

Abbey Gaterud's Publishing Software class is designed to be taken before Design and Production, but I opted to take it afterwards. The class is a full-term in-depth look at InDesign and Photoshop, and while I felt like I had a reasonable degree of familiarity with both applications, I knew there was a lot more left to learn. I also wanted to get more experience working with design, and Abbey is a fantastic designer. The class definitely taught me a number of new tricks, and increased my level of confidence in my InDesign abilities.

We produced at least one design a week, often more than that. The piece I've included here was my final project for the class; it's a full cover and the interior of a book called *Makers* by Cory Doctorow. Doctorow is one of my favorite writers, and also a huge advocate of copyright reform; he releases all of his books online under a Creative Commons license, so I was able to use his text without having to jump through any legal hoops or acquire permission. The illustrations on each page are diagrams from patents, which are all also in the public domain. My personal favorite touch is that I included patent diagrams in Doctorow's introduction from player pianos; he uses the example of player pianos frequently in his talks about copyright, as the music industry raised a huge hue and cry about them in the late 1800s, claiming that they were going to destroy the industry.

Makers

Cory
Doctorow

Praise for Cory Doctorow

"I know many science fiction writers engaged in the cyberworld, but Cory Doctorow is a native.... We should all hope and trust that our culture has the guts and moxie to follow this guy. He's got a lot to tell us."

— Bruce Sterling

"A rousing tale of techno-geek rebellion—as necessary and dangerous as file sharing, free speech, and bottled water on a plane."

— Scott Westfield on *Little Brother*

"A terrific read ... it claims a place in the tradition of polemical science fiction novels like *Nineteen Eighty-Four* and *Eahrenheit 451* (with a dash of *Mr. Smith Goes to Washington*)."

— *The New York Times Book Review* on *Little Brother*

"Enthralling ... one of the year's most important books."

— *Chicago Tribune* on *Little Brother*

"Utterly contemporary and deeply peculiar—a hard combination to beat (or, these days, to find)."

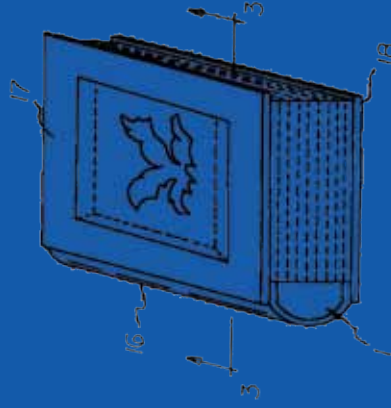
— William Gibson, author of *Neuromancer*,
on *Eastern Standard Time*

"Cory Doctorow doesn't just write about the future—I think he lives there."

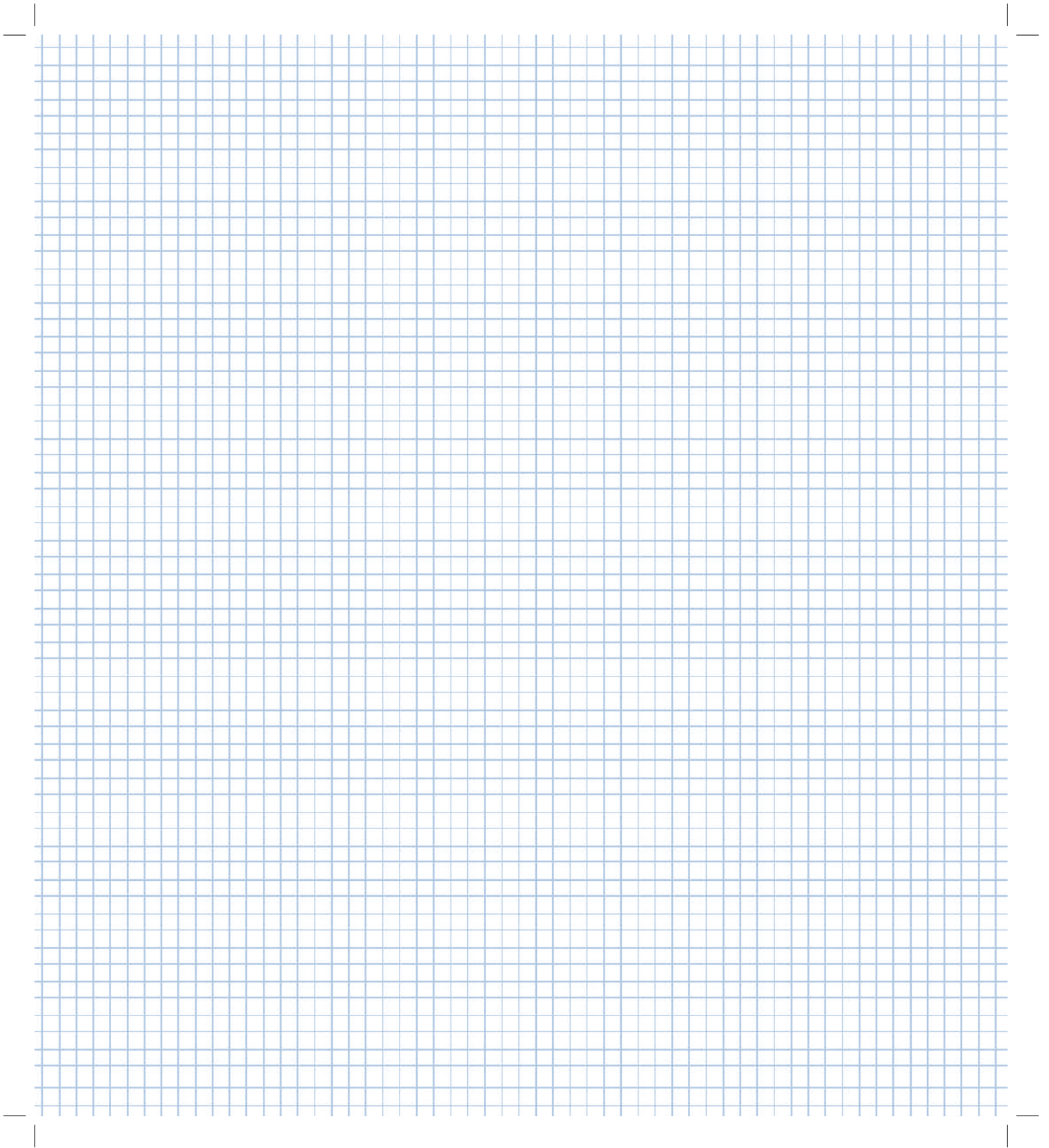
— Kelly Link, author of *Stranger Things Happen*

Makers

Cory
Doctorow

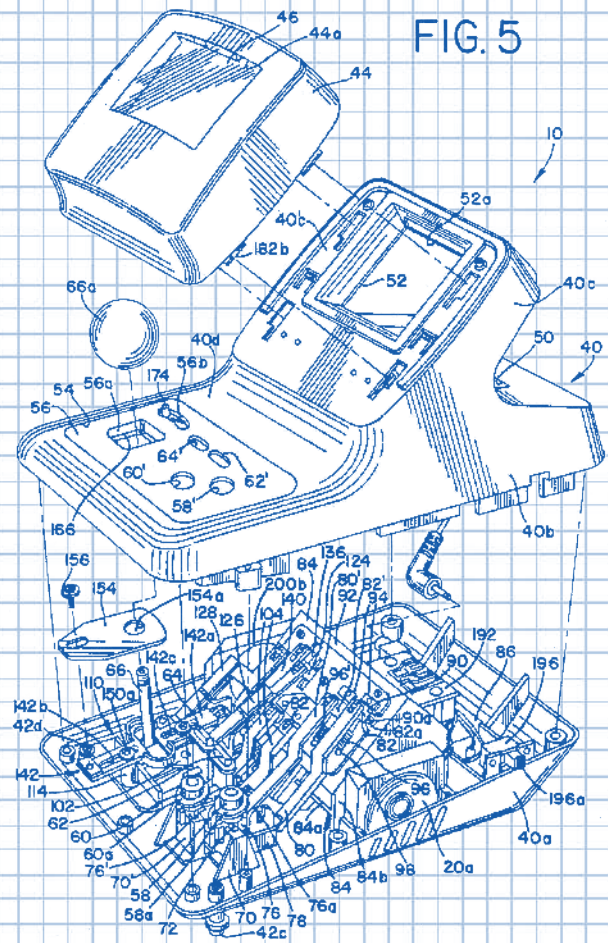


Makers



Makers

Cory Doctorow



MAKERS

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**For “the risk-takers, the doers, the
makers of things.”**

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About this book

THERE'S A dangerous group of anti-copyright activists out there who pose a clear and present danger to the future of authors and publishing. They have no respect for property or laws. What's more, they're powerful and organized, and have the ears of lawmakers and the press.

I'm speaking, of course, of the legal departments at ebook publishers.

These people don't believe in copyright law. Copyright law says that when you buy a book, you own it. You can give it away, you can lend it, you can pass it on to your descendants or donate it to the local homeless shelter. Owning books has been around for longer than publishing books has. Copyright law has *always* recognized your right to own your books. When copyright laws are made—by elected officials, acting for the public good—they always safeguard this right.

But ebook publishers don't respect copyright law, and they don't believe in your right to own property. Instead, they say that when you “buy” an ebook, you're really only *licensing* that book, and that copyright law is superseded by the thousands of farcical, abusive words in the license agreement you click through on the way to sealing the deal. (Of course, the button on their website says, “Buy this book” and they talk about “Ebook sales” at conferences— no one says, “License this book for your Kindle” or “Total licenses of ebooks are up from 0.00001% of all publishing to 0.0001% of all publishing, a 100-fold increase!”)

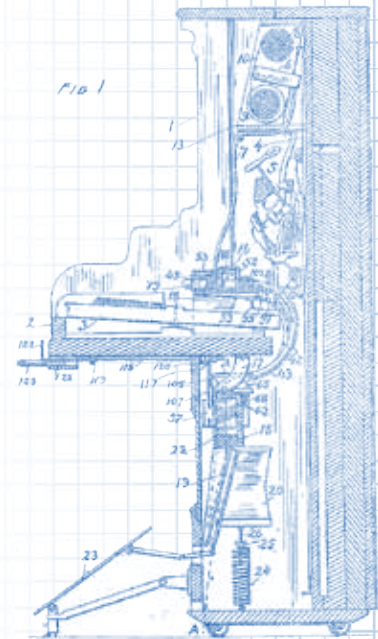
I say to hell with them. You bought it, you own it. I believe in copyright law's guarantee of ownership in your books.

So you own this ebook. The license agreement (see below), is from Creative Commons and it gives you even *more* rights than you get to a regular book. Every word of it is a gift, not a confiscation. Enjoy.

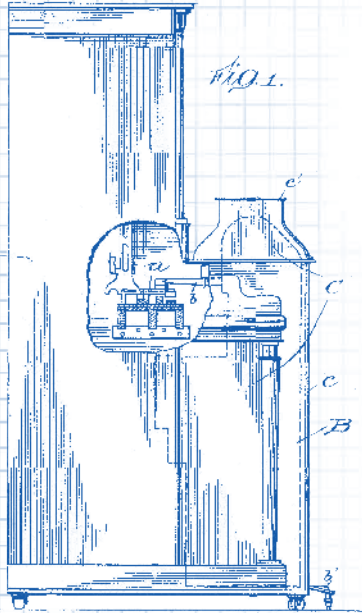
What do I want from you in return? Read the book. Tell your friends. Review it on Amazon or at your local bookseller. Bring it to your bookclub. Assign it to your students (older students, please— that sex scene is a scorcher) (*now* I've got your attention, don't I?). As Woody Guthrie wrote:

“This song is Copyrighted in U.S., under Seal of Copyright #154085, for a period of 28 years, and anybody caught singin' it without our permission, will be mighty good friends of ourn, cause we don't give a dern. Publish it. Write it. Sing it. Swing to it. Yodel it. We wrote it, that's all we wanted to do.”

Oh yeah. Also: if you like it, buy it



Cory Doctorow



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or donate a copy to a worthy, cash-strapped institution.
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Why am I doing this? Because my problem isn't piracy, it's obscurity (thanks, @timoreilly for this awesome aphorism). Because free ebooks sell print books. Because I copied my ass off when I was 17 and grew up to spend practically every discretionary cent I have on books when I became an adult. Because I can't stop you from sharing it (zeros and ones aren't ever going to get harder to copy); and because readers have shared the books they loved forever; so I might as well enlist you to the cause.

I have always dreamt of writing sf novels, since I was six years old. Now I do it. It is a goddamned dream come true, like growing up to be a cowboy or an astronaut, except that you don't get oppressed by ranchers or stuck on the launchpad in an adult diaper for 28 hours at a stretch. The idea that I'd get dyspeptic over people—readers celebrating what I write is goddamned *bizarre*.

So, download this book.

Some rules of the road:

It's kind of a tradition around here that my readers convert my ebooks to their favorite formats and send them to me here, and it's one that I love! If you've converted these files to another format, send them to me (doctorow@craphound.com, subject Makers Conversion) and I'll host them, but before you do, make sure you read the following:

* Only one conversion per format, first come, first serve. That means that if someone's already converted the file to a Femellhebber 3000 document, that's the one you're going to find here. I just don't know enough about esoteric readers to adjudicate disputes about what the ideal format is for your favorite device.

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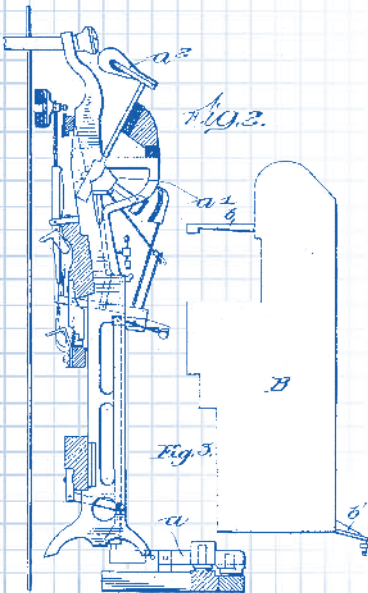
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A word to professors, librarians, and people who want to donate money to me

Every time I put a book online for free, I get emails from readers who want to send me donations for the book. I appreciate their generous spirit, but I'm not in-



Makers

interested in cash donations, because my publishers are really important to me. They contribute immeasurably to the book, improving it, introducing it to audience I could never reach, helping me do more with my work. I have no desire to cut them out of the loop.

But there has to be some good way to turn that generosity to good use, and I think I've found it.

Here's the deal: there are lots of professors and librarians who'd love to get hard-copies of this book into their students' and patrons' hands, but don't have the budget for it.

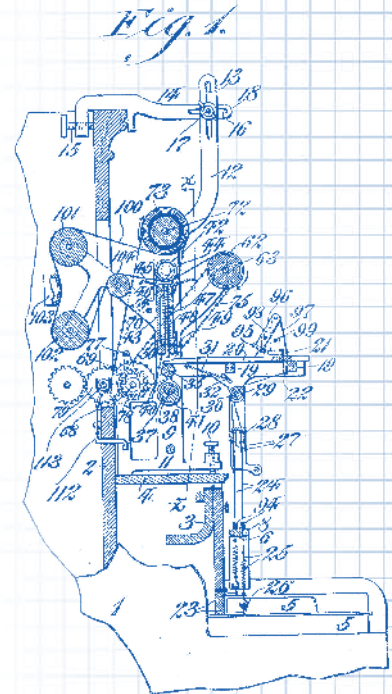
There are generous people who want to send some cash my way to thank me for the free ebooks.

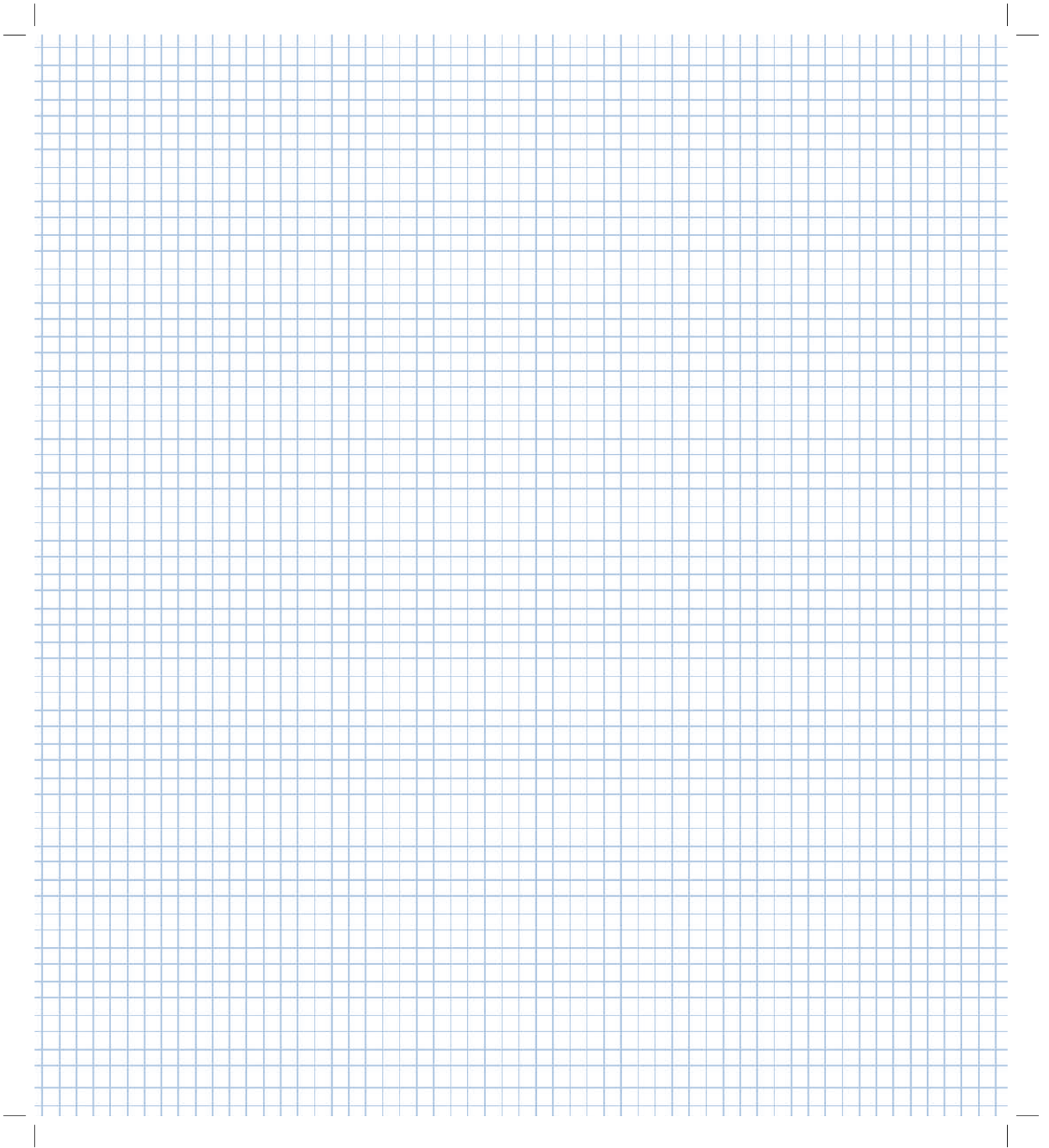
I'm proposing that we put them together.

If you're a prof or librarian and you want a free copy of *Makers*, email freemakers@gmail.com with your name and the name and address of your school. It'll be posted below by my fantastic helper, Olga Nunes, so that potential donors can see it.

If you enjoyed the electronic edition of *Makers* and you want to donate something to say thanks, check below to find a teacher or librarian you want to support. Then go to Amazon, BN.com, or your favorite electronic bookseller and order a copy to the classroom, then email a copy of the receipt (feel free to delete your address and other personal info first!) to freemakers@gmail.com so that Olga can mark that copy as sent. If you don't want to be publicly acknowledged for your generosity, let us know and we'll keep you anonymous, otherwise we'll thank you on the donate page.

Check <http://craphound.com/makers/donate> for profs, librarians and similar people seeking donations.





PART 1

SUZANNE CHURCH almost never had to bother with the blue blazer these days. Back at the height of the dot-boom, she'd put on her business journalist drag—blazer, blue sailcloth shirt, khaki trousers, loafers— just about every day, putting in her obligatory appearances at splashy press-conferences for high-flying IPOs and mergers. These days, it was mostly work at home or one day a week at the San Jose Mercury News's office, in comfortable light sweaters with loose necks and loose cotton pants that she could wear straight to yoga after shutting her computer's lid.

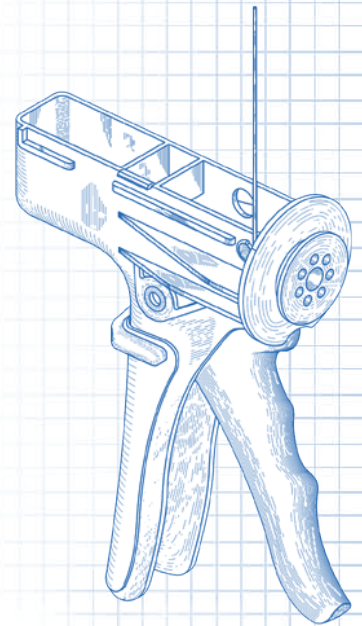
Blue blazer today, and she wasn't the only one. There was Reedy from the NYT's Silicon Valley office, and Tribbey from the WSJ, and that despicable rat-toothed jumped-up gossip columnist from one of the UK tech-rags, and many others besides. Old home week, blue blazers fresh from the dry-cleaning bags that had guarded them since the last time the NASDAQ broke 5,000.

The man of the hour was Landon Kettlewell— the kind of outlandish prep-school name that always seemed a little made up to her— the new CEO and front for the majority owners of Kodak/Duracell. The despicable Brit had already started calling them Kodacell. Buying the company was pure Kettlewell: shrewd, weird, and ethical in a twisted way.

"Why the hell have you done this, Landon?" Kettlewell asked himself into his tie-mic. Ties and suits for the new Kodacell execs in the room, like surfers playing dress-up. "Why buy two dinosaurs and stick 'em together? Will they mate and give birth to a new generation of less-endangered dinosaurs?"

He shook his head and walked to a different part of the stage, thumbing a PowerPoint remote that advanced his slide on the jumbotron to a picture of a couple of unhappy cartoon brontos staring desolately at an empty nest. "Probably not. But there is a good case for what we've just done, and with your indulgence, I'm going to lay it out for you now."

"Let's hope he sticks to the cartoons," Rat-Toothed hissed beside her. His breath smelled like he'd been gargling turds. He had a not-so-secret crush on her and liked



Cory Doctorow

to demonstrate his alpha-maleness by making half-witticisms into her ear. "They're about his speed."

She twisted in her seat and pointedly hunched over her computer's screen, to which she'd taped a thin sheet of polarized plastic that made it opaque to anyone shoulder-surfing her. Being a halfway attractive woman in Silicon Valley was more of a pain in the ass than she'd expected, back when she'd been covering rustbelt shenanigans in Detroit, back when there was an auto industry in Detroit.

The worst part was that the Brit's reportage was just spleen-filled editorializing on the lack of ethics in the valley's board-rooms (a favorite subject of hers, which no doubt accounted for his fellow-feeling), and it was also the crux of Kettlewell's schtick. The spectacle of an exec who talked ethics enraged Rat-Toothed more than the vilest baby-killers. He was the kind of revolutionary who liked his firing squads arranged in a circle.

"I'm not that dumb, folks," Kettlewell said, provoking a stagey laugh from Mr Rat-Tooth. "Here's the thing: the market had valued these companies at less than their cash on hand. They have twenty billion in the bank and a 16 billion dollar market-cap. We just made four billion dollars, just by buying up the stock and taking control of the company. We could shut the doors, stick the money in our pockets, and retire."

Suzanne took notes. She knew all this, but Kettlewell gave good sound-bite, and talked slow in deference to the kind of reporter who preferred a notebook to a recorder. "But we're not gonna do that." He hunkered down on his haunches at the edge of the stage, letting his tie dangle, staring spacily at the journalists and analysts. "Kodacell is bigger than that." He'd read his email that morning then, and seen Rat-Toothed's new moniker. "Kodacell has goodwill. It has infrastructure. Administrators. Physical plant. Supplier relationships. Distribution and logistics. These companies have a lot of useful plumbing and a lot of priceless reputation.

"What we don't have is a product. There aren't enough buyers for batteries or film— or any of the other stuff we make— to occupy or support all that infrastructure. These companies slept through the dot-boom and the dot-bust, trundling along as though none of it mattered. There are parts of these businesses that haven't changed since the fifties.

"We're not the only ones. Technology has challenged and killed businesses from every sector. Hell, IBM *doesn't make computers anymore!* The very idea of a travel agent is inconceivably weird today! And the record labels, oy, the poor, crazy, suicidal, stupid record labels. Don't get me started.

"Capitalism is eating itself. The market works, and when it works, it commodifies or obsolesces everything. That's not to say that there's no money out there to be had, but the money won't come from a single, monolithic product line. The days of companies with names like 'General Electric' and 'General Mills' and 'General

Fig: 1

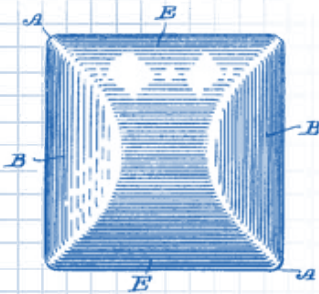


Fig: 2

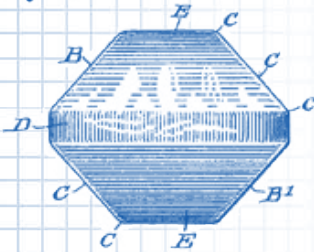
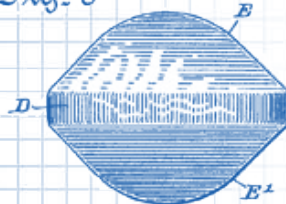


Fig: 3



Makers

Motors' are over. The money on the table is like krill: a billion little entrepreneurial opportunities that can be discovered and exploited by smart, creative people.

"We will brute-force the problem-space of capitalism in the twenty first century. Our business plan is simple: we will hire the smartest people we can find and put them in small teams. They will go into the field with funding and communications infrastructure— all that stuff we have left over from the era of batteries and film— behind them, capitalized to find a place to live and work, and a job to do. A business to start. Our company isn't a project that we pull together on, it's a *network* of like-minded, cooperating autonomous teams, all of which are empowered to do whatever they want, provided that it returns something to our coffers. We will explore and exhaust the realm of commercial opportunities, and seek constantly to refine our tactics to mine those opportunities, and fill our hungry belly. This company isn't a company anymore: this company is a network, an approach, a sensibility."

Suzanne's fingers clattered over her keyboard. The Brit chuckled nastily. "Nice talk, considering he just made a hundred thousand people redundant," he said. Suzanne tried to shut him out: yes, Kettlewell was firing a company's worth of people, but he was also saving the company itself. The prospectus had a decent severance for all those departing workers, and the ones who'd taken advantage of the company stock-buying plan would find their pensions augmented by whatever this new scheme could rake in. If it worked.

"Mr Kettlewell?" Rat-Toothed had clambered to his hind legs.

"Yes, Freddy?" Freddy was Rat-Toothed's given name, though Suzanne was hard pressed to ever retain it for more than a few minutes at a time. Kettlewell knew every business-journalist in the Valley by name, though. It was a CEO thing.

"Where will you recruit this new workforce from? And what kind of entrepreneurial things will they be doing to 'exhaust the realm of commercial activities'?"

"Freddy, we don't have to recruit anyone. They're beating a path to our door. *This* is a nation of manic entrepreneurs, the kind of people who've been inventing businesses from video arcades to photomats for centuries." Freddy scowled skeptically, his jumble of grey tombstone teeth protruding. "Come on, Freddy, you ever hear of the Grameen Bank?"

Freddy nodded slowly. "In India, right?"

"Bangladesh. Bankers travel from village to village on foot and by bus, finding small co-ops who need tiny amounts of credit to buy a cellphone or a goat or a loom in order to grow. The bankers make the loans and advise the entrepreneurs, and the payback rate is fifty times higher than the rate at a regular lending institution. They don't even have a written lending agreement: entrepreneurs— real, hard-working entrepreneurs— you can trust on a handshake."



FIG. 1

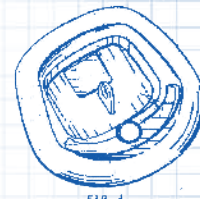


FIG. 2

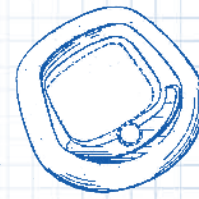


FIG. 3



FIG. 4

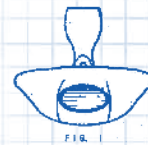


FIG. 5

Cory Doctorow

"You're going to help Americans who lost their jobs in your factories buy goats and cellphones?"

"We're going to give them loans and coordination to start businesses that use information, materials science, commodified software and hardware designs, and creativity to wring a profit from the air around us. Here, catch!" He dug into his suit-jacket and flung a small object toward Freddy, who fumbled it. It fell onto Suzanne's keyboard.

She picked it up. It looked like a keychain laser-pointer, or maybe a novelty light-saber.

"Switch it on, Suzanne, please, and shine it, oh, on that wall there." Kettlewell pointed at the upholstered retractable wall that divided the hotel ballroom into two functional spaces.

Suzanne twisted the end and pointed it. A crisp rectangle of green laser-light lit up the wall.

"Now, watch this," Kettlewell said.

NOW WATCH THIS

The words materialized in the middle of the rectangle on the distant wall.

"Testing one two three," Kettlewell said.

TESTING ONE TWO THREE

"Donde esta el bano?"

WHERE IS THE BATHROOM

"What is it?" said Suzanne. Her hand wobbled a little and the distant letters danced.

WHAT IS IT

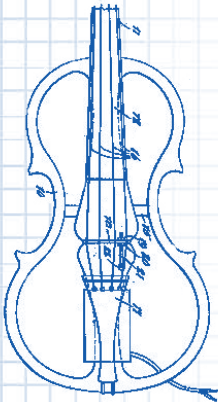
"This is a new artifact designed and executed by five previously out-of-work engineers in Athens, Georgia. They've mated a tiny Linux box with some speaker-independent continuous speech recognition software, a free software translation engine that can translate between any of twelve languages, and an extremely high-resolution LCD that blocks out words in the path of the laser-pointer.

"Turn this on, point it at a wall, and start talking. Everything said shows up on the wall, in the language of your choosing, regardless of what language the speaker was speaking."

All the while, Kettlewell's words were scrolling by in black block caps on that distant wall: crisp, laser-edged letters.

"This thing wasn't invented. All the parts necessary to make this go were just lying around. It was *assembled*. A gal in a garage, her brother the marketing guy, her husband overseeing manufacturing in Belgrade. They needed a couple grand to get it all going, and they'll need some life-support while they find their natural market.

"They got twenty grand from Kodacell this week. Half of it a loan, half of it equity.



Makers

And we put them on the payroll, with benefits. They're part freelancer, part employee, in a team with backing and advice from across the whole business.

"It was easy to do once. We're going to do it ten thousand times this year. We're sending out talent scouts, like the artists and representation people the record labels used to use, and they're going to sign up a lot of these bands for us, and help them to cut records, to start businesses that push out to the edges of business.

"So, Freddy, to answer your question, no, we're not giving them loans to buy cellphones and goats."

Kettlewell beamed. Suzanne twisted the laser-pointer off and made ready to toss it back to the stage, but Kettlewell waved her off.

"Keep it," he said. It was suddenly odd to hear him speak without the text crawl on that distant wall. She put the laser pointer in her pocket and reflected that it had the authentic feel of cool, disposable technology: the kind of thing on its way from a startup's distant supplier to the schwag bags at high-end technology conferences to blister-packs of six hanging in the impulse aisle at Fry's.

She tried to imagine the technology conferences she'd been to with the addition of the subtitled and translation and couldn't do it. Not conferences. Something else. A kids' toy? A tool for Starbucks-smashing anti-globalists, planning strategy before a WTO riot? She patted her pocket.

Freddy hissed and bubbled like a teakettle beside her, fuming. "What a cock," he muttered. "Thinks he's going to hire ten thousand teams to replace his workforce, doesn't say a word about what *that* lot is meant to be doing now he's shitcanned them all. Utter bullshit. Irrational exuberance gone berserk."

Suzanne had a perverse impulse to turn the wand back on and splash Freddy's bilious words across the ceiling, and the thought made her giggle. She suppressed it and kept on piling up notes, thinking about the structure of the story she'd file that day.

Kettlewell pulled out some charts and another surfer in a suit came forward to talk money, walking them through the financials. She'd read them already and decided that they were a pretty credible bit of fiction, so she let her mind wander.

She was a hundred miles away when the ballroom doors burst open and the unionized laborers of the former Kodak and the former Duracell poured in on them, tossing literature into the air so that it snowed angry leaflets. They had a big drum and a bugle, and they shook tambourines. The hotel rent-a-cops occasionally darted forward and grabbed a protestor by the arm, but her colleagues would immediately swarm them and pry her loose and drag her back into the body of the demonstration. Freddy grinned and shouted something at Kettlewell, but it was lost in the din. The journalists took a lot of pictures.

