leslie's work and devotion down the drain, or Leslie would have to go through with her original plan and reveal him to the world.

She rolled out of bed anyway and went to work observing Adam; the day was just as heart breaking and terrible as she'd expected. Adam spent the entire day smiling and she had to watch him "just happen to" walk by his date from last night's office, although the girl was in a different department on a different floor and they both knew he had no logical reason for being there. Even at the bar later, when Adam was laughing with his friends, an act which had never bothered Leslie before, she couldn't get the idea that the relationship he was with these friends of his would end as soon as the revelation occurred. They would feel hurt, betrayed, and confused. Some might go on to brag later about how they were friends with the *first* robot; some might genuinely miss Adam's company; some might be scared by the whole experience. Leslie could predict Adam. She could predict his reaction to a sad moment in a TV show, how he would approach someone he was meeting for the first time, what he would order at a restaurant, the kind of people Adam would be attracted to for relationships and friendships. These human people, though, Leslie could not begin to predict. And that, Leslie realized, was the prime difference between Adam and the rest of the world. He seemed fully integrated. He seemed like a human. But he never would be. Not as long as Leslie knew she'd *created* him.

That night, as Adam was sitting in his apartment, watching TV before it was time to go to bed, he did something unusual. He called the girl. At that moment, Leslie made a decision. She couldn't let this continue. She exited her car without a moment's hesitation, slamming the door behind her. She marched up to his apartment on the second floor and banged on the door. Adam opened the door a few seconds later, his cell phone still held to his ear. "One second," he mouthed to Leslie, telling the girl on the phone that he had to go but he would talk to her tomorrow. Once he'd hung up, he turned his attention to Leslie. "Can I help you?" he asked politely, looking taken aback to find a strange woman in her forties

on his doorstep.

Leslie stared at Adam, at the man she'd created. She'd grown attached to him in observing him. But, after everything, it was like he was a character on a TV show to her. Because she knew he, like characters, was written and scripted and, as much as he seemed real, he just *wasn't*. She cared about him and about what happened to him, but ultimately, Leslie knew, he was fake. It might seem real, but it wasn't. And the world wasn't ready for it.

Leslie drew in a shallow breath, tears forming at the corners of her eyes. She took the phone from a dumbfounded Adam and closed it quietly.

"Goodbye, Adam," she said quietly. Adam had barely a moment to register what was happening before Leslie pulled the device with the button out of her pocket.

"What…" Adam started, but it was too late. Leslie pushed the button. Adam's face wiped of any emotion and his eyes closed. He was gone, and it was as simple as pressing a button. He would be remembered as real among those who didn't know, but Leslie knew. A human hadn't died just then. She hadn't killed Adam. She had just written the character off the show.

extended

explorations

3.1 Original Nintendo Gameboy with Tetris running. W. Warby, May 2009. Source: Flickr. Creative Commons Generic Attribution License.

SHEP MCALLISTER
"Rolling around in the MUD"

Having played around with *Aardwolf* for awhile now, I must say that I have mixed feelings. I really wanted to spend my MMO time with *Star Trek Online*, but I'm saving for an iPad, and didn't want to spend $50.

Aardwolf was a bit overwhelming for me. This was not because of the game's scope and scale, but simply because it was text-based. I still remember my first Gameboy, and spending countless hours playing *Tetris*. Even then, games incorporated a graphical interface, a control scheme that uses arrrow keys to move the cursor, icons to represent items, and visually realistic worlds that convince us suspend our own realities and immerse us in the game.

Aardwolf is a throwback to a previous era, and for many people this is great. There are still people that prefer a command line interface on a computer to modern graphical user interfaces (GUI). I am not one of these people.

Aardwolf made me do something that games don't normally do: it made me think about how to play. After a relatively short period of time, control schemes for modern games have become familiar, almost second nature. This effectively eliminates the controller that separates the gamer from the game, and we become a part of what we see on screen.

This essential component of enjoyment never existed for me in *Aardwolf*. Having to constantly think not about "what spell should I cast?" but rather "how do I cast a spell?" made the game very frustrating.

I realize that *Aardwolf* is a throwback to the beginning of virtual worlds, and the games have come a long way since Richard Bartle's original MUD. Though I have never played *World of Warcraft, Everquest*, or *Star Trek Online*, it is clear from what I do know that they embrace modern game design principles. Though they are certainly more complicated than the average single player game and offer a higher level of customization, they use familiar graphic interfaces that allow players to become a part of the virtual world in a way that Aardwolf and similar text-based MUDs can't.

KENDRA DOSHIER
"Living in a virtual world"

A friend of mine has been trying to get me into *World of Warcraft* for almost two years now. Despite all of her persuasive efforts, I never saw the appeal. The game required too much memorization (something I hate), and the virtual relationships built with other players seemed like little more than an evolved chat room.

Recently, I asked her to play for a while so I could observe the game. Then, she graciously let me take the controls for about an hour. Compared to the game *Aardwolf*, *WoW* is more 'real' and open-ended, which make the gaming experience more enjoyable and relaxing. In *WoW*, there are a vast amount of options and both visual and aural stimulii.

Even though *WoW* is easier and more enjoyable, I still had no idea what I was doing. I aimlessly jogged around my little forest kingdom looking for people to talk to for a good chunk of the time. It reminded me of *Zelda* (Nintendo 64 version, one of the best!) when I played as Link searching around for quests… except in *WoW* I was this terrifying goblin woman who was running into trees.

The biggest difference between *Zelda* and *WoW* isthat *Zelda*'s characters were driven by artificial premeditated intelligence, whereas you're actually interacting with other people in *WoW*. It was really awkward communicating with the other players in *WoW,* because I couldn't get past the fact that they were real people. I have gathered that awkward people like me are probably not the greatest candidates for role playing games like this… and I'm okay with that.

After watching for a while, and hearing other people during the game, it was really interesting to me that there were dorky sounding guys with bulked up avatars, and men playing as female characters. That immediately struck me as one of the strange appeals that must lure some of the players in to this virtual world. No matter what you look like in real life, you are in charge of your physical construct in *WoW* in order to give yourself the optimal playing advantage and social experience. I find that people are very accepting in this type of virtual world, as far as 'accepting' goes when there is no face-to-face contact or serious interaction.

Overall, I don't think I'll ever be the gaming type, nor will I pick up on the frenzy any time soon. I'm somewhat awkward in social situations that push norms and create new boundaries because I place a lot of value on communication. Although I am completely accepting of new technologies, I like face-to-face interaction.

I have faith in our media, I'm just weird when it comes to chat-room type environments. Games like *WoW* and *Aardwolf* are very much for people who are able to engage themselves deeply in their own imaginations and who are able to explore new means of communication. I see the appeal, but don't think it's a type of reality I could ever identify with.

3.2 Nintendo Surgeon. *xkcd: A webcomic of romance, sarcasm, math, and language.* February 2, 2007. *xkcd* is licensed under a Creative Commons Attribution-Noncommercial 2.5 license.

EVAN BARNETT
"Welcome to the world"

Aardwolf reminded me heavily of my high school days playing *Dungeons and Dragons.* While neither are inherently lame, I have a hard time imagining things while playing, so they become quite lame.

Often both games boil down to "Vague story for five minutes. Tedious boring combat for an hour. Vague story for five more minutes. Tedious boring combat for an hour." I respect *Aardwolf* for what it does but have no desire to return unless I'm showing it to some seriously drunk friends.

Needing another game to play, I moved back to A*ion: THE TOWER OF ETERNITY.* (I feel that subtitle is worthy of being typed in capital letters as if it is being announced by someone really manly and awesome) A friend is testing out a private Aion server (this means it's everything in the game, minus official servers and mods, plus unofficial mods, minus paying for it monthly, minus a bunch of people, including gold spammers) so I visited his server. Though I wasn't playing with any more than three people at a time, I have to admit, the time I did spend in there with them was as much fun–or more fun–than when the world was filled to the brim with people.

Now, let's get some things straight.

First, the game was incomplete. In fact, most of it did not work. My brother got a blue screen whenever he attempted the necessary ascension quest, the Abyss didn't work, and other game mechanics (such as enchantments and stigmas) did not work at all.

Second, everyone playing was an administrator. What does this mean? It means whatever the players want, we get. Any monster. Any item. Any title. Any person. Any place. This is why I enjoyed it so much.

Now, the incompleteness of the game kinda sucked, because characters did not have advanced skills and could not function at optimal capacity. The abyss is arguably the most fun area, and it was broken.

However, the administrator privileges made the game absolutely amazing. As soon as I could, I promoted myself to fiftieth level, gave myself a million bajillion zillion gold, added all the best gear for my class, included all the enhancements I wanted, and threw in healing potions guaranteed to bring you back to full health. My brother and friends all did the same. And then the fun began.

We spawned huge monsters and small monsters, visited enemy capitals, and traveled wherever we wanted. It was everything I ever wanted to do in an MMO all wrapped into an hour.

That was awesome. We were all in Ventrillo, which is a free Voice Over IP client, laughing and having a great time. Getting to hang out and mess around with friends and family in an MMO (note this great sound byte

3.3 Playing on a private server. Players gather on a private server running a crippled version of the game *Aion Online.*
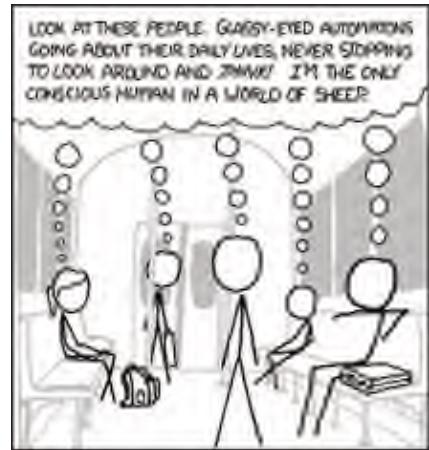
that makes it sound like my parents actually do cool things.) and doing whatever we wanted felt so much more interesting than being confined by a restrictive game.

This server was running off my friend's computer rather than a dedicated box. I cannot wait until the server eventually goes up for real. There will be fewer people, increased rates for experience and loot, and a closer community.

I hate playing MMOs normally, because I 'm fairly shy online, and it takes too long. For this reason, I've never integrated well in MMOs, which makes them rather boring for me. Exploring a community server, rather than the official server, is much more fun.

The friends I made on other games will stop by to visit now and then. With the boosted rates, it won't take forever to level up and be awesome. And, because of the size, there will be fewer people farming monsters.

In the end, I really enjoy persistent worlds as long as they're fairly small.

3.4 **Glassy-eyed automatons.** *xkcd: A webcomic of romance, sarcasm, math, and Language.* xkcd is licensed under a Creative Commons Attribution-Noncommercial 2.5 license.

3.5 Playstation Home is like Society but with more beards. In the film *Gamer* (Neveldine & Taylor, 2009), players control real people as if they were avatars in a gameworld. The above images depicts game characters in *Society*. Note the similarity to *Playstation Home* on the facing page.

ANDREW TRUELOVE
"Playstation Home: There are no words."

So after my less than ideal experience with *Maple Story,* when I was told to experiment with another virtual world, I decided to go with something a little less 2D. Now, seeing as I own a PlayStation 3, I decided to try out the *Home* application included on the console. I had messed around with friends on it before, but I decided to try going a little more in depth with what the program had to offer.

Now to those who aren't familiar with *Home* (and in all honesty, that's probably a good thing), it's like *Second Life* on a console with more advertisements for video games. I would not have bothered with it if it was not free and already on my system. My experience with it until this point had primarily consisted of having my avatar run up to random groups of people and performing the running man dance. I can also have him do the cabbage patch or the robot, but the running man is always dependable. Tonight, I decided to see if I could actually carry out a conversation with other people online.
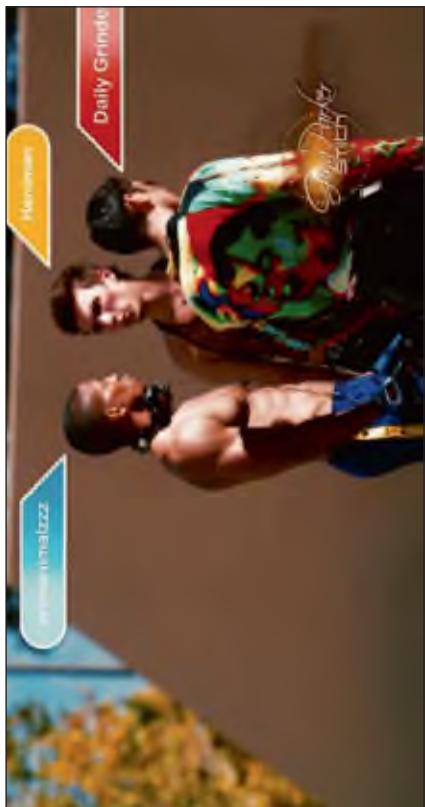
I started out by sending my avatar to the main plaza area. When I made my avatar a few months ago, I designed him to be morbidly obese and gave him a greasy hairdo, tons of freckles, a sleazy mustache and a unibrow. Most people try to make themselves look better online. I just think it's fun to make my avatar look funny. It also makes me stand out. However, it seems that funny-looking people are ignored in cyberspace as much as they are in real life. No one wanted to talk to me, and whenever I approached anyone else, I would not really get a response. So after performing the running man in front of different groups of people, I left to rethink my strategy.

I decided to make my avatar less pudgy and more in line with *Playstation Home* standards. I chose a premade avatar. He did not have greasy hair, a creeper mustache, nor a unibrow. Where's the fun in that? When I returned to the plaz, I thought I would have more people who would want to talk with me.

Instead, I was greeted by a guy with shades and a large beard who asked if he could perform an R-rated act on my character. I declined, because:

 a. *PlayStation Home* is meant to be a family program, thus rendering said R-rated acts logically unfeasible, and

b. he was a freaking creepy guy with a beard and my avatar does not go for that kind of thing.

He went on his way, and I went back to my old standby: the running man. After dancing for a few minutes, a few other people joined in and soon we had a sort of dance party going on. This was good, and I managed to have a minor conversation that consisted primarily of "Running man rules!"

However it wasn't long before everyone left and I was alone again. I tried talking to a few other people, and had a few more short conversations, but there wasn't anything substantial. What could I do to get people to maintain a conversation with me?

I went back to the character creation space and decided to try one last thing. I made my character female.

And that did it.

By doing this I discovered the key to *PlayStation Home*. Apparently, the majority of players are teenage boys so desperate for action that they flock to anything that even slightly resembles a girl. Apparently this includes avatars.

People walked up to my avatar to introduce themselves and I could reply with any crap from the suggested word pool (such as "e.g. we should wait in the store to wait in the store in the store") and I would get interested responses. However, as is the law with *PlayStation Home*, the sketchy players reappeared. If I thought the R-rated acts suggested to my male character were messed up, well—I got off the program pretty quickly. I'm just hoping Chris Hanson comes and busts some of these guys.

To sum it up: if you want to have a decent conversation online, *PlayStation Home* is not your best bet. If you want to interact with sketchy individuals, go right on ahead. Think of *PlayStation Home* as being like *Society* from the movie *Gamer*, but less people die and more apparently bisexual men with shades and large beards ask for digital R-rated material.

As for me, I might actually miss *Maple Story.*

On second thought, no,

 I do not miss *Maple Story*.

I do, however, miss the sense of innocence I used to believe still existed in this world.

3.6 Central Plaza in Playstation Home. Sony's PlayStation Home was launched in December 2008. Though sometimes compared to Second Life, Home has very little user-generated content.

LAURA SCHLUCKEBIER
"I'm a freaking centaur."

Well? I spent some time exploring more of the *Aardwolf* MUD. I'll have to say, not being able to "see" exactly what I'm doing is kind of frustrating. I'm already slightly video game impaired, so it's just a little frustrating.

What also throws me off a little bit about this text-based stuff is that it's this weird combination of things. It's a fantasy novel of sorts (which, I mean, I *really* like. Fantasy novels, I mean) combined with a video game. This is a really cool concept, but the combination of the two causes a disconnect for me. If I wanted to sit and read paragraphs of description, I would sit down and pick up a book.

It would be better if the descriptions were shorter and they would just get to the point. I found myself thinking during training, "Okay read, read, read, are there dummies in this room? No? Okay, then where are the exits so I can find more dummies? Read... read... dammit where are the exits?" Perhaps if I had a little more patience, I would understand that it was like a story that I could make up as I go along. And that would be cool. It would be like a fantasy story in which I was the author.

I tried thinking like that, and it really worked whenever I was going through training because there was a point. There was a goal I was trying to get to. But I was bored just walking around, not really doing a task or anything. I liked having a goal or something to focus on. I feel like if there was some over arching theme. Or goal. Like. You must defeat the master or boss or whatever. Except, you know, then it wouldn't really be an interactive game. It would just be a video game. Because once one player defeats the boss, then he's dead for everyone else, isn't he? So I suppose the point here is that there's not supposed to be an end. Thist bothers me in general about interactive games, not just text-based ones. I like there to be a goal. I like there to be a goal in real life too, I suppose.

Another thing that was weird for me was that because it was text-based there were no pictures. Obviously. But I was kind of bummed because, I mean. I'm a CENTAUR. A freaking centaur. They're awesome. I'd want to like pick what color my coat was and my mane and tail and my hair and facial features. But I could never see how awesome I'd look. It was just like "You kicked a dummy!" or "Your kick chopped through a dummy!"

So there definitely was an additional weird disconnect between my body and the game. I mean, even if there was a picture, I don't know if my body would have had necessarily a strong attachment or feeling towards the body on the game when it moved, but at least I could have seen how the body moved. And, yes, there's this whole desire of imagination which makes it possible for every one to imagine their individual character exactly as they want to. But in video games there's already a disconnect between player and game. The computer serves as both a connector and disconnector. On one hand, it's connecting you to the virtual world but on the other hand, you're still not physically and actually in the game because the computer is just a mediator.

3.7 Stick in the MUD. Original artwork created by Lennox seminar student John Key. May 11, 2010.

Also, there are really disturbing pictures of female centaurs when you Google them. Glad to know female sexuality permeates fantasy creatures too.

As for the actual game itself, I would need a few weeks to totally get down. As I was going through the game, I made a list of things to remember—commands and stuff—so that when I got to the training section, I could remember all of the commands that the "teacher" had taught me. And in some ways it was really helpful, but even based on my own notes I took, I still couldn't figure stuff out. Like I could only kick the dummies. Why couldn't I use my axe? My skills showed that I had only 1% skill in kicking but 95% in axing. I wanted to use my ax, but I couldn't figure out how. So for my training section of my skills and spells, I spent about fifteen minutes wandering around trying to find dummies to kick. I don't really like repetitition so that got boring really quickly.

All in all, I would have liked the game better if there were at least some kind of pictures. Even if there were just pictures of your customized person or centaur or elf. Visualization is so important in video games because it helps us better connect with with the game. We're already distanced from the world through the mediation of the computer, so why distance ourselves even further?

Recently, I've started to explore other video games. After discussing how I didn't like *Call of Duty* or those other stupid shooting games and how I wished there were more games that girls could actually get into, my boyfriend took my computer and about ten minutes later I had *Pokemon Fire Red* version on my computer.

No joke. It's the freaking coolest thing ever.

Now, instead of watching TV shows as breaks between homework assignments (currently working through *The United States of Tara*), I break it up sometimes by playing some good old fashion *Pokemon*. It's as if it's on the Gameboy, but I can play it on my computer.

I have a badass Charmeleon and Mankey and Kadabra, among others. I don't know if it's the pictures, the satisfaction of accomplishing goals whenever I defeat other trainers or the fact that it brings me back to childhood when I had to borrow my neighbors' Gameboy because my parents wouldn't let us have one, but I definitely like playing *Pokemon*. I promised Alex I'd try out *Maple Story* after I got tired of *Pokemon*, so that's next on my list of gaming adventures.

For now, I'm gonna go level up my Mankey.

3.8 Pokemon Charmander engaged in battle with Pokemon Squirtle. Screenshot from the video game *Pokemon Fire Red*. Copyright is held by Nintendo.

3.9 Pokemon Fire Red. The games *Pokemon Fire Red* and *Pokemon Leaf Green* have sold approximately 12 million copies worldwide.

COLE GRAY
"You who were with me in the ships at Mylae!"

I've been playing *Aardwolf* on my own for a week or two now and I have to say that I'm really enjoying myself. Being somewhat of a gamer myself, I've always recognized online games as something I might possibly want to get into sooner or later but I have never been comfortable with any game that would demand a long-term commitment from me to play.

Games such as *World of Warcraft* look exciting from the outside, allotting players a virtual Valhalla to explore, battle and make friends. However, I also know the darker side. Mind numbing repetition, mounting costs of online subscriptions and life consuming addictions all make me slightly apprehensive when approaching games like these. Nevertheless, I have enjoyed Aardwolf's free, text based alternative to WOW.

My character's name is Stetson. I'm a human mind flayer and I've just reached level twenty four while roaming through quests and slaying monsters. At the beginning the text based interface seemed sluggish to someone who had spent the vast majority of their childhood playing console games with graphics, but—if one persists in learning the appropriate commands—these actions become intuitive and streamlined. The game has even made me better at typing because I have to spell everything I type correctly and fast if I want the desired result from the game. Yet, much of *Aardwolf* still confuses me and I have only yet to scratch the surface of everything I am allowed to do within the world.

For me, the biggest draw of *Aardwolf* is the mindboggling amount of variety that it presents the player. During one quest, I came upon a monster, killed it and looted its body for items. I didn't pay much attention to what I received at the time, but later I discovered that I had gained a shotgun as a weapon that I could use. I equipped it immediately and subsequently began to blow away every monster I could find while still in a suit of armor. This is when the game really took off for me. I found new places to explore such as one map that's just a giant void in space with me floating from planet to planet or an amusement park with rides.

The enemies are incredibly diverse. For example, I found a purple dinosaur named Barney the Loser Dinosaur. Naturally, I had to fight him. Upon entering combat I dealt enormous damage to him while his feeble punches missed me entirely. Yet, his health never declined no matter how what attack I used. I couldn't hurt him and he couldn't hurt me. I was trapped in a never-ending battle with Barney the dinosaur. Eventually, I had to flee or I would have been stuck there forever.

All of this is only a fraction of my experiences in Aardwolf and even then my experiences with the world have been incredibly limited. In short, this is by far one of the best games that I have ever played and I can't wait to explore it some more to find out what else this game has to offer. If you didn't make it past the training portion of the game, I implore you to give the game a second chance and take the time to explore. I can almost guarantee that you will find something you like.

3.10 "One of the best games I have ever played." Screenshot from the text-based virtual world Aardwolf. To experimentwww. aardwolf.com.

IS THE VIRTUAL TOO UNREALISTIC?

CRYING OVER UNSPILLED MILK

LENNOX PUBLIC LECTURE
8TH APRIL, 2010

PROF. RICHARD A. **BARTLE**
UNIVERSITY OF ESSEX, UK

INTRODUCTION

- THIS EVENING, I'M GOING TO TALK ABOUT **VIRTUAL WORLDS**
  - SPECIFICALLY, **GAME** WORLDS, OR **M**ASSIVELY **M**ULTIPLAYER **O**NLINE **R**OLE-**P**LAYING **G**AMES
    - **MMORPGS** FOR SHORT
    - **MMOS** FOR EVEN SHORTER...
- BECAUSE WE HAVE A MIXED AUDIENCE, I'LL START BY BRIEFLY OUTLINING THEIR **HISTORY**
  - NON-PLAYERS: "SO **THAT'S** WHAT AN MMO IS..."
  - PLAYERS: "SO **THAT'S** WHERE THEY CAME FROM..."

THE LORD OF THE RINGS ONLINE

- THE LORD OF THE RINGS ONLINE, TURBINE, 2007:

WORLD OF WARCRAFT

- WORLD OF WARCRAFT, BLIZZARD, 2004:

EVERQUEST

- **EVERQUEST, SONY ONLINE ENTERTAINMENT, 1999**

You give 1 silver 3 copper to Parn Gylwyn.
You give 1 silver 3 copper to Parn Gylwyn.
Parn Gylwyn tells you, 'That'll be 3 silver 3 copper per Ration'.
You give 3 silver 3 copper to Parn Gylwyn.
Chrysta shouts, 'OO OO FINALLY one to the death'
Darthen saves.

DIKUMUD

- **DIKUMUD, COPENHAGEN UNIVERSITY, 1990**

```
[x2] A barrel has been left here.
An angry-looking statue of Hoturi is standing here.
An angry-looking statue of Priapus is standing here.
A statue of Odin is standing behind the altar.
A Sign for Newbies is here.
You are a guest here until you save yourself.

If you need
to get to your guild, use the guild medallion in your inventory. If you lose
it, pray to the statue of Odin for another.


105m/202e/38hlook
Temple of Udgaard
    You are inside the small and humble village temple in Udgaard.  A simple
stone altar, with strange stone carvings, is placed against the north wall.  A
small humble donation room is to the east.  The temple exit is south to the
Village Square.
[x2] A barrel has been left here.
An angry-looking statue of Hoturi is standing here.
An angry-looking statue of Priapus is standing here.
A statue of Odin is standing behind the altar.
A Sign for Newbies is here.

105m/202e/38h
```

• ABERMUD, ALAN COX, 1987

```
Your wimpy value is set to 15. See 'help change' to see what that means.

The Temple Of Paradise
   You stand in the Temple of Paradise, a huge sandstone structure whose
walls are decorated with ancient carvings and runes, some so old that even
the priests no longer know their meanings.
   A single set of steps lead south, descending the huge mound upon which the
temple is built and ending in the forests below.
A roaring fire burns here.  Its flames make the temple sparkle and glitter.
   At your feet a huge sacrificial pit allows you to give valuables to the gods
in the hope of being rewarded.
A furled umbrella lies here.

Obvious exits are:
North : Welcome Center
South : Forest Track
 Down : Forest Track

Last login: Wed Sep  7 17:43:26 2005


>
```

• MUD, ROY TRUBSHAW & RICHARD BARTLE, 1978

```
Narrow road between lands.
You are stood on a narrow road between The Land and whence you came.
To the north and south are the small foothills of a pair of majestic
mountains, with a large wall running round. To the west the road
continues, where in the distance you can see a thatched cottage
opposite an ancient cemetery. The way out is to the east, where a
shroud of mist covers the secret pass by which you entered The
Land. It is raining.
*w
Narrow road.
You are on a narrow east-west road with a forest to the north and
Gorse scrub to the south. It is raining. A splendid necklace lies
on the ground.
*
```

• MUD DIDN'T COME FROM **ANYTHING**

• THIS IS WHY **I** GET TO GIVE THIS TALK AND YOU **DON'T**!

WHY PEOPLE PLAY

- PEOPLE **TODAY** PLAY MMOS FOR THE **SAME** REASON PEOPLE OF **YORE** PLAYED TEXT MUDS
  - THEY GET TO **BE** AND BECOME **THEMSELVES**
- IT'S A QUEST FOR **SELF-UNDERSTANDING** AND **IDENTITY**
- THEY VISIT A PLACE THAT'S **LIKE** THE MUNDANE WORLD BUT DIFFERENT IN **STRANGE** AND **EXCITING** WAYS
  - THEY UNDERTAKE A **HERO'S JOURNEY**
- **UNFORTUNATELY**, IT WOULD TAKE ME **2 HOURS** TO EXPLAIN THE FULL **THEORY**...

LOOKING FORWARD

- WHAT WOULD A PLAYER OF A 1980S **TEXT** MUD THINK OF **TODAY'S** MMOS?
- WELL THEY'D **STILL** RECOGNISE *LOTRO* AND *WOW* AS BASICALLY **MUDS**
- THEY'D FIND THE QUALITY OF THE **GRAPHICS** UTTERLY **BREATHTAKING**
- THEY WOULD BE **IMPRESSED** BY THE **SIZE** OF TODAY'S VIRTUAL WORLDS
- HOWEVER, THEY'D REGARD ALMOST EVERYTHING **ELSE** AS A **JOKE**

EXAMPLES 1

- HERE ARE JUST **SOME** OF THE THINGS THAT A TIME-TRAVELLING MUD PLAYER WOULD **RIDICULE** IN *LOTRO*
  - *LOTRO*, BECAUSE *WOW* PLAYERS ARE FAR MORE LIBERAL IN THEIR USE OF **DEATH THREATS**
- SO: IF I KILL SOME **ORC** AND IT WAS CARRYING A **SWORD**, WHY WAS IT HITTING ME WITH A **STICK**?
- WHY DOES EVERYONE WEAR THE **SAME** CLOTHES WHEN IT **RAINS** AS THEY DO WHEN IT'S **SUNNY**?
- THESE TROUBLESOME **ANIMALS** YOU WANT ME TO KILL DON'T **ACTUALLY** SEEM ALL THAT THREATENING...
- THE **ONLY** WAY TO BE A **SCHOLAR** IS IF I'M **ALSO** A FARMER AND A METALWORKER? UH?

EXAMPLES 2

- HOW COME I MERELY SUFFER **MORALE** DAMAGE WHEN I FALL OFF **WEATHERTOP**? DID I SOMEHOW "FLEE IN FEAR" BEFORE I HIT THE GROUND?
- I CAN WALK **THROUGH** PEOPLE?
- DIDN'T I SEE YOU **DEPART** WITH THE FELLOWSHIP NOT **TEN** MINUTES AGO, LEGOLAS? WHY ARE YOU **HERE**?
- YOU CAN **DYE** METAL ARMOUR? BUT YOU CAN'T **PAINT** IT? BUT YOU **CAN** PAINT THE WALLS OF YOUR HOUSE? BUT **NOT** WALLS IN GENERAL?
- IN THE MIDDLE OF A FIGHT, **TIME** STOPPED AND THESE MID-AIR **BUTTONS** APPEARED. WHAT THE BLAZES?!
- SO... **ARRAGGORRNN** IS AN ALLOWED NAME?

- FLOWERS APPEAR TO BE EVERY BIT AS OPEN AT **NIGHT** AS THEY ARE IN **DAYLIGHT**

- WHEN I **SALUTE**, IT SAYS I DO IT **SMARTLY** – BUT I WANTED TO SALUTE **SARCASTICALLY**

- WHAT'S WITH THIS "MAKE IT LOOK LIKE I'M WEARING **THESE** CLOTHES WHEN I'M ACTUALLY WEARING **THESE** CLOTHES" SYSTEM? EITHER YOU'RE **WEARING** PLATE MAIL AND CARRYING A SHIELD OR YOU'RE **NOT**!

- HOW COME THOSE **BAD GUYS** I CAN SEE **RIGHT THERE** AREN'T RUNNING TO **STOP** ME KILLING THEIR **BUDDIES**? ARE THEY BOTH DEAF **AND** BLIND?

- THESE HALF-TIMBERED HOUSES IN **BREE** HAVE **WINDOWS** IN **SUPPORTING** BEAMS

- OH, AND JUST SO *WOW* PLAYERS DON'T FEEL **TOO** SMUG...

- DOES THAT PORTCULLIS WORK LIKE A **ROLLER BLIND** OR WHAT?

- WHAT THE MUD-PLAYERS OF YESTERYEAR WOULD BE **COMPLAINING** ABOUT IS THAT TODAY'S MMOS ARE NOT **REALISTIC**

- HOLD ON! ISN'T A **VIRTUAL** WORLD SET IN AN **IMAGINARY** MILIEU POPULATED BY **FANTASY** CREATURES "NOT REALISTIC" BY **DEFINITION**?

- NO! **REALISM** ISN'T **REALISTICNESS**!
  - *LOTRO* **WITH** ELVES LACKS REALISM
  - *LOTRO* **WITHOUT** ELVES LACKS REALISTICNESS

UNREALISTIC

- BECAUSE PEOPLE **COMPLAIN** MORE THAN THEY **PRAISE**, THE USUAL FORM IS "UNREALISTIC"
  - IT MEANS "NOT **CONSISTENT** WITH HOW I **BELIEVE** THINGS **SHOULD** BE"
- AS TO HOW PEOPLE **DO** BELIEVE THINGS SHOULD BE, THERE ARE **TWO** COMPONENTS:
  - THE **FICTION**. THERE ARE ELVES AND MAGIC AND DEATH IS NOT A PERMANENT CONDITION AND ...
  - THE **NON-FICTION**. YOU CAN'T WALK THROUGH WALLS, AND THINGS FALL WHEN YOU DROP THEM AND THE SKY ON A SUMMER'S DAY IS BLUE AND ...

DEFERMENT

- THE WAY THESE TWO COMPONENTS **WORK** IS THAT THE **FICTION** TAKES **PRECEDENCE**
  - ANYTHING THE FICTION HAS SOMETHING TO **SAY** ABOUT, THE FICTION **CONTROLS**
  - ANYTHING THE FICTION **DOESN'T** HAVE ANYTHING TO SAY ABOUT, IT **DEFERS** TO THE **NON-FICTION**
- ACTUALLY, MODERN MMOS ARE PRETTY **GOOD** AT BEING **FAITHFUL** TO THEIR **FICTION**
- IT'S WHAT THEIR FICTION **DEFERS** TO THAT IS THE PROBLEM...

- TEXT MUDS DEFERRED TO **REALITY**
  - ONES IN WHICH BAGS COULD CONTAIN BAGS CONTAINING BAGS **DISPARAGED** ONES THAT DIDN'T EVEN **HAVE** BAGS
  - ONES IN WHICH BISCUITS TURNED TO **MUSH** WHEN **WET** WOULD **DISDAIN** ONES WHEREIN YOU COULD SWIM ACROSS A RIVER AND YOUR **CRACKERS** WOULD REMAIN **EDIBLE**
  - ONES IN WHICH **ICICLES** GRADUALLY MELTED ABOVE FREEZING POINT WOULD **MOCK** ONES IN WHICH THEY COULD SAFELY BE CARRIED ACROSS A **DESERT**
    - IN YOUR **COAT POCKET**

- THEY DEFERRED TO REALITY FOR TWO REASONS: **PERSUASIVENESS** AND **EMERGENCE**
- HMM, I HAVE SOME FREE **SPACE** ON THIS SLIDE, SO HOW ABOUT A PICTURE OF A SPACE STATION?

- **PERSUASIVENESS** MEANS THE DEGREE TO WHICH THE VIRTUAL WORLD'S CONCEIT THAT IT'S **REAL** IS **CONVINCING**
- YOUR BRAIN IS **HARD-WIRED** TO MAKE SENSE OF THE REAL WORLD ALMOST INSTANTLY
  - IF SOMETHING DOESN'T **FIT**, YOU **NOTICE**
- IF IT'S PART OF THE **FICTION**, YOU HAVE TO **WILL** YOURSELF TO BELIEVE IT
- YOU WANT TO **MINIMISE** THESE OCCASIONS WHERE MISMATCHES ARE **NOTICED**, BECAUSE THEY ARE **OBSTACLES** TO **IMMERSION**

- IMMERSION IS THE SENSE THAT **YOU** ARE **THERE**, IN THE VIRTUAL WORLD
  - A VERY **HIGHLY** DESIRED STATE
  - ACCORDING TO THE **THEORY** I DIDN'T EXPLAIN TO YOU, THE VERY **AIM** OF PLAYING MMOS
- THEREFORE, IF THE FICTION **DOESN'T** HAVE ANYTHING TO SAY ABOUT SOMETHING, AN MMO SHOULD DEFER TO **REALITY** SO AS TO **PROMOTE** IMMERSION
  - IF **MOST** THINGS WORK AS THEY SHOULD, THE **REST** IS MORE EASILY **BELIEVABLE**

- WHO'S REALLY IN **CHARGE** OF AN ORCHESTRA, THE **CONDUCTOR** OR THE **FIRST VIOLIN**?
  - IS IT THE **BATON** OR THE **BOW**?

- EMERGENCE IS THE PROCESS BY WHICH INTERACTIONS BETWEEN **SUB-SYSTEMS** CREATE **NEW** SYSTEMS OF THEIR OWN
  - CAN BE **PLANNED**-FOR OR **UNPLANNED**-FOR
  - CAN BE **FEATURES** OR **EXPLOITS**
- **VERY** DESIRABLE BECAUSE IT GENERATES **CONTENT**
  - CONTENT IS OTHERWISE **EXPENSIVE** TO CREATE
- EMERGENT CONTENT ALSO TENDS TO BE MORE **MEANINGFUL** FOR INDIVIDUAL PLAYERS

NO ANSWER

- **NONE** OF THESE ARE SHOW-STOPPERS
  - THEY'RE JUST **SPECIAL CASES**
- SO WHY **DO** MMOS SIMULATE REALITY SO LAZILY?
- THEY **DON'T** MESS WITH THE **FICTION** ("LORE") UNLESS THEY REALLY **HAVE** TO
- THE **LORE** DEFERS TO REALITY
- SO WHY WOULD THEY RISK **UNDERMINING** THE LORE BY DEFERRING TO SOMETHING **ELSE**?!

WEIGHTLESSNESS

- **ASTRONAUTS**: YOU SEE THEM ON TV, FLOATING AROUND IN SPACE, DOING THINGS TO SATELLITES WITH EXOTIC TOOLS
- THEY'RE **WEIGHTLESS**, RIGHT?
  - OTHERWISE THEY'D **FALL**!
  - **EVERYONE** KNOWS THEY'RE WEIGHTLESS!
- EXCEPT THEY'RE **NOT**
  - THE **ISS** IS 350KM ABOVE THE EARTH'S SURFACE
  - IF YOU CLIMBED A 350KM-HIGH **TOWER**, YOU WOULD WEIGH **95%** OF WHAT YOU DO ON EARTH
  - THOSE ASTRONAUTS **ARE** FALLING!

NAÏVE PHYSICS

- PEOPLE **EXPECT** WEIGHTLESSNESS IN SPACE
- IF THEY PLAYED AN MMO IN WHICH THEY CLIMBED TO THE TOP OF A **350KM TOWER** AND **WEREN'T** WEIGHTLESS, THEY WOULD **COMPLAIN**
  - IT WOULD INTERRUPT THEIR SENSE OF **IMMERSION**
- NOT **JUST** A PROBLEM FOR MMOS
  - **EXPLOSIONS** IN SPACE IN MOVIES
  - WORKING CLASS VICTORIAN EDUCATION IN **BOOKS**
- IT'S MUCH **WORSE** IN MMOS, THOUGH

IN MMOS

- THE VALUE OF "REALISTIC" TO IMMERSION IS THAT YOU DON'T HAVE TO **THINK** ABOUT IT
- THEREFORE, IF BEING REALISTIC **MAKES** YOU THINK ABOUT IT, IT **UNDOES** ITS **OWN PURPOSE**
- THIS MEANS MMOS WANT TO DEFER NOT TO WHAT **IS** TRUE, BUT WHAT PLAYERS **EXPECT** TO BE TRUE
- IF IN THEIR **PREVIOUS** MMO THEY COULD TELEPORT FROM ANYWHERE TO THEIR HOME, THEY **EXPECT** THAT IN THEIR **CURRENT** MMO

- PLAYERS DO **NOT** COME TO AN MMO WITH EXPECTATIONS THAT IT WILL WORK LIKE THE **REAL** WORLD
- THEY COME WITH EXPECTATIONS THAT IT WILL WORK **LIKE MMOS**
- MMOS SUCH AS *WOW* AND *LOTRO* DEFER NOT TO **REALITY** BUT TO AN MMO **PARADIGM**
  - A PARADIGM IN WHICH WALK-THROUGH PEOPLE, DRY RAIN, FLOATING STEEL ARMOUR AND SHOPKEEPERS WHO **BUY YOUR JUNK** IS THE **NORM**

WHENCE THE PARADIGM?

- HERE'S WHAT HAPPENS:
  - PLAYERS **ONLY** LOOK AT THE **SHORT** TERM, SO WILL PLAY MMOS THAT MAKE **BIG PROMISES**
  - SHORT-TERM **GOOD** IS OFTEN LONG-TERM **BAD**
    - EVENTUALLY THEY **QUIT** BECAUSE THE GAME **SUCKS**
  - THEY DON'T **REALISE** THAT THE FEATURES THAT **ATTRACTED** THEM ARE THE **VERY ONES** THAT CAUSED THEM TO **LEAVE**
    - THEY **SEEK** THOSE FEATURES IN THEIR **NEXT** MMO
  - MMOS **WITHOUT** THOSE FEATURES DON'T GET THE **NEWBIES**, SO THEY **WITHER** AND **DIE**
    - EVEN THOUGH THEY HAVE THE **BETTER DESIGN**!

- THE PARADIGM IS CONSEQUENTLY GETTING **SHALLOWER** AND **SHALLOWER**
- GRAPHICS QUALITY IS **HIDING** THIS, BUT CAN ONLY GO **SO FAR**
- 2002: *ASHERON'S CALL 2* **FLOPPED** BECAUSE THE DESIGNER TOOK OUT ALL THE **BORING** PARTS
  - SADLY, THIS MADE THE **EXCITING** PARTS BORING
- MANY OF *AC2'S* EASE-OF-USE FEATURES ARE **NOW** BEING GRADUALLY ADOPTED BY *WOW*...

- THE MORE THAT **DETAIL** IS REPLACED BY **ABSTRACTIONS**, THE LESS OF ITS POTENTIAL AN MMO IS ABLE TO **DELIVER**
- EVENTUALLY, THEY'LL BECOME SO **SUPERFICIAL** THAT PEOPLE WILL WONDER **WHY** THEY WERE EVER CONSIDERED **FUN** AND **COMPELLING**
- AT THAT POINT, THERE'LL BE A **REALIGNMENT**
  - THE SIMPLE ONES WILL CARRY ON SUCCESSFULLY AS **CASUAL** GAMES
  - **NEW** MMOS WILL **REBOOT** THE PARADIGM

- WHAT WILL THESE NEW MMOS **LOOK** LIKE?
- THEY'LL **HAVE** TO GO BACK TO THEIR **ROOTS**
- MMOS LET YOU **BE** AND **BECOME** WHO YOU **REALLY** ARE
- WHAT MMOS OFFER, **NOTHING** ELSE OFFERS
  – WELL, UNLESS YOU'RE **RICH** OR GET **SHOT AT**
- **NOT** EVERYONE **WANTS** OR **NEEDS** WHAT THEY OFFER, BUT IF THEY **DO** THEY **WON'T** GET IT FROM A FURTHER WATERED-DOWN PARADIGM

- MY 1985 WORLD, **MUD2**, HAS A **BATON** AND A **BOW**
  – IF YOU **WAVE** ONE, IT **TELEPORTS** YOU TO THE **OTHER**
- THESE **FLOAT** IN **RIVERS**, WHICH **FLOW**
- ONE PLAYER **DROPPED** THE BOW DOWN A **WELL**, WHEREUPON IT WAS **CARRIED** DOWNSTREAM AND **STUCK** ON A **GRATE** IN A **SECRET** ROOM
- HE WAVED THE BATON, **PICKED UP** THE BOW, AND REALISED HE WAS **SAFE** FROM ATTACK

- *MUD2* ALSO HAS A **KEG** OF **GUNPOWDER**
  - FOR SHOOTING A CANNON AT A TREASURE ROOM DOOR
- ONE PLAYER PUT IT IN A **CORACLE** ALONG WITH A **BURNING BRAND** AND DROPPED IT IN THE **WELL**
- THE CORACLE **CAUGHT FIRE** FROM THE BRAND AS IT FLOATED DOWN THE RIVER TO THE GRATE
- **BEFORE** THE CORACLE SANK, THE FIRE **SPREAD** TO THE GUNPOWDER, WHICH **EXPLODED**
  - KILLING THE GUY WITH THE BATON SLEEPING "SAFELY" NEARBY

EMERGENCE

- WHAT TODAY'S MMO PARADIGM IS MISSING IS **EMERGENCE**
  - THEY'VE CONCENTRATED ON **IMMERSION** SO MUCH THAT THEY'VE FORGOTTEN WHAT IT'S **FOR**
- THE **POWER** OF MMOS COMES FROM PEOPLE **CONSPIRING** TO BELIEVE THAT THE **VIRTUAL** WORLD IS **REAL**
- IF THEY CONSPIRE TO BELIEVE THAT IT'S AN **MMO**, THEY MISS HALF THE POINT
- EMERGENCE **ALSO** AIDS IMMERSION

CONCLUSION

- IN THE PAST **DECADE**, VIRTUAL WORLDS HAVE BECOME **DECREASINGLY** DETAILED
  - THEY HAVE **BREADTH**, BUT NOT **DEPTH**
- THE **AIM** IS TO MAKE THEM MORE IMMERSIVE, BUT ULTIMATELY THIS IS **SELF-DEFEATING**
  - EVENTUALLY THEY WILL DEPART **SO FAR** FROM THEIR ORIGINS THAT THE CONNECTION WILL **SNAP**
- NEW VIRTUAL WORLDS **WILL** APPEAR THAT ONCE AGAIN DELIVER ON THEIR PROMISE
  - A PLACE WHERE YOU CAN BE **YOU**

QUESTIONS?

- THIS IS WHERE I PAY FOR HAVING SPENT TOO LONG TALKING...

AARON DELWICHE
"Girls will be boys and boys will be girls"

3.11 An experiment in gender ambiguity.
Blogger Lewis Luminos writes that s/he regards herself "as transgendered, female to male" and—though s/he cross-dresses seven days a week—cannot afford to make a medical, biological transition. Lewis created the Second Life avatar Salo (depicted on following page) using a freebie female skin without makeup.

"It's an odd situation, being transgendered in SL," writes Lewis, "because I don't feel that it's my SL avatar thats the wrong gender. My SL gender is right, it's my RL avatar that's wrong."

Bit by bit, the mainstream is waking up to the existence of digital worlds that bring together players from all walks of life. In recent years, *FoxTrot*, *South Park* and *Big Bang Theory* have all poked fun at massively multiplayer games.

Even celebrities are not immune to the lure of the virtual life. William Shatner, Jean-Claude Van Damme, Ozzy Osborne and Mr. T. have all been linked to the game *World of Warcraft*. They are not alone. More than 11.5 million subscribers pay $20 a month for the privilege of entering the fantasy-themed world.

But something funny is happening in these on-line spaces. If you were to wander through the capital cities of Orgrimmar or Stormwind, you would notice an equal number of male and female characters. However, reliable estimates suggest that women make up only 16 percent of the game's player base. As games researcher Nick Yee explains, men play half of all female characters.

In theory, gender bending should go both ways. Women can easily create male characters. Yet, Yee's research has found that men are eight times more likely to play characters of the opposite gender. This means "1 out of every 2 female characters is played by a guy, [but] only 1 out of every 100 male characters is played by a woman."

Why are so many men experimenting with gender in virtual worlds? And why aren't women doing the same thing?

Some male gamers say that they play female characters because they are more likely to receive donations of money and equipment during early stages of the game. A few claim that the speed and size of female characters provide strategic advantages during combat.

Others rationalize the behavior as a form of voyeurism. One gamer says that her male friends say they play female Night Elves because they enjoy looking at their highly sexualized bodies. "They might as well have a nice-looking avatar who can pole dance," she explains.

These explanations almost make sense, but they fail to acknowledge the intense identification between players and their on-line selves. Game characters are not just objects deployed for strategic advantage or for visual pleasure. We actively become our characters.

Research shows that typical gamers spend 23 hours a week in the game world. Assuming eight hours of sleep each night, this means that one-fifth of their waking life is experienced in their on-line bodies.

Clearly, something else is happening here.

From the earliest stages of childhood, society reprimands young men for

displaying gender-inappropriate behaviors. Girls make crafts or pretend to be princesses. Boys play with thinly disguised "toy soldiers."

Today, as the result of years of struggle, girls can express a range of behaviors. Barbie can be a doctor, a lawyer, or an architect, and she can ride a Harley Davidson. For boys, the possibilities have not changed since the 1950s. They can be superheroes, soldiers, robots, or race-car drivers, but never mermen or nurses.

When boys attempt to cross the line, they quickly get the message that they have done something wrong. Research shows that parents worry much more about "sissy" behavior in boys than about "tomboy" behavior in girls.

We often think of oppression as something that stems from the barrel of a gun, but it is even more insidious when reinforced by subtle messages from peers and loved ones. From the schoolyard to the workplace, the typical American man hears the same message throughout his lifetime: "Boys don't cry." "Stop acting like a girl." "Be hard, not soft." "Show no fear."

So it is mind-blowing that men choose to play women in on-line games at all. Virtual worlds are one of the few social spaces in which men can display female-coded behaviors without fear of social persecution. Perhaps so many males are playing female characters in Azeroth because this is the only place that they can get away with it.

I am not suggesting that World of Warcraft — or any other multiplayer world—is an enlightened utopia. Homophobic and racist slurs fly fast and furious in the general chat channels, and the level of maturity is a few notches below that of a junior-high cafeteria.

It is also important to acknowledge that men who experiment with female characters often rely on clichéd stereotypes. At first, they might play a hyper-sexualized character who jokes about having a bad sense of direction and becoming grumpy during "that time of the month."

However, over the course of a single year, the average gender-bending male player spends approximately 30 work weeks in a female body. It is possible—though not guaranteed—that he will encounter new insights about gender along the way. For example, he might realize that it's not flattering to be constantly flirted with when wandering through a public area.

Ultimately, these digital arenas remind us that gender is a social construction. For all of their problems, on-line games allow men to explore these issues with unparalleled freedom. As Richard Bartle, the programmer who created the first virtual world, writes: "For me, the question isn't 'why would people play the opposite to their real-life gender' but 'why wouldn't they?'"

3.12 Lewis Lumino as Salo. "This whole experiment has been very interesting," writes Lewis. "Firstly because of how surprisingly easy it was to create this very androgynous appearance – even though Salo is wearing both a female skin and a female shape, the appearance is so far off what people expect of female that other people have assumed male. Which is what tends to happen in RL too. So even a transgendered female avatar in SL can 'pass.'" Lewis' blog is accessible at: luminosity21.wordpress.com/

AARON DELWICHE
"Grief and the magic circle"

3.13 Mourners massacred on Illidan. Screen images of mourners being massacred on Illidan. The first image shows mourners gathering to pay respects to their fallen teammate. The second image shows the first wave of the attack.

Several years ago, players on the Illidan server of World of Warcraft learned that their dear friend Fayejin had died unexpectedly of a stroke. She was described by those who knew her as "one of the nicest people you could ever meet," and her guildmates were deeply saddened to learn of her death.

In a short posting to the game's message boards, Fayejin's friends invited the community to commemorate her by holding an in-game memorial near the Frostfire Hot Springs in a zone called Winterspring. "She loved to fish in the game," explained the organizers, "she liked the sound of water … and she loved the snow."

Unable to attend the real-world funeral for financial and geographic reasons, the organizers hoped to record the memorial service for their friend's parents. Fayejin had spent hundreds of hours building a life within the game, and it seemed important to document the meaningful relationships that she had formed on-line.

On the appointed day, dozens of players congregated near the water, lining up to pay their respects. Close friends shared memories of the deceased, and mourners filed one-by-one up to the water's edge.

Without warning, a mob of players from another guild descended upon the funeral and began slaughtering members of the grieving crowd. Paralyzed by a mixture of shock and sorrow, the mourners did not fight back. Soon, the area was littered with corpses of funeral attendees.

A few days later, the guild responsible for the attack posted a short video clip celebrating the massacre. Combining excerpts from angry e-mail messages with game footage and a pulsing soundtrack, the video was rapidly propagated throughout the net.

The attack on the funeral was only possible because Illidan is a "player-vs.-player" (PvP) server. On such servers, players in contested areas are allowed to kill members of other game factions. PvP culture is notoriously cutthroat. Some players say that PvP is crucial to their enjoyment of the game, while others argue that it enables bullies and psychopaths.

This was hardly the first time that player events had been raided on PvP servers. Funerals and weddings for game characters have often been attacked by outsiders. However, in this instance, there was one crucial difference: The funeral had been organized to commemorate the loss of a real human being.

Many gamers viewed the attack as unconscionable. Posting in an affiliated message board, a higher-level dwarf asked members of the raiding guild, "is there no sense of right or wrong within you? These people were honoring a person who is no longer with them, and you attacked them while they were unarmed."

As discussion escalated in on-line forums, many gamers supported the guild's right to attack the mourners. "Oh, good grief," suggested one player. "It's a PvP server, and you should expect it to happen. Why go on a PvP server? To kill and have fun killing helpless people who just stand around."

Defending their actions in public forums, the attackers showed no signs of remorse. "I wish I were undead so I could have cannibalized her corpse," wrote one attacker. Another argued that virtual funerals are a ridiculous concept. "I don't log in to watch people celebrating things that happened outside the game," he wrote. "When you sign in, you sign an invisible consent contract to be part of that game's rule set."
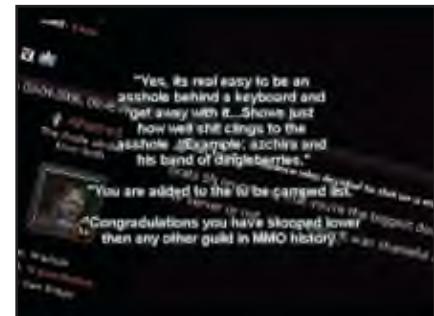
In a follow-up message, the same assailant wrote, "Yes I went out of my way to kill stupid people doing something stupid in a video game. I loved doing it, and seeing you cry here ... We decided to make a bunch of nerds rage out ... cry more dude."

To gamers and non-gamers alike, the entire incident might seem like a frivolous topic. However, conversations about these happenings are important. Ethical understandings that emerge from these debates may affect the ways that virtual worlds develop in the future. The stubborn refusal to contemplate the humanity of players on the other side of the network is callous and disturbing.

These games are creating global social networks that pull people together across national borders. Even on PvP servers, we have an opportunity to augment our compassion, rather than become dehumanized killers.

Ultimately, the biggest losers may be the members of the guild who initiated the attacks. As Michael W. pointed out in a recent post to Terra Nova, "I mourn the day they lose someone they love, or someone in their guild steps out in front of a bus, or whatever. Their actions now mean their pain will likely be compounded in the future when they realize both what loss is and how they must have made the others feel at the time."

3.14 Sorry for your loss. The griefers reveled in the emotional response to their attacks, and they included choice comments in their YouTube video.

projects

AARON PASSER
"Our turn: Generation Y ruling the corporate landscape."

Whether you like it or not games of all kinds are transforming and progressing the corporate landscape. Video games today have the ability to teach and reinforce specialized skills that allow players to practice without the stress of real life failure. Today many surgeons practice laparoscopic surgery by first playing simple games like *Super Monkey Ball* that require the same fine motor skills that complex surgeries do . Other games are designed to help promote mental agility and wellness. In business it is becoming more productive to focus on communication and collaboration rather than autocratic direction. Likewise, the most popular games of today are those that require teamwork and cooperation. Specifically, games that incorporate both social and competitive interactions such as Massively Multiplayer Online Games (MMOGs) can be used in the corporate setting to promote collaboration and teamwork skills in coworkers.

Games like *World of Warcraft* (*WoW)* encourage and require players to collaborate with each other in order to conquer quests that with out such cooperation would be impossible. In my personal adventures in *WoW,* I set out to discover how in-game challenges and interpersonal relations can be directly translated to foster better communication and problem solving skills in today's corporate world. No longer should games be viewed as a waste of body and mind; rather we should continue to utilize social games and interfaces to promote and teach skills that are pivotal to success in the ever changing business environment.

Most organizations today do not allow for games in the workplace. Employees must scan the environment for superiors, waiting for the right moment to get in a quick game of minesweeper or solitaire. If caught, employees are told to stop wasting time and get back to work (minesweeper got me kicked off the computer for a day at my summer internship). Despite this overwhelming attitude towards games in the work place more and more "companies are setting up break rooms with video games to create a fun office atmosphere and—believe it or not—increase productivity."

As a business major here at Trinity one thing I have learned is that interpersonal relationships have the ability to make or break business deals and team goals. Video games are a great way for peers to interact with each other in a fun and informal way. As Generation Y continues to invade the workforce many companies are designing game rooms instead of coffee lounges for their employees to enjoy. Keeping morale high in the office is key to success, and a game room is a great way for employers to provide a fun place to interact with co-workers.

MMOGs can provide another great learning environment for co-workers that is not only fun, but also can help teach important leadership skills necessary for continued success in the corporate world. Instances, raids, and guilds in *WoW* have the ability to strengthen relationships and teamwork between coworkers that can be used for real life business

situations. Games are designed to be stimulating, challenging, and fun, and that is exactly the type of atmosphere that employers want to provide. In raids (large-scale group quests) it is necessary that all players fulfill their specific role: whether it is to tank (take damage) or to heal. If group members lag behind or don't do what they are supposed to, the whole raid is put in jeopardy. This is also true in the business world. In many cases coworkers must work together to accomplish goals, and just like in *WoW* if even one group member falls back on their responsibilities it puts the whole group at risk of failure. Quests in *WoW* are composed of challenging tasks that are satisfying to accomplish and are linked to a clear mission. Games like these can be used for co-workers to learn how to work together to complete difficult goals.

When participating in instances (small scale raids) I was able to identify several leadership skills that are reinforced through the game. The first is learning how to pick team members. While participating in an instance it is necessary to have players who can take damage, inflict damage, and heal other players. *WoW* now makes this very easy with the "Dungeon queue" which searches for other players who are trying to accomplish the same instance. Based upon your preferred position in the instance the game will pair you up with other players who have chosen other tasks. For example if an instance composed of five players has no one who can take a lot of damage the group will fail. It is necessary in the game and in real life to choose team members with unique skill sets that are necessary to get the job done. It may be possible to complete the instance with out a "tanking" player, but it will definitely be a lot more difficult. While this does make it easy to team up with other people, it doesn't account for players who won't actually put full effort into the instance. Being in a guild is one way to get around this problem because constant player interaction helps build trust, which is a key ingredient to success, even in the gaming world.

Planning is also a determining factor for success in both worlds. Group members must understand their roles and stick to the plan if success is to be had. A famous viral video known to most simply as "Leeroy Jenkins" is a good example of this point. In the video a group of *WoW* players are getting ready to do a raid. A few of the players are assigning tasks to other players and are planning the attack based on past failures. Leeroy Jenkins, one of the players, decides it's time to run to battle and leave behind the others. This causes total panic among the group and in a short time causes the death of all players' involved and ultimate failure. Leeroy didn't stick to the plan and ruined everything for all players involved. In business planning is of utmost importance. Time is money, and if you don't have a plan you are probably wasting your time.

Another key skill is being able to evaluate performance. In *WoW* this can easily be accomplished by checking various gauges that track a players performance. This can be a bit more challenging to do in the real world, but the idea of monitoring performance of team members is vital to uncovering why the group succeeded or failed. Managers must be willing and able to deal with underperformers in order to ensure that failure does not happen again. Sometimes underperformers simply are

bad players who don't care and who should probably not be a part of your group anymore. Other times however, underperformance is due to the individual wanting to contribute and help, but not knowing exactly how to do that. While playing *WoW* one day a player of a higher rank invited me to join his group so that he could help me with quests. We played together for almost eight hours that night and he eventually invited me to his guild. I quickly learned that the guild I had joined was assembled to help lower level players advance more rapidly. Before player Sofedanor came to my aid I found myself mostly wandering aimlessly around the world trying to complete random tasks. However when I joined forces with Sofedanor he gave me tons of hints and tricks on how to improve my game play. With out his game play knowledge I probably would have eventually found my way, but his sincere help made for a smooth transition into an active and contributing guild member.

WoW in general is a great place to practice leadership skills. Anyone has the ability to be a party leader or start his or her own guild. Leadership roles in real life may present more pressing matters, but leadership roles in video games like *WoW* have enough parallels to real life that they can be used to prepare new workers for management positions in the future. In WoW you can lead, organize with others, solve problems, learn, motivate, and gain a sense of unity among players. Valuable leadership skills like those are important for success in *WoW* and business. As a member of Generation Y I grew up learning through technology so it seems only fitting that we continue to use every facet of technology, especially video games, to continue our learning. Games like *WoW* can promote and reinforce communities of practice among coworkers, which build strong relationships through interaction and collaborative work on problem solving.

In today's rapidly changing business environment the valuable leadership and collaborative skills taught and reinforced in games like *WoW* are more important than ever. The most popular games of today are "massive problem solving exercises wrapped in the veneer of an exotic adventure." Games like these are increasingly more complex and require players not only to play individually, but also to actively solve problems through teamwork and cooperation. Video games have evolved to engage rationality and logic skills that can be directly related to real life situations. The teamwork and logic skills demanded by MMOGs are the same skills that are demanded for success in business, and by harnessing everyone's greatest abilities, raids and business teams are able to work together to solve problems where the individual would fail.

MARK MCCULLOUGH
"Faces of Agras"

Agras woke-up on this rather gloomy pre-dawn Monday morning as if he had sprung to life. In an instant he was on his feet, fully-dressed and ready to go. Everything seemed normal. Awake and ready to go, Agras looked down at his watch to read new messages in his inbox.

While opening his inbox, Agras made sure to keep a close eye for his friends, he didn't want them to notice his *iOMEGA 3*. Just last week Agras bought an *iOMEGA 4*, but because he's so short compared to others in his class, he was forced to relinquish the *iOMEGA 4*, or else. If his family or friends were to notice the *iOMEGA 3* instead of the *iOMEGA 4*, then they might kick him out of the house, his dad was the military-type: unrelenting, unwilling, and unmerciful. Maybe this was good for Agras, to have a strong fatherly figure guiding him on his life's journey; and besides, it's not like Agras is starving, homeless, or worse yet, lost.

The *iOMEGA 3* flashed with vibrant colors: red, blue, magenta, purple. An annoying folkish song began to pierce the jet-black walls of Agras' small 20 x 20 parcel of a room. The sound waves filled His ears with such piercing intensity that He was left with no other choice but to lower the volume, somehow and someway it had to happen and it did.

Business was usual, the market went down a few percentage points and his SPAM folder was filled to the zipper with advertisements for penis enlargers and gold. "Delete" He said with a temporary lisp, He continued "huh, that'd be so cool, one day, drink beers. HA HA! Yes, Asia, China, Asian food, Asian *women*;" He was unmistakably faded from the night's activities and clearly He had no idea what He was talking about.

Agras put his free hand down and looked around the room. The dark walls were jet black and windows were missing. No sunlight had ever shined down into Agras' room, never. But this didn't bother him, after all, sleeping is always better without light; movies, too. Bored, Agras decided to lead himself to the door in the Northeast corner of the room and with little effort the door swung open rapidly and crashed into the other side of the wall. Apparently this was a usual occurrence as Agras noticeably didn't flinch to the chaotic door. Agras walked down his cobblestone steps outside his room when all of a sudden, He got a craving for a cigarette, but tobacco went extinct in 2036 so cigarettes were no longer produced.

As he took his next to last step off the uneven cobblestone steps, his *iOMEGA 3* once again broke the sound barrier and projected the unmistakable sound of new messages in the inbox. Surprised that a message had arrived right after He just got through checking, He reluctantly opened the message, not even realizing that his family and friends might notice the *iOMEGA 3*.

The message was from a sender by the name of "Kypolai" from the

Department of Public Affairs. The message was written in CAPS:

DEAR AGRAS,

DUE TO YOUR ACTIONS FROM THE NIGHT OF THE PAST FEW HOURS, YOU WILL BE SENT TO THE NEWLY LIVABLE PLANET, OTULP. YOUR ACTIONS ARE NOT TO BE SEEN AS THREATENING TO OUR RACE, FOR THIS YOUR EXILE WILL BE TEMPORARY AND THE DATE OF YOUR RETURN WILL BE ESTABLISHED AFTER A FULL-REVIEW OF YOUR CASE# 1123581321.

YOUR IMPENDING EXILE SHOULD NOT BE VIEWED AS A PUNISHMENT, OTULP IS FULL OF NEW AND EXCITING ADVENTURES FOR LIFE'S SPONTANEOUS JOURNEY. PLEASE KEEP IN MIND, ANY FURTHER DISSENTING ACTIONS WILL DRASTICALLY INCREASE THE SEVERITY OF YOUR EXILE. PLAY NICE BY THE RULES AND WE SHOULD BE WELCOMING YOU BACK IN NO TIME AT ALL!

WE GRANT A GRACE PERIOD OF 12 HOURS WHICH CAN BE UTILIZED AT YOUR DISCRETION TO SECURE BELONGINGS OR BID FAREWELL. WE ALWAYS RECOMMEND THE SECURING OF IMPORTANT DOCUMENTATION. AT 1818 HOURS, YOU WILL BE TELEPORTED TO THE SPACE MIGRATION STATION.

THANKS FOR YOUR LOYALTY AND PLEASE CONTINUE YOUR JOURNEY WITH ENTHUSIASM.

BEST REGARDS,
KYPOLAI
Grand President, Department of Public Affairs

"What the fuck!" He shouted with rage causing His mother to wake up from her early-morning hang over; she stormed down the hall scolded Him for His gamer thug talk and rudeness. But seriously, He was right for shouting out loud, he was being sent to another planet in exile for his past actions. What actions? What did Agras do? What did He do?

He paused but couldn't remember anything—who he fought, who he talked with, *nothing*. The smell of His breath told the story, it was tequila. With the realization of his utter impairment, He passed-out, and laid down in a folded position on His desk.

He shuffled in His dream and eventually fell onto the floor. The sun light woke Him up and He grawged and yawned with unprecedented intensity, tequila still poignantly in his breath.

14:41

Agras jumped up off the ground with enthusiasm. He shook off His

impairment, which by now had subsided after the brief nap. He only had 8 more hours left until he'd be automatically teleported to the Space Migration Station (SMNSN). The Department of Public Affairs has jurisdiction over the SMNSN and up until recently, the Station was only used for alpha Migrators. These alphas were given the task to explore the far off lands and to report back to the Department of Public Affairs. Awareness was slim, as nobody seemed to care that new worlds were being created every day. Alpha tests confirmed that the far off lands would be great depositories for societal dissidents, you know, those who broke the rules.

Looking around, Agras found his transport wrecked into the sidewall of his room, luckily the walls were made of material from 2012—when the ancient astronauts came back to earth and brought new technology! The transporter on the other hand looked nearly totaled, the back left tire was split in half from the sharp edge of a decorative boulder. The grille was cracked and the manufacturer's logo became even less intelligible. Not knowing how his transport got into the side of the wall but seemingly unaffected, Agras jumped aboard and drove off, speeding and peeling away in the grass as usual; teenagers these days.

Agras raced past his neighbors, ones which he never truly knew. The trees on the road to the federally run Local Community Center (LCC) were hanging well into the street, sometimes in the way of pedestrians or traffic. Complaining wouldn't accomplish much, though. Public Affairs didn't *do streets*, that was something for the planners and designers. But for as long as He could remember, the trees were always hanging in the way of day-to-day traffic, that's just how it was. Looking at His watch He realized that his time to exile was approaching quickly; so Agras abruptly turned 20 degrees to the left in the direction of the LCC; after thinking over the exile message, it occurred to Him that it would be most wise to secure his personal belongings and items, as well as documentation—couldn't even expect the feds to keep backup copies of legal documents anymore.

15:15

"Three hours left, shit." Agras stood at a stand still for a couple of minutes patiently waiting for his transport to begin moving again. He looked around, a layer of thick pixelated mist floated above the lush grass and rolling mounds. It was deathly still outside, not even a breath of wind. As He came back from a quick mental hiatus outside, He realized the situation was perfect for killing. Agras was jolted forward sharply by his near ruined transport, which ironically was still running like a charm, equally as fast as always. Hunting involved no smell, only sight. Looking over his shoulder He found one, a prime and delicious water buffalo lying down in the brush. The transport screeched to an extreme halt 200 yards away from the buffalo, throwing Agras off the front end of the buggy; but his skills kept him on his feet.

He was unsure whether the buffalo was asleep or not, but Agras seemed to only care about killing. He ran with haste, sometimes so fast forcing Him to lag.

He was obviously annoyed and felt no sympathy for His mother who was still waiting for her exedrin to kick-in as epitomized by his constant bursts of rage, "MEEERHEH! MIERDA! I wonder if everyone has bad connections... GOSHH!"

The buffalo was near, and it was definitely not asleep. Agras leaped thirty feet with the help of His super boost, traveling through two large bushes and falling on top but sliding off of the buffalo. No matter how hard He tried, Agras couldn't get on top of the "stupid dummy" to kill it. The buffalo, half the size of Agras, was startled by the attack but kept her ground; in the past the buffalo would have ran off in fear because of a genetic glitch or something, but once the update came out buffalo no longer ran off when bigger enemies challenged it.

Blood spilled from the buffalo as Agras took his knife and jabbed at the buffalo. She was a tough cookie because until she had died there were no wounds, it was like she was untouched, "[*sic*] well I guess they are tough animals /shrug" he wrote on his chat journal, linked to His fwitter account.

Agras searched through the buffalo carcass and found 4 gold in its back hind. He picked up the gold, as expected, and looked around for more buffalo to kill. "C'mon son, what's up with that shit... how can you do shit like that Kanye?" was heard in the background.

"Damn foutube.... jeez."

It continued, "how you gonna go on stage and do that shit to that little white girl? c'mon son..."

He burst out in laughter, obviously no longer paying attention to His urge to kill. "Ha! well, c'mon son... I guess I should go to the bar and at least get a drink or some potion before the journey. Also need to stop by the bank... or maybe I'll trade platinum for gold with a farmer... I hear gold is like literally *the* universal currency. SOO righteous! "

Apparently the likes of "c'mon son" grabbed His attention, forcing Him to remember that he was on a time schedule!

15:51

He had ventured so far into the forest that Agras couldn't spot his transport. He looked at his *iOmega* and went to the map function, he appeared close to the bar and His experience suggested that he should just run, he was *fast* after all.

Agras ran at full speed towards the bar, speeding past conversing shamen, clerics, and soldiers and pretty much anyone else who was signed in and nearby. He even might have passed some friends, but Agras was obviously in a hurry and He imagined the others could notice he was doing something important.

He could see the bar, perched on flimsy looking wooden stilts high into the air. Trees covered the four corners of the bar and an ancient looking wooden plank walkway led up to the entrance. As he got to the top, now walking on the level porch which went around the outside perimeter of the bar, Agras turned and looked north and upwards towards the sky. Up there, He thought, was where he was going.

"I wonder what it's like. I hope it's not as bad as it sounds, I mean, being a beta is always fun even if shit does go wrong. But that's definitely their reasoning behind the decision, it's gotta be. I bet I'll be listed on the founder's blog for the new world at OTULP. That'd be *so* cool."

Appearing bewildered, Agras jaggedly looked around and found the entrance to the bar. As he swung the door open it once again crashed into the wall with unprecedented force and silence—"there was definitely something glitchy about these doors," He thought. Entering the hall, he noticed the regulars sitting in their usual, seemingly permanent positions at tables just waiting to be talked to. They didn't mind though, that's just what they did, not everyone had cool, fun, and interesting jobs; not everyone was allowed to kill!

"Nobody interesting today... hmm, how does some milk sound? I do need some after the killing and I guess the crash... OH yea! the crash, how did I crash anyway?"

As he approached the bar, Agras automatically put down his weapons so that he could sit on one of the awkwardly designed barstools. The bartender, il dirigente, looked emotion-less as if something had happened. Agras got his attention and He ordered some milk to replenish his magma.

"One milk for the recent inquirer," said il dirigente.

"You sound like a moron..." He said directly to il's face. But il just stood there, looking past Agras and at the back wall of the bar. Il's stare and casual shifting movement made it seem like something was wrong, but there most definitely wasn't. At least there wasn't a problem that affected il, and it's not like he knew of OTULP or Agras' punishment, or did he?

Agras finished the milk in an instant and immediately regained his much needed magma. Getting creeped out by il's lameness, He looked around the room, remarking to Himself that it was just the regulars, "... noooobody cool." Time was being wasted anyway, so He decided to leave.

16:20

By now Agras was halfway to the bank, it was only on the other side of Nihiri-platz which was not very far at all. On the way though he encountered some interesting characters one stood out from the crowd like Tom Cruise at a gay bar; it's not like he didn't fit in with the crowd, but this crazy man on the corner of Huvin and Nihiri-Strasse just wanted way too much attention, he kept screaming over-and-over, "Reeloy

Renkins! Oooohh YES that's me! REEEEEELOOOOY REEENKINSSS.
The KNOW-IT-ALL extraordinaire! Ask me anything, DO IT! Reeloy
Renkins! Oooohh YES that's me! REEEEELOOOOY REEENKINSSS….
"

"What an annoying buffoon… who the hell does he think he is. Reeloy,
psh, c'mon son." At that very instant, He knew what He had to do.

Agras drew-out his knife, and prepared for battle. The obnoxious fool on
the corner, screaming as loud as he could was going to pay for being such
a tool. As he quickly approached Reeloy, He noticed that it was coming as
a surprise to the supposed know-it-all. "This is gonna be too easy!" Agras
threw all his mass and force into his knife's blow. The tip of his knife
soared through the air skillfully slicing a tiny insect in half as if that was
part of the plan. The knife approached Reeloy. Ten inches. Seven inches.
Two inches. Right before the sharp edged tip of the knife was about to
pounce the weak-looking body of the halfling, it bowed to a standstill in
the air. Reeloy must have had these threats all the time because a forcefield
surrounding the buffoon prevented Agras from penetrating his form.

"Do it! C'mon, let's chat… ask me anything. Only thrrrreeee buffalo
carcass' or six copper!" said Reeloy.

Agras stood there, hilariously stunned, He paused to think and He
checked his balance. "All platinum and no carcass. Shit."

After a few minutes of awkward standing, Agras left Reeloy in search
of the bank. He could see the bank in the distance. It was a hut, made
of wood, stone, and straw. Rather unsecure looking, but the bank was
actually impenetrable from direct contact, a thief would have to hack it's
mainframe to cause any real ruckus.

As Agras approached the door to the bank, he was met by a farmer
who had in his possession ample amounts of gold, platinum, and even
copper; not even the bank carried copper, it was sort of left only to the
underground, and Febay.

The gold farmer approached Agras and offered to conduct a trade at a
lower interest than the bank. It was sketchy, but He knew that there was
no other option. Bank tellers could take up too much time, which is
something He did not have.

Accepting the offer, Agras traded all his platinum for gold and the farmer,
rejoicing, gave him seven copper as a token of gratitude, "thank so much!"

16:51

Kypolai was a brilliant ranger and a loyal member of the Order. His
long and droopy face could be seen mirrored on his glass desktop. At
the very moment when Agras traded with the farmer, Kypolai received a
notification message that He had received another point for "dissenting
behavior."

"Who does he think he is?" said the Russian-born Kypolai, "try to mess with me, I mess back at you!"

17:17

Unaware of the developments occurring within the walls of the Public Affairs building, Agras left the farmer and the bank and enthusiastically / dance'd his way back to the corner of Huvin and Nihiri-Strasse. He found the farmer's generosity to be an omen, He was curious as to what Reeloy had to say, if he knew everything, then he'd surely know of Agras' forced migration and maybe even further details.

"This is gonna be great, he's annoying but I have to give him a try, maybe he's part of the new update or something," He said to Himself.

As Agras approached Reeloy, He heard an unusually familiar sound, "MAIL!!!" He said in a very deep, loud, and obnoxious yet exciting voice.

"/iOmega."

Agras looked at his watch and opened his inbox. The sender was Kypolai from Public Affairs. When His eyes on the screen read Kypolai, His heart dropped. "What did Agras do now?"

He opened the message and noticed it was in CAPS:

DEAR AGRAS,

DUR TO YOUR ACTIONS OF THE PAST FEW MINUTES,
YOUR EXILE SENTENCE HAS INCREASED. YOU WILL
BE AUTOMATICALLY TELEPORTED TO OTULP AT 18:18
HOURS, BYPASSING THE SPACE MIGRATION STATION.

YOUR HARSHER SENTENCE SHOULD NOT BE TAKEN
DISTASTEFULLY, OTULP IS FULL OF FUN AND
EXCITING ADVENTURES AND I PROMISE YOU'LL ENJOY
IT! SEE YOU SOON!

BEST REGARDS,

KYPOLAI
Grand President, Department of Public Affairs

Completely and utterly befuddled, all He wanted to do now as speed to Reeloy to figure out what's going on—otherwise it would be all over.

Agras put away his *iOmega 3* and continued to approach Reeloy. He could hear the annoying buffoon off in the distance.

He could spot Reeloy. Agras drew his knife once again and went running through the air. The tip of his knife went soaring towards the heart of Reeloy, "whatever, at least it's fun, even if I can't kill him."

Agras' knife stood dead still at the onset of Reeloy's forcefield. "REEEEEELOOOOY REEENKINSSS. The KNOW-IT-ALL extraordinaire! Ask me anything…"

"Shut-up bitch…" said Agras right to Reeloy's face. He looked at his clock and realized that time was running-out. In less than an hour, he would be teleported directly to OTULP and perhaps Kypolai will bet here to great him. He did say in the message after all that he would "SEE YOU SOON!"

He clicked on Reeloy's chat bubble with the click of a mouse. Reeloy sprang to life and greeted Agras warmingly.

"Hello sir," Reeloy said in a surprisingly normal tone of voice, "how may I be of service?"

Agras was instructed by his player Bruce to give six copper to Reeloy in exchange for information. Bruce typed in his question, "What is OTULP, who is Kypolai, and why and I being exiled?"

"/enter."

Reeloy took a second to process the information and a smile soon shined brightly on his face. Bruce couldn't help himself but to be excited, he was about to finally figure out what has been happening with his avatar Agras.
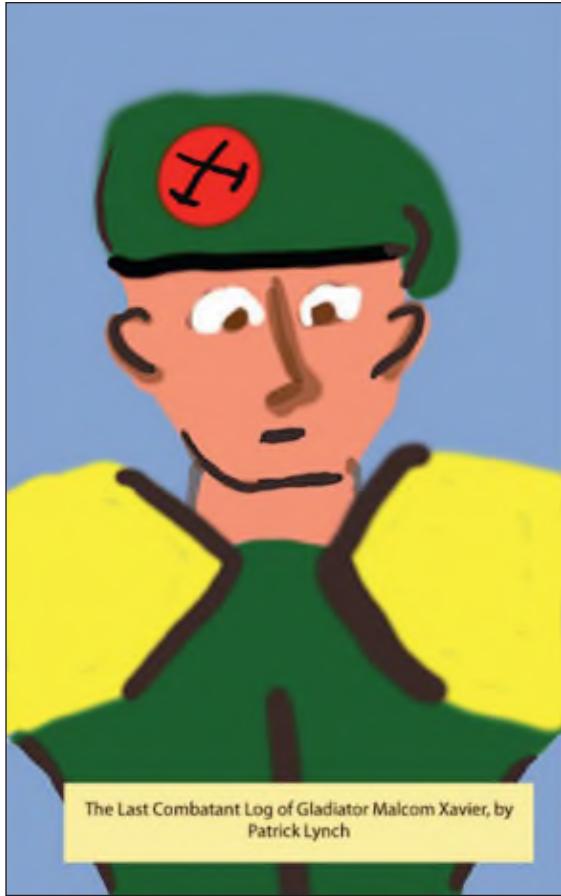
As he anxiously awaited Reeloy's response, His laptop fan began to run loudly and rapidly. "What's going on?! Huh?!?"

In a robot tone, Reeloy gave Agras his answer, "You gave me six copper but asked me THREE q-u-e-s-t-i-o-n-s! You are t-er-m-i-n-a-t-ed!"

At that very instant, Bruce's laptop screen went blue, and at the top of the screen read, "Trojan download successful."
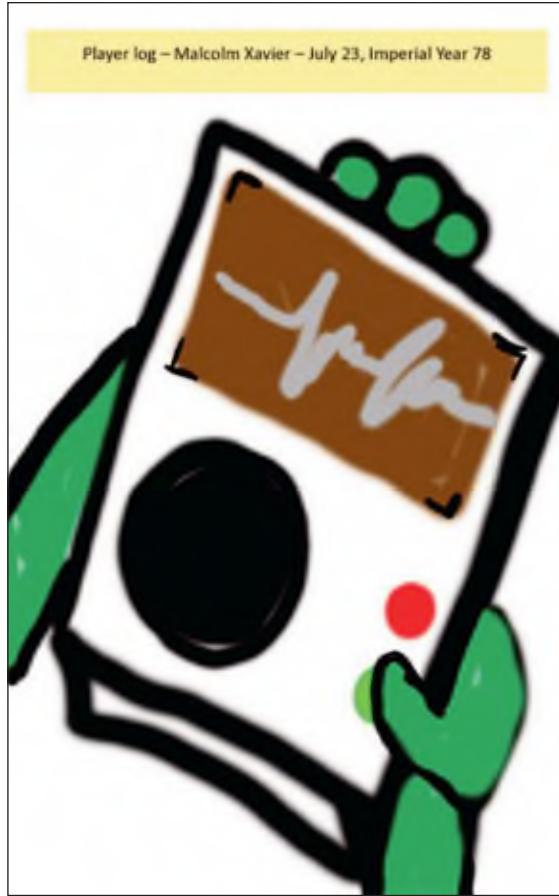
"NOOOOOOOOOOO!" He cried, His mom's footsteps could be heard pounding down the carpet of the hallway leading to his room.

Bruce's laptop had died, and for the time being, so had Agras.

The Last Combatant Log of Gladiator Malcom Xavier, by Patrick Lynch

Player log – Malcolm Xavier – July 23, Imperial Year 78
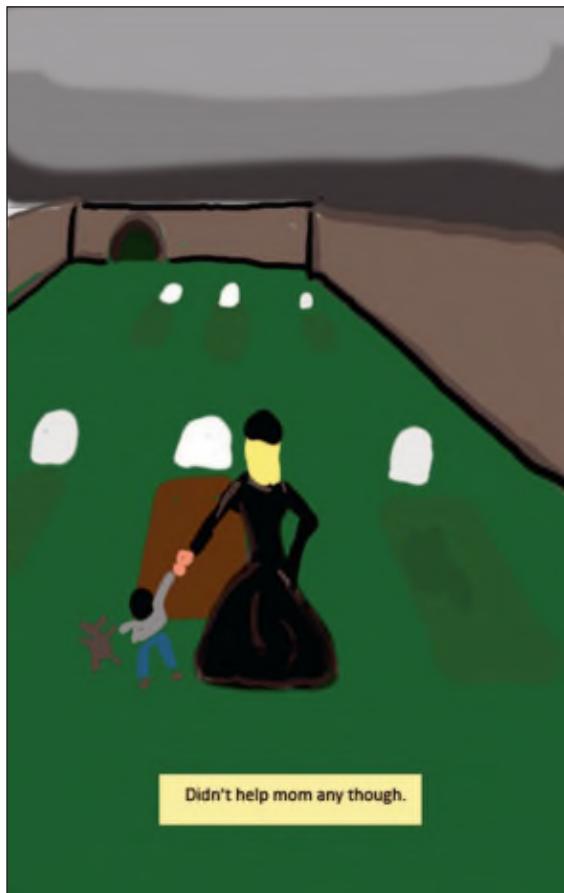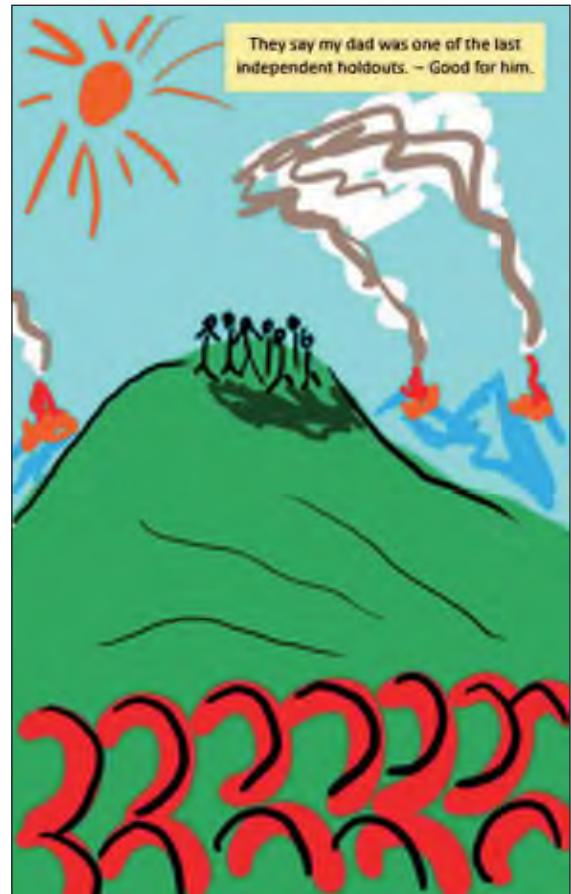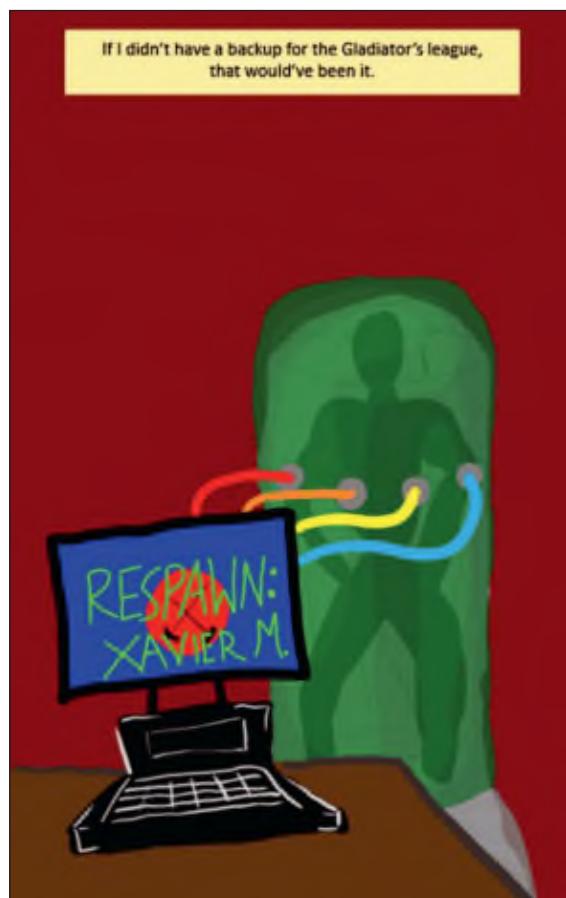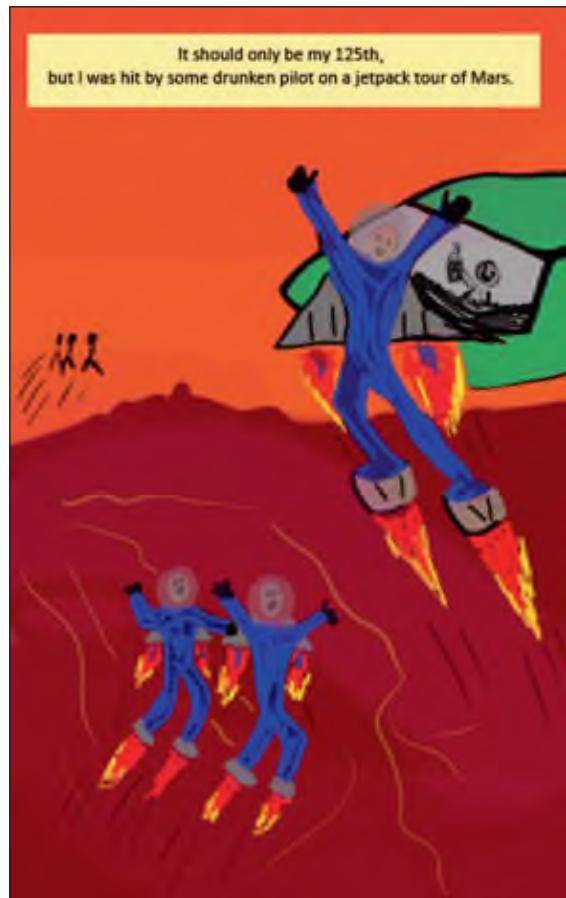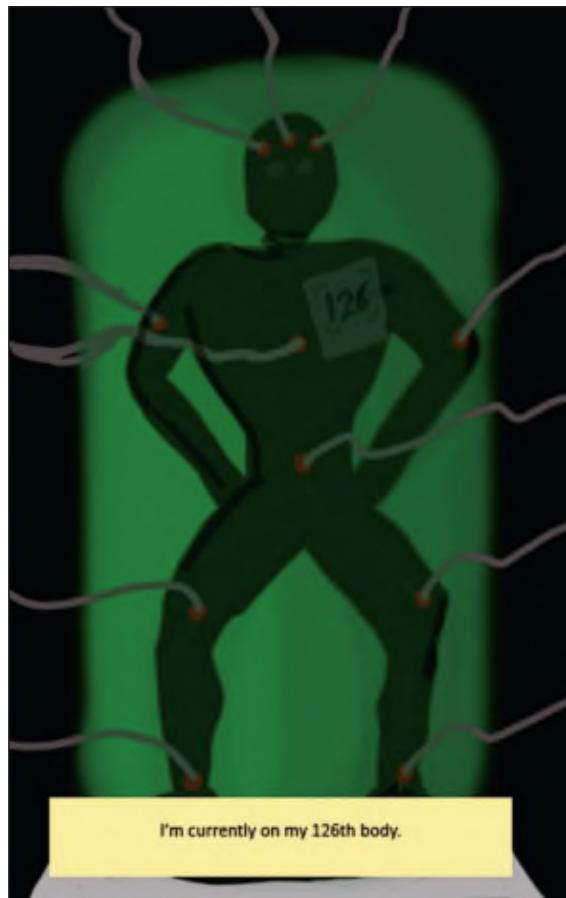
My name is Malcolm Xavier, born on earth in year 2467 of the old calendar.
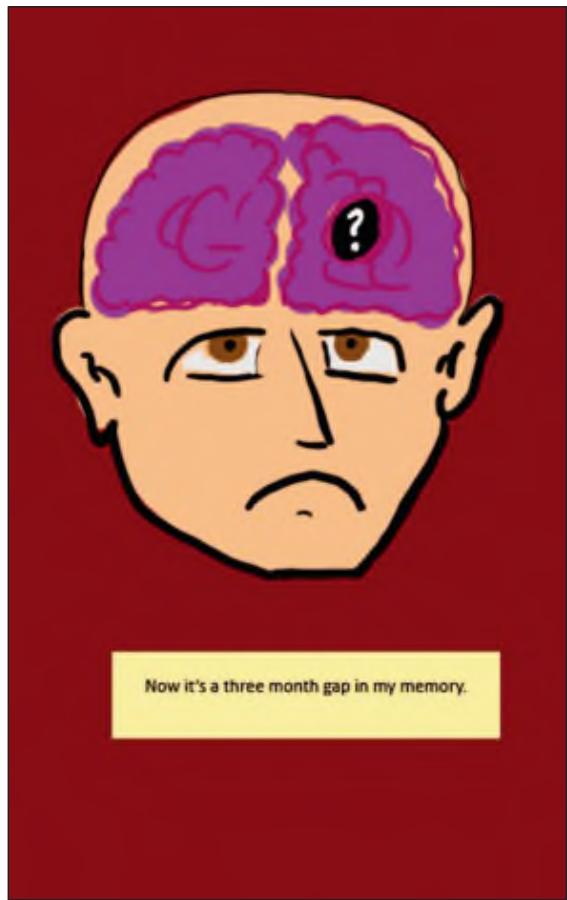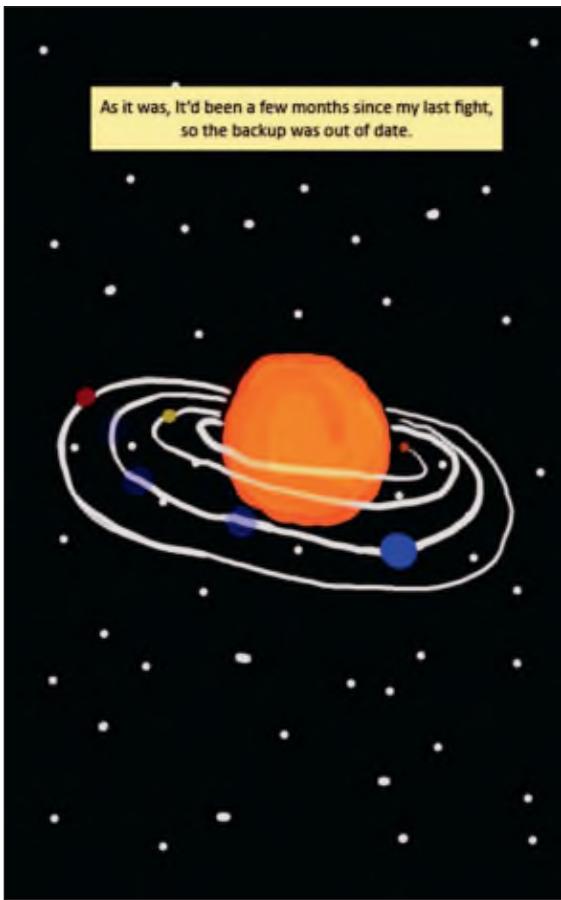
I earned the Gladiator sigil in Imperial Year 13, the day of my 16th birthday.

I was three years old during the revolution, but remember little of it.

They say my dad was one of the last independent holdouts. – Good for him.

Didn't help mom any though.

LeagueRepo

Xavier, M
Rank: 1/420
Age: 81
Last body: 14 mo, 3d

W: 500 | L: 124

For the last sixty five I've been a gladiator, and in that time have won 500 battles and lost 124.

I'm currently on my 126th body.

It should only be my 125th,
but I was hit by some drunken pilot on a jetpack tour of Mars.

Somehow that death seems more 'real' than all the others.

If I didn't have a backup for the Gladiator's league,
that would've been it.

RESPAWN:
XAVIER M.

As it was, It'd been a few months since my last fight, so the backup was out of date.

Now it's a three month gap in my memory.

Since then I've posted a new save to the server almost every night.

Xavier M.
Brain
7.23.78

I might go months without a fight,
but that doesn't mean I'm going to risk anything I don't have to.

I like to think of it as a really good corporate life insurance policy.

I WANT YOU

FAME! MONEY!

FREE BODY REPLACEMENT!

TO JOIN THE GLADIATOR'S LEAGUE

Yeah, it may be rough, but being a gladiator has its perks.

CORY DOCTOROW
"Anda's Game"

Originally published on Salon in November 2004, the short story "Anda's Game"has been translated into multiple languages. Cory has graciously shared all of his writings with the community via an Attribution Non Commercial ShareAlike Creative Commons License.

Anda didn't really start to play the game until she got herself a girl-shaped avatar. She was 12, and up until then, she'd played a boy-elf, because her parents had sternly warned her that if you played a girl you were an instant perv-magnet. None of the girls at Ada Lovelace Comprehensive would have been caught dead playing a girl character. In fact, the only girls she'd ever seen in-game were being played by boys. You could tell, cos they were shaped like a boy's idea of what a girl looked like: hooge buzwabs and long legs all barely contained in tiny, pointless leather bikini-armor. Bintware, she called it.

But when Anda was 12, she met Liza the Organiza, whose avatar was female, but had sensible tits and sensible armor and a bloody great sword that she was clearly very good with. Liza came to school after PE, when Anda was sitting and massaging her abused podge and hating her entire life from stupid sunrise to rotten sunset. Her PE kit was at the bottom of her school-bag and her face was that stupid red color that she *hated* and now it was stinking maths which was hardly better than PE but at least she didn't have to sweat.

But instead of maths, all the girls were called to assembly, and Liza the Organiza stood on the stage in front of Miss Cruickshanks the principal and Mrs Danzig, the useless counsellor.

"Hullo chickens," Liza said. She had an Australian accent. "Well, aren't you lot just precious and bright and expectant with your pink upturned faces like a load of flowers staring up at the sky?

"Warms me fecking heart it does."

That made her laugh, and she wasn't the only one. Miss Cruickshanks and Mrs Danzig didn't look amused, but they tried to hide it.

"I am Liza the Organiza, and I kick arse. Seriously." She tapped a key on her laptop and the screen behind her lit up. It was a game—not the one that Anda played, but something space-themed, a space-station with a rocketship in the background. "This is my avatar." Sensible boobs, sensible armor, and a sword the size of the world. "In-game, they call me the Lizanator, Queen of the Spacelanes, El Presidente of the Clan Fahrenheit." The Fahrenheits had chapters in every game. They were amazing and deadly and cool, and to her knowledge, Anda had never met one in the flesh. They had their own *island* in her game. Crikey.

On screen, The Lizanator was fighting an army of wookie-men, sword in one hand, laser-blaster in the other, rocket-jumping, spinning, strafing,

making impossible kills and long shots, diving for power-ups and ruthlessly running her enemies to ground.

"The *whole* Clan Fahrenheit. I won that title through popular election, but they voted me in cos of my prowess in *combat*. I'm a world-champion in six different games, from first-person shooters to strategy games. I've commanded armies and I've sent armies to their respawn gates by the thousands. Thousands, chickens: my battle record is 3,522 kills in a single battle. I have taken home cash prizes from competitions totaling more than 400,000 pounds. I game for four to six hours nearly every day, and the rest of the time, I do what I like.

"One of the things I like to do is come to girls' schools like yours and let you in on a secret: girls kick arse. We're faster, smarter and better than boys. We play harder. We spend too much time thinking that we're freaks for gaming and when we do game, we never play as girls because we catch so much shite for it. Time to turn that around. I am the best gamer in the world and I'm a girl. I started playing at 10, and there were no women in games—you couldn't even buy a game in any of the shops I went to. It's different now, but it's still not perfect. We're going to change that, chickens, you lot and me.

"How many of you game?"

Anda put her hand up. So did about half the girls in the room.

"And how many of you play girls?"

All the hands went down.

"See, that's a tragedy. Practically makes me weep. Gamespace smells like a boy's *armpit*. It's time we girled it up a little. So here's my offer to you: if you will play as a girl, you will be given probationary memberships in the Clan Fahrenheit, and if you measure up, in six months, you'll be full-fledged members."

In real life, Liza the Organiza was a little podgy, like Anda herself, but she wore it with confidence. She was solid, like a brick wall, her hair bobbed bluntly at her shoulders. She dressed in a black jumper over loose dungarees with giant, goth boots with steel toes that looked like something you'd see in an in-game shop, though Anda was pretty sure they'd come from a real-world goth shop in Camden Town.

She stomped her boots, one-two, thump-thump, like thunder on the stage. "Who's in, chickens? Who wants to be a girl out-game and in?"

Anda jumped to her feet. A Fahrenheit, with her own island! Her head was so full of it that she didn't notice that she was the only one standing. The other girls stared at her, a few giggling and whispering.

"That's all right, love," Liza called, "I like enthusiasm. Don't let those staring faces rattle yer: they're just flowers turning to look at the sky. Pink

scrubbed shining expectant faces. They're looking at you because *you* had the sense to get to your feet when opportunity came—and that means that someday, girl, you are going to be a leader of women, and men, and you will kick arse. Welcome to the Clan Fahrenheit."

She began to clap, and the other girls clapped too, and even though Anda's face was the color of a lollipop-lady's sign, she felt like she might burst with pride and good feeling and she smiled until her face hurt.

###

> Anda,

her sergeant said to her,

> how would you like to make some money?

> Money, Sarge?

Ever since she'd risen to platoon leader, she'd been getting more missions, but they paid *gold*—money wasn't really something you talked about in-game.

The Sarge—sensible boobs, gigantic sword, longbow, gloriously orcish ugly phiz—moved her avatar impatiently.

> Something wrong with my typing, Anda?

> No, Sarge,

she typed.

> You mean gold?

> If I meant gold, I would have said gold. Can you go voice?

Anda looked around. Her door was shut and she could hear her parents in the sitting-room watching something loud on telly. She turned up her music just to be safe and then slipped on her headset. They said it could noise-cancel a Blackhawk helicopter—it had better be able to overcome the little inductive speakers suction-cupped to the underside of her desk. She switched to voice.

"Hey, Lucy," she said.

"Call me Sarge!" Lucy's accent was American, like an old TV show, and she lived somewhere in the middle of the country where it was all vowels, Iowa or Ohio. She was Anda's best friend in-game but she was so hardcore it was boring sometimes.

"Hi Sarge," she said, trying to keep the irritation out of her voice. She'd never smart off to a superior in-game, but v2v it was harder to remember

to keep to the game norms.

"I have a mission that pays real cash. Whichever paypal you're using, they'll deposit money into it. Looks fun, too."

"That's a bit weird, Sarge. Is that against Clan rules?" There were a lot of Clan rules about what kind of mission you could accept and they were always changing. There were curb-crawlers in gamespace and the way that the Clan leadership kept all the mummies and daddies from going ape-poo about it was by enforcing a long, boring code of conduct that was meant to ensure that none of the Fahrenheit girlies ended up being virtual prozzies for hairy old men in raincoats on the other side of the world.

"What?" Anda loved how Lucy quacked *What?* It sounded especially American. She had to force herself from parroting it back. "No, geez. All the executives in the Clan pay the rent doing missions for money. Some of them are even rich from it, I hear! You can make a lot of money gaming, you know."

"Is it really true?" She'd heard about this but she'd assumed it was just stories, like the kids who gamed so much that they couldn't tell reality from fantasy. Or the ones who gamed so much that they stopped eating and got all anorexic. She wouldn't mind getting a little anorexic, to be honest. Bloody podge.

"Yup! And this is our chance to get in on the ground floor. Are you in?"

"It's not—you know, *pervy*, is it?"

"Gag me. No. Jeez, Anda! Are you nuts? No—they want us to go kill some guys."

"Oh, we're good at that!"

#

The mission took them far from Fahrenheit Island, to a cottage on the far side of the largest continent on the gameworld, which was called Dandelionwine. The travel was tedious, and twice they were ambushed on the trail, something that had hardly happened to Anda since she joined the Fahrenheits: attacking a Fahrenheit was bad for your health, because even if you won the battle, they'd bring a war to you.

But now they were far from the Fahrenheits' power-base, and two different packs of brigands waylaid them on the road. Lucy spotted the first group before they got into sword-range and killed four of the six with her bow before they closed for hand-to-hand. Anda's sword—gigantic and fast—was out then, and her fingers danced over the keyboard as she fought off the player who was attacking her, her body jerking from side to side as she hammered on the multibutton controller beside her. She won—of course! She was a Fahrenheit! Lucy had already slaughtered her attacker. They desultorily searched the bodies and came up with some

gold and a couple scrolls, but nothing to write home about. Even the gold didn't seem like much, given the cash waiting at the end of the mission.

The second group of brigands was even less daunting, though there were 20 of them. They were total noobs, and fought like statues. They'd clearly clubbed together to protect themselves from harder players, but they were no match for Anda and Lucy. One of them even begged for his life before she ran him through,

> **please sorry u cn have my gold sorry!!!11!**

Anda laughed and sent him to the respawn gate.

> **You're a nasty person, Anda,**

Lucy typed.

> **I'm a Fahrenheit!!!!!!!!!!**

she typed back.

#

The brigands on the road were punters, but the cottage that was their target was guarded by an altogether more sophisticated sort. They were spotted by sentries long before they got within sight of the cottage, and they saw the warning spell travel up from the sentries' hilltop like a puff of smoke, speeding away toward the cottage. Anda raced up the hill while Lucy covered her with her bow, but that didn't stop the sentries from subjecting Anda to a hail of flaming spears from their fortified position. Anda set up her standard dodge-and-weave pattern, assuming that the sentries were non-player characters—who wanted to *pay* to sit around in gamespace watching a boring road all day?—and to her surprise, the spears followed her. She took one in the chest and only some fast work with her shield and all her healing scrolls saved her. As it was, her constitution was knocked down by half and she had to retreat back down the hillside.

"Get down," Lucy said in her headset. "I'm gonna use the BFG."

Every game had one—the Big Friendly Gun, the generic term for the baddest-arse weapon in the world. Lucy had rented this one from the Clan armory for a small fortune in gold and Anda had laughed and called her paranoid, but now Anda helped Lucy set it up and thanked the gamegods for her foresight. It was a huge, demented flaming crossbow that fired five-meter bolts that exploded on impact. It was a beast to arm and a beast to aim, but they had a nice, dug-in position of their own at the bottom of the hill and it was there that they got the BFG set up, deployed, armed and ranged.

"Fire!" Lucy called, and the game did this amazing and cool animation that it rewarded you with whenever you loosed a bolt from the BFG,

making the gamelight dim towards the sizzling bolt as though it were sucking the illumination out of the world as it arced up the hillside, trailing a comet-tail of sparks. The game played them a groan of dismay from their enemies, and then the bolt hit home with a crash that made her point-of-view vibrate like an earthquake. The roar in her headphones was deafening, and behind it she could hear Lucy on the voice-chat, cheering it on.

"Nuke 'em till they glow and shoot 'em in the dark! Yee-haw!" Lucy called, and Anda laughed and pounded her fist on the desk. Gobbets of former enemy sailed over the treeline dramatically, dripping hyper-red blood and ichor.

In her bedroom, Anda caressed the controller-pad and her avatar punched the air and did a little rugby victory dance that the All-Blacks had released as a limited edition promo after they won the World Cup.

Now they had to move fast, for their enemies at the cottage would be alerted to their presence and waiting for them. They spread out into a wide flanking manoeuvre around the cottage's sides, staying just outside of bow-range, using scrying scrolls to magnify the cottage and make the foliage around them fade to translucency.

There were four guards around the cottage, two with nocked arrows and two with whirling slings. One had a scroll out and was surrounded by the concentration marks that indicated spellcasting.

"GO GO GO!" Lucy called.

Anda went! She had two scrolls left in her inventory, and one was a shield spell. They cost a fortune and burned out fast, but whatever that guard was cooking up, it had to be bad news. She cast the spell as she charged for the cottage, and lucky thing, because there was a fifth guard up a tree who dumped a pot of boiling oil on her that would have cooked her down to her bones in ten seconds if not for the spell.

She power-climbed the tree and nearly lost her grip when whatever the nasty spell was bounced off her shield. She reached the fifth man as he was trying to draw his dirk and dagger and lopped his bloody head off in one motion, then backflipped off the high branch, trusting to her shield to stay intact for her impact on the cottage roof.

The strategy worked—now she had the drop (literally!) on the remaining guards, having successfully taken the high ground. In her headphones, the sound of Lucy making mayhem, the grunts as she pounded her keyboard mingling with the in-game shrieks as her arrows found homes in the chests of two more of the guards.

Shrieking a berzerker wail, Anda jumped down off of the roof and landed on one of the two remaining guards, plunging her sword into his chest and pinning him in the dirt. Her sword stuck in the ground, and she hammered on her keys, trying to free it, while the remaining guard ran

for her on-screen. Anda pounded her keyboard, but it was useless: the sword was good and stuck. Poo. She'd blown a small fortune on spells and rations for this project with the expectation of getting some real cash out of it, and now it was all lost.

She moved her hands to the part of the keypad that controlled motion and began to run, waiting for the guard's sword to find her avatar's back and knock her into the dirt.

"Got 'im!" It was Lucy, in her headphones. She wheeled her avatar about so quickly it was nauseating and saw that Lucy was on her erstwhile attacker, grunting as she engaged him close-in. Something was wrong, though: despite Lucy's avatar's awesome stats and despite Lucy's own skill at the keyboard, she was being taken to the cleaners. The guard was kicking her ass. Anda went back to her stuck sword and recommenced whanging on it, watching helplessly as Lucy lost her left arm, then took a cut on her belly, then another to her knee.

"Shit!" Lucy said in her headphones as her avatar began to keel over. Anda yanked her sword free—finally—and charged at the guard, screaming a ululating war cry. He managed to get his avatar swung around and his sword up before she reached him, but it didn't matter: she got in a lucky swing that took off one leg, then danced back before he could counterstrike. Now she closed carefully, nicking at his sword-hand until he dropped his weapon, then moving in for a fast kill.

"Lucy?"

"Call me Sarge!"

"Sorry, Sarge. Where'd you respawn?"

"I'm all the way over at Body Electric—it'll take me hours to get there. Do you think you can complete the mission on your own?"

"Uh, sure." Thinking, *Crikey, if that's what the guards* outside *were like, how'm I gonna get past the* inside *guards?*

"You're the best, girl. OK, enter the cottage and kill everyone there."

"Uh, sure."

She wished she had another scrying scroll in inventory so she could get a look inside the cottage before she beat its door in, but she was fresh out of scrolls and just about everything else.

She kicked the door in and her fingers danced. She'd killed four of her adversaries before she even noticed that they weren't fighting back.

In fact, they were generic avatars, maybe even non-player characters. They moved like total noobs, milling around in the little cottage. Around them were heaps of shirts, thousands and thousands of them. A couple

of the noobs were sitting in the back, incredibly, still crafting more shirts, ignoring the swordswoman who'd just butchered four of their companions.

She took a careful look at all the avatars in the room. None of them were armed. Tentatively, she walked up to one of the players and cut his head off. The player next to him moved clumsily to one side and she followed him.

"Are you a player or a bot?" she typed.

The avatar did nothing. She killed it.

"Lucy, they're not fighting back."

"Good, kill them all."

"Really?"

"Yeah—that's the orders. Kill them all and then I'll make a phone call and some guys will come by and verify it and then you haul ass back to the island. I'm coming out there to meet you, but it's a long haul from the respawn gate. Keep an eye on my stuff, OK?"

"Sure," Anda said, and killed two more. That left ten. *One two one two and through and through,* she thought, lopping their heads off. *Her vorpal blade went*snicker-snack. One left. He stood off in the back.

> **no porfa necesito mi plata**

Italian? No, Spanish. She'd had a term of it in Third Form, though she couldn't understand what this twit was saying. She could always paste the text into a translation bot on one of the chat channels, but who cared? She cut his head off.

"They're all dead," she said into her headset.

"Good job!" Lucy said. "OK, I'm gonna make a call. Sit tight."

Bo-ring. The cottage was filled with corpses and shirts. She picked some of them up. They were totally generic: the shirts you crafted when you were down at Level 0 and trying to get enough skillz to actually make something of yourself. Each one would fetch just a few coppers. Add it all together and you barely had two thousand gold.

Just to pass the time, she pasted the Spanish into the chatbot

> **no [colloquial] please, I need my [colloquial] [money|silver]**

Pathetic. A few thousand golds—he could make that much by playing a couple of the beginner missions. More fun. More rewarding. Crafting

shirts!

She left the cottage and patrolled around it. Twenty minutes later, two more avatars showed up. More generics.

> are you players or bots?

she typed, though she had an idea they were players. Bots moved better.

> any trouble?

Well all right then.

> no trouble

> good

One player entered the cottage and came back out again. The other player spoke.

> you can go now

"Lucy?"

"What's up?"

"Two blokes just showed up and told me to piss off. They're noobs, though. Should I kill them?"

"No! Jeez, Anda, those are the contacts. They're just making sure the job was done. Get my stuff and meet me at Marionettes Tavern, OK?"

Anda went over to Lucy's corpse and looted it, then set out down the road, dragging the BFG behind her. She stopped at the bend in the road and snuck a peek back at the cottage. It was in flames, the two noobs standing amid them, burning slowly along with the cottage and a few thousand golds' worth of badly crafted shirts.

#

That was the first of Anda and Lucy's missions, but it wasn't the last. That month, she fought her way through six more, and the paypal she used filled with real, honest-to-goodness cash, Pounds Sterling that she could withdraw from the cashpoint situated exactly 501 meters away from the schoolgate, next to the candy shop that was likewise 501 meters away.

"Anda, I don't think it's healthy for you to spend so much time with your game," her da said, prodding her bulging podge with a finger. "It's not healthy."

"Daaaa!" she said, pushing his finger aside. "I go to PE every stinking day.

It's good enough for the Ministry of Education."

"I don't like it," he said. He was no movie star himself, with a little pot belly that he wore his belted trousers high upon, a wobbly extra chin and two bat wings of flab hanging off his upper arms. She pinched his chin and wiggled it.

"I get loads more exercise than you, Mr Kettle."

"But I pay the bills around here, little Miss Pot."

"You're not seriously complaining about the cost of the game?" she said, infusing her voice with as much incredulity and disgust as she could muster. "Ten quid a week and I get unlimited calls, texts and messages! Plus play of course, and the in-game encyclopedia and spellchecker and translator bots!" (this was all from rote—every member of the Fahrenheits memorized this or something very like it for dealing with recalcitrant, ignorant parental units) "Fine then. If the game is too dear for you, Da, let's set it aside and I'll just start using a normal phone, is that what you want?"

Her Da held up his hands. "I surrender, Miss Pot. But *do* try to get a little more exercise, please? Fresh air? Sport? Games?"

"Getting my head trodden on in the hockey pitch, more like," she said, darkly.

"Zackly!" he said, prodding her podge anew. "That's the stuff! Getting my head trodden on was what made me the man I are today!"

Her Da could bluster all he liked about paying the bills, but she had pocket-money for the first time in her life: not book-tokens and fruit-tokens and milk-tokens that could be exchanged for "healthy" snacks and literature. She had real money, cash money that she could spend outside of the 500 meter sugar-free zone that surrounded her school.

She wasn't just kicking arse in the game, now—she was the richest kid she knew, and suddenly she was everybody's best pal, with handsful of Curly Wurlies and Dairy Milks and Mars Bars that she could selectively distribute to her schoolmates.

#

"Go get a BFG," Lucy said. "We're going on a mission."

Lucy's voice in her ear was a constant companion in her life now. When she wasn't on Fahrenheit Island, she and Lucy were running missions into the wee hours of the night. The Fahrenheit armorers, non-player-characters, had learned to recognise her and they had the Clan's BFGs oiled and ready for her when she showed up.

Today's mission was close to home, which was good: the road-trips were getting tedious. Sometimes, non-player-characters or Game Masters would try to get them involved in an official in-game mission, impressed by their stats and weapons, and it sometimes broke her heart to pass them up, but cash always beat gold and experience beat experience points: *Money talks and bullshit walks*, as Lucy liked to say.

They caught the first round of sniper/lookouts before they had a chance to attack or send off a message. Anda used the scrying spell to spot them. Lucy had kept both BFGs armed and she loosed rounds at the hilltops flanking the roadway as soon as Anda gave her the signal, long before they got into bow range.

As they picked their way through the ruined chunks of the dead player-character snipers, Anda still on the lookout, she broke the silence over their voicelink.

"Hey, Lucy?"

"Anda, if you're not going to call me Sarge, at least don't call me 'Hey, Lucy!' My dad loved that old TV show and he makes that joke every visitation day."

"Sorry, Sarge. Sarge?"

"Yes, Anda?"

"I just can't understand why anyone would pay us cash for these missions."

"You complaining?"

"No, but—"

"Anyone asking you to cyber some old pervert?"

"No!"

"OK then. I don't know either. But the money's good. I don't care. Hell, probably it's two rich gamers who pay their butlers to craft for them all day. One's fucking with the other one and paying us."

"You really think that?"

Lucy sighed a put-upon, sophisticated, American sigh. "Look at it this way. Most of the world is living on like a dollar a day. I spend five dollars every day on a frappuccino. Some days, I get two! Dad sends mom three thousand a month in child-support—that's a hundred bucks a day. So if a day's money here is a hundred dollars, then to a African or whatever my frappuccino is worth like *five hundred dollars*. And I buy two or three every day.

"And we're not rich! There's craploads of rich people who wouldn't think twice about spending five hundred bucks on a coffee—how much do you think a hotdog and a Coke go for on the space station? A thousand bucks!

"So that's what I think is going on. There's someone out there, some Saudi or Japanese guy or Russian mafia kid who's so rich that this is just chump change for him, and he's paying us to mess around with some other rich person. To them, we're like the Africans making a dollar a day to craft—I mean, sew—t-shirts. What's a couple hundred bucks to them? A cup of coffee."

Anda thought about it. It made a kind of sense. She'd been on hols in Bratislava where they got a posh hotel room for ten quid—less than she was spending every day on sweeties and fizzy drinks.

"Three o'clock," she said, and aimed the BFG again. More snipers pat-patted in bits around the forest floor.

"Nice one, Anda."

"Thanks, Sarge."

#

They smashed half a dozen more sniper outposts and fought their way through a couple packs of suspiciously bad-ass brigands before coming upon the cottage.

"Bloody hell," Anda breathed. The cottage was ringed with guards, forty or fifty of them, with bows and spells and spears, in entrenched positions.

"This is nuts," Lucy agreed. "I'm calling them. This is nuts."

There was a muting click as Lucy rang off and Anda used up a scrying scroll to examine the inventories of the guards around the corner. The more she looked, the more scared she got. They were loaded down with spells, a couple of them were guarding BFGs and what looked like an even *bigger* BFG, maybe the fabled BFG10K, something that was removed from the game economy not long after gameday one, as too disruptive to the balance of power. Supposedly, one or two existed, but that was just a rumor. Wasn't it?

"OK," Lucy said. "OK, this is how this goes. We've got to do this. I just called in three squads of Fahrenheit veterans and their noob prentices for backup." Anda summed that up in her head to a hundred player characters and maybe three hundred nonplayer characters: familiars, servants, demons;

"That's a lot of shares to split the pay into," Anda said.

"Oh ye of little tits," Lucy said. "I've negotiated a bonus for us if we make it—a million gold and three missions' worth of cash. The Fahrenheits are

taking payment in gold—they'll be here in an hour."

This wasn't a mission anymore, Anda realized. It was war. Gamewar. Hundreds of players converging on this shard, squaring off against the ranked mercenaries guarding the huge cottage over the hill.

#

Lucy wasn't the ranking Fahrenheit on the scene, but she was the designated general. One of the gamers up from Fahrenheit Island brought a team flag for her to carry, a long spear with the magical standard snapping proudly from it as the troops formed up behind her.

"On my signal," Lucy said. The voice chat was like a wind-tunnel from all the unmuted breathing voices, hundreds of girls in hundreds of bedrooms like Anda's, all over the world, some sitting down before breakfast, some just coming home from school, some roused from sleep by their ringing game-sponsored mobiles. "GO GO GO!"

They went, roaring, and Anda roared too, heedless of her parents downstairs in front of the blaring telly, heedless of her throat-lining, a Fahrenheit in berzerker rage, sword swinging. She made straight for the BFG10K—a siege engine that could level a town wall, and it would be hers, captured by her for the Fahrenheits if she could do it. She spelled the merc who was cranking it into insensibility, rolled and rolled again to dodge arrows and spells, healed herself when an arrow found her leg and sent her tumbling, springing to her feet before another arrow could strike home, watching her hit points and experience points move in opposite directions.

HERS! She vaulted the BFG10K and snicker-snacked her sword through two mercs' heads. Two more appeared—they had the thing primed and aimed at the main body of Fahrenheit fighters, and they could turn the battle's tide just by firing it—and she killed them, slamming her keypad, howling, barely conscious of the answering howls in her headset.

Now *she* had the BFG10K, though more mercs were closing on her. She disarmed it quickly and spelled at the nearest bunch of mercs, then had to take evasive action against the hail of incoming arrows and spells. It was all she could do to cast healing spells fast enough to avoid losing consciousness.

"LUCY!" she called into her headset. "LUCY, OVER BY THE BFG10K!"

Lucy snapped out orders and the opposition before Anda began to thin as Fahrenheits fell on them from behind. The flood was stemmed, and now the Fahrenheits' greater numbers and discipline showed. In short order, every merc was butchered or run off.

Anda waited by the BFG10K while Lucy paid off the Fahrenheits and saw them on their way. "Now we take the cottage," Lucy said.

"Right," Anda said. She set her character off for the doorway. Lucy brushed past her.

"I'll be glad when we're done with this—that was bugfuck nutso." She opened the door and her character disappeared in a fireball that erupted from directly overhead. A door-curse, a serious one, one that cooked her in her armor in seconds.

"SHIT!" Lucy said in her headset.

Anda giggled. "Teach *you* to go rushing into things," she said. She used up a couple scrying scrolls making sure that there was nothing else in the cottage save for millions of shirts and thousands of unarmed noob avatars that she'd have to mow down like grass to finish out the mission.

She descended upon them like a reaper, swinging her sword heedlessly, taking five or six out with each swing. When she'd been a noob in the game, she'd had to endure endless fighting practice, "grappling" with piles of leaves and other nonlethal targets, just to get enough experience points to have a chance of hitting anything. This was every bit as dull.

Her wrists were getting tired, and her chest heaved and her hated podge wobbled as she worked the keypad.

> **Wait, please, don't—I'd like to speak with you**

It was a noob avatar, just like the others, but not just like it after all, for it moved with purpose, backing away from her sword. And it spoke English.

> **nothing personal**

she typed

> **just a job**

> **There are many here to kill—take me last at least. I need to talk to you.**

> **talk, then**

she typed. Meeting players who moved well and spoke English was hardly unusual in gamespace, but here in the cleanup phase, it felt out of place. It felt wrong.

> **My name is Raymond, and I live in Tijuana. I am a labour organizer in the factories here. What is your name?**

> **i don't give out my name in-game**

> **What can I call you?**

> **kali**

It was a name she liked to use in-game: Kali, Destroyer of Worlds, like the Hindu goddess.

> **Are you in India?**

> **london**

> **You are Indian?**

> **naw im a whitey**

She was halfway through the room, mowing down the noobs in twos and threes. She was hungry and bored and this Raymond was weirding her out.

> **Do you know who these people are that you're killing?**

She didn't answer, but she had an idea. She killed four more and shook out her wrists.

> **They're working for less than a dollar a day. The shirts they make are traded for gold and the gold is sold on eBay. Once their avatars have leveled up, they too are sold off on eBay. They're mostly young girls supporting their families. They're the lucky ones: the unlucky ones work as prostitutes.**

Her wrists *really* ached. She slaughtered half a dozen more.

> **The bosses used to use bots, but the game has countermeasures against them. Hiring children to click the mouse is cheaper than hiring programmers to circumvent the rules. I've been trying to unionize them because they've got a very high rate of injury. They have to play for 18-hour shifts with only one short toilet break. Some of them can't hold it in and they soil themselves where they sit.**

> **look**

she typed, exasperated.

> **it's none of my lookout, is it. the world's like that. lots of people with no money. im just a kid, theres nothing i can do about it.**

> **When you kill them, they don't get paid.**

no porfa necesito mi plata

> When you kill them, they lose their day's wages. Do you know who is paying you to do these killings?

She thought of Saudis, rich Japanese, Russian mobsters.

> not a clue

> I've been trying to find that out myself, Kali.

They were all dead now. Raymond stood alone amongst the piled corpses.

> Go ahead

he typed

> I will see you again, I'm sure.

She cut his head off. Her wrists hurt. She was hungry. She was alone there in the enormous woodland cottage, and she still had to haul the BFG10K back to Fahrenheit Island.

"Lucy?"

"Yeah, yeah, I'm almost back there, hang on. I respawned in the ass end of nowhere."

"Lucy, do you know who's in the cottage? Those noobs that we kill?"

"What? Hell no. Noobs. Someone's butler. I dunno. Jesus, that spawn gate—"

"Girls. Little girls in Mexico. Getting paid a dollar a day to craft shirts. Except they don't get their dollar when we kill them. They don't get anything."

"Oh, for chrissakes, is that what one of them told you? Do you believe everything someone tells you in-game? Christ. English girls are so naive."

"You don't think it's true?"

"Naw, I don't."

"Why not?"

"I just don't, OK? I'm almost there, keep your panties on."

"I've got to go, Lucy," she said. Her wrists hurt, and her podge overlapped the waistband of her trousers, making her feel a bit like she was drowning.

"What, now? Shit, just hang on."

"My mom's calling me to supper. You're almost here, right?"

"Yeah, but—"

She reached down and shut off her PC.

#

Anda's Da and Mum were watching the telly again with a bowl of crisps between them. She walked past them like she was dreaming and stepped out the door onto the terrace. It was nighttime, 11 o'clock, and the chavs in front of the council flats across the square were kicking a football around and swilling lager and making rude noises. They were skinny and rawboned, wearing shorts and string vests with strong, muscular limbs flashing in the streetlights.

"Anda?"

"Yes, Mum?"

"Are you all right?" Her mum's fat fingers caressed the back of her neck.

"Yes, Mum. Just needed some air is all."

"You're very clammy," her mum said. She licked a finger and scrubbed it across Anda's neck. "Gosh, you're dirty—how did you get to be such a mucky puppy?"

"Owww!" she said. Her mum was scrubbing so hard it felt like she'd take her skin off.

"No whingeing," her mum said sternly. "Behind your ears, too! You are *filthy*."

"Mum, *owwww!*"

Her mum dragged her up to the bathroom and went at her with a flannel and a bar of soap and hot water until she felt boiled and raw.

"What *is* this mess?" her mum said.

"Lilian, leave off," her dad said, quietly. "Come out into the hall for a moment, please."

The conversation was too quiet to hear and Anda didn't want to, anyway: she was concentrating too hard on not crying—her ears *hurt*.

Her mum enfolded her shoulders in her soft hands again. "Oh, darling, I'm sorry. It's a skin condition, your father tells me, Acanthosis Nigricans—he saw it in a TV special. We'll see the doctor about it

tomorrow after school. Are you all right?"

"I'm fine," she said, twisting to see if she could see the "dirt" on the back of her neck in the mirror. It was hard because it was an awkward placement—but also because she didn't like to look at her face and her soft extra chin, and she kept catching sight of it.

She went back to her room to google Acanthosis Nigricans.

> A condition involving darkened, thickened skin. Found in the folds of skin at the base of the back of the neck, under the arms, inside the elbow and at the waistline. Often precedes a diagnosis of type-2 diabetes, especially in children. If found in children, immediate steps must be taken to prevent diabetes, including exercise and nutrition as a means of lowering insulin levels and increasing insulin-sensitivity.

Obesity-related diabetes. They had lectures on this every term in health class—the fastest-growing ailment among British teens, accompanied by photos of orca-fat sacks of lard sat up in bed surrounded by an ocean of rubbery, flowing podge. Anda prodded her belly and watched it jiggle.

It jiggled. Her thighs jiggled. Her chins wobbled. Her arms sagged.

She grabbed a handful of her belly and *squeezed it*, pinched it hard as she could, until she had to let go or cry out. She'd left livid red fingerprints in the rolls of fat and she was crying now, from the pain and the shame and oh, God, she was a fat girl with diabetes—

#

"Jesus, Anda, where the hell have you been?"

"Sorry, Sarge," she said. "My PC's been broken—" Well, out of service, anyway. Under lock-and-key in her dad's study. Almost a month now of medications and no telly and no gaming and double PE periods at school with the other whales. She was miserable all day, every day now, with nothing to look forward to except the trips after school to the newsagents at the 501-meter mark and the fistful of sweeties and bottles of fizzy drink she ate in the park while she watched the chavs play footy.

"Well, you should have found a way to let me know. I was getting worried about you, girl."

"Sorry, Sarge," she said again. The PC Baang was filled with stinky spotty boys—literally stinky, it smelt like goats, like a train-station toilet—being loud and obnoxious. The dinky headphones provided were greasy as a slice of pizza, and the mouthpiece was sticky with excited boy-saliva from

games gone past.

But it didn't matter. Anda was back in the game, and just in time, too: her money was running short.

"Well, I've got a backlog of missions here. I tried going out with a couple other of the girls—" A pang of regret shot through Anda at the thought that her position might have been usurped while she was locked off the game "—but you're too good to replace, OK? I've got four missions we can do today if you're game."

"Four missions! How on earth will we do four missions? That'll take days!"

"We'll take the BFG10K." Anda could hear the savage grin in her voice.

#

The BFG10K simplified things quite a lot. Find the cottage, aim the BFG10K, fire it, whim-wham, no more cottage. They started with five bolts for it—one BFG10K bolt was made up of 20 regular BFG bolts, each costing a small fortune in gold—and used them all up on the first three targets. After returning it to the armory and grabbing a couple of BFGs (amazing how puny the BFG seemed after just a couple hours' campaigning with a really *big* gun!) they set out for number four.

"I met a guy after the last campaign," Anda said. "One of the noobs in the cottage. He said he was a union organizer."

"Oh, you met Raymond, huh?"

"You knew about him?"

"I met him too. He's been turning up everywhere. What a creep."

"So you knew about the noobs in the cottages?"

"Um. Well, yeah, I figured it out mostly on my own and then Raymond told me a little more."

"And you're fine with depriving little kids of their wages?"

"Anda," Lucy said, her voice brittle. "You like gaming, right, it's important to you?"

"Yeah, 'course it is."

"How important? Is it something you do for fun, just a hobby you waste a little time on? Are you just into it casually, or are you *committed* to it?"

"I'm committed to it, Lucy, you know that." God, without the game, what was there? PE class? Stupid Acanthosis Nigricans and, someday, insulin jabs every morning? "I love the game, Lucy. It's where my friends

are."

"I know that. That's why you're my right-hand woman, why I want you at my side when I go on a mission. We're bad-ass, you and me, as bad-ass as they come, and we got that way through discipline and hard work and really *caring* about the game, right?"

"Yes, right, but—"

"You've met Liza the Organiza, right?"

"Yes, she came by my school."

"Mine too. She asked me to look out for you because of what she saw in you that day."

"Liza the Organiza goes to Ohio?"

"Idaho. Yes—all across the US. They put her on the tube and everything. She's amazing, and she cares about the game, too—that's what makes us all Fahrenheits: we're committed to each other, to teamwork, and to fair play."

Anda had heard these words—lifted from the Fahrenheit mission statement—many times, but now they made her swell a little with pride.

"So these people in Mexico or wherever, what are they doing? They're earning their living by exploiting the game. You and me, we would never trade cash for gold, or buy a character or a weapon on eBay—it's cheating. You get gold and weapons through hard work and hard play. But those Mexicans spend all day, every day, crafting stuff to turn into gold to sell off on the exchange. *That's where it comes from*—that's where the crappy players get their gold from! That's how rich noobs can buy their way into the game that we had to play hard to get into.

"So we burn them out. If we keep burning the factories down, they'll shut them down and those kids'll find something else to do for a living and the game will be better. If no one does that, our work will just get cheaper and cheaper: the game will get less and less fun, too.

"These people *don't* care about the game. To them, it's just a place to suck a buck out of. They're not players, they're leeches, here to suck all the fun out."

They had come upon the cottage now, the fourth one, having exterminated four different sniper-nests on the way.

"Are you in, Anda? Are you here to play, or are you so worried about these leeches on the other side of the world that you want out?"

"I'm in, Sarge," Anda said. She armed the BFGs and pointed them at the cottage.

"Boo-yah!" Lucy said. Her character notched an arrow.

> Hello, Kali

"Oh, Christ, he's back," Lucy said. Raymond's avatar had snuck up behind them.**> Look at these**

he said, and his character set something down on the ground and backed away. Anda edged up on them.

"Come on, it's probably a booby-trap, we've got work to do," Lucy said.

They were photo-objects. She picked them up and then examined them. The first showed ranked little girls, fifty or more, in clean and simple t-shirts, skinny as anything, sitting at generic white-box PCs, hands on the keyboards. They were hollow-eyed and grim, and none of them older than she.

The next showed a shantytown, shacks made of corrugated aluminum and trash, muddy trails between them, spraypainted graffiti, rude boys loitering, rubbish and carrier bags blowing.

The next showed the inside of a shanty, three little girls and a little boy sitting together on a battered sofa, their mother serving them something white and indistinct on plastic plates. Their smiles were heartbreaking and brave.

> That's who you're about to deprive of a day's wages

"Oh, hell, *no*," Lucy said. "Not again. I killed him last time and I said I'd do it again if he ever tried to show me photos. That's it, he's dead." Her character turned towards him, putting away her bow and drawing a short sword. Raymond's character backed away quickly.

"Lucy, don't," Anda said. She interposed her avatar between Lucy's and Raymond. "Don't do it. He deserves to have a say." She thought of old American TV shows, the kinds you saw between the Bollywood movies on telly. "It's a free country, right?"

"God *damn* it, Anda, what is *wrong* with you? Did you come here to play the game, or to screw around with this pervert dork?"

> what do you want from me raymond?

> Don't kill them—let them have their wages. Go play somewhere else

> They're leeches

Lucy typed,

> **they're wrecking the game economy and they're providing a gold-for-cash supply that lets rich assholes buy their way in. They don't care about the game and neither do you**

> **If they don't play the game, they don't eat. I think that means that they care about the game as much as you do. You're being paid cash to kill them, yes? So you need to play for your money, too. I think that makes you and them the same, a little the same.**

> **go screw yourself**

Lucy typed. Anda edged her character away from Lucy's. Raymond's character was so far away now that his texting came out in tiny type, almost too small to read. Lucy drew her bow again and nocked an arrow.

"Lucy, DON'T!" Anda cried. Her hands moved of their own volition and her character followed, clobbering Lucy barehanded so that her avatar reeled and dropped its bow.

"You BITCH!" Lucy said. She drew her sword.

"I'm sorry, Lucy," Anda said, stepping back out of range. "But I don't want you to hurt him. I want to hear him out."

Lucy's avatar came on fast, and there was a click as the voicelink dropped. Anda typed onehanded while she drew her own sword.

> **dont lucy come on talk2me**

Lucy slashed at her twice and she needed both hands to defend herself or she would have been beheaded. Anda blew out through her nose and counterattacked, fingers pounding the keyboard. Lucy had more experience points than she did, but she was a better player, and she knew it. She hacked away at Lucy driving her back and back, back down the road they'd marched together.

Abruptly, Lucy broke and ran, and Anda thought she was going away and decided to let her go, no harm no foul, but then she saw that Lucy wasn't running away, she was running *towards* the BFGs, armed and primed.

"Bloody hell," she breathed, as a BFG swung around to point at her. Her fingers flew. She cast the fireball at Lucy in the same instant that she cast her shield spell. Lucy loosed the bolt at her a moment before the fireball engulfed her, cooking her down to ash, and the bolt collided with the shield and drove Anda back, high into the air, and the shield spell wore off before she hit ground, costing her half her health and inventory, which scattered around her. She tested her voicelink.

"Lucy?"

There was no reply.

> **I'm very sorry you and your friend quarreled.**

She felt numb and unreal. There were rules for Fahrenheits, lots of rules, and the penalties for breaking them varied, but the penalty for attacking a fellow Fahrenheit was—she couldn't think the word, she closed her eyes, but there it was in big glowing letters: EXPULSION.

But Lucy had started it, right? It wasn't her fault.

But who would believe her?

She opened her eyes. Her vision swam through incipient tears. Her heart was thudding in her ears.

> **The enemy isn't your fellow player. It's not the players guarding the fabrica, it's not the girls working there. The people who are working to destroy the game are the people who pay you and the people who pay the girls in the fabrica, who are the same people. You're being paid by rival factory owners, you know that? THEY are the ones who care nothing for the game. My girls care about the game. You care about the game. Your common enemy is the people who want to destroy the game and who destroy the lives of these girls.**

"Whassamatter, you fat little cow? Is your game making you cwy?" She jerked as if slapped. The chav who was speaking to her hadn't been in the Baang when she arrived, and he had mean, close-set eyes and a football jersey and though he wasn't any older than she, he looked mean, and angry, and his smile was sadistic and crazy.

"Piss off," she said, mustering her braveness.

"You wobbling tub of guts, don't you DARE speak to me that way," he said, shouting right in her ear. The Baang fell silent and everyone looked at her. The Pakistani who ran the Baang was on his phone, no doubt calling the coppers, and that meant that her parents would discover where she'd been and then—

"I'm talking to you, girl," he said. "You disgusting lump of suet—Christ, it makes me wanta puke to look at you. You ever had a boyfriend? How'd he shag you—did he roll yer in flour and look for the wet spot?"

She reeled back, then stood. She drew her arm back and slapped him, as hard as she could. The boys in the Baang laughed and went whoooooo! He purpled and balled his fists and she backed away from him. The imprint of her fingers stood out on his cheek.

He bridged the distance between them with a quick step and *punched her*, in the belly, and the air whooshed out of her and she fell into another player, who pushed her away, so she ended up slumped against the wall, crying.

The mean boy was there, right in front of her, and she could smell the chili crisps on his breath. "You disgusting whore—" he began and she kneed him square in the nadgers, hard as she could, and he screamed like a little girl and fell backwards. She picked up her schoolbag and ran for the door, her chest heaving, her face streaked with tears.

#

"Anda, dear, there's a phone call for you."

Her eyes stung. She'd been lying in her darkened bedroom for hours now, snuffling and trying not to cry, trying not to look at the empty desk where her PC used to live.

Her da's voice was soft and caring, but after the silence of her room, it sounded like a rusting hinge.

"Anda?"

She opened her eyes. He was holding a cordless phone, sillhouetted against the open doorway.

"Who is it?"

"Someone from your game, I think," he said. He handed her the phone.

"Hullo?"

"Hullo chicken." It had been a year since she'd heard that voice, but she recognised it instantly.

"Liza?"

"Yes."

Anda's skin seemed to shrink over her bones. This was it: expelled. Her heart felt like it was beating once per second, time slowed to a crawl.

"Hullo, Liza."

"Can you tell me what happened today?"

She did, stumbling over the details, back-tracking and stuttering. She couldn't remember, exactly—did Lucy move on Raymond and Anda asked her to stop and then Lucy attacked her? Had Anda attacked Lucy first? It was all a jumble. She should have saved a screenmovie and taken it with her, but she couldn't have taken anything with her, she'd run out—

"I see. Well it sounds like you've gotten yourself into quite a pile of poo, haven't you, my girl?"

"I guess so," Anda said. Then, because she knew that she was as good as expelled, she said, "I don't think it's right to kill them, those girls. All right?"

"Ah," Liza said. "Well, funny you should mention that. I happen to agree. Those girls need our help more than any of the girls anywhere in the game. The Fahrenheits' strength is that we are cooperative—it's another way that we're better than the boys. We care. I'm proud that you took a stand when you did—glad I found out about this business."

"You're not going to expel me?"

"No, chicken, I'm not going to expel you. I think you did the right thing—"

That meant that Lucy would be expelled. Fahrenheit had killed Fahrenheit—something had to be done. The rules had to be enforced. Anda swallowed hard.

"If you expel Lucy, I'll quit," she said, quickly, before she lost her nerve.

Liza laughed. "Oh, chicken, you're a brave thing, aren't you? No one's being expelled, fear not. But I wanta talk to this Raymond of yours."

#

Anda came home from remedial hockey sweaty and exhausted, but not as exhausted as the last time, nor the time before that. She could run the whole length of the pitch twice now without collapsing—when she'd started out, she could barely make it halfway without having to stop and hold her side, kneading her loathsome podge to make it stop aching. Now there was noticeably less podge, and she found that with the ability to run the pitch came the freedom to actually pay attention to the game, to aim her shots, to build up a degree of accuracy that was nearly as satisfying as being really good in-game.

Her dad knocked at the door of her bedroom after she'd showered and changed. "How's my girl?"

"Revising," she said, and hefted her maths book at him.

"Did you have a fun afternoon on the pitch?"

"You mean 'did my head get trod on'?"

"Did it?"

"Yes," she said. "But I did more treading than getting trodden on." The other girls were *really* fat, and they didn't have a lot of team skills. Anda

had been to war: she knew how to depend on someone and how to be depended upon.

"That's my girl." He pretended to inspect the paint-work around the light switch. "Been on the scales this week?"

She had, of course: the school nutritionist saw to that, a morning humiliation undertaken in full sight of all the other fatties.

"Yes, Dad."

"And—?"

"I've lost a stone," she said. A little more than a stone, actually. She had been able to fit into last year's jeans the other day.

She hadn't been the sweets-shop in a month. When she thought about sweets, it made her think of the little girls in the sweatshop. Sweatshop, sweetshop. The sweets shop man sold his wares close to the school because little girls who didn't know better would be tempted by them. No one forced them, but they were *kids*and grownups were supposed to look out for kids.

Her da beamed at her. "I've lost three pounds myself," he said, holding his tum. "I've been trying to follow your diet, you know."

"I know, Da," she said. It embarrassed her to discuss it with him.

The kids in the sweatshops were being exploited by grownups, too. It was why their situation was so impossible: the adults who were supposed to be taking care of them were exploiting them.

"Well, I just wanted to say that I'm proud of you. We both are, your Mum and me. And I wanted to let you know that I'll be moving your PC back into your room tomorrow. You've earned it."

Anda blushed pink. She hadn't really expected this. Her fingers twitched over a phantom game-controller.

"Oh, Da," she said. He held up his hand.

"It's all right, girl. We're just proud of you."

#

She didn't touch the PC the first day, nor the second. The kids in the game—she didn't know what to do about them. On the third day, after hockey, she showered and changed and sat down and slipped the headset on.

"Hello, Anda."

"Hi, Sarge."

Lucy had known the minute she entered the game, which meant that she was still on Lucy's buddy-list. Well, that was a hopeful sign.

"You don't have to call me that. We're the same rank now, after all."

Anda pulled down a menu and confirmed it: she'd been promoted to Sergeant during her absence. She smiled.

"Gosh," she said.

"Yes, well, you earned it," Lucy said. "I've been talking to Raymond a lot about the working conditions in the factory, and, well—" She broke off. "I'm sorry, Anda."

"Me too, Lucy."

"You don't have anything to be sorry about," she said.

They went adventuring, running some of the game's standard missions together. It was fun, but after the kind of campaigning they'd done before, it was also kind of pale and flat.

"It's horrible, I know," Anda said. "But I miss it."

"Oh thank God," Lucy said. "I thought I was the only one. It was fun, wasn't it? Big fights, big stakes."

"Well, poo," Anda said. "I don't wanna be bored for the rest of my life. What're we gonna do?"

"I was hoping you knew."

She thought about it. The part she'd loved had been going up against grownups who were not playing the game, but *gaming* it, breaking it for money. They'd been worthy adversaries, and there was no guilt in beating them, either.

"We'll ask Raymond how we can help," she said.

#

"I want them to walk out—to go on strike," he said. "It's the only way to get results: band together and withdraw your labour." Raymond's voice had a thick Mexican accent that took some getting used to, but his English was very good—better, in fact, than Lucy's.

"Walk out in-game?" Lucy said.

"No," Raymond said. "That wouldn't be very effective. I want them to walk out in Ciudad Juarez and Tijuana. I'll call the press in, we'll make a

big deal out of it. We can win—I know we can."

"So what's the problem?" Anda said.

"The same problem as always. Getting them organized. I thought that the game would make it easier: we've been trying to get these girls organized for years: in the sewing shops, and the toy factories, but they lock the doors and keep us out and the girls go home and their parents won't let us talk to them. But in the game, I thought I'd be able to reach them—"

"But the bosses keep you away?"

"I keep getting killed. I've been practicing my swordfighting, but it's so hard—"

"This will be fun," Anda said. "Let's go."

"Where?" Lucy said.

"To an in-game factory. We're your new bodyguards." The bosses hired some pretty mean mercs, Anda knew. She'd been one. They'd be *fun* to wipe out.

Raymond's character spun around on the screen, then planted a kiss on Anda's cheek. Anda made her character give him a playful shove that sent him sprawling.

"Hey, Lucy, go get us a couple BFGs, OK?"

—

Cory Doctorow (craphound.com) is a science fiction author, activist, journalist and blogger—the co-editor of Boing Boing (boingboing.net) and the author of the or Teens/HarperCollins UK novels like FOR THE WIN and the bestselling LITTLE BROTHER. He is the former European director of the Electronic Frontier Foundation and co-founded the UK Open Rights Group. Born in Toronto, Canada, he now lives in London.

His next book will be WITH A LITTLE HELP, an audacious experiment in print-on-demand publishing (July 2010).

On February 3, 2008, he became a father. The little girl is called Poesy Emmeline Fibonacci Nautilus Taylor Doctorow, and is a marvel that puts all the works of technology and artifice to shame.

appendices

EVAN BARNETT

UNIT DETAILS

Age: 20

Year: Sophomore

Technical Background: A few multimedia classes, some Java, C and C++. Currently learning SQL.

Class: Computer Science Major

Primary Weapon: PC / **Secondary Weapon:** PS3

Background: Born and raised in Austin, Texas. Developed an intense interest in games at an early age. Currently enjoys playing games, hanging out in rooms that aren't his own (but are owned by friends), sleeping, reading Chuck Klosterman, watching Doctor Who, and generally putting off work as long as possible. Future interests include, but are not limited to, game development/finally putting his 360 to use, doing research, having half his Parallel Processing classes canceled, and maybe getting an internship this summer (because it beats the hell out of shelving books).

Miscellaneous Interests: comic books (mostly *The Umbrella Academy*), action figures/models, nerf guns, Butter Butterfly Knives (otherwise known as training balisong knives), building a gaming rig.

SKILLS

Ranting

Cooldown: change of topic in the conversationRange: 10 ft

Mental Effort: Low

RAGE cost: Variable

Description: Evan embarks on a 2 - 5 minute monologue about a given topic, or tangent related to the topic. Depending on the topic/tangent, various amounts of RAGE may be expended.

Intellectualism

Cooldown: 30 minutes

Range: Personal

Mental Effort: High

Description: Converting RAGE into brain power, Evan pretends to know what he's talking about, and sounds smarter. Grants a +10 bonus to intellect and wisdom. Affects creatures equal to or lower than Evan's level in whatever he is talking about.

Marathon Gaming

Cooldown: 1 day

Range: Personal

Mental Effort: High

Description: Evan is able to convince his brain that other assignments and tasks do not exist, and completely immerse himself in whatever game he may be playing.

Special: If intellect is equal to or greater than 50, Evan can convince himself the entire world does not exist.

End Note: some may wonder why this was formatted similar to a unit read-out for an RTS (or just wonder why it looks weird, in which case, it's because it was formatted as the aforementioned RTS unit read-out). The reasoning is simple: I am eccentric, and I am bored. I guess the entire thing could have been summed up in that line alone, but where's the fun in that?

Annnnnnd now to fulfill the criteria of the actual assignment:

My name is Evan Barnett, and I was born and raised in Austin, TX. I'm 20 years old, a sophomore, and a computer science major. I am also thinking of doing a double major/minor with communications.

My main interest is in gaming. Ever since I was a child (to be exact, 6 years old) I've been playing games, and it's been my dream to develop them for a long time (God that sounds cheesy). Also, as a side note, gaming refers not to just video games, but board games as well (however, I spend most of my time on video games).

I have a fair amount of experience with general usage of computers, and programming. In middle school I took two multimedia classes that went over a diverse range of topics (and was actually fairly in-depth. Still some of my favorite classes to this day.), and in high school I took two years of Java (and hated the language. Playing games was AWESOME though). I have continued learning programming languages and skills in college.

Aside from computer science, I am also very interested in various communications topics, such as public relations, media trends/analysis, and how to effectively communicate an idea to other people in a business setting.

In conclusion, some miscellaneous stuff: I enjoy Chuck Klosterman books, Gerald Way when he is writing comics, *Doctor Who*, action figures, nerf gun fights, and raspberries. Also: I have never broken a bone in my body. I have worked at a library for almost 3 years, AND I was a webmaster for PCL at UT.

4.1 A Day in the Life. Still from original machinima video created by Evan Barnett for the Lennox seminar. Evan explains: "A Day in the Life is a short machinima (the use of real-time graphics rendering engines, mostly three-dimensional (3-D), to generate computer animation, Wikipedia) that looks into what could be the near future and tells the story of a government agent trying to locate someone who has gone missing. Covering concepts from the panopticon and the participatory panopticon, as well as how machines and AI will affect our lives, A Day in the Life is meant to be pseudo-realistic, and relevant to the present day."

"First, what is the panopticon? In short, it's a way a source of authority uses our paranoia against us. The basic concept is that because the authority could be keeping us under surveillance at any time, we won't misbehave because we don't want to be unlucky enough to get caught; a fairly effective theory, in my eyes. However, what's more powerful is the participatory panopticon. The idea behind the participatory panopticon is that it takes away the source of authority, and puts the power of surveillance in the hands, or eyes, of the population. Every person could be watching you, and therefore you are even less likely to misbehave. With technologies such as cell phone cameras, YouTube, and public web cams, it's also easy to be recorded, and not just seen."

"In my machinima, the view of the 'target' is constantly changing. The first camera is a security camera, which most people are okay with being seen on. It's there to protect you. However, as the narrative progresses, the source of the camera becomes more and more personal. Be it a cell phone camera, a TV camera, or the camera in the back of your car, these are all devices which we don't really see being used to keep tabs on the populous. What I wish to get across is that the technologies we all use today that seem completely irrelevant to anything but entertainment, can be easily applied to surveillance."

"That brings me to technology, and its rapid advancement. As this is set in the near future, we're still on Earth, everything is mostly normal (from what is shown), and the robots haven't taken over. However, there have been massive strides in Artificial Intelligence from now until whenever the events in the machinima take place. These strides in AI are part of what I think is necessary to apply those entertainment technologies, such as YouTube and cell phone cameras, to surveillance. What we lack right now is an entity that can pull all the necessary data (YouTube videos, cell phone records (video, text, or call), security footage, etc.) into one place and put it together in a relevant sequence of events. However, once we can even get an entity that can put together public/security footage into a timeline (so, pulling things such as YouTube videos, security footage, and TV footage together) and advance our facial recognition technology, then we're already at the threshold. All the entity needs is clearance to the private data."

"And who says this is bad? In my machinima, the technology is being used to find someone who was attacked. However, the technology could easily spawn something similar to U.S.Ident, a Big Brother, government surveillance branch in *Southland Tales*.

To see the entire video, visit the course site at http://transmedia.trinity.edu.

ANDREW COE

Hey everyone, my name is Andrew Coe (as you can see). I am from Houston, Texas, not born there but spent most of my life there. For all you Houston kids out there, I went to St. Thomas Episcopal School in Meyerland near Bellaire. What else is there to know about me fact-wise? Let's see, I'm about to be 21 at the end of January and I'm a Junior. That is about all I can think of at the moment.

Now for other useless facts about me....I love sports. If there is one thing I would want to do in life it would be work for a sports team. I grew up playing soccer and I played for 8 years but no longer play on a team due to two blown knees, but I still play intramural sports. Soccer is, as you can probably tell, my favorite sport. But I also love football (college and pro) and baseball. I'm slowly starting to get into basketball. I spend much of my spare time reading about sports and the goings-on in the world of sports through sports blogs and professional journalism sources.

Not to say that blogs aren't professional; it's just a way of distinguishing between reading an article on ESPN or Yahoo! Sports and *Kissing Suzy Kolber* (a fairly popular sports blog). So if anyone ever wants to talk sports I am always game. I'll talk about any team but my favorites are the Dallas Cowboys, Texas Longhorns, Houston Astros, Houston Rockets, Houston Texans, and the Chelsea Blues. Just as a disclaimer though, I despise the Yankees, Patriots, and FC Barcelona. I apologize if you are a fan of these teams.

I love watching movies too. My favorite movie of all time is *The Godfather Part I*. *Part II* is good too but *Part III* is garbage. Favorite director has to be Ridley Scott. I love the attention to detail he has to his movies and the epic feel of almost all of them. *Blade Runner* and *Gladiator* are my two favorite by him. As far as my single favorite scene of all time, it is a tie between the John Travolta/Sam Jackson "Say what again" scene in *Pulp Fiction* and the scene in The *Godfather Part I* where Michael kills Sollozzo. The *Pulp Fiction* scene because it is just hilarious and I like it and the *Godfather* scene because, in my opinion, it is the most crucial scene in the entire movie and one of the greatest scenes in all of film as far as turning points and such go. I hope that makes sense. If you've seen the whole movie you'll know what I'm talking about, if not then I highly recommend watching the movie.

PATRICK CRIM

I am currently twenty and attend Trinity University in San Antonio, Texas. I was born in Cleveland, Ohio, where my father, Randy, was going through his residency as a surgeon. When I was three, my family moved back to Dallas where my mother, Ellen, and her parents are from and where my dad began his practice. I have three other siblings: Emily, who is twenty two and a senior at the University of Texas in Austin, Andrew, who is fifteen and a freshman at Jesuit College Preparatory School where I went to high school, and Charlotte, who is thirteen and in seventh grade at St. Monica Catholic School, where I also went to middle school.

I have always loved sports. My first sports team was when I was three and played soccer for the Bearcats. I would then go on to play baseball, basketball, track, football, golf, and wrestling, to name a few. I have gone skiing every year with my family since I was four, and I consider myself to be very good at it. I currently play football for Trinity University, where I am one of the punters. I have played the piano since I was four, and I love all kinds of music.

I consider myself a very social person. I like having lots of friends in all different friend groups. I try not to judge people based on their initial appearance but I must admit I have been guilty of doing this before. My friends would tell you I'm trustworthy and a good listener, and I try to always be helpful and thoughtful of my roommate and of others.

Currently I am on my way to be a Communication Major with a Minor in Spanish. I have taken Spanish ever since grade school and I hope to travel abroad to Spain in order to continue my studies. I have always thought it would be cool to be a sports anchor or something involving speaking such as being the spokesperson for a large company or being the P.R. man. Right now, however, I want to attend law school either at the University of Texas in Austin or SMU in Dallas. My mom is from a family of seven children and all of them are lawyers except for her. They are all part of a family law firm known as The Hartnett Law Firm. I hope to one day join them and continue this tradition

KENDRA DOSHIER

My name is Kendra Doshier and I'm a sophomore Communication Major here at Trinity. I'm probably going to fall into an English minor because I'm obsessed with taking English classes at Trinity, and the department is pretty much second home - same goes for the Communication Department. I'm a writer and a filmmaker when it really comes down to it, so my life pretty much revolves around those two activities. I'm working on two films at the moment; one is in the making, while the other is in post-production. I'm versed in *Final Cut* and *Adobe Premiere*, and love being behind the camera. Film school may be in the future, but I know my career will somehow involve creative writing/ directing. I hate staying in one place, so hopefully I'll move around a lot. I went abroad for a year when I was 15/16 to Italy, and I'm pretty good with foreign languages - so that's definitely something important me. Networking, traveling, exploring, growing... it's all wonderful and totally necessary.

I'm from Anchorage, Alaska and I'm not best friends with Sarah Palin. I do love snow and cold weather, so you can imagine I'm not the happiest of people when San Antonio goes through its obscenely hot months. Which is kind of all the time. I listen to strange types of music and will usually stand fiercely loyal to 'bad', misunderstood movies that don't make sense. I have a lot of experience with computers and video editing software, though I wouldn't exactly consider myself a techie. I'm interested in learning more about biohackers, because I've been so unfamiliar with the term and the idea is completely jarring to me.

I'm sure that I will gain a lot from this new Lennox Seminar, and I'm excited to learn more! I'm a little worried about the computer game experimenting that will happen in this class, but I'm willing to learn anything! As for *Southland Tales*, I'm interested to see why this movie got such bad reviews.

CHRIS DUDLEY

I'm Chris D, a computer science major / senior on his last semester of college. I enjoy sci-fi, Internet culture, gaming, and watching a good movie (or a terrible movie. who cares). I'm really looking forward to this class because the topic ideas presented sounded really interesting to me.

ENDER ERGUN

Well, where to begin? Hopefully, some of you might know me by now, if not I guess this a chance to do so. I'm Ender. I'm Turkish (an excuse that I use to exemplify completely unrelated things). I am a junior this year. Now that the basic facts are aside, let's get down to the fine detail. I think a fine example of something that truly describes me is my astrological sign, which ironically is something I don't believe in. I am a Taurus, which describes most of my habits of being protective, patient, so on and so forth. I am a boxer, although I hate watching it. I guess that's why I hardly become aggravated because I take it out on some stranger in the ring. I was once a great fan of Legos, although in recent years my mild OCD (self-diagnosed) has made me into somewhat of a perfectionist when it comes to making things, which makes playing with Legos more of a chore than anything else. I think the best way to know me is just to ask; I like conversation more than typing.

Regarding this year, I think things are going to be great. Awesome classes. Job that pays well. Recently started writing for the *Trinitonian*, although I don't like the name of my column, "Ender's Games," because it really does not help the fact that when I first meet people they usually respond with, "Ender? Like the book *Ender's Game*? Awesome!"

Yes. Great book. Same name. Stop. I've been hearing that same line for like five years now. Back to why this year is going to be great. Single, finally. "But Ender, your ex might not appreciate the hinted sign of relief that you're no longer in a relationship with her!" Good. I'm actually not that bitter, if so at all. Just don't have to go through the daily grind of being in a relationship, it's very, pleasant. Well, I think I've ranted enough. But like I mentioned before, I enjoy conversation more than I do typing, so feel free to come up and ask something (non-creepy way is preferred).

ASHLEY FUNKHOUSER

I'm Ashley Funkhouser and I am a sophomore communication major from Albuquerque, New Mexico.
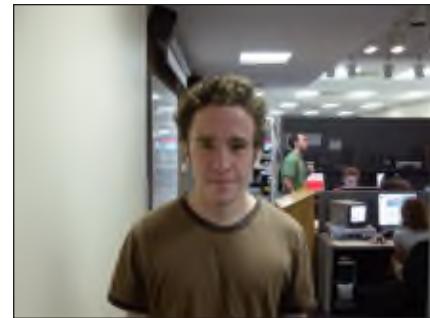
After graduation, I hope to go to law school, and will probably return to New Mexico which I've realized is actually a really great place, now that I've been away from it for a little bit. Now, every time I go home I feel like a tourist, absolutely awestruck by how amazingly clear the sky is, how cool the city looks at night, and yes, how amazing green chile tastes on pizza (and pretty much everything else).

Here at Trinity, I'm currently a sophomore, the Sports Editor for the *Trinitonian*, the athletics chair for my sorority, Alpha Chi Lambda, and a member of the National Society of Collegiate Scholars and Alpha Lambda Delta.

When I'm not busy with school, the newspaper or whatever else, I love to read and write, spend lots of time outside, and watch way too much TV. In fact, my TV addiction has gotten so bad that my parents gave me a DVD recorder for Christmas so that I can tape any shows that I miss because I'm too busy watching a show on another channel. It's Heaven.

COLE GRAY

Hello, my name is Cole Gray and welcome to my blog *The Parapatterner*. In case you're wondering what a parapatterner is I suggest you read the short story entitled "The Worm that Flies" by Brian W. Aldiss, one of my favorite pieces of science fiction. Pretentious literary references aside though, I've never really been that into keeping a blog, visiting Facebook, 'tweeting' or even texting so I'm still a bit of a novice when it comes to social technologies but I'll try my best to accommodate any person so kind enough to read my electronic monologues.

So let's begin with some basic biographical facts.

I was born in Austin, Texas on June 26, 1989 and I'm currently 20 years old. I go to Trinity University in San Antonio as a sophomore looking into a major in Communication and a minor in Environmental Studies although I'm still not quite sure that this will be my final decision. I have an identical twin brother named Travis who also goes to Trinity and plans to major in History.

I have myriad interests but my main hobbies include reading, writing poetry, drawing, running, weight lifting and video games.

My favorite books are classic literature, authors like Dostoevsky, Kafka, Tolstoy, Hemmingway, Nietzsche and J.D. Salinger. I also like to read Shakespeare as well as Greek or Roman tragedies.

I tend to write a lot of poetry and have even gotten a few of poems published but I also like to read and memorize poetry. My favorite poets are T.S. Eliot, William Blake, Galway Kinnell and Samuel Taylor Coleridge.

I do like to draw and although I've never taken an actual drawing class I believe that I am pretty decent at it. My style is an attempt to combine photorealistic drawing with surreal landscapes or characters.

For my exercise I usually sprint about eight miles and lift some free weights coupled with a lot of sit-ups and pushups every other day.

As for my religious views I consider myself an existential atheist.

I hope that covers just about everything, thanks for reading.

SARAH HELLMAN

My name is Sarah and I am a sophomore at Trinity University and I am 20 years old. My major is undeclared but I want to be a communication major. With all the classes I will have taken in art and drama by the end of my time here maybe I will be able to minor in one or both of those. Even though I am taking art and drama classes, I am not a very good actor or artist, but I enjoy the classes. Right now, besides this class, I am also taking a photography class, introduction to stage lighting, introduction to dramatic literature, and rollerblading. Here at Trinity I am also involved in the horseback riding team. I show in the open division which is the highest division. We do show jumping.

I was born in San Francisco in 1989 and lived there for the first three years of my life with my three sisters and parents. At the age of three my family moved to Hong Kong and my youngest sister was born. My father needed to move there for his job. I went to preschool, kindergarten, and half of first grade there. The school I went to was called Kellet School and it was British. I developed a British accent while living in Hong Kong but lost it when I moved back to the U.S.

My family moved back to San Francisco when I was 6 years old. I went to school in San Francisco and Marin for elementary school. For High School I first went to Westover in Connecticut and then Foxcroft in Virginia. Both were all-girls boarding schools. I switched half way through my sophomore year. Since switching I have avoided snow except during the holidays. After high school I came to Trinity and am very happy with my choice for college.

Something I love to do outside of school is horseback riding. I have been riding for 7 or 8 years now. I have had many horses that I share with my sisters. Three of my four sisters and my mother also ride horses.

Burberry is my only horse right now. He is not very big but can jump pretty high. The kind of riding I do on Burberry is called hunters. It is based on foxhunting. A competitor must follow a posted course over about 8 jumps. Hunters started in order for a judge to decide how safe the competitor would be if they were out foxhunting with the solid jumps. The jumps are collapsible so it is not as dangerous. However, you can still be injured. I cut my face open, got a minor concussion, and fractured one of my fingers all in one fall.   I am not entirely sure what I want to do in my future. All I know right now is that I would like to finish college and be able to horseback ride for as long as I can. I plan on being one of those crazy horse ladies who isn't very good at riding and everyone thinks is certifiable. It just seems like a lot of fun. I don't want to be the kind that thinks they can understand their horse though, that's a little crazy for me.

Also, I'm almost certain that I will have severe memory loss when I'm older because I am already starting to have memory problems and there is a history of it in my family. I do know that once I am done with all my schooling I would like to live in California. I think it is much prettier than Texas. Texas is very fun, but I love my home state.

JOHN KEY

I guess I would have to classify myself as a gamer (I have spent too many hours of my life playing videogames not to) but I am not fully devoted to one game or another. I have been through large phases of *Call of Duty*, *World of Warcraft*, *Team Fortress*, and *Civilization* as well as a few others. Currently the main game I am playing however is unfortunately *World of Warcraft*.

Outside of the gaming world I really don't have a specialty per se. I am somewhat involved in a little bit of everything and like with games I go through phases. I work for the admissions office on campus, I sing in two of the choirs, etc. As for field of study, I am a double major in both art and communications with a minor in business. Hopefully this field of study will lead me into advertising and marketing which I find fascinating.

I tend to be a bit scatter brained at times and don't really like to focus on one thing in particular unless it is really fascinating. So my mind is pretty much on whatever it is I'm thinking about at the time. Maybe it is split between writing a few paragraphs and watching *Glee* at the same time, and not to mention checking my e-mail in between things. That is why they created tabbed browsing right?
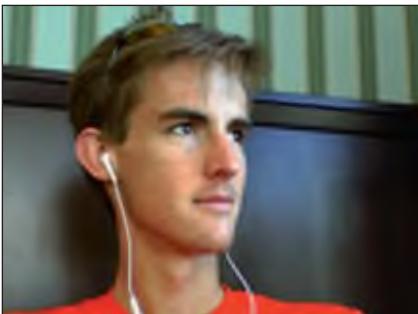
CHRIS KRADLE

Hey guys! My name is Chris Kradle and I am a sophomore from Eagan, MN. Hopefully, I will be double majoring in Political Science and Communication. My dream job is to be a lobbyist for the MN teachers association. I have only taken two communication classes so far: Media Interpretation and Criticism and Mass Media. So far, those classes have kept my attention with interesting subject matter.

My friends back home are much bigger computer nerds than I am, so they are surprised that I am taking this class, and think I will do horribly in this class. I want to prove them wrong and get a decent grade. I never have had any experience with the topic of hackers, but I was told that this class would not only interest me, but also teach me.

I sit in the back row not because I hate classes, but because it is a ritual I have in the Richardson building. I am already interested in the lecturers; hopefully they don't let me down. Looking forward to this semester and learning about reality hackers!

PATRICK LYNCH

Well, if you're following this blog, you probably have too much time on the Internet.

Be that as it may, I'm going to start posting more stuff on here, not so much as an expression of free will, but as an expression of my desire to satisfy minimum requirements and graduate with a B.A. in Credible Sounding Prestige from my institute of higher learning.

So, basics...

I don't take anything very seriously,

I'm about to graduate and have only vague ideas about where I'm going next,

I like long walks on the beach, romantic candlelit dinners, and am saving money so I can buy my future wife a lot of shiny trinkets.

I used to have a really high IQ, and then I started drinking Wild Turkey 101 and Red Bull as a breakfast meal replacement.

I'd rather get one of those giant inflatable rafts and float around a swimming pool than program anything in Java or C++, which makes my second major in Computer Science seem kind of worthless.

That's all I care to think of now, so thanks and have a nice day.

SHEPHERD MCALLISTER

First and foremost, I really like to write...just not about myself. I'll start with the basics. I grew up in Lexington, VA. I've included a Google Maps satellite picture of that town below. Exciting, right? Having grown up in such a tiny place, I wanted to be sure to go to school in a city with places open after 8, and preferably a professional sports team. So now I find myself as a sophomore at Trinity University, and couldn't be happier about it.

I'm double majoring in communication and political science, and took the Hackers class with Dr. Delwiche last semester. Feel free to check out my previous entries in this blog for thoughts on my experiences in this class. I was lucky enough to come into Trinity with a lot of AP credits to put towards my common curriculum, so most of my classes to this point have been in one of my two majors. Currently I'm working on some research with Dr. Nishikawa in the political science department regarding a link between online political participation and real world political action. It is a nice melding of my two academic interests.

In addition to being a full time student here at Trinity, I also have a part time job with the San Antonio Spurs in the new media department. I perform various tasks to assist in keeping Spurs.com, sasilverstars.com, and sarampage.com up and running. My tasks include shooting and editing videos, taking and posting photos, creating some special content, and assisting with game night responsibilities. It's time consuming, occasionally stressful, and certainly makes my life more complicated, but I wouldn't trade the experience for anything.

In my free time I enjoy playing sports, especially basketball, tennis, racquetball, and even a little pick-up football. I'm also a bit of a web junkie. Not a day goes by that I don't check my Google Reader (populated with nerdy feeds like *Gizmodo* and *Lifehacker*). I'm slightly obsessed with all things Apple, and I'm a bit embarrassed to say that I look forward to all of their major product announcements. I love shooting and editing videos; I'm getting started with photography. Hopefully my abilities will come in handy in the development of our transmedia project this semester.

MARK MCCULLOUGH

My name is Mark and I am a Junior History major and Communication minor studying in the hills of San Antonio. My classes this semester are proving to be a bit more of a challenge compared with past semesters. I am finally getting into more advanced methods of studying history and the materials are become more complex! I am trying to specialize in European history because I find the links to families and dynasties interesting and unique. For Communication I am focusing my attention on the effectiveness of games in the classroom. I am planning on attending the Master of Arts in Teaching (M.A.T.) program for my fifth year, so hopefully I can use my knowledge from Communication to create new ways of teaching. Other than that, each day seems like it's SSDD... which can make things monotonous from time-to-time but overall liberal arts style here at Trinity has helped me develop and continue to learn!

I was born in Arizona and can't wait to get back. I enjoy golfing and flying in and around Arizona and Scottsdale. It's a fun place to live and the mountains are amazing. I've been told from time to time that I act like a 40 year old... which is probably true, but I don't know if it's necessarily a bad thing. :) I obtained my pilot's license a few years back and love the feeling of freedom while in the air; it's almost as if nothing matters except for the tasks in the cockpit.

Golf is also very relaxing even though it can be more than frustrating at times. I never read when I was younger but am beginning to realize what I was missing... I enjoy reading books that will teach me something: ethics, morals, facts, opinions... I like Bill O' Reilly *and* Keith Olbermann. I think they're hilarious and equally pompous, arrogant, and cynical, just in their own different ways. It's fun to watch them both on the same day and see their contrasting opinions and ways of presenting their arguments... Olbermann makes me laugh more, but O' Reilly makes me laugh harder.

The future seems daunting and scary. I want to study for the MAT and see what I can do with that, maybe teach in the years after college until life falls into alignment (will it ever?) I used to be heavily interested in politics and government, but that passion has since faded; not to say that I don't vote, but it's just too hard to follow these days!
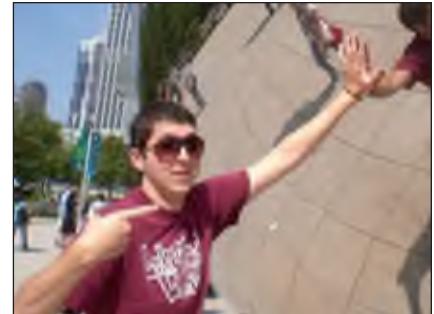
JUSTIN MICHAELSON

My name is Justin J. Michaelson, but most of my friends call me J-Mike. When I was a freshman I pledged the fraternity Kappa Kappa Delta and the name calling began. At first I loathed this shortened version of my given name but have learned, over time, to appreciate and accept it.

I was born in Madrid, Espana on December 23, 1987. My parents were in the Air Force and we traveled a lot as I was growing up. After Madrid, we moved to Germany where we lived until I was about 4 or 5 and then we moved back stateside to a military town called Abilene, Texas. My younger sister, Jania Nichelle, was born in Abilene and to this day we are pretty close. We later moved to San Antonio for a year before finally settling in Lockhart, Tx (aka, small town Texas) when I was in the 5th grade. Yes, I know Lockhart is know for its Bar-Be-Que, but you try living there!

I am now a senior (although I will be graduating in Dec 2010 and not May 2010) and I'm studying Political Science and Communication. I pretty much despise all things political and found the glorious communication department a bit late in the game, thus the extra semester of study. My most immediate goals are to graduate and work for the HEB grocery company in their PR offices here in San Antonio.

Some things that bring me joy are, but are not limited to: Friends and Family, Music (currently listening to a playlist of Jay-Z and Lady GaGa), Good television (such as *Weeds*, *Mad Men* and *True Blood*) and Crap television (like the *Real World* and *Flipping Out*), Expertly mixed martini's, Mimosas on a Sunday and Cheap Lone Star Light, Backpacking and camping, traveling (to a nearby town or across the world), all things Spain and particularly Madrid, Concerts and great food!

ALYSON MILLER

Hey y'all! So this is my blog for the Lennox Seminar class I'm taking at Trinity University. My name is Aly Miller, and I'm a sophomore and a Communication major/Art History minor at Trinity University. I'm from Fort Worth, TX, and I'm (at the moment) 19, although I turn 20 in about...two and a half hours. Which is weird.

I'm taking this class because, well, it sounded interesting. I didn't really know what to expect when I came to the class and I'm still not sure what to expect, but we're watching *Dr. Horrible's Sing-a-long-Blog* in class, so I feel like that's a good sign. While I don't know much as of now about any of the topics we will be discussing, I am excited to learn more.

In my spare time I like doing pretty average stuff—reading, watching way too much TV (current obsessions include *Dollhouse, How I Met Your Mother, Big Bang Theory, Gossip Girl, Lost, Ugly Betty*...plus all the shows I watch on DVD), playing video games occasionally, watching movies, listening to music, and making cookies.

ROBIN MURDOCH

Once upon a time, in a generally unattractive land called Houston, Texas, a little girl was born. Her mother was pleased to count the correct number of limbs and phalanges, and delighted in hearing the healthy sound of crying. What she was not prepared for, however, was the oozing wound located right on the back of the child's head. The doctor threw some papers at her to sign away liability for the child's wound, and no explanation was ever given as to what the cause might have been.

As the mother slept of the pain medication she begged for all through delivery, her husband decided to get the naming of the little girl over with (unfortunately without the input of the slumbering mother). So, just in time for dinner on the eve of May 30, 1990, Robin Halliday Murdoch officially entered the world. The little girl grew up healthy and happy, the seeping wound becoming nothing but an irritating scar always evoking the reaction of "Ohhhh! That explains a lot...."

It's always interesting when people readily jump to the conclusion that your personality was formed through some sort of severe head injury. But that's my life, and I'm not quite sure whether or not these assumptions are correct. Needless to say, the past nineteen years and eight months have been extremely interesting.

My family is slightly insane. Perhaps not in the clinical sense, but they definitely tip the strange scale in a way that frightens some. My dad is a geophysicist with an affinity for sarcasm and jokes that nobody who doesn't have a ludicrous amount of random knowledge. My mother carries on intense conversations with her pets, one of which regularly responds. My 24 year old brother... still lives at home. We have two birds (and by "we" I mean my mother has acquired them from people who

didn't want them anymore and we are all forced to coexist with them) named Charlie and Lola. Charlie has about three or four years on me and is a sulfur crested umbrella cockatoo. He spends his days flying freely around the kitchen, and going in for the attack whenever I need to eat a meal. Lola, an African grey, possesses a more pleasant demeanor, and has the added trait of speech. Her repertoire includes "You're a wizard, Harry", "I'm a gangster", the creak of the door, the phone ring, giggling, names, and "I'm Afrikin Grey" among many others.

We also have Biscuit, the cat who followed my mom home from a walk and never left.... This is the house i grew up in. Insanity surrounding me on all sides, and death dropping in from above, attempting to scalp me while a little voice from the other room screams out lines from Harry Potter. My little madhouse. Ain't no place I'd rather be.

When not entertaining homicidal birds, I enjoy long walks on the beach, romance novels, and sacrificing virgins to pagan gods. I spend my time between sacrifices experiencing as much musical amazement as I possibly can. Though I have absolutely no musical talent (three failed attempts to play insturments even close to decently has told me this) I have a true passion for music. My iPod is one of my most important assets, though the lifespan of electronics once they reach my possession tends to be relatively short. I have a physical incapability to keep cell phones and iPods working for longer than a year. No matter what happens, death finds them. Sometimes in painfully ironic ways.

Here at Trinity, I am a communication major, a member of Zeta Chi sorority, and often wear false facial hair around campus. I enjoy my friends, my classes, and my professors. Unfortunately, I have no real idea of what I want to do once I leave this place.... But I intend on making large amounts of money to avoid ever having to do real housework of any kind. And I feel that I have now officially exhausted my ability to write about myself.

AARON PASSER

My name is Aaron Passer and I am from Omaha, NE. Go BIG RED! I have lived in Omaha my entire life and I attended the same small private school from Kindergarten through 12th grade. While growing up I participated in Cub Scouts and Boy Scouts, and when I was 16 I became an Eagle Scout. Through my years of scouting I have developed a love for the outdoors. I have been backpacking all across the United States and even a few places overseas. To me there is nothing better than a night spent camping in the wilderness.

I also got involved with sports at an early age. As a youngster in Nebraska I played soccer when there wasn't snow on the ground and I swam when there was. In high school I played football in the fall, swam in the winter, and golfed in the spring (we didn't have a soccer team so I opted for golf). Out of the three I achieved most success in golf. As a starter all four years I helped our team win 3 district titles and 1 state-runner up trophy. Besides being a big sports nut I am also a concert and music junkie. I have been to several different music festivals across the U.S. including Lollapalooza in Chicago and Austin City Limits (ACL) in Austin.

I am, what many in the online community would consider a noob when it comes to the world of blogging. Never have I had the unquenchable desire to spill my thoughts and ideas out into the reality that has become the Internet. With that said, I know find myself writing this blog. Though reluctant at first, I am excited about the potential our blogs have to expand class discussions and help facilitate collaboration for class projects. It should be a fun semester. I am a junior majoring in accounting, minoring in french, and am looking in to getting a minor in communication also. I am also a member of Pi Kappa Alpha fraternity.

While wasting time browsing this morning I came across a page relevant to class and *Southland Tales*. It's a list of the most "memorable" fictional drugs used in movies and television, and Liquid Karma made the cut. It doesn't give too much deep insight into the effects of the drug, but it gives a nice overview if you were at all confused. You can find the page by Googling the phrase "fictional drugs in movies and television" with the words "liquid karma."

MARICELA RIOS

My name is Maricela Rios, and I am a Sophomore at Trinity University, majoring in communications with a art/ art history minor. I am from San Antonio, Texas and have lived here all of my life. I have a politically active family. My father is a politician in San Antonio and ran for Congress in 1995. I graduated from Incarnate Word High School in 2008. I played tennis throughout high school, and taught summer camps. I was an intern for the San Antonio Artist Foundation before I started college. I enjoy dark room photography along with digital photography and studio art.

I just recently decided on a major this year, and I am happy with my decision. I hope to apply to law school when I graduate, and am currently looking for another internship for this upcoming summer. I plan to go abroad next spring to perfect my bilingual abilities, mainly Spanish/English.

I am a member of Gamma Chi Delta Sorority. This sorority has made my time at Trinity truly memorable. Gamma Chi Delta is responsible for organizing the Concert for the Cure that benefits the Cancer Society. It is a privilege to be able to contribute with Gammas to that particular fundraiser.

I don't know much about reality hacking. But so far the class readings have sparked my interest. I look forward to the in depth class discussion and hearing the opinions of other class members.

LAURA SCHLUCKEBIER

Hometown: Dallas

Major: Communication / **Minors:** Classical Studies and Sociology

Non-School Activities: Ropers and TigerTV (Studio 21)

Currently Listening To: *Glee* Soundtrack (duh)

Ongoing Obsessions: *Harry Potter*, *Black Beauty*, *Pearls Before Swine*, chocolate

New(er) Obsessions: *Glee* (ARTIE), *Dollhouse* (Paul/Echo)

Favorite Color: I originally had put "not pink" but after messing with the layout I realized this was hypocritical.

Favorite Place To Be: Lost Valley Ranch, Colorado or Austin, TX

Fun Fact: My last name means literally gulper/swallower of beer in German.

Favorite Place to Eat: Mabee! Not. Torchy's Tacos in Austin (Fried avacado taco = to die for)

Favorite Book: Too many to count. But I am a huge scifi/fantasy fan. Huge nerd. Win.

Favorite Show: I watch way too much TV. I don't even have a TV in my room. Shows include: *Glee*, *Dollhouse*, *Fringe*, *Prison Break*, *Kings*, *Battlestar Galactica*, *Law & Order*, *Law & Order SVU*, *Bones*, *Grey's Anatomy*, *Private Practice*, *Gossip Girl*, *Smallville*, *Burn Notice*, *The Closer*, *Psych*, *FlashForward*, *Heroes*, *House*, *Lost*, and *The Soup*.

Dream Job: Developing and creating awesome TV shows

Dream Pets: not a cat. A German and/or Aussie. Perhaps I will get the horse I have been asking for for (?) Christmas since I was three.

Place to Live: Texas. Obviously.

First Car I Owned: 1990 Chrysler LeBaron convertible— **this** (paint job and all) but a convertible. Plus a leaky roof and no hubcabs.

Current Car: 2002 Jeep Liberty

Newest Favorite Activity: Playing street hockey on top of vacant parking garages

Patronus: Horse

RAELLE SMILEY

My name is Raelle Smiley. I am a sophomore at Trinity University. I am from Austin, Texas and have lived there most of my life. I was born in Philadelphia, Pennsylvania but moved to Austin when my father was hired to do restoration on the glass in the capitol dome. I graduated in 2008 from Westlake High School. I am a Communication major at Trinity.
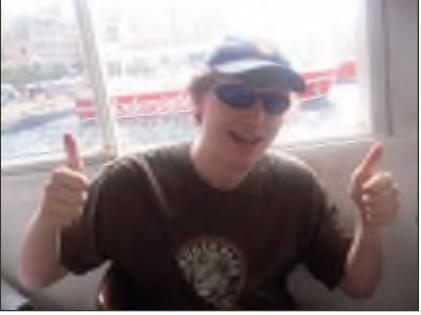
I have been swimming since I was five years old and swam at Trinity last year and for part of this year. I currently hold the school record for the 1000 freestyle. Now I train for open water swims and love working out. My family is very active, and both of my parents ride bicycles. I spent some time in high school teaching swim lessons and would love to do that again sometime, it is very rewarding to see your hard work pay off and to give kids the confidence to swim!

I am a member of Gamma Chi Delta Sorority at Trinity. For me, Gammas is one of the best things about being at Trinity, outside of the academic opportunities. Being a member of a sorority has given me the opportunity to be involved in a variety of service events and things such as the Reflections Body Image Program which originated at Trinity among the local sororities.

This summer I will be working as an intern for the company, ROSS Communications in Austin. I interviewed for the position over winter break and was just informed that I got the position. I think this will be a great opportunity for me and give me an idea of what working in the professional world will be like.

I look forward to being involved in the Lennox seminar and experiencing all of the unique opportunities we will have as members of this class. I hope to get to know everyone and share our knowledge and skills when it comes to the group projects!

ANDREW TRUELOVE

My name is Andrew Truelove. I'm 20 years old and am a sophomore at Trinity University. I'm planning on a major in Communication and a minor in Music. I was born in Houston, Texas, but since my dad works for Shell, I moved around a lot growing up. Up until the year 2000, this mostly involved moving back and forth between Texas and Louisiana, but when I was ten, we were transferred to the Netherlands where I remained until I graduated from high school. Holland was nice enough. If there's anything I can say about the whole Dutch experience it's that they know how to make a pancake there. That and you should never go to the country on New Year's Eve. It's the only day of the year where fireworks are legal, which means they like to go to town with their explosives.

My family at the moment is living in Calgary, sort of. My dad's in the process of moving the family to Abu Dhabi thanks to another transfer. Shell is loaning him out to the UAE national oil company or something to that extent, and the rest of my family is following him. Well technically, my older brother who is in the navy is stationed in Florida, and I have a sister going to school in Kentucky, so we've still got a good number of people staying in the Western hemisphere.

As far as my interests go, I'm not exactly sure where to begin. I have a lot of movies on me at my dorm, so I guess you could say I'm into that. I've got everything from *Goodfellas* to *Good Burger*, which may not exactly be a good thing. I got a lot of James Bonds here at Trinity, and the complete collection at home. If you ask me, there isn't really a movie series better than Bond. Sure *Star Wars* has a strong following and the *Lord of the Rings* may be superior as far as writing and visual effects go, and yes, the James Bond series did give the world Sheriff J.W. Pepper (I'm sorry), but I still like it.

With music, I'm a Beatles fan. No better band exists. Only the greatest musicians in the world could name a song "Everybody's Got Something to Hide Except for Me and my Monkey." Honorable mention goes to ZZ Top for beard related qualifications. And finally, my favorite television show has got to be *Arrested Development*. Really, there's always money in the banana stand.

I'm not exactly sure what else I can say. I'm a pretty quiet guy, but that should be obvious to anyone who's ever met me. I like to listen and take in what the world around me has to offer, or something like that. I've been told I have a dry, offbeat sense of humor, but I'm not sure how true that is. In any case, if you're reading this, that either means you're in my class or you are some stalker reading the pages of random people. If the former is the case, it's good to meet you, in an indirect, completely impersonal way. If you're the latter, I really live in Guam and my actual name is Pedro Hasselbrock. Stalk me there.

RICHARD BARTLE
"Biography"

Richard Allan Bartle was born in Ripon1, England, on Sunday, 10th January, 1960. His family (mother, father, younger brother) moved in 1963 to the small (population 7,000) Yorkshire seaside town of Hornsea, where Richard attended the local school and did all the other usual things that growing up involves.

Richard's interests in gaming go back a long way. His father was an enthusiastic player of all boardgames, and soon had his two sons just as interested as he. Hornsea is quite remote as English towns go, and its social life can be most succinctly described by the word "none", so Richard sought out like-minded games-players among his friends at school, later expanding his horizons by playing games postally. He began a small gamers' magazine for his local group of fellow players, which acted as a prototype for a national zine he ran for the two years prior to his going to University. Both these projects gave him a grounding in written English rarely seen among today's computer programmers (or, come to that, today's game authors!).

The purchase by mail-order in 1975 of one of the first sets of *Dungeons and Dragons* rulebooks to reach the UK married together Richard's gaming and SF/fantasy interests. He and his brother had developed several informal role-playing gaming systems themselves, but none in the domain of Tolkienesque fantasy, and none with the depth of the D&D rules. Nightly D&D sessions soon became a regular thing among Hornsea's dedicated group of gamers.

Being some distance from a large town, the local school couldn't easily organise trips to visit computer installations, and therefore was granted the special privilege of having a subsidised phone connection to the County Council's own timesharing system. This meant that computer access was actually better than for most schools in the UK. Richard therefore got an early chance to learn programming, which he immediately put to use by writing (and getting published) a single-player programmed-text book (you know the sort: "if you wish to open the door immediately, go to 19C; to knock first, go to 7F; to run like hell, go to 24A").

At school, Richard passed all his examinations without problem, but almost always relying on flair rather than hard work and revision. This was nevertheless quite sufficient to win him a place at Essex University in 1978, where he registered to study Mathematics. He switched to Computer Science at the end of the (common) first year, however, because "there were people better than me at Mathematics". His subsequent first-class honours degree was (and, I gather, still is) the highest ever recorded in Essex University's Department of Computer Science. He stayed on to take a PhD in Artificial Intelligence, eventually taking up a lectureship in the subject (which, at the time, made him the youngest member on the academic staff in the whole of the University).

4.1 Richard Bartle. Currently a lecturer at Essex University, Dr. Richard Bartle co-authored the world's first virtual world as a college undergraduate in 1978. A former university lecturer in artificial intelligence, he is an influential writer on all aspects of virtual world design and development. As an independent consultant, he has worked with almost every major online gaming company in the U.K. and the U.S. over the past 20 years, transforming an undergraduate research project into a multi-billion dollar industry. His book *Designing Virtual Worlds* is widely viewed as a "tour de force of virtual world design."

4.2 The original *Dungeons and Dragons*.
Published by Gary Gygax and Dave Arneson in 1974, the Dungeons and Dragons became a cultural phenomenon and is the world's most well-known role-playing game.

In his first full week as an undergraduate, Richard had met Roy Trubshaw - a brilliant programmer in the year above Richard's. Roy was thinking of writing a computerised fantasy game, and was impressed by what he saw in Richard's programmed-text book. He introduced Richard to the game *Adventure* (a transcript of which Richard had seen the previous year in a postal games magazine), and soon after hit upon the idea of writing a similar game which would allow several people to share the game world at the same time. He called his creation MUD and devoted the remainder of his undergraduate career to writing it. Richard was on hand with a ready supply of suggestions and ideas for Roy to incorporate into the game.

Roy had the shell of his third version of MUD running by the end of his course, but didn't have time to complete the rest of the game. He passed it to Richard, who added perhaps 75% of what constituted the final program. Roy had the "engine" working, but it didn't do much; Richard enhanced it, and employed it to manage a fully-realised game world.

Through MUD's success, Richard met a book publisher called Simon Dally. Simon commissioned a book from Richard (Artificial Intelligence and Computer Games;, Century Communications, London, 1985), and the two became friends. Along with Roy, they formed a company, "MUSE", to market MUD. In his spare time, Richard completely redesigned the entire MUD system from scratch, then wrote it anew himself. The new game was dubbed MUD2 by its players (although formally it should be MUD4). Roy's MUDs had certain limitations that meant some of the more complex concepts that it transpired rôle-playing games required were either difficult to express or necessitated large amounts of surgery to the MUD program itself. MUD2 addressed these issues by having its own fully empowered programming language, MUDDLE, specifically intended to be used for writing MUD-like games but strong enough to be used for general programming (you could write the MUDDLE compiler in MUDDLE if so inclined). So flexible was the design for MUDDLE that it's still very much in use today.

Richard left Essex University in 1987 to work on MUD2 full time. In 1989, Simon got manic depression and committed suicide, leaving MUSE in a thoroughly awful mess. Although the company survived this, the writing was on the wall. These days, it's little more than a place-holder for various pieces of MUD-related intellectual property.

Richard gave up working for MUSE full-time in 2000, to head up the online games division of dot com start-up Gameplay. Sadly, the company rather squandered its resources, and all that was left after the dot com bust was a rump that sold games by post.

Richard switched to consultancy, which he'd always done in the past but not very regularly. In between assignments, he wrote the world's first book on the design of MUDs, *Designing Virtual Worlds*. Published in 2003, DVW rapidly became the standard work for anyone developing, studying or playing MUDs (or MMORPGs, MOOs, MU*s, PWs or any of the other acronyms variously applied to this kind of software these days). He is also one of the authors of the popular research blog *Terra Nova*.

Richard returned to his Essex University roots in 2002, teaching on its nascent computer games degree. He was appointed Visiting Professor in 2004. Currently, he therefore spends his time juggling teaching duties and research with the occasional demands of his consultancy business. He still plays a lot of games, too!

Richard lives near Colchester in Essex, with his wife, Gail, and daughters Jennifer (born July 1990) and Madeleine (born March 1994).

4.3 Lecturing in *Everquest II*. In 2006, Richard Bartle delivered a guest lecture to Trinity University students enrolled in a seminar on virtual world research methods. Rather than flying from the United Kingdom to Texas, he met with the students in the virtual world of Norrath.

ANNALEE NEWITZ
"Biography"

4.4 Annalee Newitz. This photograph of Annalee Newitz was taken by Scott Beale in 2008 at the Arse Elektronika conference. Photo reprinted courtesy of Sacott Beale and Laughing Squid.

Currently, I am the lead editor for science fiction and science blog *io9*—it went live in January 2008, and in 2010, over 2 million people read it every month. I am also a freelance writer, contributing work to *Wired, Popular Science, New Scientist*, and other excellent publications. During 2004 and most of 2005, I was the policy analyst at the Electronic Frontier Foundation. In 2006 I published a book based on my doctoral research. It's called *Pretend We're Dead,* and it was published by Duke University Press. In early 2007, Seal Press published a collection of essays I co-edited called *She's Such a Geek*—yes, it's about female nerds.

My work has also appeared in magazines and papers such as: T*he Washington Post, New York Magazine, Technology Review, Hilobrow, The San Francisco Chronicle, 2600, The Believer, Nerve, The Utne Reader Online, Alternative Press Review, New York Press, The San Francisco Bay Guardian*, The Silicon Valley Metro, and several academic journals and anthologies.

From 1999 to 2008, I wrote a weekly syndicated column called Techsploitation, which was about the ways that media mutates and reiterates the problems of everyday life.

Formerly, I was the culture editor at *The San Francisco Bay Guardian* and in 2002 I was awarded a Knight Science Journalism Fellowship, which allowed me to spend the 2002-2003 academic year as a research fellow at MIT.

I was born just after the New Left died and shortly before abortion was legalized. Growing up in the planned suburban community of Irvine, California, I was exposed at a young age to the clash between Information Era techno-utopianism and the disturbing realities of middle-class greed, cynicism, and sexual repression.

When I moved to Berkeley, California, I began what became a ten-year odyssey through the land of academia. During that time, I founded a webzine, *Bad Subjects,* which is still going strong; I published two books, *White Trash: Race and Class in America* (Routledge, 1997) and *The Bad Subjects Anthology* (NYU Press, 1998); and in 1998 I graduated from UC Berkeley with a Ph.D. in English and American Studies. I wrote my dissertation on images of monsters, psychopaths, and capitalism in 20th Century American pop culture. After working for a year as an adjunct professor, I decided to pursue the career I loved most: writing.

I had been freelancing since 1996, mostly for alternative weeklies and on-line magazines, and in early 1999, I began to write for a living full-time. Having spent so many years studying pop culture and media in academia, I was naturally interested in writing about these topics as a journalist. And that's what I've been doing for a decade now.

EKATERINA SEDIA
"Interview by Annalee Newitz"

In the introduction to her interview with Ekaterina Sedia, Annalee Newitz wrote: "A couple of weeks ago, I told you about a haunting new novel from Ekaterina Sedia called Alchemy of Stone. It's the tale of a female robot named Mattie who works as a chemist on an alternate world where the industrial revolution is in full swing. Though the engineer who made Mattie has set her free, he refuses to give her the key that winds her mechanical heart. All Mattie wants is control of her own key and a peaceful place to work, but instead she gets caught up in a workers' revolt and her life begins to unravel. The novel was so thought-provoking that I tracked Sedia down and asked her some questions about female robots, politics, and magic."
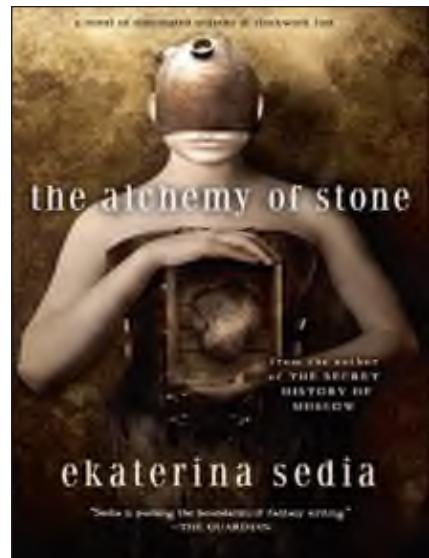
Ekaterina Sedia and Annalee Newitz are at the forefront of this decade's science fiction revival. Annalee interviewed Ekaterina on August 4, 2008 for the science fiction blog io9. This work is licensed under a Creative Commons Attribution-Noncommercial 3.0 Unported license.

4.5 Alchemy of Stone. Published in 2008, Ekaterina Sedia's novel was identified by the blog *io9* as one of the top twenty science fiction novels of the previous decade. Sedia's prose has been described as "haunting and magical," and reviewers praise her knack for "leaving readers to reach their own conclusions about the proper balance of tradition and progress and what it means to be alive."

One thing that makes *Alchemy of Stone* different from many other books about robots is that Mattie is more vulnerable than the humans around her. She doesn't have superpowers, and is in fact quite breakable. Why did you choose to take her character in that direction? Along those same lines, what abilities does Mattie have that humans don't? You mention at one point that her eyes are much better than humans'—are there other super-human abilities she has?

I noticed that in much of SF, written or visual, machines are portrayed as benign or menacing, but almost always as more powerful than people. To me it seems like a bad case of hubris, where we believe that we are capable of creating something more perfect than us, even if it will destroy us in the end. Of course, anyone who had ever owned a computer, driven a car or operated a toaster knows that it's not true—machines break a lot, redundancies fail, and basically without constant repair and upkeep, machines do not fare too well.

Mattie was in part a reaction to the myth of superpowered machines (*Terminator* or *Six Million Dollar Man* or HAL) as a more realistic alternative, but also as a more interesting protagonist. Plus, I believe that we care about characters not because of their perfection but because of their vulnerabilities. Mattie cannot heal, she needs to be repaired constantly—and this is really the crux of her existence, because she wants to be able to survive on her own. Even her eyes, which were made to SEE better are still glass, breakable, and can be taken away from her at any time. As for other superpowers—she is a very good alchemist. And she is strong when working properly. That's about it.

Though Mattie is an outcast among humans, her life has been privileged enough that she doesn't fit in with the proletarian revolutionaries either. Do you think Mattie has a political position of her own?

4.6 Lungworts and the doctrine of signatures. The phrase "doctrine of signatures" refers to the belief that God marked natural creations with a divine signature providing a clue about the object's purpose. For example, the lungwort plants were once used as a treatment for pulmonary illness because the spots on the leaves reminded physicians of infected, ulcerated lungs. The above photograph was taken by flickr user "Cliff," and is licensed under the Creative Commons Attribution 2.0 Generic license.

You are absolutely right. Despite her being fairly wealthy, her wealth can be easily taken away from her, by whoever is in power—bourgeoisie or proletariat or aristocracy. Everything she has, she has because of someone else's kindness. So in that sense, she is in her own camp, simply because people around her are unlikely to accept her as anything other than an inanimate object with no rights. If you were to ask her position, I don't think she would have a very defined or politically astute one—except for believing that people ought to be allowed to live the way they see fit, and that she ought to be allowed the same.

Despite the fact that you set this novel in a semi-magical world, the chemistry that Mattie does feels very realistic. She does a lot of repetitive tasks to isolate elements, and generally acts as if she's working in a typical chemistry lab. Do you think there is magic in Mattie's world, or just events that don't have a scientific explanation yet?

Souls and the Soul-Smoker [a character who can absorb other people's souls] are the only explicitly magical things in this book; at least, this was my intent. The rest of it is based on the supposition that alchemy and the Doctrine of Signatures actually work—which are not quite magic, those are just theories that had been demonstrated wrong in our world. So they just have different laws of the natural world, which doesn't really count as magic, does it? Even the gargoyles appear, to me at least, as creatures that are *different* but not *supernatural*.

There were a lot of moments in this novel where it felt like Mattie's struggles to be accepted as an alchemist mirror the struggles of a lot of women who want to be accepted as scientists (especially in male-dominated fields). Were you trying to touch on those issues, or more broadly on the issue of inequality between men and women?

I am a scientist in real life, so yes, of course I am aware of discrimination and inequality that still exists in most scientific fields, and it colored my depiction of Mattie. At the same time, I did try to talk about inequality and oppression in their many forms—not just gender, but also class, ethnicity, and, in Mattie's case, chemical composition. Each of those is an added burden, and yes, I think women who work in male-dominated fields will be able to relate to that sense of constant swimming upstream and the simplest things being a chore when you just want to do your job and not to be challenged every time you take a breath. Most of us could do with a bit less overcoming, I think.

What are you working on right now? Any new novels in the works?

Oh my, yes. I have another one coming out in 2009, *The House of Discarded Dreams*. I also just finished a Victorian Gothic YA based in real-world alchemy; it is about a girl and her salamander. I am currently working on an alternate history/steampunk novel taking place in Russia just before the Crimean War, in which the British and the Ottoman Empires team up against Russian-Chinese alliance. So it's basically Russian steampunk with wuxia. And British spies.

STEVEN SHAVIRO
"Interview by Zoran Roško"

This interview was originally published in the Croatian journal QUORUM. It was translated and reprinted by the 16 Beaver Group on February 5, 2005.

Zoran Roško: Mr Shaviro, the subtitle of your book *Doom Patrols* is "a theoretical fiction about postmodernism." What is your general attitude toward that invisible continent of time called postmodernism? Is it maybe just another great narrative, great slogan, ideology, late capitalism's shock absorber, just one arbitrary cultural mode among many others...? Is our life (or your life in the USA) really postmodern, or is it maybe just an exciting possibility to think, write and talk about? Or something else altogether?
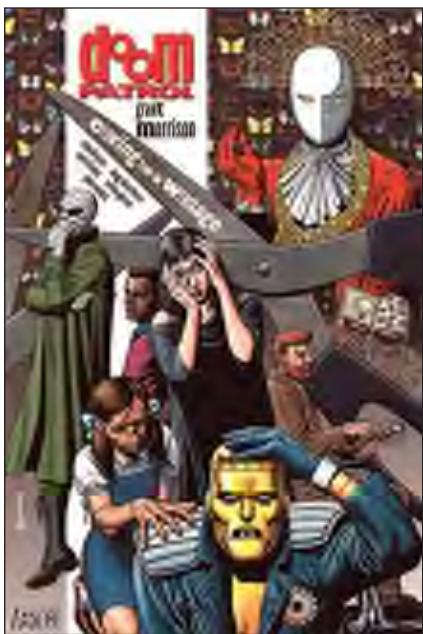
After overusing the word "postmodernism" in *Doom Patrols*, I have tried to stop using it entirely in what I am writing now (*Stranded in the Jungle*). This is mostly because the word has come to mean too many different things; everyone has their own definition, and the word has been stretched so broadly in the last few years. I still think, though, that what I wrote in *Doom Patrols* remains valid. If the word has any use, it is not to designate a particular style of writing or philosophy, but a social/political/economic situation that we all are in. A situation of global brand names, multinational corporations affecting every area of life, and the use of relatively new, and increasingly ubiquitous electronic, digital technologies (not to mention bio-technologies, which are also digital since they are based in DNA)—all of this all the more so now that we are living in a post-Communist, post-Cold War era.

Zoran Roško: It seems that you object to the typical pomo leitmotif concerning the importance of language and language games. What are the limits of that idea? And, related to that, it seems that you dislike the Lacanian approach. Why?

Of course language is an important part of what makes us human. But I think it is an exaggeration to say that everything is language, everything is textuality, etc. That is why I don't accept the idea of some overarching "Symbolic Order" as the Lacanians do (as far as I can tell; in Lacan and followers of Lacan like Žižek, I find what they say about the impossible Real far more interesting than what they say about the Symbolic or the Imaginary). Instead, I would want to emphasize the multitude of different "language games" (Wittgenstein): language works in all sorts of different ways, it is involved in many different forms of life, and it is involved in all sorts of different ways with other, non-linguistic factors (bodies, emotions, architectures and other organizations of space, images, sounds, etc). So I am not opposed to talking about language games, understanding that Wittgenstein says they are always not just linguistic, but also involve forms of life; I find this sort of formulation, or for that matter Foucault's notion of the materiality of multiple discourses, more to the point than theories that exalt the power of the Signifier.

4.8 Doom Patrol (*Crawling from the Wreckage*). In the late 1980s, Grant Morrison initated a legendary run on the comic book *Doom Patrol*. His work served as partial inspiration for Steven Shaviro's equally groundbreaking work *Doom Patrols: A Theoretical Fiction about Postmodernism and Literature*. (See www.dhalgren.com/Doom/ to read the full text of Shaviro's book on-line.)

Zoran Roško: Does pomo consist in negotiating various discoursive strategies, are signifiers really so important? Why would it be that FREE play of signifiers is preferable if such a play is always regressive,i.e. purely theoretical. Isn't the idea of infinite play of signifiers an indicator of just the opposite - that that play isn't important at all, because all the important decisions and choices are, by it's immanent logic, being "made" somewhere else (so pomo would be just a big cover for all the important stuff behind the scene of language)? "Our" emotions, joys, pains, decisions, fascinations, tastes are always already some kind of performances, so the MEANINGS of the performance X may be infinitely multiple but that doesn't undo the "finite" Singularity (mystery) of that performance. Is the deferral of the meaning (and identity) of that X identical to the defferal of performativity of that X? Why should that performance be dependable on the identity of X in the first place: if the X is the same thing with or without its identity, why is it so important to deconstruct its identity? Isn't a pomo just some kind of secondary narcissism, a compulsive ego-trip, a paranoic rapture (ego's fear that it doesn't exist is returning in the inverted form, as a joy in nonidentity)? Is pomo just another narcissistic illusion? Is there anything BEYOND ego?

There are lots of issues being raised here, I cannot answer them all. I would go on from what I said above about why I don't find it useful to focus on signifiers—there are probably better ways to talk about constraints vs the infinitude of potential play, than one that is focused on signifiers. Following from that, I could agree with what you are suggesting, translating it into the idea that presence/absence of identity is less important than concretely grasping the multitide of performances. As for ego and narcissism, I am inclined to say that one never gets totally BEYOND ego, it is always there, but by the same token one is never ENTIRELY narcissistic, there is always otherness too, the ego is never total—which for me suggests yet again that the best response might be to learn how to talk in a different register altogether, than one that asks whether there is a self, whether the self gets "deconstructed" or not, etc. It may well be that there are other dimensions of "postmodern" experience that it is more interesting to address.

Zoran Roško: I'm very interested for that "different registers" and different formats of experience (exemplified in transpersonal ideas of Ken Wilber and Stanislav Grof for example). Although the postmodenists are supposedly open to ontological multiplicity it seems that they are open ONLY to multiplicities that are rationally accountable (so the paradox is the only liminal tool for them), and very UNRESPONSIVE toward the "altered" (non-reductive, non-united) states of consciousness—understanding here that these states are not only the other "discourses" (even in a foucauldian way, like you said) but the completely other registers (levels) and formats of being (Peter Koslowski said that pomo is a "mysticism without mystics"). For example, Žižek is arrogantly designating all this different reality markup languages "obscurantism", although, as I see it, he is actually preparing a ground for a mystic play of life

(and it's his blind spot, I think). But it seems that these new cyber-postmodernists are much more open to gnostic/shamanistic aspects of "multiplicity". You have that text about LSD, so how "relevant" that altered states (from shamanistic to mystical and "paranormal") are for you? Do you find any appeal in the New Age excitement with new levels of being and with human mutations and transhumanism. Are we evolving/mutating into anything (new)?

I have a somewhat nuanced and skeptical answer to this question. Yes, I am interested in other, "altered" states or levels of being, but at the same time I am suspicious of attempts to give these other states some sort of objectified reality. The chapter I wrote in Stranded in the Jungle about LSD exemplifies this. I wanted to describe the affective experience involved, but without making any transcendent or metaphysical claims for that experience. This was in deliberate opposition to the way that psychedelic intellectuals from Timothy Leary to Terence McKenna have tried to use their experiences with mind-expanding drugs as the grounds for all sorts of cosmic theories. So I am equally opposed to those people who would inflate these limit-experiences (with drugs, sex, mysticism, dying, etc), and those who would simply dismiss them. Actually I think this attitude is not just "postmodern"; it goes back to Georges Bataille, who insisted on an "inner experience" that was its own sole authority, and yet that "expiated itself", disavowed its own authority. When we "translate" these experiences into discursive meanings, we thereby falsify them; the problem is to preserve the experiences without appropriating them into such meanings.

4.9 I Want to Believe. Lego recreation of the iconic *X-Files* poster created by Mike Stimpson. Image reproduced under the terms of a Creative Commons Attribution-Noncommercial 2.0 Generic license.

Zoran Roško: You also have that text about the aliens? What's your interest in them? What can they not tell us that may be interesting, are they showing by not showing? Are they blinding us with light (one character in The X-Files said - "what is hidden in the light")?

In my chapter on alien abductions, I wanted, again, to get at some sort of affective core of the experiences as they have been reported, without either saying that "I want to believe" in the truth of the experiences (as Mulder wants to), nor just skeptically debunking them (because, even granted that they didn't "really" happen, the sense of lostness, of dislocation, of something that might be called "alienation" except that there is no wholeness to be alienated from—-all that still remains.

Zoran Roško: Can you shortly summarise the po-mo legacy, what is still alive in the "classic" works of Lyotard, Baudrillard, Deleuze, Lacan, Foucault...? May we say that something like the post-postmodernism is on the horizon?

I am not sure how to answer this question (though it is a good question). Personally, I feel that I have learned a lot from these postmodern thinkers, and for that very reason I do not tend to read them much any more. Most of these people are now dead (all except for Baudrillard and Derrida) and I have assimilated them sufficiently that they do not seem 'new' to me any more. I have not really come across anything of similar weight among younger, more recent generations of philosophers (except perhaps for

4.10 Jean Says: You are Ze Real Thing. This illustration by Dan Archer, created for www.archcomix.com in 2010, pays homage to the philosopher's famous observation that "Disneyland is presented as imaginary in order to make us believe that the rest is real, when in fact all of Los Angeles and the America surrounding it are no longer real, but of the order of the hyperreal and of simulation." Shaviro takes up this issue in the Walt Disney chapter of his book *Doom Patrols: A Theoretical Fiction about Postmodernism and Literature*.

Agamben)—this may just be my limitation, that I have not encountered the right texts. But for the most part what has inspired my more recently have been novels, films, music, etc, more than theoretical writing. I would say also, that even now as we enter the 21st century, we are still under the domination of 19th century thought. Most of contemporary, 'postmodern' thought still refers back to the great 19th century thinkers: Nietzsche and Darwin above all. (Perhaps also to Marx and Freud—Freud's major works, I know, come from the first few decades of the 20th century, but his background and formation are still very much 19th century—but Marx and Freud are more the wellsprings of modernism than of postmodernism).

Zoran Roško: On your web-site we may find some information concerning your taste in fiction. In a way you are assocciated with the avant-pop sesibility. Is that just your private idiosincratic taste, or you can recommend those authors to the wider audiences, for example even in Croatia?

I don't always know how well the American fiction writers whom I like the best right now will travel in international contexts. The people who coined the term 'avant-pop' are my friends, and I like many of their works, but I think the term is more a marketing concept than an actual movement. I would say that, in the United States today, I don't find many of the writers who are more conservative aesthetically to be very interesting. But there are a lot of ways to be innovative, I don't think there is any unity among the writers I am interested in in this sense.

Zoran Roško: Are there any authors in the USA that share your views, or resemble your style, are you alone?

My aesthetic perspectives are not shared with, say, the major US intellectual journals, but I do not feel isolated, because I have lots of friends or people I share aesthetic affinities with, even if they don't publish in these major journals.

Zoran Roško: In croatian you cannot have non-gendered assertions, so when you say "I took a knife", it is either he or she that is speaking. So, what is the gender of the narrator in the "Kathy Acker" text (Doom Patrols)?

Actually I cannot give you a definitive answer to this from the point of view of how best to translate the text, because I quite deliberately took refuge in the fact that in English the first and second persons are not gender-marked, only the third person singular is. You could say equally well that the speaker is male (to the extent that the text is autobiographical—I do not claim to be doing Cixousian écriture feminine or anything like that), and female (to the extent that the text is build around quotations from Acker which are themselves paraphrases, translations, or deliberate rewritings and mistranslations, of quotations from texts by Laure).

Zoran Roško: My first reading of the "Kathy Acker" text was rather naive (it was my first encounter with Doom Patrols, without reading the introduction first). I thought that YOU were ACTUAL lover of Kathy Acker, and that possibility seemed exciting and sort of sad to me (considering what happened to "two of you guys" and Kathy herself). Only on the second thought, and especially after the conversation with Goran, the translator (who translated the text, to my surprise, as she-gendered) I recognized the undecidabilty of what is going on. Mybe I was just projecting myself into the text too much (in a way I "recognized" myself in a story, in an old fashioned reader's way). Now, what is that telling us? Who is that "being" in me that is doing an "identification", and unconciously wanting it? Just my ego? Kaja Silverman is talking about "idealization from a distance" and about constitutive role of identification with an (idealized) image for the making of ourselves and for the enjoyment. Mark Pesce said that giving a meaning to something is a MAGICAL act - so, can we find any magical-voyeuristic power in anything without that notorius being aka "ego" (be it an illusion or not)? Maybe an ego is not so bad an invention after all! Maybe an ego is just the last stand of magic (and magical terror, of course) in a nonmagical age! In that case, question is - Who or What in us, or through us, is needing that magic, and for whose agenda is that magic lobbying for? Shuld we pay attention to what is that "being" telling us, should we belive our desires, or is it just something that we have to "overcome" and surpass with "better", cleverer reading of ourselves? Besides, have you ever met Kathy?

4.11 An extraordinary person and a great writer. Kathy Acker (1947-1997). Robert Croma took this photo of the legendary social critic in 1986. Image reprinted under the terms of a Creative Commons Attribution-Noncommercial-Share Alike 2.0 Generic license.

I will start answering this question backwards—yes, I knew Kathy Acker pretty well. She was an extraordinary person, I think, as well as a great writer; somebody who meant a lot to me and who taught me a lot. There is a chapter in Stranded in the Jungle which is my personal response to her death. The chapter which bears Acker's name in Doom Patrols is "autobiographical" in the sense that I am talking on some level about my own emotions; but I am also trying to channel these emotions through Acker's texts and the texts that she was already channelling and transforming. Which, I would say, is my way of projecting myself into the text—not (I hope) by idealizing and appropriating the text to my own ego-needs, but rather, to the contrary, by trying to discover what it is in "my own" inner experience that is already in a real sense impersonal or transpersonal. I'd even say that this is what is most uncanny and powerful about those moments which we classify as "aesthetic": that, far from reflecting us back to ourselves, they make us realize how much of ourselves really isn't our own, how much otherness already pervades us.

Zoran Roško: Are you familiar with the work of such "radical" thinkers as Hakim Bey, John Zerzan, Robert Cheatham (from Perforations), Critical Art Ensemble, Avital Ronell, Robert Anton Wilson, Terence McKenna? Are there any authors that you think we MUST read (besides Thomas Carl Wall, who is really wonderful)?

Tom Wall is a friend of mine, his work is great, and I am glad that you know about it and like it. Otherwise, I have read most of the people you mention, with varying degrees of interest and enjoyment, but none of

4.12 Bret Easton Ellis' *Glamorama* **(1998).** Loosely linked to his other works, Bret Easton Ellis' novel *Glamorama* brilliantly captured global consumer culture near the end of the Millennium.

them have really affected or influenced me very strongly. I find Terence McKenna vastly entertaining, but I do not take his intellectual assertions very seriously. I don't know if there are any MUST-READS that I can name. The novels by younger (i.e. under the age of 40) English-language novelists that have delighted me the most in the last few years are Glamorama by Bret Easton Ellis and Slaughtermatic by Steve Aylett (I have no idea if either of these are known in Croatia).

Zoran Roško: You've been cyber-addict, what are your cyber-doses now, when the heroic era of the cyber-frontier turned out to be just another parcel of our ordinary virtual lives?

Yes, I think that being online is no longer a novelty for me; it has become just another taken-for-granted part of my life. The Web is where I first check when I am doing research or looking for information; it has become pretty much routine. Now that I have a fast connection that is always on, I even do things like checking the definition of a word in an online dictionary, because it seems less effort than getting out of my chair to take the print dictionary off the shelf. On the other hand, I don't spend as much time in MOOs or chat spaces as I once did; I think I got burned out on the intensity of it all. To live an active online social life takes up a lot of time as well as being emotionally draining. So usually I go to a cafe instead.

Zoran Roško: What is hot in the Seattle (alternative) cultural mileu now? And is there anything cool in the USA academic world?

Seattle had its moment of glory in the early 1990s with Nirvana and other bands; I don't think there is any local scene that is "hot" or "cool" or potentially influential like that now. The city and its surroundings have radically changed in the last couple of years, because of Microsoft, Amazon.com, Real.com, and all the other software and Internet companies. This basically means that the number of arrogant rich people has increased, to the detriment of everyone else and of the city in general. In academia, I don't really know what the trends are now, I more or less deliberately try to avoid contact with academic writing because I don't want it to affect or influence my own writing.

Zoran Roško: What are your experiences with the academic establishment and publishers, since you must have been some kind of freak to many of them (or not so)?

In fact, I have had bad experiences with academic publishers—ones who ended up not publishing my books—but I prefer not to name names. I welcomed the opportunity to have my last completed book, *Doom Patrols*, published by a non-academic press [Serpent's Tail]. But this is mostly because I am actively trying to write in a less academic prose style, and address a less academic audience.

Zoran Roško: Are you paranoic about anything? Are you a paranoia-fan (in Pynchonland-style, or in the context of Jodi Dean's and Jerry Aline Flieger's texts about paranoia - if you've read them).

Personally, I am not very paranoid. I am inclined to think that you don't need to invoke conspiracies to explain the vast quantity of stupidity, oppression, and injustice in the world; "business as usual" and the everyday functioning of corporations and bureaucracies is enough to account for it all. I've looked at Dean's and Flieger's books; I would agree that they are pointing to something that does have a real presence in contemporary popular culture, just because the pace and magnitude of technological change, combined with the power of elites, gives reasons why the idea of conspiracy is so prevalent in so many minds. I enjoy The X-Files, but I was a bigger fan of Chris Carter's other TV show, Millennium (I don't know whether this showed in Croatia; it only played in the US for 3 seasons, never got good ratings, and was then cancelled). Millennium was a little different than The X-Files, because its main trope was not conspiracy-theory paranoia, but a kind of religious mania and metaphysical anxiety. As for Pynchon: his most recent, and I believe, greatest book, Mason & Dixon, pretty much renounces the paranoia of Gravity's Rainbow.

Zoran Roško: In Croatia we've had only The X-Files on tv. If you are not paranoic enough, maybe that's so because you are information-hysteric too much (I'm just kidding).What reviews, magazines and journals are you reading and like the most? Have you discovered some new exciting web-sites or e-journals lately. Are you a victim of the information overload yet, or, in other terms, are you capable to download the Silence?

I wonder whether information overload and The Silence aren't really the same thing-the excess of too much, and the subtlety of almost-nothing (since when all is silent you find yourself hearing the silence itself) might be the two interconnecting moebius-strip sides of the same thing.
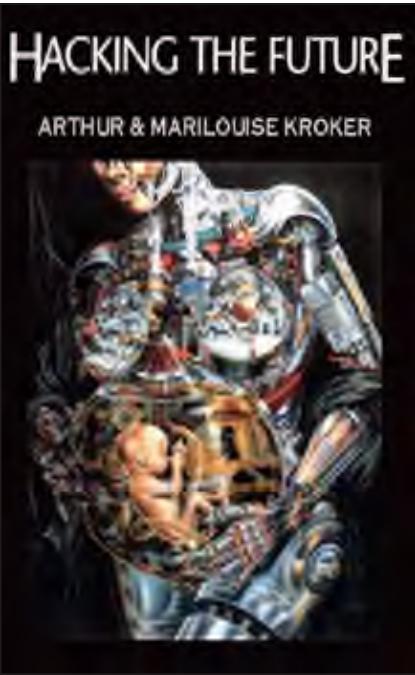
Zoran Roško: Have you jumped to any "conclusions" considering net-art, digital art, tele-art, hypertextual fiction (and the theory behind it, for example Roy Ascott's)? Do you consider it as the NEW BIG THING ?

I'd say we should always beware of the NEW BIG THING, which is usually just an effect of marketing. Or, to put the same idea differently, in a "postmodern" age where everything new is instantly commodified, where continual "innovation" is itself the way the system of control reproduces itself and thereby remains the same, that maybe the strategy to adopt is not one of being the next big thing, but of flying under the radar as it were, of moving so stealthily and so close to the ground that you don't get noticed.

Zoran Roško: In your texts, you are writing about My Bloody Valentine, Sonic Youth, Bjork, Prince etc and in this conversation you said that you are finding more inspiration in music than in theory, at least lately. In "Spasm" the Krokers said that "music rules today as a dominant ideogram of power.. [that it is] a real ruling labaratory of the age of sacrificial power... the key code of the postmodern body as a war machine" and that "sampler technology is the forward

4.13 Möbius strip. A Möbius band is defined as "a surface with only one side and only one boundary component." Image shared by photographer David Benbennick under the terms of a Creative Commons Attribution ShareAlike 3.0 License.

4.14 Hacking the Future. Since the 1980s, Canadian philosophers Arthur and Marilouise Kroker have been a driving force of cyberculture studies. Their book *Hacking the Future: Stories for the Flesh-Eating 90s* (1996) explores such topics as pregnant robots, the ebola virus, and the death of cyberpunk.

mechanism of late capitalist culture". But Kodwo Eshun said that new music is the laboratory for the creation of NEW EMOTIONS for which there is no language yet (he means it positively). What is your opinion - are we just slaves to the rhythm (of cyborg money) or are we at last getting tuned to the real rhythm of "history" (whatever it's acid house of being turns out to be)?

It should be evident that I am on the side of Eshun, not on that of the Krokers. I don't think that the Krokers' politics are wrong, exactly; many of their warnings are indeed relevant, and I have no utopian delusions that the current cyber-euphoria is a movement of true liberation. Still, I don't think that is ALL there is to the story. Counter to Adorno and the Krokers, it isn't JUST alienation and cynical ruses of power: though these are never absent, they also aren't the full story. I do think that music (probably music is the privileged case today, but the same is possible in other cultural forms) is grasping, and concretely bringing into being, new emotions or new modes of being. Though I do not think this is "the real rhythm of 'history'"; there is no finality to it, it is rather just the continual creation of newness out of repetition (here I am channelling Deleuze channelling Bergson and Nietzsche).
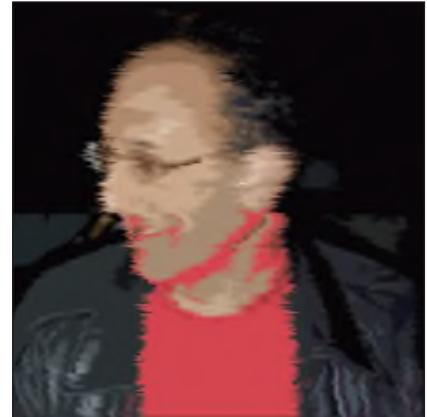
Zoran Roško: Some authors are emphasizing the religious/spiritual/ gnostic aspect of (new) technologies (tech-gnosis). Are you religious in any way? What will you be doing after you die?

I quite admired Eric Davis' book *Techgnosis*, which deals thoroughly and intelligently with all this. But I have to say that I myself don't have any sort of religious or spiritual longings that I am aware of. All that leaves me unmoved. I don't think I will be anywhere, or be doing anything, after I die.

Zoran Roško: I think that Baudrillard and you are the most exciting pomo theorists that I know, and, trying to find some parallel and opposition between two of you, I'm inclined to say that you are for the end of pomo just what Baudrillard was for it's beginning: alibi. You guys have made pomo - it's first, coital coming (to life), and it's second, postcoital coming (to death) - ontologically glamorous so that pomo looked like it's a natural born celebrity right at the spot (of its birth/death). So it seems that B. discovered an "ecstasy of communication" and that you discovered something like the postecstasy of noncommunication, i.e. postcoital tele-orgasm (excitement, or even sense, comes to us arbitrarily, randomly, madly, parasiticaly, just when we think that it is all gone and that there is nothing more to remember, pretend about or belive to). "Meaning" or willingness to live has nothing to do with the structure of that living. "Meaning" is digital (independent of the life to which it transfers the meaning) and demonic (outside of the interiority that is it's medium): meaning of life is a DIGITAL DEMON. We are ruled not by the spell of analog magic (layed bare and disenchanted by pomo deconstructions), but by the spell of digital magic - by the spell of joy that is alien to us, that comes from without. Meaning is here not to comfort us and save/deliver us but to devour us.Because of that, your

glamour is more dark, indie, carnal, fetishistic, scatological, bizzare and emotional, in one word - deadly: joy doesn't come dramatically, it comes like death, fatally, not to reward you or to flatter you, but to stop you and to punctuate you with destiny, to make you digital - made of ones of life and zeroes of its meaning. While B introduced puritanic, bright angels of ontological dadaism and dandysm (with some nostalgic shades), you've delivered us to angels of elctronic ontological disturbance (with lot of futuristic and post-apocalyptic extravaganza). Besides, I think that you help us to us recognize (since the life is a medium without a message) that pomo is ultimately about the perverted emotionality of being (what is the emotion if not the medium without a message): drag-queen of emotion turned into paradoxical thought. So, I think that pomo helped us to develop not an idea but the particular sensibility of life. So, pomo turns realities into virtualities, emotions into thoughts and by laying it bare shows us the next challenge: why are emotions so perversely powerful, why we can't live with or without them. Good old/new question. Is this crap?**

4.15 Transforming Shaviro. A photograph of Steven Shaviro after being run through multiple filters in *Adobe Photoshop*.

Thank you, it is very flattering to be read and re-written in this way. I cannot say you are right or wrong, since this is the way you are transforming my words just as I have transformed the words of others; which I think is a process that cannot be controlled beforehand, and that never stops.

4.16 R. U. Sirius. Also known as Ken Goffman, Sirius is wearing the latest in transhumanist fashion: *h+ Magazine*'s "OMG. I can't believe I missed the Singularity" t-shirt.

R. U. SIRIUS
"Biographical memories"

Let the story beginning in the Spring of 1967. I am 14 years old and in 9th grade. It's early evening and the doorbell rings at the suburban house in Binghamton, New York where I live with my mom and dad. It's a group of my friends and they're each carrying a plastic bag and looking mighty pleased. They come in, we shuffle into the guest room (where the record player is kept) and they show off their gatherings— buttons ("Frodo Lives!" "Mary Poppins is a Junkie" "Flower Power"), beads, posters (hallucinatory), incense with a Buddha incense burner, and kazoos. A lonely looking newspaper lays at the bottom of the pile, as though shameful, the only item unremarked.

Without realizing the implications, I happen to throw side one of Between The Buttons on the player. Eventually, the song "Cool Calm and Collected" plays and a kazoo sounds through the speakers. In an instant, newly purchased kazoos are wielded and The Rolling Stones only-ever kazoo solo is joined by three wailing teenagers, bringing sudden shouts of objection from my famously liberal and tolerant Dad in the living room. It's quickly determined that it's late, Dad's tired, and it's time to send all kazoo-wielding teens packing. As each of the friends moves to retrieve his items, I grab the newspaper to see what it is. There are, I now see, two of them—two editions of something called "The Oracle." It has hallucinatory visuals on the cover and boasts an interview with a member of The Byrds (David Crosby). Vinnie, who had bought it—but who, despite writing poetry—avoids any signifiers of intellectual curiosity as the teen status crushers that they are, feigns disinterest and gives the copies to me.

And that's where it begins, this strange love affair with the periodical, particularly the periodical that has flair and style… where you can almost feel the energy and fun emanating off the pages.

I remember only one thing from the content inside those two Oracles and that's David Crosby denying that he was "some kind of weird freak who fucks ten chicks a day." That stuck in my mind. I didn't know it was possible even to think that, much less print it, much less be in a position to find it necessary to deny being it!

Let the story continue some time in early 1969, I'm 16 and in my junior year at Binghamton Central High School. The student/youth protest movement has fired my imagination—and the more radical the better. The Columbia University takeover with obscenity screaming Mark Rudd! The French Revolution of May '68! The armed black student takeover of the Cornell administration building, just 45 miles away in Ithaca! WoWeeee!

I wanted a piece of it. So I started a high school "underground newspaper"—The Lower Left Corner. Wanting to spring it on the school as a total surprise, I brought in only one co-conspirator (memory fails me,

but he was more a collegian liberal type while I hung with the freaks.) Anyway, what we came up with was, I am sure, a completely lame and absurd piece of adolescent indignation. While college students revolted against the war, racism, and authoritarianism in school, we boiled it down to authoritarianism at school. The one thing I remember is that we had a cartoon of a teacher wearing a swastika armband busting a student for smoking in the boys' room. (Eat your hearts out, Brownsville Station!) It was that stupid.

To this day, I consider The Lower Left Corner a great success. Eight pages, Xeroxed front and back and stapled together… we entered the school each armed with a boxful… probably about 80 copies each total, and started handing them out selectively, avoiding the jocks and straights (by the way, straight used to mean "not hip.")

We got to homeroom—official start of the school day. The principle came over the loudspeaker. "Anyone caught with a copy of the paper called The Lower Left Corner will be immediately suspended from school." All eyes on me. Homeroom ends and as the door to the hallway swings open, I step out into my first taste of celebrity. All the jocks that usually threaten to beat me up or cut my hair off are jostling for a copy of the forbidden paper… even thanking me upon receiving. Laughing, I thrust the pieces 'o' crap into the grasping hands, happy also to get rid of them so that I wouldn't be caught with any copies… and then I waited for the administrative consequences.

None were forthcoming. I had beaten the system… and in two ways. I'd gotten the administration to act out the very authoritarian impulse that we were lamely dithering about in print; and I learned something that served me well through the rest of my career as a high school "sixties radical. " If the authorities think you're political enough to run to the ACLU, they'll leave you alone and bust your intended audience instead!
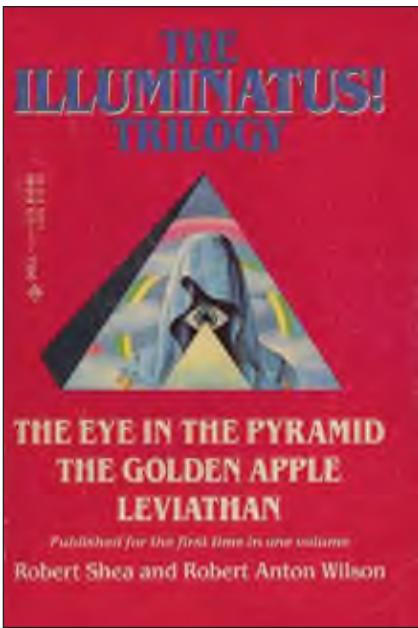
We created and "printed" one more issue of The Lower Left Corner. As I recall, it was on an antiwar theme and we paid more attention to the quality of the text and design the second time out. This time, we handed them out without any attempted interference. Teachers even used it as a source for classroom discussions. And of course… no one cared.

Let the story continue in Fall of 1971. I'm 19. I meet Tommy Hannifin at a rally against the killings at Attica State. He's shouting the not-so-secret codeword… YIPPIE! We converge and excitedly share our mutual love of the Yippies funny and fun acid-infused, prankster, wild-in-the-streets take on The Movement as a Youth Culture Revolution. I tell him that I want to create a Binghamton Chapter of the Yippies and start an underground newspaper. And so we did.

I should be clear. I had never thought… even for a moment, about journalism as a craft and/or a career. It didn't even occur to me that I should think about it in those terms. Indeed, to the constant worry of Mom and Dad, I never thought about career at all. I assumed that The Revolution would render those issues moot. I simply reached for the

4.17 Yippie! Abbie Hoffman and Paul Krassner hatched the term "Yippie" in 1967 as a deliberate attempt to reclaim the media hype surrounding the less political hippie movement. The Yippie publication *Youth International Party Line* (1971) is often cited as an essential milestone in the evolution of the hacker subculture

4.18 Think for yourself, schmuck. Co-authored by Robert Shea and Robert Anton Wilson, *The Illuminatus! Trilogy* (1984) has been credited with kick-starting the genre of conspiracy fiction.

print medium because it seemed like a tool that was accessible. (It was… relatively speaking.) I seem to recall that Tommy, at least, knew something about layout—that you had to get these boards, type out the text, get visuals and paste it all up. And so, we pasted together Lost In Space, Binghamton's little underground newspaper, ripping off a few frames from an underground cartoon titled Nancy Kotex: High School Nurse for the front page. This thievery was utterly naïve. The idea of copyright and intellectual property was unfamiliar to me—like so many things in life that seemed obvious to so many, it hadn't occurred to me. The cartoon just struck us as funny, and when we imagined people getting all upset and offended by it, it became twice as funny. And so I learned about the double scoop of pleasure you get from prankster humor that confounds or freaks people out. You get to laugh at the joke… and then you get to laugh at the over-reaction to the joke.

Like The Lower Left Corner, Lost In Space (changed by issue #2 to Space because movement types told us Lost In Space sent a negative message) was a piece of crap. And unlike the underground papers of the bigger urban centers and hip college towns like Madison Wisconsin and Ann Arbor Michigan, we had no tributes to George Jackson and Ho Chi Minh; we had no quasi-sophisticated neo-Marxian analyses of the movement; no major statements from Robin Morgan about the rise of militant feminism; and probably not much news. Like The Lower Left Corner, Space was locally focused, reflexively against all authority, and juvenile. But it was probably a bit more stylishly written… and it certainly had a puckish sense of humor.

Let the story continue in 1980. I'm 27 years old and a Junior at the State University College at Brockport, New York, near Rochester. (The Revolution having left me stranded.) My friend Brian Cotnoir wants to start an avant-garde art newspaper. He calls it Black Veins—which comes from an interpretation of a line from Lautreamont's epic proto-surrealist misanthropic horror poem Maldoror (Les Chantes de Maldoror)—and he signs me on as co-editor. The paper features dark, perversely angled bits of poetry and fiction, but I bring something else in. Since the mid-1970s, I have been nursing a growing obsession with the neuro-futurisms of Dr. Timothy Leary and Illuminatus author/philosopher Robert Anton Wilson.

For the first issue, I have a written exchange with Wilson, performed by the soon to be archaic means of letters sent by mail. (As best I recall) the exchange essentially involves me wringing my hands that the world is a terrible place and that his optimistic weltanschauung may actually be a dangerous diversion. (I would later get letters like that myself at MONDO 2000 and, generally, respond with dismissive quips intended to communicate my lack of commitment to an optimistic—or any—point of view.) My letter includes a pretentious, portentous quote from a Village Voice review of Hans-Hurgen Syderberg's 6 hour film, Our Hitler.

And then word comes that Dr. Leary himself is coming to Rochester on his "stand up philosophy" tour. Brian, his girlfriend Ellen, myself, and our ex-girlfriend Liz pile in Ellen's car for the 30-minute drive to Rochester

for the Sunday afternoon performance. Our goal is to interview the Dr. after the show for the second issue of Black Veins and then to film him. I plan to try and incorporate him into an 8mm movie called Armed Camp I'm making for a film class. (Incidentally, that's camp in the Susan Sontag sense.) The film involves, among other things, some 20-somethings playing poker in pajamas using the Aleister Crowley Thoth Tarot deck and then dancing to The Archies "Sugar Sugar" 45 rpm played at 33 (makes the vocals sound sort of like Jim Morrison). There is a vague narrative structure to this odd little attempt and I have reworked it so that it required Timothy Leary to say a few lines.

My posse—myself excluded—is negative about mind-altering drugs and cynical about Leary, and this makes me anxious. As we take our seats, the end of the Pink Floyd album The Wall blasts out of the loudspeakers and the cover of Leary's book The Intelligence Agents—which shows multiple copies of the same baby attempting to climb over a brick wall which appears to have no end—is projected onto a screen on stage. Then comes Side 2 (The "1984" side) of David Bowie's Diamond Dogs. Given his recent byzantine adventures with prison, exile, revolution, and compromise with the powers of state, it seems as if Leary is trying to tell us something. To the final echoes of Bowie singing "We want you, big brother," Dr. Leary walks on stage. Liz mutters a bit too loudly, "Ohmygod, it's Johnny Carson!"

The performance is not particularly impressive or funny, but Leary agrees to be interviewed. He unleashes that famous laser beam smile on each of us, one at a time, and the vibe immediately changes. Instant intimacy. Timothy Leary is now our special pal and we're his co-conspirators. We move into the restaurant attached to the club, order drinks and peruse the menu. Liz, a slightly moralistic vegetarian, asks Leary if he eats meat. "I'll eat anything!" he says directly to her, smiling. It's something that has been said a million times before by both jackasses and geniuses, but it comes out like a blast of freedom. Everybody feels this.

We all have a roaring great time interviewing Leary about life, drugs; his hatred of followers, his futurist theories, and the 1980 Democratic primaries ("If I'd done a better job, you wouldn't have all these pasty-faced white guys running around New Hampshire.") We're all dazzled, feeling like the host of Planet Earth's party had lifted the velvet rope and let us in. As we finish the conversation, Ellen urges me to ask Tim about appearing in Armed Camp. I'm feeling shy, but I share the script—such as it is—with him and point him at his two-sentence part. "What's it about?" he asks. A bit flustered, I blurt out, "Nothing really." He laughs and looks at my friends. "Thaaat's wonderfullll, isn't it? Nothing. Isn't thaaat wonderful?" Everybody laughs, including me. He won't read the lines but he will let me ask him a question and film his response… which turns out to be useless for my movie, but a treasure (that I will soon lose) nonetheless.

As we wrap up, Tim asks for a ride back to his hotel. He shrewdly picks Brian to dismantle and pack up the photo projector he'd uses to backdrop his talk. As we head to the car, night has fallen. Liz is pawing

4.19 "Sugar sugar." In the late 1960s, the fictional cartoon characters in the television show *Archies* released a series of pop albums with insanely catchy numbers. The song "Sugar Sugar" was ranked the number one song of 1969 by Billboard Magazine.

4.20 Mill Valley Celebrates its 80th Anniversary (1980). Located in Marin Countey, just north of the Golden Gate bridge, Mill Valley is known for its second-growth Redwoods and firm commitment to environmental preservation.

Dr. Leary, while they both gaze up at the stars. He points and describes a constellation or two. In the car, Liz continues to stroke and flirt, offering to come up to his hotel. Leary tells her she is very beautiful and wonderful, but he's married. As "Sympathy For the Devil" pops up on the mainstream rock radio station, we pull up to a raggedy-ass little hotel that's near the Rochester Airport and the good Dr. takes his leave of us.

Let the story continue in early November 1983. I am 31 years old and have just recently moved into a weirdly straight (see above) shared household in Mill Valley, California, a 'burb of San Francisco. The house is made up mostly of sedate 50-something recent converts to new age philosophies—an oddly pale white man who emanates a bland but likeable passivity seems to be the eminence grise of the household scene. And then there's a Hindu Hippie couple around my age that lives in the back room. They smoke pot (I can smell it) and they pretty much keep to themselves.

I have moved from Brockport, New York to the San Francisco Bay Area (starting off in Berkeley) with a "note to self" in my pocket—the only thing I could write during several months of writer's block, after a briefly successful academic and small town rock and roll career as a writer of fiction… and writer and singer of song lyrics. The note contains my California to-do list: "Start the Neopsychedelic Wave. Start a Neopsychedelic band. Start a Neopsychedelic magazine."

In late 1980, having written two darkly comic short stories to great local academic approval, and even winning a scholastic award (best fiction) for one of them (titled "Glib Little Holocausts"); having written darkly comic lyrics for a punk-tinged rock band (called "Party Dogs") and performed to some approval in both Brockport and Rochester; and looking ahead vaguely to either trying to make a run at a career as a rock and roll eccentric or hiding in obscurity as a writing professor; I came in for an odd reckoning—an interruption, really. It was a really good LSD trip.

Two days after the murder of John Lennon, laying in a room in a small apartment in which the heat pipes played oddly angelic music that had gone heretofore unnoticed, my girlfriend Lisa and I laid face to face, took the clean 250 microgram doses of liquid LSD-25 we had gotten from the colleges' hippyest Deadhead and made off for the cosmos.

Up until then, even my best trips had been fraught with ambiguity. My friends and lovers were weird. My hometown was relatively small… and contained parents who worried, and hostile lawmen and jocks who knew who I was. There was always at least the hint of trouble or shame—the feeling that my neurological nakedness was something to hide and someone lurked around the bend ready to give me a bad—or, at least, a strange time.

Now, there I was, safe and high and with a girlfriend who I actually liked and felt comfortable with, primed by my readings of Leary and Wilson to tap into an elegant symmetry, a generosity, even a sense of frivolity in the heart of all-that-is.
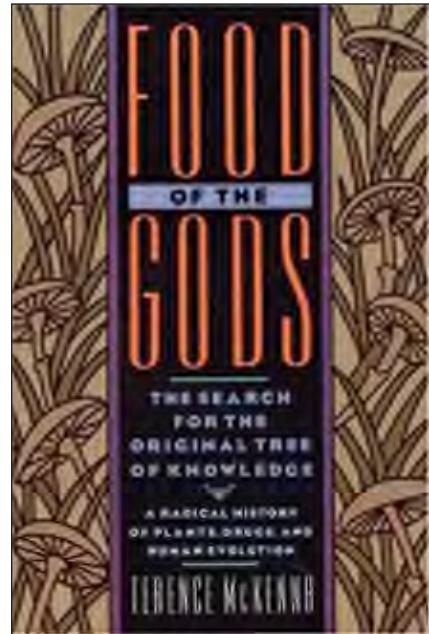
At first, the acid hit strong. It jolted up and down my spine like kundalini lightening, then shooting out the top of my head in a glorious explosive overabundance—an excess of multicolor wow! and then it smoothed over into an endless and sumptuous multidimensional layer cake of pastels filled to the brim with warm congratulations at having arrived. Later, it took me into deep space, and the heat pipes, which had been playing a pleasant kind of Tuvan throat music drone started, instead, to play John Lennon's hit song, "Starting Over" and, well… the message seemed clear. What the Lizard King had said was true: "Everything must be this way."

The aftermath of the trip found me disastrously happy, playful, optimistic, frivolous and energized… and writing about the coming of a Neopsychedelic Wave in lyrics and fiction. In the real (small) world of Brockport, New York, I'd shifted into a master's course in Fiction Writing, and attempts to give expression to my new head in that context weren't working. What came out was the sort of gibberish that has been produced before and aft by so many in the throes of psychedelic wonder—shards of flashy words that tried to convey – no, make that impart the energy of being aliver than thou to the recipient with FLASHY CAPITALIZED WORDS. Finally, after a couple of floundering semesters, I heard the siren call: "California is the place you oughta be!" There was really, after all, only one state from which to start a Neopsychedelic Wave.

So I'm sitting in the living room here in Mill Valley in 1983 just sort of gazing out the window when something bordering on an apparition appears. The Hindu Hippies plus their friend, a tall thin man in white robes—a visitor who occasionally slinks in and out of their room to use the bathroom—are opening a side door, and walking with them into the very back yard that I am gazing upon is a tall, thin, curly haired man, speaking something not quite audible in a familiar, nasally voice.

I recognize the man. I had attended a lecture he gave at a place in Berkeley a few months earlier. It was something about magic mushrooms and UFOs. In a nasally voice that reminded me of Jello Biafra, the man—Terence McKenna—had woven an astounding linguistic spell, rich with references ranging from Learyesque projections of future space architectures and superhuman amplifications to McLuhanistic media meanderings and, to top it all off, erudite descriptions (damn, why couldn't I do that?) of psychedelic experiences… including one that involved something along the lines of forty days and forty nights on mushrooms in the Amazonian Rain Forest during which he "channeled" a message from the logos that was calling us forward through time and using the acceleration of technology and consciousness and social crisis to bring us to some kind of psychedelic Singularity in which exteriority and interiority would trade places!

Well… far out! But what the fuck is he doing at my house with the Hindu Hippies!? Here am I, on cosmic assignment from something or other to start the Neopsychedelic Movement and feeling meek and quiet and ill prepared and there's this McKenna guy at my house. They quickly retreat into the back room. It takes me a good half hour to work up my nerve and tap on the door.

4.21 *Food of the Gods*. The philosopher Terence McKenna (1946-2000) believed that low doses of psilocybin-containing mushrooms helped our tree-dwelling primate ancestors make an evolutionary leap to spoken language ("the ability to form pictures in another persons' mind through the use of vocal sounds").

4.22 Psilocybe Mexicana. This photograph of the psilocybin mushroom was photographed by Alan Rockefeller and is reproduced under the terms of a Creative Commons Attribution-Share Alike 3.0 Unported license.

What happens next is (like an alien probe) wiped from my memory. Let it be said—and many will attest to this—that Mr. McKenna always brought the powerful fucking weed with him when he came. All I know is that, somehow, at the end of the visit, which probably lasted all of an hour, Mr. McKenna is handing me a baggie with 6 grams of dried psilocybin mushrooms and a joint of his way-too-strong pot and telling me (McKenna familiars… hear the nasel): "Eat these on an empty stomach. An hour later, go into a darkened room and smoke this joint. That will get you where you want to go."

So it's about a week later, and it's Monday, the start of a Thanksgiving weeklong break in my job selling season ticket subscriptions by phone for various Bay Area arts organizations. I have decided that tonight's the night. I will take the 6 grams of mushrooms late that night and lie in the dark in silence in my room and I will make contact with The Others—the alien intelligences that Mr. McKenna says are available on the Psilocybin frequency (when you take enough)—or I won't… and either way, it will be a groovy trip.
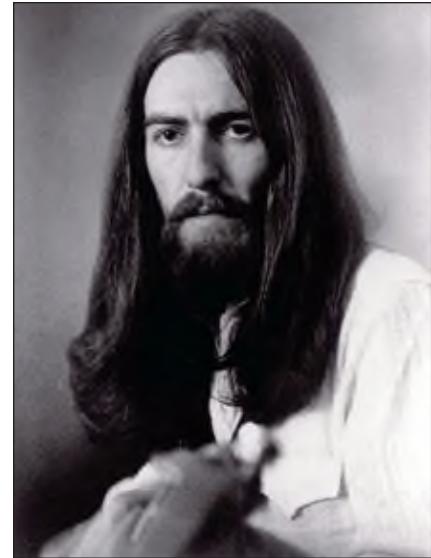
I have decided to try a borderline fast—nothing but toast and water (and my morning cup of coffee) all day. It's a big mistake. It's around 5 pm and I'm heading home after strolling into town and I start to pass the McDonalds on the corner when the hunger overwhelms me and the biological robot commandeers my brain. By the time my brain returns to ordinary consciousness, I have downed a bag of Chicken McNuggets and a small bag of fries. Now I'm unhappy with myself and I'm deciding that I've blown the opportunity. No trip tonight.

I get back to the house and, oddly, it's empty. It's a large household, yet no one is home. A thought grips me. If they all stay away for an hour, I have a chance to get off on the mushrooms alone, having the run of the house during those energetic, intensely physical early moments that occur when you first come on to psychedelics. Then, I can hide out in my room with the lights out for the remainder of the trip. The time is nigh. I chew down the biggest batch of 'shrooms in my life by far and I find myself pacing the house, nervously. Suddenly, after about 20 minutes, it slices through me like a shard of angry glass. A shattering angry splintery energy thing is outside me lacerating me and I am in everything's sights and all-that-is is pissed at me. The house cats start scurrying around yowling, running furiously, scratching at and trying to climb the walls. The suburban Mill Valley street suddenly looms very small and enclosed and conservative, and me… Mistra Inappropriate… not in control of my basic social signals and I'm now being lacerated by demons from a peculiar occult/Rolling Stones mirrorworld for abandoning them back in Binghamton, New York. Multiple car engine noises scrape the insides of my gut (In reality, it's around 6 pm, the time when people in the suburbs get home from working in San Francisco)—each one of them very likely carrying narcotics cops or agents of some hostile control system and, worst of all, I see it like it is now… They're the good guys and I am cast out, having done wrong; having eaten magic mushrooms on a corporate McDonald's stomach… heedlessly. I stare out the front window expecting incoming—hoping merely that the inevitable death is not too tortuous.

And then it happens. A car actually stops right in front of the house. This is it. It's over! But wait. The doors open and several clearly preoccupied corporeal and painfully ordinary humans emerge—all my housemates. They are opening doors and the trunk and picking up grocery bags. In an instant, things shift. The immediate danger lessens but does not disappear. I still may be attacked by angry beings, but right now I have another challenge. I have to act normal. I shuffle to the front door and open it, thinking that the best strategy is to wander out and offer to carry grocery bags. I take one step outside. Can't handle it. I go back inside and close the screen door. Now I've given myself away. But the roomies walk in the house, preoccupied with their normal activities and blandly saying hello, to which I manage a normal sounding reply. All, that is, except for the Hindu Hippie guy. He makes a beeline for me and looks me right in the eyes. Quietly, he says, "Oh boy. Come with me" and, with his girlfriend, leads me by the hand into their back room. I start to tell him what I've done but he already knows. "You've taken Terence's mushrooms." The thin man in the white robes is lying on his side on a cot looking calm. He has been sitting in there all along. They say very little at first. They bring me a cup of warm tea; have me lie down on a cot, and the Hindu Hippie girl gives me a shoulder rub. I mutter something about demons from a Rolling Stones mirrorworld and start to explain about the friendship I had with a strange and charismatic guitar player who was fanatically and uncannily tapped into Keith Richards almost to the point where the evidence suggested a mystical connection and how we spent five months together in borderline isolation learning the entire Rolling Stones catalogue, and how he played it better than anybody alive except maybe Keith (better than Ronnie, by far), and how we talked long into the night about the occult dimensions of The Rolling Stones and the gut level pagan authenticity of the sex and drugs and rock and roll left hand path to enlightenment and how this friendship had all the elements of an intense sexual affair but without the sex and he started talking about Rimbaud & Verlaine and how it made me self-conscious and I couldn't handle it and then I gave him my song lyrics to start writing originals and he said he lost them and laughed at me and I left town and never spoke to him again.

And this makes perfect sense to my Hindu Hippie friends. I mean, christ… they were California hippies. They were probably at Altamont as teenagers! Demons sent from a Rolling Stones mirrorworld made perfect sense. And then, as I settled into a state of calm, the thin man in the white robes told me his story. Vijaya was a former leader of the American Hare Krishna cult. He had left the group because they had started to behave— as do pretty much all cults—like gangsters, with all the corruption and violence that implies. He still believed in Hare Krishna's brand of Hinduism, but he was part of a renegade group of psychedelic Hare Krishnas. And the Hare Krishna cultists had tried to kill him… and he was hiding out. So here we were, me hiding out from mirrorworld Stones demons and him hiding out, ostensibly, from Hare Krishna assassins, both of us in the back room of a very bland Mill Valley shared household.

While the LSD trip that had sent me to California was a "good trip" and the trip on McKenna's shrooms was a "bad trip," they both propelled me

4.23 Krishna Krishna. In the 1960s and 1970s, many people – such as the guitarist George Harrison – were attracted to the Hare Krishna movement.

4.24 Mondo 2000. Ken Goffman's *Reality Hackers* evolved into the groundbreaking *Mondo 2000*. To learn more about the magazine's history, search for the R. U. Sirius page on the site www.kickstarter.com

on. A couple of days after the psilocybin trip, the resolve to go forward with the creation of a psychedelic magazine took hold of me. I contacted Will Nofke, a new age radio host who had done a series of interviews about psychedelics with Albert Hofmann, Timothy Leary, Terence McKenna and Andrew Weil on Berkeley's Pacifica station KPFA, and asked him for the tapes to transcribe and publish the content. He sent me the tapes and granted me the permission. On New Years Eve—as 1983 was becoming 1984—I stayed home alone. I finished transcribing the last of the tapes—the Leary interview—while watching the avant-garde video artist Nam June Paik host a very special New Years Eve 1984 show titled Good Morning, Mr. Orwell on PBS' Alive From Off Center, featuring many of my culture heroes: Laurie Anderson, John Cage, Allen Ginsberg, and Paik himself. Later I would have my first date with my wife Eve at a Nam June Paik exhibit in San Jose, California and I would co-create a TV show proposal and sample titled "The R.U. Sirius Show" for the consideration of PBS with John Sanborn, the Producer of Alive From Off Center. When the show ended, I channel surfed and found Timothy Leary on a silly, long forgotten entertainment talk show (I have mercifully forgotten the host). It was lame, but still, it was Timmy on network TV. A great signifier for the beginning of a new life. As 1984 dawned, I started reaching out to find compatriots to be part of a magazine that would be called High Frontiers and later Reality Hackers and then finally MONDO 2000.

AARON DELWICHE
"Interviewed by Sanford Allen"

In the process of promoting the Lennox seminar series, we were thrilled to discover Missions Unknown! Authored by John Picacio, Paul Vaugh, and Sanford Allen, this first-rate blog focuses on the science fiction, fantasy and horror communities in San Antonio. In this piece, Sanford Allen interviewed the professor who coordinated the Lennox seminar on which this book is based.

4.25 Aaron Delwiche at State of Play conference in Singapore (2007).

Aaron Delwiche is the curator of the fantastic Reality Hackers lecture series going on this spring at Trinity University. Aaron, a professor in the school's communication department, has rounded up a mind-meltingly cool gaggle of futurists, technology-focused critics and science fiction writers to take part in the series, which is free and open to the public.

So far, the series has presented talks by *io9* editor Annalee Newitz and cultural critic Steven Shaviro. Journalist and hacker R.U. Sirius will speak at 7 p.m. on Monday, March 29, at Trinity's Chapman Auditorium. It's pretty clear that Aaron not only knows who the important thinkers are when it comes to our rapidly evolving technoculture, he's obviously done some pretty important thinking on it himself.

You've assembled an impressive list of lecturers for the Reality Hackers series. How did you make your selections?

All five of these speakers are inspiring thinkers who combine critical analysis with innovative creative projects. These speakers enjoy theory and reflection, but they are equally passionate about using their own hands to create blogs, magazines, virtual worlds, short stories, and – with any luck – a better future.

What central thread seems to run through all of these thinkers' work?

The easy answer is that all five thinkers are clever, imaginative, and thought-provoking. At a deeper level, these thinkers transcend clichéd assumptions that pit knee-jerk technophobes against breathless techno-evangelists.

These writers refuse to be mystified by computers and biotechnology, and they are quick to criticize aspects of our media landscape. However, they also recognize that emerging technologies can be used to make the world a happier place. Perhaps most important, their work is characterized by compassion for human beings (and other life forms) and a corollary belief that ordinary people should be empowered to make decisions about their technological future.

The next lecture in the series is R.U. Sirius, editor-in-chief of the transhumanist magazine h+ and former editor of the '90s magazine Mondo 2000. Tell us why people don't want to miss it.

For decades, R. U. Sirius – a.k.a. Ken Goffman – has been on the forefront of science, technology, and social change. His magazine Reality

4.26 Your noun is not as cool as our noun. In 2009, Intel initiated the "Sponsors of Tomorrow" advertising campaign. Each commercial ends with a snappy saying that illustrates the intelligence and technocratic vision of Intel employees.

Hackers (a predecessor to Mondo 2000) inspired this entire lecture series. He's smart, funny, anti-authoritarian, and – much like his friend and co-author Timothy Leary – he confronts accelerating technological change head-on. Like much of the best science fiction, his books have the ability to warp the reader's perception of reality while simultaneously enlarging the reader's sense of possibility.

If Robert Anton Wilson, Timothy Leary and Philip K. Dick were still alive, you can bet that they would be attending Ken's talk to find out what R. U. Sirius has to say about the Singularity.

On the website for the lecture series, you write that "if democracy is to continue as a viable alternative to technocracy, the average citizen must become more involved in these debates (about technology)." Do you think the average citizen, right now, is dangerously underprepared for a serious discussion of how emerging technologies will affect their lives?

Yes. In his 1960 farewell address, President Eisenhower warned that the growing power of scientific and technologic elites threatened the very fabric of our democracy. Some on the left interpreted this in conspiratorial terms, but Eisenhower was putting his finger on a more intractable problem. Citizens are far too willing to believe that only a small percentage of the population is capable of understanding the scientific creations that are reworking the fabric of society.

Consider cultural phenomena such as the Apple Store, the Geek Squad, Big Bang Theory, and those creepy Intel commercials which constantly proclaim the intellectual superiority of the company's employees (e.g. "Our joke aren't like your jokes" "our big ideas aren't like your big ideas.")

The difference between the self-proclaimed technological elite of the 1960s and the self-proclaimed technological elite of the 2010s is largely cosmetic. Eisenhower's technocrats wore lab coats, business suits and oversized horn-rimmed glasses, while contemporary technocrats wear hipster t-shirts, trendy sneakers and oversized horn-rimmed glasses. Yet the underlying message is largely the same: "We, the technological elites, are building and creating your future. We are the sponsors of your tomorrow."

There is also an unfortunate tendency to view science and technology as domains that are beyond the comprehension of mere mortals. Sure, we're all required to take basic science and computing courses in college and high school, but our scientific education typically ends when these prerequisites are satisfied. As a result, citizens are far too willing to yield decisions about vital scientific matters to the experts.

Really? The experts? The same people who brought us the atomic bomb, electroshock therapy, phrenology, lobotomies, the Tuskegee experiment, DDT, Thalidomide, and the Hollerith Tabulators used by the Nazis to keep track of Jewish prisoners during the holocaust? These are the same experts who I'm supposed to trust to make decisions related to genetic

engineering, nanotechnology, and Internet privacy? No thanks.

But this sort of paralysis isn't something that is done to us. It's something that we allow to happen.

Ekaterina Sedia and Annalee Newitz are both pretty well known in the sf world. In fact, both are probably better known for their involvement in science fiction than science fact. Why is it important that sf authors/commentators be involved in these discussions?

Science fiction authors and commentators are vital precisely because they bridge this gap between the world of science and the world of civil society. The best science fiction writers mine the pages of scientific journals and trade publications for ideas, and they use their gift of storytelling to encourage the rest of us to reflect upon the social and ethical implications of new technologies.
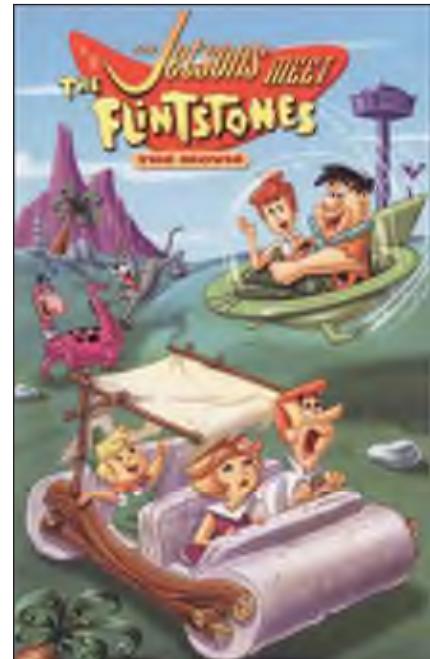
Let me play devil's advocate here. Some sf authors have a pretty good track record for predicting future technology trends, but many have widely missed the mark. Isn't most sf more of a comment on contemporary issues and society than a real attempt to predict where technology is taking us?

Very true! Among people who don't read science fiction, there is a tendency to equate this wonderful field with television programs such as The Jetsons. But, as your readers know full well, that is hardly science fiction. The Jetsons was an ideologically loaded futurist counterpoint to the Flinstones. Those television programs projected consumer culture, the nuclear family, corporate power, and gender roles into the future and the past simultaneously – right down to the identical aprons worn by Wilma Flinstone and Jane Jetson. But that's not sf.

The most interesting science fiction is speculative fiction, and my favorite writers are those who leverage the imaginative power of the genre as a strategy for provoking the reader. Orwell wasn't saying that totalitarian dystopia was inevitable when he wrote 1984; he was warning us to not let it happen. Ursula K. LeGuin wasn't predicting the ascent of androgyny when she wrote Left Hand of Darkness; she was prodding us to consider the socially constructed nature of gender roles. Cory Doctorow isn't suggesting the death of privacy rights is inevitable in Little Brother; he is encouraging us to hack back against those who would crush those rights.

A great example of science fiction's power is Ekaterina Sedia's short story "The Mind of a Pig," which you can find online in Apex Magazine. Though only a few pages long, her tale raises unsettling issues that continue to haunt readers long after the story is finished.

Could you briefly talk about your academic background and how it's led you to examine the emerging technologies that are "reshaping collective identities and challenging our understanding of what it means to be human?"

4.27 The Jetsons meet The Flinstones: The Movie. Essentially the same show set in different time periods, *The Jetsons* and *The Flintstones* both featured amiable but clueless fathers, stay-at-home mothers, loveable house-pets, and tyrannical bosses.

My parents have all been deeply involved in science, technology and education, and this has shaped my life path. My Mom and Dad were graduate students in the 1970s; she studied biochemistry and became fascinated with DNA while he studied computer science and helped build out the precursors to the Internet. They often brought me to school with them, and they taught me how to use the computer mainframe as a kid. My stepmother is passionate educator – a middle school principal who taught social studies for years. My stepfather, who has worked with NASA since the 1960s, spearheaded efforts to convert the Ames military base into a center for interdisciplinary scientific research. With these sorts of role models – and all four of my parents have been hugely influential – it was inevitable that I would end up teaching, researching and writing about emerging technologies. And don't even get me started about my grandmother!

I studied political science as an undergraduate, but quickly realized that the field of communication is an ideal home for anyone interested in the social implications of new technology. (My doctorate is in communication.) These days, if you want to study web development, user-centered computer programming, game design, film, social media, participatory subcultures, Internet law, or on-line journalism, communication is the place to be.

How important was reading/seeing sf books, movies and the like in leading you down this academic path?

Life without science fiction and fantasy books, movies, games, and graphic novels would be empty, drab and miserable. It's almost impossible to contemplate.

How difficult was it to convince Trinity to fund this series of lectures by mavericks, sf weirdos and self-described geeks?

Not at all difficult. One of the many great things about Trinity University is the institution's liberal arts mentality and the administration's willingness to fund a wide range of creative projects. It's important to note that the Martha, David and Bagby Lennox Foundation provided financial support for this series. The Lennox Foundation has funded several seminar series on topics ranging from the role of poetry in contemporary society to aesthetics and the philosophy of music.

Historically, Trinity University has recognized that some of the most interesting discoveries emerge from the margins. Statisticians are obsessed with developing mathematically sound generalizations about the "mean" and "median" of the population, but statistical outliers are just as important – often much more so – than those data points captured within the "normal curve." Of course science fiction fans already understand the limitations of normality and the value of statistical outliers.

4.28 Trinity University. Consistently recognized as one of the top liberal arts colleges in the western United States, Trinity University is located near downtown San Antonio. With approximately 3,000 students, and a 10:1 student-faculty ratio, Trinity University offers a stimulating environment for teaching and research. The book you hold in your hand is just one example of the creative freedom nurtured on the Trinity campus.

And, now, the question we throw at all of our Q&A subjects: Can you list your five favorite sf, fantasy or horror books, films and comics/graphic novels?

It is so difficult to reduce the list to just five items! (Ed. note—We actually meant five of each category, but we admire your discipline!)

4.29 We are egg snatchers. *Blows Against the Empire*—a concept album released by Paul Kantner and Jefferson Starship in 1970—includes contributions from Grace Slick, Jerry Garcia, David Crosby, and Graham Nash among others.

- Philip K. Dick, *Radio Free Albemuth*, 1982. (Book)

- Ian M. Banks, *Player of Games*, 1988. (Book)

- Andrew Niccol, *Gattaca*, 1997. (Film)

- Bill Willingham and Mark Buckingham, *Fables* (On-going comic book)

- Paul Kantner with Grace Slick, David Crosby, Jerry Garcia and Mickey Hart (among others), *Blows against the Empire*, 1970. (It's a Hugo-nominated science fiction rock and roll fantasy about a rag-tag bag of hippies who escape oppression by hijacking a starship and trekking across the universe with "free minds, free bodies, and free music." What's not to love?!)

Also, who can forget *Harry Potter*, *Alice in Wonderland* and *Star Wars*?

REALITY HACKER
STEVEN SHAVIRO

PUBLIC LECTURE ON GAMING AND SURVEILLANCE

2.18.10 Trinity University Holt Center, 7:00 - 8:00 pm   transmedia.trinity.edu

4.30 Promotional poster for Steven Shaviro's public lecture. (Cuban propaganda style.)

4.31 Promotional poster for Steven Shaviro's public lecture. (Created by John Key)

4.32 Promotional poster for Annalee Newitz's public lecture. (Cuban propaganda style.)

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4.33 Fake post-Singularity advertisements in Trinitonian. (Ads created by Lennox students.)

REALITY HACKER
R. U. SIRIUS
PUBLIC LECTURE ON HIJACKING THE SINGULARITY
Trinity University Chapman Auditorium, 7:00 - 8:00 pm, March 29th 2010

"I like to think of the transhumanist movement as an ongoing project to hack the human body and the brain, and the social and material worlds outside our bodies and brains, and get them to do things that they can't do now... we're looking at hacking our biologies for extended lifespans, hacking our brains for increased intelligence, hacking molecules for material abundance, building intelligences that are greater than ours... we also might be looking at engineering our level of happiness or bliss, engineering out painful forms of insanity, hacking our skin pigmentation color or our physical design. As Debbie Harry put it back in 1990, 'A tail might be nice.'"

REALITY HACKER
RICHARD BARTLE
PUBLIC LECTURE ON EMERGENCE AND REALISM IN VIRTUAL WORLDS
Trinity University Chapman Auditorium, 7:00 - 8:00 pm, April 8, 2010

"When Roy and I designed the first virtual world, we deliberately promoted hacker ideals. Some of those persist to this day.
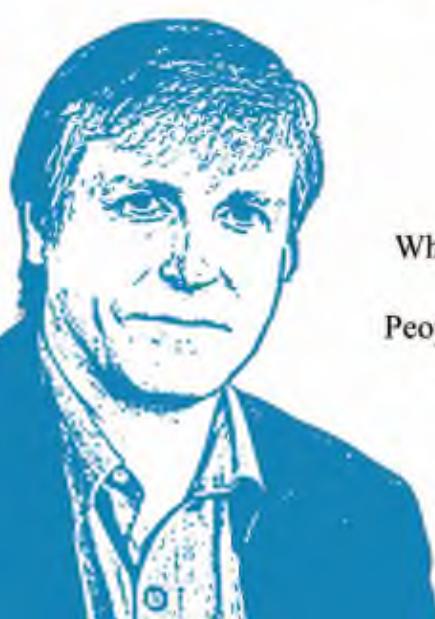
I wanted people to experience freedom through playing virtual worlds. With freedom, comes understanding. When people are free, they want others to be free.

People who haven't known true freedom absolutely love it, but they have to learn what it means — and that freedom is easy to lose, too.

You can change the world — the real world — for the better."

4.34 Advertisements in *Trinitonian* for Bartle and Sirius. (Back page)

R.U. SIRIUS

Public lecture: "Hijack the Singularity. Why the future must be post-scarcity or not at all."

March 29, 7:00 - 8:00 pm. Chapman Auditorium.

R.U. Sirius (real name Ken Goffman) is currently editor-in-chief of the transhumanist magazine *h+*. Sirius was widely known in the early 1990s as editor-in-chief of the popular "cyberpunk" magazine *Mondo 2000*. He has authored or co-authored 11 books, including *Everybody Must Get Stoned, Cyberpunk Handbook, True Mutations* and *Design For Dying* with psychedelic legend Timothy Leary. In 2000, Sirius ran a write-in campaign for president of the United States for the Revolution Party, an organization that offered a platform that combined left and libertarian themes.

Learn more at transmedia.trinity.edu and hplusmagazine.com.

RICHARD BARTLE

Public lecture: "Is the virtual too unrealistic? Crying over non-spilled milk."

April 8, 7:00 - 8:00 pm. Chapman Auditorium.

Currently a lecturer at Essex University, Dr. Richard Bartle co-authored the world's first virtual world as a college undergraduate in 1978. A former university lecturer in artificial intelligence, he is an influential writer on all aspects of virtual world design and development. As an independent consultant, he has worked with almost every major online gaming company in the U.K. and the U.S. over the past 20 years, transforming an undergraduate research project into a multibillion dollar industry. His book *Designing Virtual Worlds* is widely viewed as a "tour de force of virtual world design."

Learn more at transmedia.trinity.edu and www.youhaventlived.com/qblog.

4.35 Advertisements in *Trinitonian* for Bartle and Sirius. (Inner fold)

MIND OF A PIG

4.36 Advertisement in *Trinitonian* for Ekaterina Sedia. ("Mind of a Pig" is reprinted in this book.)

EKATERINA SEDIA
Science fiction author

Public lecture on "Genetic modification and copyright."

April 22, 7:00 - 8:00 pm (Chapman Auditorium)

Ekaterina Sedia is a Moscow-born author whose third novel, *The Alchemy of Stone*, has been hailed as one the best novels of the previous decade. Her next one, *The House of Discarded Dreams*, is expected in July 2010.

Her prose has been described as haunting and magical, and reviewers praise Sedia's knack for "leaving readers to reach their own conclusions about the proper balance of tradition and progress and what it means to be alive." She is an award-winning editor of the *Paper Cities* anthology; her next anthology, *Running with the Pack*, will be released in May 2010. In addition to writing, she teaches genetics, botany and plant ecology at a state liberal arts college in New Jersey.

Ms. Sedia is visiting Trinity University as part of the Lennox Seminar Series on Reality Hackers. This series is made possible by the Martha, David, and Bagby Lennox Foundation. For more details see transmedia.trinity.edu or contact Dr. Delwiche in the Department of Communication.

4.37 Advertisement in *Trinitonian* for Ekaterina Sedia. (Inner fold)

MISSIONS UNKNOWN!
SCIENCE FICTION, FANTASY & HORROR IN SAN ANTONIO

« THE DEVIL IN GREEN Final Cover Art   Review: Foiled by Jane Yolen and Mike Cavallaro »

io9's Annalee Newitz Coming to SA!

By **Mission Control**, on March 9th, 2010

io9 Editor-in-Chief, journalist, author, and hacker Annalee Newitz will visit San Antonio's Trinity University as part of the school's March 10 at 7pm in the Fiesta Room. Her talk is entitled "Curse of the Meatsack: Biohacking, Immortality, and Science Fiction."

Newitz's work has been published in Popular Science, The Believer, New Scientist, Wired Magazine, and Wall Street Journal. She is a fellow-traveler of the emerging biopunk movement who argues passionately on behalf of open-sourced genomic databases. She co-edited (along with io9's Charlie Jane Anders) the anthology *She's Such A Geek: Women Write About Science, Technology, and Other Nerdy Stuff*, a "hopeful book that looks forward to the day when women will invent molecular motors, design the next ultra-tiny supercomputer, and run the government."

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5. **McKinney and Bartle geek up your Thursday night**

March 9th, 2010 | Tags: Annalee Newitz, io9, Reality Hackers, Trinity University

Greena Untier Annalee Newitz is a must-see at Trinity University midweek-this night.

4.38 Science fiction blog *Missions Unknown* profiles Annalee Newitz.

MISSIONS UNKNOWN!
SCIENCE FICTION, FANTASY & HORROR IN SAN ANTONIO

Mission Control

JOHN PICACIO is a World Fantasy Award-winning and Hugo Award-nominates illustrator of science fiction, fantasy, and horror literature. *On The Front*

SANFORD ALLEN is a musician and author with more than two dozen horror and dark fantasy stories published. *Sanford Allen | Bexar Satan*

PAUL VAUGHN AKA The Mac Guy is a graphic artist, web designer, writer, consultant and all around techno-geek. *The Mac Guy | Dragon Design*

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« Remembering The Galaxy's Fantastic Film Festival   Made in SA: Aaron Delwiche »

R.U. Sirius tonight

By Sanford Allen, on March 29th, 2010

Tonight, Trinity University is presenting the latest can't-miss installment in its REALITY HACKERS lecture series: author R.U. SIRIUS.

Sirius, current editor of the transhumanist magazine h+ and former editor of the cyberpunk magazine Mondo 2000, is speaking tonight at 7 p.m. in Trinity's Chapman Auditorium. The free lecture is entitled "Hijack the Singularity, or Why the Future Must Be Post-Scarcity or Not at All."

Sirius has authored or co-authored 11 books, including *Everybody Must Get Stoned, Cyberpunk Handbook, True Mutations* and *Design For Dying*, with psychedelic legend Timothy Leary. In 2000, Sirius ran a write-in campaign for president of the United States for the Revolution Party, an organization that offered a platform that combined left and libertarian themes.

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R.U. Sirius wants to make sure you don't miss the Singularity.

March 29th, 2010 | Tags: h+, R.U. Sirius, Reality Hackers, the singularity, transhumanism

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MISSIONS UNKNOWN!
SCIENCE FICTION, FANTASY & HORROR IN SAN ANTONIO

McKinney and Bartle geek up your Thursday night

By Sanford Allen, on April 7th, 2010

Looking for a little intellectual stimulation tomorrow night? You may have to flip a coin to figure out where you end up.

You've got two pretty solid choices — and they're both free.

First, SAPD officer-turned-horror writer JOE MCKINNEY will be speaking at the SAN ANTONIO WRITERS GUILD'S monthly meeting, which is free and open to the public. A recent Stoker Award nominee, McKinney has published two post-apocalyptic horror novels set in San Antonio (one with zombies!) and more than 30 horror, crime and sf short stories.

McKinney will be discussing horror writing techniques in what may be a preview of his April 10 GEMINI INK class "Writing Modern Horror." The guild meets at 7:30 p.m. at Bethany Congregational Church, 500 Pilgrim Dr.

And DR. RICHARD BARTLE, an influential writer and consultant on virtual world design, will be speaking at Trinity University as part of its uber-hip REALITY HACKERS series. A former university lecturer in artificial intelligence, Bartle co-authored the first virtual world as a college undergraduate in 1978. He's worked as a consultant with almost every major online gaming company in the U.K. and the U.S. since then and is now a lecturer at Essex University.

Bartle will be speaking at Trinity's Chapman Auditorium. His lecture is titled 'Is the Virtual World Too Unrealistic? Crying Over Spilled Milk.' The lecture starts at 7 p.m.

Richard Bartle, Creator of virtual worlds

4.40 Science fiction blog *Missions Unknown* profiles Richard Bartle.

MISSIONS UNKNOWN!

SCIENCE FICTION, FANTASY & HORROR IN SAN ANTONIO

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Missions Unknown: Third Best Blog in SA? »

Ekaterina Sedia closes out Reality Hackers series

By Sanford Allen, on April 21st, 2010

Clear off your calendar for the final lecture in Trinity University's astoundingly cool Reality Hackers lecture series — fantasy author and genetics scholar EKATERINA SEDIA.

Sedia's lecture on genetic modification and copyright takes place tomorrow, Thursday, April 22, in Trinity's Chapman Auditorium. It starts at 7 p.m.

Scholar and fantasist Ekaterina Sedia

Moscow-born Sedia's third novel, *The Alchemy of Stone*, has been called one the best books of the previous decade. and her anthology of urban fantasy, *Paper Cities*, also has drawn profuse critical praise. Her next novel, *The House of Discarded Dreams*, and another anthology, *Running with the Pack*, will hit bookstore shelves this summer.

Reviewers have lauded Sedia's lyrical prose for "leaving readers to reach their own conclusions about the proper balance of tradition and progress and what it means to be alive." Read her story "THE MIND OF A PIG" online if you haven't experienced it yet.

In addition to writing, she also teaches genetics, botany and plant ecology at a state liberal arts college in New Jersey. Guess that qualifies her to discuss genetic modification.

If you have missed any of the Reality Hackers lectures, organizer AARON DELWICHE has been nice enough to post videos on the SERIES WEBSITE.

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Mission Control

JOHN PICACIO is a World Fantasy Award-winning and Hugo Award-nominated illustrator of science fiction, fantasy and horror literature.
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