
THE MANUAL

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Paul Soulellis
Tiffani Jones Brown
Nina Stössinger
Duane King
Jeremy Keith
Ethan Marcotte

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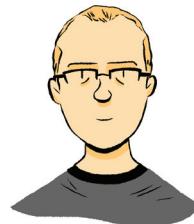
Tiffani Jones Brown is a content strategist at Facebook. She's also an editor and a creative-writing dabbler, and used to run the design agency Things That Are Brown with her husband. She has spent most of her career thinking about how content and design work together.

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Jeremy Keith is an Irishman living in Brighton, England, where he makes websites at the design agency Clearleft. He has written a few books and regularly updates his website, Adactio.

**Duane King**

Together with Ian Coyle, Duane King runs a creative studio and consultancy in Portland, Oregon, that focuses on design, culture, and craft. Duane is the founder of *Thinking for a Living*, a curation of original, thought-provoking design content, and he's on the board of Designspeaks. *Fast Company* named him one of the fifty Most Influential Designers in America.

**Ethan Marcotte**

Ethan Marcotte is an independent designer/developer who is passionate about beautiful design, elegant code, and the intersection of the two. He coined the term *responsive web design* to describe a new way of designing for the ever-changing web, wrote a book on the topic, and would like to be an unstoppable robot ninja when he grows up. Beep.

**Paul Soulellis**

Paul Soulellis is an artist and creative director, maintaining his studio in Long Island City, New York. He founded the strategic design firm Soulellis Studio in 2001 and has produced award-winning work for clients such as TED, Cornell University, Esri, and the Rockefeller Foundation. He is a graduate of Cornell University's College of Architecture, Art, and Planning.

**Nina Stössinger**

Nina Stössinger is a (typo)graphic designer from Basel, Switzerland. She started building websites sixteen years ago but switched tracks for the most part once she discovered her love for typography at art school. Nina now spends her days designing primarily printed matter, logos, and books—and some of her nights designing typefaces.

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Rob Bailey is an artist and illustrator based in Manchester, England. His work combines the order of geometry and the elegance of the natural world in an attempt to make something more beautiful than both. It's a losing battle but one he enjoys fighting.

Owen Davey

Owen Davey has been working as a freelance illustrator since graduating with a First Class degree from UCF (England) in 2009. His clients now include Orange, BBC, Microsoft, Persil, the *Guardian*, the *New York Times*, Jamie Oliver, and End of the Road Festival. He has published two picture books with Templar Publishing.

Eleni Kalorkoti

Eleni Kalorkoti is a freelance illustrator from Edinburgh, Scotland. She is now based in Paris where she enjoys making bold and slightly mischievous illustrations. Her clients include Random House, *Anorak* magazine, Analogue Books, and Advice to Sink in Slowly.

Michael Kirkham

Michael Kirkham graduated from the Edinburgh College of Art in 2006. His work has appeared in major publications throughout the world and is characterized by its clear lines, composite viewpoints, and subtle human interactions. He is represented in London and New York by the Heart Agency.

Micah Lidberg

Micah Lidberg is an illustrator living in Kansas City, Missouri. His deep appreciation and curiosity for the

wonders of nature imparts a similar sense of mystery and delight in his images. He often works between the boundaries of design and illustration, seamlessly integrating typography with fantastic hand-drawn worlds.

Luke Pearson

Luke Pearson is an illustrator and comics artist. He is probably best known for writing and drawing *Everything We Miss* and the *Hilda* comics, both published by Nobrow Press.

Jing Wei

Jing Wei is an illustrator and printmaker. Since graduating from RISD, she has been making artwork for a variety of clients, including NPR, McSweeney's, the *New York Times*, *Fast Company*, HHMI, and the *Boston Globe*. Jing is currently based in Brooklyn and works out of a studio in Greenpoint.

Design Humility

PAUL SOULELLIS



I went on a mushroom walk recently.

It was part of a tour of the old Black Mountain College campus, near Asheville, North Carolina. This is where some of the American avant-garde converged for a few hot moments in the early 1950s, and I wanted to taste some of that. The mushrooms themselves didn't draw me there. I wasn't one of those children who grew up near wild raspberry bushes, marking the seasons by what was pickled and preserved. I grew up playing on the lawns of suburban Long Island, unable to identify a weed from a salad, or a Judd from a Lewitt, for that matter. Instead, I was genuinely curious about what kind of insight into Cage, Rauschenberg, Cunningham, and Albers might come from walking in these same woods and looking for their ghosts among the mushrooms.



This wasn't an unfounded curiosity; the artist John Cage was an amateur mycologist. In 1958 he won an Italian television quiz show by answering questions about mushrooms, and he taught mushroom identification at the New School in the 1960s. I hoped I'd discover a good reason why the man who had famously given us chance operations and 4'33" was fascinated by spore-bearing things that grow deep in the forest.

Our guide didn't mention him at all. She was a chatty Brit with a beautiful basket and a wide-brimmed hat, the perfect combination of whimsy and nerd and charm. We were in good hands.

Not that much happened. We walked around Lake Eden, and into the woods a bit, and by the side of the road. We wandered together, and at times one or two of us would fall back, or stray closer to the water or to a particular tree. Frankly I don't remember anything she said. We weren't really *doing* anything. Except observing. I found myself walking slow but looking hard—at tree trunks, along the bottoms of bushes, within patches of grass, at the edges of things. There was intention, and a focused observation, but still—we were wandering. A *focused* wander.

There was a joy in this looking around, and I was rewarded a few times with my own discoveries. Things I might normally have missed. A purple mushroom first, and then a white one that had already decayed, leaving behind what we were told was a "mushroom print"—a faint, white shape flat against the dark dirt, like a negative shadow. And just as we started out around the lake, not thirty seconds on the path, someone pointed to what looked like ten pounds of oyster mushrooms clinging to a rotten stump at the water's edge. "Dinner!" our guide merrily proclaimed.

CHANCE

Cage would flip three coins six times to draw *I-Ching* hexagrams, yielding random numbers between one and sixty-four. He used the numbers to make decisions in his music, his visual work, and even in his writing. Later in life he was given a rudimentary computer program that generated the numbers for him. He explained chance operations this way: “I gave up making choices. I’ve merely changed my responsibility from making choices to asking questions. It’s not easy to ask questions.”¹ He would devise methodologies that used chance operations for determining how long a musical piece should be, or how long to hold a note, or where to locate an element on a page—all of the creative decision-making in his work.

By embracing chance rather than choice, Cage tried to remove his own judgment—the artist’s ego—from the artistic process. One result was an opening up to all of the ways in which art imitates nature. “The first question I ask myself when something doesn’t seem to be beautiful is why do I think it’s not beautiful. And very shortly you discover that there is no reason.”² Chance frees us from the constraints of our own likes and dislikes. Chance reveals nature. For Cage, taste (and along with it, history and tradition) was irrelevant.

I’m interested in this idea: that beyond our own personal tastes, all sounds (or colors, or shapes) have equal value. Using chance-determined results to break free from pre-determined choices in order to realize something new. This requires a kind of humility, a giving over to nature. The yin to this yang, of course, is absolute certainty, always lurking just ahead of indeterminacy. A commitment to the answers. An understanding that three coins tossed six

times doesn’t simply yield *any* number. It yields a *specific* number, and this specificity can be heavy.

And so it is in mushroom hunting. The undirected, yet deliberate *wander* through the woods, fully engaged but not knowing what will come into play. Open to surprise. Unsure even if anything will be found. And understanding that when a mushroom is discovered, all uncertainty must be left behind. Identifying the fungus before ingestion puts us face to face with the greatest of certainties, a matter of life and death. Perhaps this play between the freely focused *wander* and the gravity of the tangible discovery—of what nature gives us—is what appealed to Cage.

I did an experiment recently. I used Cage’s very analog coin-toss method for yielding numbers to create a process for selecting colors—pairs of 6-bit web colors. I did this once a day for a few days, and to ritualize it I formally posted the chance-determined results on my website. The very first time that the color pair was revealed to me was thrilling. I can honestly say that this was unlike anything else I’ve ever experienced in my creative career. Every formalized decision-making process that I had been taught vanished at the moment that I looked at those colors on my screen. All rationalization and careful justification that I had taught my clients—everything that allows me to be considered an “expert” in design—became irrelevant as I accepted these colors into my life.

A few days later I expanded the experiment to 24-bit colors. I was now asking for pairs of chance-determined colors from 16.7 million possibilities. The first time that this process yielded two colors that I would never have selected myself—what I would normally reject as an *ugly* pair—I felt resistance. Using randomness as a tool to open

oneself up to what lies beyond *good taste* goes against the very basis of design expertise. Cage said that “the highest discipline is the discipline of chance operations, because chance operations have absolutely nothing to do with one’s likes or dislikes. The *person* is being disciplined, not the work.”³

I just sat and stared at the screen, absolutely astonished that I could feel so light and free, and at the same time so serious, about a pair of colors. Like a gift.

But I also felt anxiety.

Anxiety because I was posting the results, no matter how ugly, to my website. For me, this was a key part of the process. It’s one thing to conduct an experiment in the privacy of one’s own studio; it’s another to publish the results to an audience, in real time. To a waiting design community poised to judge. For a recovering perfectionist like me, “amplified vulnerability” is frightening. I wanted to move, once and for all, beyond any sort of fear of judgment—not by becoming arrogant but by embracing humility.

EXPOSURE

I built my website exactly ten years ago to show finished work. It was a static design portfolio site and it served me well for several years. I updated it with new projects from time to time and kept the client list current. Eventually, I shifted over to a blog format and started adding other kinds of content. Design-related ephemera, inspiration, and the occasional process shot from the studio were mixed in with finished work, and Sourellis.com started to open up. I was getting more attention and a more diverse audience.

And then, a bigger change happened. I had closed my office and was about to take off for Europe to do non-client work for an extended period. Just before leaving, I relaunched the site and called it a “design journal.” *Sourellis Studio* simply became *Sourellis*, without a physical place, and I started to use the website as a virtual studio. An organic space to post work as it developed, not just when it was finished. In fact, I was less interested in the completed projects and much more curious about how the work (and I) would evolve emotionally along the way as it was publicly exposed on the site. Posting my work to the blog felt a bit like a slow walk in the woods—wandering but deliberate, private but exposed.

Sourellis became more than an archive. It was a journal and an active work area and a place for critique—I would come back to it repeatedly after posting, to re-look, re-evaluate and refine.

Using the designer’s website as a public window into the creative process, instead of as a closed portfolio box, introduces a new kind of risk. The uncertainty becomes part of the work, and the designer exposes ugly dead ends and nonlinear thinking in full (or mostly full) view of the audience. This requires exposure and vulnerability, but the potential reward can be a rich, amplified growth that only comes from feedback loops that aren’t possible in more private realms. Twitter, Flickr, Tumblr, Dribbble, and other social venues are performative spaces for exposing in-progress work, but they favor the polished and trendy. Maybe we need to demand more from our audiences—a slower read, a wider view. This suggests longer-form platforms, like the personal blog, where exposure of works in progress can appear with all their emotion, authenticity, and even messiness, intact.

Uncertainty runs counter to how we're trained to articulate our design values. We're taught to express clearly and certainly, and to manifest our beliefs within a system—a framework of standards and ideals (think minimalism). Consistency, wholeness, and ease of understanding are rewarded; ambiguity and periphery and doubt are not. Perhaps the ultimate expression of this assertiveness is the design manifesto (think F.T. Marinetti's "Futurist Manifesto," Walter Gropius's "Bauhaus Manifesto," or Dieter Rams's "Ten Principles for Good Design").

BRAVADO

We're drawn to manifestos but oftentimes there's a blurry line between spirited conviction and presumptuous command. A design legend proclaims that only a half-dozen or dozen typefaces are necessary to do good work; this kind of limited view is a shutting down of possibilities, an exaggeration of ego that only exposes the designer's limits. This faux-masterful display is a kind of design arrogance.

I hear a tone in the design community today that stops short of design arrogance but flirts with self-importance and conceit. It's a kind of firm-footed stance—a self-reliant projection of confidence and certainty that's become the de facto voice of Twitter and many design blogs. Rather than the focused drift of foraging in the woods, design bravado is more like a golf course strategy—the swing, the swagger, the show of conquering the landscape.

Designers with an open view to the future and a firm connection to the digital are fond of this declarative voice. Sweeping pronouncements about industry turbulence ("the end of print," "the death of the logo," etc.) or one's rank ("I have developed quite an antenna for people

talking design without showing design in the past few years"—the kind of tweet that simply leaves me speechless) are sticky with conviction and puff.

But with so much uncertainty in the design world, an expansive projection of confidence can take on charismatic appeal. Entire industries (publishing, branding, design, web), disciplines (art vs. design), and our own "likability" in the world (friends, fans, and followers) are under constant scrutiny and threat. It makes sense that design bravado might be so popular at a time when all of the traditional assumptions about how we work are being questioned.

Yet, design bravado can be a valuable tactic for rallying and creating momentum, and some designers have translated this machismo into a never-before-seen kind of thriving entrepreneurship. Notebooks, posters, and apps—even tattoos—shift the designer from service provider to sleek thing-maker (for an audience comprised mostly of our own peers). This has its merits; design bravado is sexy, good for the career, and good for business.

HUMILITY

What happens when one sets design bravado aside and looks the other way?

After the web color experiment, I designed a 294-page book using chance operations. I wanted to discover just how far I could remove my own ego from the process, so I generated lists of random numbers with Random.org. Like Cage, I devised simple methodologies to use the numbers to manipulate content and make decisions about book structure, page size, grid, layout, and typography. I relinquished many of my trusted techniques for decision

making in design and gave myself over to chance operations. This work was unlike any design project I'd created before, but it was firmly grounded in an art tradition (the book was created for a gallery environment).

I love this book, but it has left me with more questions than answers. I'm thankful for that.

And I question just how far over into design I could take this—if there's any place for chance operations in the client relationship or in real-world problem-solving.

Whether or not chance operations has agency applications, I suspect the design community at large has much to gain by more openly confronting ambiguity, self-doubt, and complexity in our relationships and in our *selves*. I'd like to counter the celebratory stance of the moment—design bravado—with a more humbled position. A slow ramble: sensing, collecting, and being fully present to changes in light, weather, and sound. Searching, discovering, and acknowledging one's own presence in the environment but without placing our selves at the center. A non-judging acceptance of all that nature delivers. The value in the focused wander is tremendous.

Perhaps it's the courage to confront self-doubt that empowers us.

Let's call it *design humility*—a vulnerable, observant posture. Fully engaged and open to risk. It's difficult to articulate it, but I know design humility when I see it. I see it when Milton Glaser talks about failure. "The only way to confront the realization that we're not as good as we think we are"—that the master is not the genius that everyone expects him to be—"is to embrace failure."⁴

I see it in Kate Bingaman Burt's inspiring talk for Portland Creative Mornings. "You should start projects because you feel like you're going to explode, or vomit, or both."⁵

I see it in Bruce Mau's "Incomplete Manifesto for Growth": "Allow events to change you...forget about good...capture accidents...drift..."⁶

I see it when designers and performers speak passionately at an Occupy Wall Street rally about artists using their work to enable change in the world.

I see it in the tweets of John Maeda, who says that humility is "a leader's greatest strength."⁷

I want to see more design humility in our conversations. I suspect our work will take on thicker value if we start to openly acknowledge the full range of emotions we invest in our careers—from insecurity to courage. The rewards might be richer, and the conversations more interesting, if we freely expose ourselves in real time to our peers as emotional beings who are sometimes afraid, sometimes gutsy, but always human. ▶

¹ Richard Kostelanetz, *Conversing with Cage*, (Routledge, New York, 2003).

² Ibid.

³ Ibid.

⁴ Milton Glaser, "On the Fear of Failure," (Berghs Exhibition, 2011).

⁵ Kate Bingaman Burt, (Creative Mornings Portland, October, 2011).

⁶ Bruce Mau, "Incomplete Manifesto for Growth," (Blog, Bruce Mau Design, 1998-2011).

⁷ John Maeda, @maeda, on Twitter.

Lesson

PAUL SOUELLIS

After the relationship ended, I let go of twelve clients, closed my office, and left the country.

What had happened was this: I was in a relationship that failed. After being with someone for six years, and struggling, and growing, and wanting it to work, and working so hard, and realizing that it had failed, I came to understand that sometimes, no matter how much it hurts, you have to leave the one you love.

What I didn't realize at the time was that I would also leave everyone else. For six months following the breakup, I slowly dismantled several of my most intimate professional relationships—therapist, employees, clients.

I was tired. I didn't want to accommodate anyone anymore. But I wasn't thinking about it like that—what happened next was more like a series of scripted operations. Like the autopilot kicking in again after turbulence. Suddenly it's smooth, and you forget that you've been jostled around. Later, you find bruises.

Soon after my partner moved out of the apartment, I ran into Louise Fili on the street. I told her how much I missed Italy. We had been there together earlier in the year for an intense program in typography with the School of Visual Arts.

"Why don't you apply to the American Academy in Rome," she suggested.

Two months later, I found myself accepted there as a visiting artist. I scheduled meetings with clients to let them know that I was closing Sourellis Studio and leaving the country for six months. Maybe more.

What I told everyone was this: after working as a creative director and running a small, successful design studio for exactly ten years, I wanted to see what would happen without clients.

What kind of work would I do?

I asked myself if I had a personal design philosophy. Could I create work that was more satisfying if I was producing it for myself? Did I need an audience? I sensed that without clients, I might be free to explore these areas between art and design.

I allowed myself to ask these questions before leaving, but I really had no idea where the journey was taking me. I had a sketch, at best—I would produce new work in Rome and then study Greek in Athens, my father's homeland, for a few months. I knew I would be stretched in new directions but had no idea how I would react. This terrified me.

My only plan was to be present in the world by looking and listening and being open. And to myself. After years of trying to make a relationship work, I needed to return to myself. To do that I had to get comfortable with uncertainty. I needed to get back to curiosity.

I was leaving the office to get to work.

I called it a six-month sabbatical. I guess it was important to name it. To give it some definition and shape in the face

of self-doubt. I feared loneliness. I feared mistakes. I was afraid that if I wasn't *careful* I would destroy everything I had worked so hard to build in my career.

It turns out that *careful* was only half of it. The other half was a letting go and an opening up to serendipity; the breakup was a *break* from the familiar. It allowed me the luxury of not knowing what would happen.

Eighteen months after the breakup, I find myself in a very different place, my work transformed. I have an artist's studio now but continue to consult with design clients. I recently showed work in a gallery for the first time in my life. Even my creative process has changed. Uncertainty and fear, the duo that accompanied me throughout the breakup and the sabbatical, seem to be here to stay in a now-cherished concept that I struggle to shape and incorporate in my creative process: *design humility*. It's a lens that seems to have emerged from all of this, one that might bring a new clarity or discovery.

My *sabbatikos* (Greek for *rest* or *week*, derived from the Aramaic *sabbata*) was neither a fixed period nor a rest. Six months turned into twelve, and one year now turns to two. It began as a painful rupture, but this *breaking* profoundly reverberated through every aspect of my life.

"Give me a break," we say to express exasperation or disbelief—a cry for space, a protest. The break, in fact, was a bend in my life. A space to breathe, *unbroken*. An opening for growth. ▶

Practicing Passion

TIFFANI JONES BROWN



I'm at South by Southwest Interactive listening to a keynote on doing what you love. The speaker is pacing furiously across the stage, talking a mile a minute, insisting that unbridled passion for our work is the only way we'll ever amount to anything.

"I want you to ask yourself whether you love what you're doing," he commands. "Is the answer no? Is it?! If the answer is no, I want you to stop it. Stop it right now." A rainbow of spittle sprays into the theater lights. "If you're not doing it for the love, you're not doing it! Follow your passion and then—only then—will you kill it."

He keeps talking about dedicating your life to your one true passion. I shift in my seat as I wonder: am I passionate enough to really *kill it*? A montage from earlier in the week forms: I'm sitting at my computer, staring at a

responsible-looking woman and her Labradoodle in the hero image of BizFilings.com. I'm with two silent, stony-faced marketing executives in a boardroom, explaining a copywriting choice. I'm brushing my teeth at 2 p.m. I'm standing in line at Chase.

Sure, I'd been excited to start my own business. And sure, I'd loved the idea of writing for a living. Yet banal and frustrating tasks—the kind you approach with a groan, not a fist-pump—make up much of my job. So do I feel over-the-moon about my work? I truly like it. I feel good when I get better at it. *Passion* overstates the point.

Applause, and my thoughts snap back to the auditorium. The speaker basks in his standing ovation. I'm weary as we glue iPhones in front of our faces and file out the door.

SPARKS AND CURRENTS

When it comes to building passion in work, we often take a just-add-water approach. “Do what you love,” say the self-help gurus we parrot, “and the rest will take care of itself.” Not riding an adrenaline rush? You must be in the wrong profession.

This is like saying that if you aren't feeling *sparks* for your partner every day, you should ditch him. Of course, people who've sustained happy relationships understand this attitude reflects a shallow take on what love is. Real, lasting passion is about sticking it out through difficult, not-so-sparky times. It's about *doing things* to ground the sparks in a strong current.

We should treat our jobs like this, too. Instead of asking “what will make me feel passion?” we should ask, “how

can I make passion happen?” The answer is to cultivate a way of living and working that makes passion more likely.

Passion takes practice.

TWIRLING IN THE JUNKYARD

To practice passion, we must first set the proper expectations: Your work, even when you love it, will not always please you.

I went to grad school to pursue my true love, philosophy. I had dreams of sitting in periwinkle fields, effortlessly penning ideas in leather-bound journals. Instead, I spent massive amounts of time underlining ancient texts and painstakingly outlining arguments. You can't do philosophy without being downright mathematical in your thoughts, and math is not, to put it lightly, my strong suit.

Over time, to my surprise, I somehow started to enjoy the outlines and even the math. They made my papers better. So I relaxed into them. At some point, the process became more than palatable, even meditative.

Philosopher Slavoj Žižek talks about this feeling in the documentary, *Examined Life*. In one scene, he stands in front of a junkyard, giving a lecture on ecology and ideology. He sweats as he gestures wildly at the trash. “This is where we should start feeling at home,” he says. “This is part of nature! Because what is love? It is not idealization. Every true lover knows this... You seek perfection in imperfection. Find poetry in the real and imperfect!”

Love is not idealization. Find poetry in the real and imperfect.

Doing what we love involves things we don't love. Learning ballet, I expected to be bounding swan-like across polished wood floors, pink toe shoes glimmering under theater lights. Instead I spent most of my time doing the robot from first to second position. Once I gave up on the romantic *ideal* of toe shoes, I could relax into the minuscule movements that might eventually earn me a pair. The things I disliked became comforting and rewarding.

If you're a designer, this probably means learning code and copy. If you're a content strategist, it might mean cozying up to Excel spreadsheets or becoming fluent in the language of engineers. As in work and the rest of life, passion comes not from idolizing perfection but from embracing what we love in its totality.

GYM CLASS FOR CREATIVES

It's easier to bleed than sweat, Mr. Motes.

—Flannery O'Connor¹

It's summer in Selma, Indiana, and I'm outside throwing softballs against the barn. I'm practicing my grounders. To make it harder on myself, I throw the ball far to the left and to the right, like my Poppy taught me. I do this for about an hour until I'm so exhausted I have to sit down in the gravel. I feel my heart beat in my chest and watch the heat rise off the corn as I rest. I feel tough and confident, like a 5th-grade girl version of Larry Bird.

If you grow up playing a lot of sports, the importance of practice is drilled into you. "Practice makes perfect," your coaches repeat as you hurl free throw after free throw. Even those of us who didn't grow up playing sports instinctively accept this.



We recoil at the idea, however, that “creative” work might be bound by rules similar to, say, wrestling. And yet, research has shown that this is, to some extent, the case. Psychologist Mihaly Csikszentmihalyi puts it this way:

The more a job inherently resembles a game—with variety, appropriate and flexible challenges, clear goals, and immediate feedback—the more enjoyable it will be regardless of the worker’s level of development.²

In other words, taking a sports-like approach to work makes us enjoy it more, by helping us get into a sports-like state of *flow*—the feeling that you’re so involved in something that nothing else seems to matter, or even exist. Workers who regularly slip into flow report feeling much higher job satisfaction and happiness than others do.

You can get into flow doing almost any activity, no matter how good you are at it, no matter how mundane the task. Only two things are required: the activity has to have a *clear goal* and a *challenge*. You need to be really plugged in and focused; what you’re doing must stretch your body or mind. You won’t achieve flow while multitasking or surfing the internet but you might, odd as it seems, while doing a content audit or cleaning up comps.

A graphic designer I know is especially good at this. He shows up at work earlier than I do, then pumps out multiple versions of his designs—regardless of how much he likes the assignment—before lining them all up on a board for his teammates to evaluate by midday. Rinse, repeat. When he gets stuck, he takes a break. Rather than watering down the artfulness of his work or mechanizing it, this athletic approach actually improves it. He sprints

through the week and produces interesting work on a schedule while seeming to truly enjoy it. Watch him at his desk and you’ll see he’s not only focused, he’s *immersed*.

If you want to have passion for your work then do what your coaches told you: set challenging goals for yourself every day, work hard to achieve them, and evaluate how you did at the end. Structure it in a way that makes absorption possible. *Do it*, in other words. Then do it some more.

COURTING TERROR

If your Nerve deny you—Go above your Nerve.
—Emily Dickinson³

I’ve known I wanted to be a creative writer of some sort since I was a little girl. Before I could read, I remember nabbing books from my grandparents’ crusted 1950s Friendly Zoo Animals encyclopedias, scooting an old wood chair into the middle of the kitchen floor beneath the brightest light, and then pretending to read while my family ate their fried chicken and potatoes. After I learned to write, I would scribble poetry and songs out the eyes and ears of common warthogs and giraffes in those same encyclopedias. “Tiffy’s gonna be a writer someday,” my Nanny—whose parents made her quit school at 8th grade so she could take care of her siblings—would beam.

But my high school years came and went and, save mandatory school papers and an occasional literary outburst in the margins of a P.G. Wodehouse novel, I barely wrote a thing. Same with college. I pretended I was too busy focusing on my *real* courses to do anything *creative*, but in reality I was too terrified to write.

More than once, I vowed to start writing, trekked to the library late at night, then sat paralyzed in front of the computer while the papers of prolific English majors poured out of the printers. I'd slouch home at 3 a.m., fear hardening into defeat. I'd never be even an ounce as good as the writers I admired. Plenty of people whose parents never went to college don't become writers. Why try?

Years later grace came, as it often does, in the form of people who love me. "You said you wanted to write. Send me something next week," they'd prod. Then, after two weeks had passed with no writing, "Tiff, where's that thing?" Then the final straw from my husband, "Stop being a wimp. Write, Tiff."

I had a writing phobia. I needed to systematically desensitize myself to it. So I signed up for a class.

The first day of "Personal Essay for Publishing," I was relieved to find that my fellow students seemed as terrified as I was. We went around the table, apologizing for our lack of talent until our teacher made his introduction.

"You know that feeling you get, when you're completely panicked in front of a blank sheet of paper or have no idea what you're going to write about?" Emphatic head-nodding around the table. "That's how I feel about six hours out of every day. Complete terror. The whole point is to write through that. Stand on your head, do your *Vipassana*, fall facedown on the grass—do whatever you need to get your mind out of panic mode. Just keep writing."

Every day I wrote furiously, pounding away at the keyboard during my commute from San Francisco to Palo Alto. I belched out one thousand words a day. After a week

of this, I read over my essay—only to find that it was completely incoherent and embarrassing. The standard fare: "I'm not a writer. This sucks." Delete. Try again. Delete.

A week before my essay was due, I had nothing to show for my labor. I was still terrified. So I did what any mature adult would do. I threw my laptop across the couch, guzzled two glasses of wine and then sat in the dark, loathing myself and tearing up repeatedly until 2 a.m. "Just put your butt on the ground and write," I heard my teacher say. So I did. I sat down on the floor. I decided to write just one sentence. But then one turned into two, and then three—until I had something decent. Not great, but decent.

A few days later, I read the story out loud to a kindly, well-dressed audience at the Book Passage near the Embarcadero. I wasn't a wimp.

DRAGONS AND PRINCESSES

Perhaps all the dragons in our lives are princesses who are only waiting to see us act, just once, with beauty and courage.

—Rainer Maria Rilke⁴

"What Would You Do if You Weren't Afraid?" Every day, the big, red question stares down at me from the poster where it lives in my office. It reverberates in my head while I fill my coffee mug and visit the paper clips drawer. The message makes my fears more apparent to me, while de-sensationalizing the concept of fear itself.

We're all afraid. Might as well barrel through and do what you want to do anyway.

Those who do barrel through may notice that, instead of eradicating fear, doing what you love brings brand new fears roaring to the forefront. With each new skill or personal milestone, there is more to learn and possibly more to be afraid of.

I used to be terrified of writing. Now I am merely very afraid of it. I keep pushing through Word docs and text files with the vague hope that eventually I'll land on something that feels good. Until then, I have to make a choice: To write, and then write some more, even when I'm nervous. To accept the imperfections.

To practice my passion until I feel it. ▶

¹ Flannery O'Connor, *Wise Blood*, (Farrar, Straus and Giroux, 1962).

² Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, (HarperCollins, 2009).

³ Emily Dickinson, *Complete Poems of Emily Dickinson*, (Little, Brown and Company, 1976).

⁴ Rainer Maria Rilke, *Letters to a Young Poet*, (Dover Publications, 2002).

Lesson

TIFFANI JONES BROWN

My husband Matt and I are sitting around the kitchen table with Nanny, engulfed in chain smoke from her Winston 100's. It's Christmas in Selma, Indiana, and a blizzard has hit this eight-hundred person town where I used to live with my grandparents. Only the farmers' sons on their snowmobiles can pass the roads, so there's nothing to do but play Skip-Bo and talk.

Nanny is animated as she tells us stories from her past. The whites of her eyes have yellowed from years of smoking, but they light up as she recounts getting into fights at the county fair, growing up a coal miner's daughter in Appalachia, stoking drama from the Free Will Baptist Church she attends.

I have always been mesmerized by her stories. Even as a little kid I was always the last one at the table, head desperately nodding so I could stay awake for every word. I loved seeing the wrinkles on her face come alive, the cross around her neck sway, her excessive jewelry shine.

Tonight, though, things feel different. I haven't been home in almost a year because I've been busy running a design agency in Seattle. I find my thoughts drifting as I think about the work I have waiting for me back in a house with filtered water and the internet. For the first time, I notice myself tuning out.

I linger over a scene from the week before: Some web friends and I are at a professional meetup at a bar. People

are friendly, but there is a heightened energy in the air—we're all checking our phones obsessively, tweeting *over-heards*, snapping pictures of one another mid-sip.

The difference between my two worlds feels like a record skipping, and I wonder if the disjointed parts can ever be balanced, even connected. How do Nanny's stories factor into my life now? How do the two relate?

I am stuck on this thought when Nanny interrupts. Her drawl sounds like static and sandpaper bent over a steel guitar. She's telling a story about Halloween in Jamestown, Tennessee, in the 1950s. As a practical joke, she and her sisters moved the outhouse, leaving the well beneath exposed. Then they sat behind a tree all night, waiting for someone to fall in.

"J.D. Pritchett never came by to fall in," she says. "But, boy, Daddy almost did. I thought for sure he'd whup us when he realized what we'd done but instead he just stood there, scratchin' his thick head, wonderin' what happened to the outhouse." She looks each of us straight in the eye to make sure we know how funny it is.

I've heard this story a hundred times, but I still love it. I feel grateful for the image I will always have of three young girls cracking up in their nightgowns, waiting for their father to fall into a shithole.

I look up at Matt and notice that for the first time in months, he, too, is completely absorbed. Focused. His phone and camera are nowhere in sight. He's just sitting there with a huge grin on his face, looking back and forth between Nanny and me. We're all having fun. We're all laughing. Nobody wants to do anything *next*.

Nanny's stories seem to have a special power over everyone she tells them to. You show up at her house, she stuffs you with pinto beans and cornbread and instant coffee, and the rest of the night you just sit there, doing nothing but listening to each other talk. The feeling is of being transported to someone else's world, into another life, so that the one you've created, great as it is, fades into the background for a moment.

This must be what people mean when they talk about why good stories matter. It's what they mean when they talk about exposing yourself to people who are different from you. Such people, great storytellers or not, *have* a story; they teach you there is life out there beyond your own.

Back in Seattle, my inbox is growing and my clients want their content. But right now, I can't think of anything more productive than just sitting here, letting Nanny's stories wash over me. When I go back to work, I know it will be with a greater appreciation, a deeper sense of empathy. That's what listening teaches you.

It's what good stories are for. ▶

Deeper Into Type

NINA STÖSSINGER



Picture for a moment that you are a director of a theater in another place, in another time. Exciting innovations in stage technology are made almost daily and your productions are the most advanced in the world. You use a new lighting system that you can dim and pan live, build movable stage designs for each play, and procure expensive props from out of town. You wow the audience again and again. They respond with wild applause.

You don't give much thought to casting actors. There are just four of them in town and they only work locally. They are good actors, though, seasoned professionals ready to work with any content. You can require them to arrive shortly before opening night, show them their positions, and walk away as they are picking up their cues. You tell yourself the audience will get over seeing Romeo and Tybalt and Lord Capulet, Macbeth and Hamlet all wearing

the same face, speaking in the same voice. There simply is no other choice.

Then a new generation of eager young actors, ready to tour, floods the scene, and theater work starts changing fast. You are quick to learn about casting actors; you are out scouting for fresh faces—ones the competition hasn't spotted yet; you stage them beautifully, watch them perform. Sometimes they stumble; some of them mumble. But having a variety of actors from which to choose is priceless.

NEW FACES ON WEB TYPOGRAPHY'S STAGE

Hungry for the same diversity of *faces* to deliver content to its audience, the web design scene is enthralled by a newfound love for type, fueled by the advent of webfonts. In this typographic gold-rush fever, we've seen typefaces shine. But fonts soar to the top of trendiness only to soon be labeled overused and then cast aside. We've seen showcases and freak shows; illusionists creating shining beauty from next to nothing, their *abracadabras* written in CSS. It's wonderful to see web designers get excited about type, learn to love type. I think what web typography needs next is not *hotter* but *deeper* love.

Yes, type is sexy—especially in a medium as starved for typographic expression as the web. But it is mistakenly viewed as merely concerned with the so-called *visual* layer of design. As designers become excited about type choice, big type, sexy type—and web type the competition hasn't used yet—it is all too easily forgotten that typography's *visual* and *functional* aspects are deeply intertwined.

Leaving aside type design (the actual design *of* type), typography is designing *with* type, and two aspects of it are



central: selecting type and typesetting it; in effect, casting your actors and directing them in delivering the content. It is worth noting that the term *typesetting* originally encompassed much more in print typography, where one would be manually perfecting hyphenation and line returns, eliminating widows and orphans, etc.—tasks that in web design are either automated or virtually absent.

There's an important distinction to be made here between *display type* (used in a large size and for few words at a time, such as in headings) and type for *body text*. Display is more glamorous, freer, easier. It has to be legible, but most of all it needs to work visually (read: look good and be appropriate). With body text typography (on which I will focus), surface beauty matters less. This craft is murkier, more complex; its repercussions reach more deeply into the functional layers of design.

As more webfonts have become available that are appropriate for text sizes rather than just for titling, body text is becoming our new focus. Knowledge of typographic design methods (such as grid systems) is spreading. We're also seeing increased calls for a “typography-out”¹ approach. This phrase describes designing from the body type “outwards,” letting the character of the main typeface “bubble up to whole experiences,”² rather than forcing the type to meet other, predetermined design considerations. Shifting our discourse to these topics has the potential to carry web typography forward, past the point where we're simply enraptured with new typefaces.

MAKING IT CONVINCING

Does that typeface look convincing delivering that copy? Look it in the eye. Does it feel appropriate and inviting?

Does the texture lend clarity and liveliness and draw you in? Does it feel at home on screen or is it struggling? Even typefaces that look great in print won't necessarily shine in the still-crude resolution of most screens, where details get lost in the pixel grid, lending antialiased noise instead of graceful finish. Elegantly thin letters turn out too spindly, and if special care has not been taken with the hinting, things can quickly fall apart in Windows-based browsers.

Does the expression of the typeface match the text? The differences between text typefaces are certainly small as they all share the same basic structures, but they're not negligible—any more than all actors look the same because they all have two arms and two legs. Wouldn't text spoken loudly by a big bald guy sound quite different when uttered by a petite lady with glasses? Tone, volume, facial expression, and body language of the speaker color and shape the content, and—though the effect is subtle at text sizes on screen—typefaces do the same. Indeed, studies have shown that laypeople rather consistently attribute atmospheres or feelings to typefaces and that congruity between this perceived feeling and the content can make text easier to read and process.³

Besides casting the right actor, making typography effective depends on how you direct that actor to speak.

Every typeface interprets the text, but typeface alone does nothing. [...] Type size, length of line, line increment, column depth, position of the text area on the page... all contribute to the total impression it makes.⁴

My father is an actor, and growing up I remember him endlessly reciting his lines in the living room. He would

repeat the same sentences over and over and over, with minute or surprising variations in tempo, in air between the phrases, in volume, in intonation and pitch. As he was thinking about the text, he was anchoring it inside himself and finding the point, I think, where it clicked, where it became his, and became true within the overall concept of the play. Only then could he deliver those words in a convincing way for the director to evaluate.

Good actors don't pretend. The text is *true* to them when they speak it.

Now when I'm sitting at my desk, designing, say, a book, I imagine I'm in a similar state to that of my father—one that is a strange marriage of playfulness and meticulous attention to detail. For every project, every setting, I look anew at the actual words in my layout, I play with the type; make it slightly bigger, slightly smaller; let it breathe over shorter line lengths or longer ones; use more or less leading, and try to add emphasis through italics or boldface or color or a different font—until the type feels natural and *convincing* in its role. Like a good actor, good type, selected and set well, does not pretend.

TYPEFACES AS INTERFACES

Picture a designer creating a menu for an upscale restaurant famed for its rich and complex culinary creations. Fancy food deserves fancy type, so he picks out an elaborate script typeface, takes a long time setting it beautifully—elegantly subdued in size, and with all manner of extra swashes—and prints it on shimmering stock in metallic ink. It's stunning. However, in the atmospheric dim lighting of the restaurant, it simply cannot be read—and thus fails at its most basic task, leaving dinner guests frustrated.

Letters aren't just visual elements, little drawings for us to enjoy. Typefaces are interfaces. They make words visible, convert them to patterns of black and white for us to decode. Here is the actor that lends your text its voice. Let this actor be annoying to listen to, let him stutter or mumble or be difficult to follow, and your audience likely won't listen—or at least not favorably, no matter how pretty the actor might be if you look at his features up close.

MAKING IT EFFORTLESS

So while it matters to get the atmospheric quality right, what's really crucial is to make the typography *work*. Ideally, to make it feel *effortless*: easy and inviting to read.

In a world rife with unsolicited messages, typography must often draw attention to itself before it will be read. Yet in order to be read, it must relinquish the attention it has drawn.⁵

Reading is a fragile task. It requires sustained focus and is easily interrupted. In this context, the goal of typography must be to reduce distraction and irritation as much as possible. That's not the same intention as making text look beautiful; rather than drawing attention to its own prettiness, text typography should strive to make itself, if not invisible, at least inconspicuous.

The harder text is to read, the more effort is asked of readers. This will cause some to simply abandon the piece; and for those who do continue, their impression of the content may be negatively affected. In a study fiercely criticized on the type scene for its lack of typographic sensitivity, Hyun-jin Song and Norbert Schwarz nevertheless made a finding that I think is fascinating and fundamentally relevant for

anyone who communicates with type. They found that the exact same content (a set of instructions) was perceived as more demanding and less attractive when presented in a typographic setting that was harder to read.⁶ This implies that if you want to make something seem easy and accessible, make it easy to read—not just on the semantic level of the text but also on the formal level of typography.

When working, it's difficult to precisely evaluate how readable your text is. The act of reading is not a fully conscious task; typography is really only noticed if it's *not* ideal, if it gets in the way of the reading experience. And even then, readers will likely not be able to pinpoint what irritates them. Even if they comment on the content or the language, it's quite possible that their irritation has originally sprung from a badly spaced typeface whose letters stumble into each other, or by the type being too small or too fuzzy or the lines too long or too tight, or even from an annoying blinking element way across the page that keeps tugging on the eye and the attention.

POWERS OF OBSERVATION

There is no recipe for making text effortless to read. But some guidelines and conventions are risky to break. Regularity of texture is important: gaps and clogging distract. Exaggerated monotony hurts too: lettershapes need to be clearly distinct from one another. A not-too-long line is helpful: a sixty to seventy character limit is a good rule of thumb. Sufficient (but not excessive) line spacing helps avoid errant line returns. Longer lines need more line spacing. Intuitive visual hierarchy clarifies the structure of the text. Decide just how active the emphasis needs to be: subtler emphasis is less visible from a distance but also less jarring to the reader up close.

Learn from experiences made in the old craft of print typography, and learn to see why they might be relevant. But also question if you might need to deviate from some of them. Web designers will have a different perspective on some problems than will their print colleagues.

Don't just read about typography; explore it. Really look at books, at dictionaries, newspapers, magazines; observe how their formal vocabulary works. Maybe you'll spot devices that seem promising for web layouts too. For example, many books use first-line indents instead of vertical spacing between paragraphs. Book design has its conventions but they aren't set in stone; each book designer has his own sensibilities, constraints, and reasons. Some of these guidelines have been carried over to the web; some have been abandoned. How much thought was put into those decisions? Examine conventions in print design, and question usual practices on the web. Understand them fully, then try to adopt, adapt, or transform what promises to be useful. By all means play.

Stay honest. It's better to respect constraints than feign typographic sophistication. Observe the subtle but crucial difference between the appearance of fake and real small caps. *Fake* small caps are actually spaced caps set at a smaller size. Type snobbery is one reason to reject them; a better reason is *seeing* that they don't speak loudly enough. They look as if someone counterintuitively picked a smaller font size (which of course is exactly what happened). On a low-resolution screen the effect may not be as jarring as it is on paper, but it still doesn't *really* work.

Focus on your own medium, the rules and conventions it needs. And all fascination with the new typographic web aside—don't be blinded by excitement. The point can be

made that the advent of webfonts has actually made some things *worse* in web typography; the biggest elephants in the reading room are the rendering differences between platforms and browsers. The web has gained a lot of pretty text, but also more dysfunctional text settings. We've all seen spindly, poorly hinted letters that fall apart on XP or fat letters that inflate beyond readability on the Mac. Type that's set too small or lines that get too long. Incomplete character sets that let unusual diacritics default to a fallback font, causing the line to hiccup. These things do matter. They do hurt.

THE ELBOW GREASE OF ANTS

If we accept that, as Oliver Reichenstein wrote, design for the web as a text-based medium is "95% typography,"⁷ let's not just discuss OpenType feature support, CSS drop shadows, or even which implementation of grid layouts to use. Let's instead take a closer look. What good typography requires is sensitivity and respect for the inglorious and invisible craft of making text work.

For far too long, many of us... have been guilty of focusing on *decoration*: the colours and the shapes and the textures. [...] I'm talking about stripping away all the cruft and getting back to good, solid design principles, like well-formed grids and decent measures and incremental leading and appropriately paired typefaces. As the web is content and content is type, it's no surprise that at the heart of this approach is typography.⁸

The challenge then is this: Really dive into the micro-world of type. Learn to see; develop an eye for type, one that you trust. Force yourself to slow down. The web may be a fast

medium, but reading is slow, and so is crafting text that is meant to be read. It takes time, and curiosity, and the patience to really stop and sniff the serifs, to precisely observe what changes with each decision. If design, understood as craft, generally requires elbow grease, setting body type well requires the sort of micro-level elbow grease that ants' elbows would have. And lots of it.

Design is about obsessively caring to the point you will annoy most everyone around you.⁹

So cast the best actor you can and work with the text to really make it shine. Then sit back and watch. And know that even on an empty stage, this actor could deliver an experience more powerful and intense than a stage full of bells and whistles built around a voice that doesn't reach the audience or just isn't all that memorable. Know that the right type, set well, can make all the difference, can drive your site and carry your layout. Even—and especially—if readers don't consciously take notice. ♦

¹ Elliot Jay Stocks, “The typography-out approach in the world of browser-based web design,” (Blog, Elliot Jay Stocks, 2011).

² Tim Brown, “More Perfect Typography,” (Build Conference presentation, 2010).

³ Richard L. Hazlett, A. Dawn Shaikh, Kevin Larson, Barbara S. Chaparo, “The Instant Impact of Onscreen Aesthetics: The Effects of Typeface Personality,” (unpublished research/publication proposal, 2008).

⁴ Jost Hochuli and Robin Kinross, *Designing Books: practice and theory*, (Hyphen Press, 1996).

⁵ Robert Bringhurst, *The Elements of Typographic Style*, (Hartley & Marks, 1992/2005).

⁶ Hyunjin Song and Norbert Schwarz, “If It's Easy to Read, It's Easy to Do, Pretty, Good, and True,” (*The Psychologist*, 2010).

⁷ Oliver Reichenstein, “Web Design is 95% Typography,” (Blog, Information Architects, October 19, 2006).

⁸ Elliot Jay Stocks, “The typography-out approach.”

⁹ @rands on Twitter, November 28, 2011.

Lesson

NINA STÖSSINGER

It's a Sunday, close to midnight, a summer seven years ago. I'm walking home from the movies to my parents' house where I'm staying during semester break. The night is mild. I enjoy the walk; my mind is brimming with thoughts about the film I've seen and playful plans for maybe moving to Tokyo for a while.

The path is dim; some of the streetlights broken. I look up at one, its glass cover dangling and dead wires outstretched against the night sky, and it makes me laugh—it appears so grandiosely dramatic that I can almost hear scary music stirring in the background. Considering my surroundings, that might be fitting—a deserted footpath between a thicket and then the zoo on one side and the streetcar tracks and road on the other. I chuckle at this horror movie setting. I've walked this path so many times.

The scary soundtrack still hasn't played a note when suddenly a hand reaches out from behind to cover my mouth, and a man pulls me into the trees. "No!" my mind shouts, at once yearning for denial and grasping that this is real. This is where the continuity of my memory breaks; I only know fragments. That night has shattered into dark sharp splinters of time suspended in my mind.

Branches scratch my arms and face. I'm screaming for help and wishing for a moment to just hand the man my money and iPod and walk away. But the words he's mumbling reveal different intentions, and acquiescing to them is out of the question. I'll have to defend myself.

Time is slow, sound is muted, and I'm strangely calm. I have snapped out of normal time, the normal me. Another Nina inside me has taken over who does not consider fear. Self-preservation is the only thing that matters; all attention is focused on the next move. Somehow in this altered state there is time to think, to evaluate the situation. Yes, I have to twist his arm this way. Mind the knife. Kick that shin. Duck out of his grip. Bite his fingers. Keep calling for help. It's almost like a practice session from my karate class, yet all too real. I'm not a very strong fighter, but I must fight. There is no choice.

I see him pulling out the knife. "Put the knife away, please, I'll do anything you want." And he does put it away and I resume fighting—did he really think I wouldn't?

The streetcar screeches past, the one I decided, back in another life, not to wait for. I want to wave but the man pulls me down. He is stronger. I scream. The streetcar is louder. I am pushed to the ground, knees on the pavement, heavily pushed from above. I can't move now, can't do anything. I feel the blade sharp against my side. I know now he just needs to push it. But so far, I'm still here, still alive. And my dear belly fat secures the pants he's vainly yanking on.

Cut to us standing again, with my wrist in his tight grip, and I'm screaming at the top of my lungs.

And then from somewhere a bit away, someone yells back.

It's a moment of clarity. In slow motion I see fear and doubt rising in the man's eyes; his grip loosens slightly. I know it needs to be now; I twist my arm free, and I run.

I bolt in the direction of home, I run and run and finally dare to look behind me, scared, and I see nothing, he's not there following me, and I run further into the trees and black tarry heaviness is creeping up my legs and I look behind me again and the man is definitely not there and then I can see the street ahead and I stumble into the open and there are the police.

I wave and I yell. There is blood on my clothes. I pant, say a man tried to rape me, he has a knife, he went that way. They dash into action. A little while later the weapon has been seized and the man arrested, and a calm policeman offers me a smoke. The other Nina in me says no thanks, I'm trying to quit. I'm not here yet; still in survival mode. This scene is bizarre, not as real as the place I just was.

It has taken me a while to fully return. Amazingly enough, my only physical damage that night was scrapes, cuts, and bruises. But I also felt a dent in my soul, a newfound source of fear. A fear so bottomless that for a while I thought I'd drown.

It was a fear I'd always refused to yield to. Yes, I practiced karate, but not for self-defense. As I saw it, that mind-set belonged to a complex of worry and weakness that I wasn't buying into. I wanted to feel free—too free to accept the fact that sudden attacks in my own life could be real. That night taught me the hard way that they are.

At first I feared I had forever lost any sense of safety. But gradually I found it anew—I go out again, I travel, I live. What I did lose was my naïvete, my recklessness. And good riddance. Because it turns out that I have actually become stronger knowing and living with my very real vulnerability. ♦



Hyper

DUANE KING



The other day, I began to think back to the way that I interacted with text as a child. A voracious reader from a young age, I would feign sleep each night as my parents left my room after tucking me into bed. Upon hearing the click of my bedroom door shutting, I would sit up and listen to the sound of their footsteps going down the hall. As the steps faded into the distance, I would crawl back under my covers, flashlight in hand, and read for hours.

I can still recall the golden glow of the flashlight and hear the rustle of the pages as I turned them. I still sense the feel of the faux leather covers that wrapped the set of children's classics that was the stuff of my childhood dreams. These pages held no illustrations, so I had to complete the stories with vivid mental images of my own. Fritz in *The Swiss Family Robinson*, Captain Nemo, Black Beauty, Peter Pan, Tom Sawyer, Robin Hood, Robinson Crusoe,

Sherlock Holmes, and Mr. Toad. I had imagined them all into reality and I was captivated.

When we read good stories, our minds are more fully engaged. We walk away from them with a sensory experience that has more depth. Finer detail. And not only are we able to read, we *want* to. This act is often defined as reading for pleasure. A form of play, reading for pleasure is a passion that carried over to my teen years and into my adult life.

And then I met the internet. At the same time, I was forced to focus on life and career. Somewhere in the process, my attention was stolen.

Over the years, I've had an uncomfortable feeling, a suspicion that something is rewiring my brain. I think differently (thanks, Apple). This is most evident to me when I'm reading. Immersing myself in a book or an article used to be a delightful pleasure. I could lose myself in a narrative and spend hours pouring over texts. These days, that's rarely the case. My tolerance and patience are worn. Far too often, I read now because I must. And when I do, I can get lost as I follow the forks in the road. I get fidgety and lose myself in multiple threads of thought. I feel the same tendencies emerge when I write. My thoughts are scattered. I connect random ideas, expecting the reader to be able to reach the same conclusions and make the same connections. I think in hypertext.

The term *hypertext* was coined in 1963 to describe text, displayed on a computer screen, that contains references, or hyperlinks, to other text that the reader can immediately access. In other words, hypertext is a fancy name for the underlying concept that defines the structure of the

internet. The name makes sense to me. For starters, the prefix *hyper-* means *over* or *beyond*. To me, that signifies the overcoming of the age-old constraints of written text and the change from linear, structured, and static forms of representing and understanding the world. We've moved on to a view of both text and the world that is fractured, decentralized, and mutable. Coincidentally, the same prefix, if used as an adjective, means to be *overexcited* or *overstimulated*. Hypertext therefore seems aptly named as its moniker is indicative of both its potential and its pitfalls.

Hypertext connects ideas and information. We have the freedom to jump around at will. We are not only permitted to explore, we are encouraged to. We are swimming in information. At times it even feels as if we are drowning in it. We have created a severe poverty of attention, making simple tasks such as reading a book, or even a magazine article, ever harder as our minds wander through hyperlinks. There are those who would argue that after decades of public brain rot caused by television, the internet revitalized long-form content consumption, but we forget to consider that wandering is built into the system. Consider that the reading speed for an average adult in the United States is purported to be around 250 to 300 words per minute. If the average time spent on a site is only fifty-six seconds, we must conclude that there's not a lot of reading happening. In fact, if you've gotten this far in this article, you are already three times over that average—so, congratulations are in order. Thank you for reading.

I must admit that even as I begin to type this document, I feel pulled in multiple directions—a self-imposed attention deficit disorder of sorts. At this very moment, in the corner of my eye, the muted television screen beckons for my attention as Growl notifications on my laptop screen

inform me that I have seven new emails. Like clockwork, my iPhone and iPad screens soon blink to life, their screens displaying Twitter, Facebook, and Instagram notifications that vie for my attention as well. I realize that we spend our days surrounded. Surrounded by screens. In fact, even in the morning, the very first thing I do when I wake up is turn on my iPhone and begin to check email. From morning to night, the routine continues in a futile attempt to keep up. Catch up. Create order. Instead, the only thing we seem to create is an expectation—and therefore an *obligation*—of availability. A culture of availability.¹ It seems to come from everyone and everything around you—the overwhelming expectation that you are, and should be, constantly on call.

We can imagine that, through our grandparents' eyes, our daily experiences with screens would feel like an overwhelming visit to the television section at Best Buy during the holiday shopping madness, an onslaught of different channels playing at once. Our *idealized* vision of the internet interaction, however, is more akin to that of *Minority Report*, rife with elegantly multilayered images, messages, and utility. But over the course of time, the amount of information that we glean from the screens around us has changed so incrementally that we hardly noticed the increasing demands on our attention. For years, they crept up on us slowly before suddenly exploding beyond our capacity to absorb. And all the sparkly bits of data raining down from that explosion seem to crowd and cloud our vision with more force each day.

As humans, when we encounter too much information, instinct takes over in the interest of self-preservation. We begin to rely on pattern recognition to structure our experiences and make sense of the world at large. We scan



and skim. It can be overwhelming and is, at times, an experience akin to that strange feeling of driving on the highway and suddenly realizing that you haven't been paying attention to what you've been doing for the last fifteen minutes. How did I get *here*? There's so much information out there that it's impossible to keep up. Even if you did, you would likely only have a shallow understanding of it all, ingesting merely the outer surface and never reaching that good, creamy center.

The cognitive overhead required to maintain so many tasks comes at a high cost. Foolishly, we often pride ourselves for our ability to multitask, but this notion is folly. While a computer is well suited for context switching, the human mind is much less so. Shifts in context whittle away at our concentration and ultimately at our efficiency and sanity. Instead of doing more, we simply spread ourselves ever thinner. For many of us, it can even be agonizing to *wait*. We've trained ourselves to need constant stimulation and instant gratification. If we are stuck in line, we can't stop glancing at our phones. It is the modern equivalent of drumming your fingers in impatience. Instead of engaging with others nearby, we are engaged with the screen. Engaged with words and pictures that are merely a representation of the world around us instead of the reality we live in.

The devices we love to connect with are the same devices that cause us to *disconnect* from one another. Everyone knows where everyone is and what everyone is doing, but how does that enrich our lives? We experience the world through screens and devices, and we often document a life event with a tweet or post rather than participating in the experience directly. Note the stream of tweets from people who are supposedly giving their full attention to

listening to a speaker at a conference. We are left with the illusion of engagement when we are actually *less* involved.

The technological advances of our tools shape and morph our societies and lives. The printing machine disseminated the written word, putting news and knowledge in the hands of the people and in turn, affected the future of mankind. In doing so, we saw the slow goodbye to exquisite hand-penned manuscripts. Picasso once pointed out that every act of creation is first of all, an act of destruction. By this he meant that in order to create music, we must first destroy the silence. To create a garden, we must destroy the weeds. It follows suit that in order to create the new, we must destroy the old, even if something born of love and beauty is lost. As humans, we naturally seek order and completeness. We are resistant to change. All of this flux leaves us uneasy and can result in a malaise due to our attempts to view the world of today through the lens of the past. It can lead to a sort of time sickness. A restless feeling that is a byproduct of our culture of availability. The strain we feel is simply the result of society and experience being out of phase with one another, a matter of perception. An asynchronicity.

It's not just the screen that has changed. It is also the mode in which we approach the written word. The written word is an abstraction of oral communication. An abstraction of sight and sound, with sounds captured as symbols, symbols converted into language, and language then transformed into narratives. The linear progression of the unfurling scroll forced a single perspective on the passive reader.

In contrast, the internet is a place of multidimensional simultaneity. Our perspective is continuously changing.

Thought and action are interwoven with time. We must learn to live in flux: imperfect, impermanent, and incomplete. We can almost feel the universe expanding with each collective breath. This process of postmodern fragmentation has been accelerated by the rise of the internet as a medium of communication. Knowledge is no longer envisioned as a static, unified body, existing in one dimension. It is no longer the sole property of our institutions, universities, and libraries. We share it between us. It is accessible. Information is no longer passive. It lives and breathes like an organism. It ebbs and flows. Not only are there variables, but now even the variables themselves are in flux.

You can see evidence of this in the way that we document things. Snapshots are being slowly replaced by movies; pictures by simulations. Words and studies and explanations and essays are being replaced by graphs and data visualization. It even applies to our own life stories. Autobiography is now spread non-linearly across the internet. Our lattes from this morning are on one platform, our childhood photos live somewhere else. Our days are a tangle of disconnected events, thoughts, and reactions, each with multiple simultaneous conversations that some people see and others don't.

Media now allows for new modes of narrative. Modes that retain some aspects of the linear traditions of oral and written word but that allow for user control. Modes in which time is abstracted, giving us the ability to scrub time or to interrupt, replay, or skip the serial narrative, much like we can with a video.

We begin to have a dialogue with the devices and content, an active exchange of feedback and information that creates an environment that has begun once again to feel

rich and alive. Our senses are stimulated. When we take full advantage of the potential of hypertext, the page once again pops to life. Just like the pages we read under the covers as a child.

Where is the hope in all of this, the *peace* in the *hypertext*? As designers, we hold a potent place in this ecosystem. As the creators of the technology and content that is our new, shared experience, we influence and inform. We are storytellers, and as we learn to master our personal narratives and those of our clients, it's with these shared stories that we shape our culture.

Design is not a passive container, but rather an active process invisible to the eye. We have creative control. We can make smart decisions about the things we introduce into our lives and the lives of others. We also must fiercely edit—but not so much so that the taproot is cut away. Design is about choices and, with them, the world we want to make. The world is our lump of clay.

Make something good. ♡

¹ Renny Gleeson, “Anti-Social Phone Tricks,” (TED, February, 2009).

Lesson

DUANE KING

I grew up on the top of a gentle slope in the Hill Country of Texas. It was beautiful there. Our land seemed to stretch out forever. Summer felt endless, and Christmas was always an eternity away. Time moved slowly and everything good was possible.

We had six acres of land that were my kingdom and I knew it like the back of my hand. In middle school, I cataloged every single tree on that piece of property. From my favorite climbing tree to the natural grapevine swing in the back corner of our land, I had combed every inch.

During those summers, I would wake up and make a peanut butter and jelly sandwich. I'd pack it with my Boy Scout flashlight in a red bandana that I fashioned into a hobo bindle. With my Daisy BB gun in hand, I would head out for a full day of hopping through barbed wire fences. Following the sun in one direction until noon, I would stop to eat my lunch before turning around for home. Occasionally I'd run into a critter to chase or, at times, one that cared to chase me. On some days, I would cross paths with the neighboring goat rancher, who would scare me off with mumbled curse words and a blast of his shotgun into the air. But mostly, things were peaceful. I was sun-kissed and smelled of the earth, the way a kid should. I had a mom and a dad and a little sister. We had two dogs and two cats. Everything was normal. Whatever that means.

One Sunday, when I was still in middle school, we all went to church. My mother stayed home, saying that she wasn't

feeling well. After church service, we skipped playing with friends and returned home quickly, as promised. But she was gone. Instead of her warm smile, three envelopes greeted us on the kitchen counter. She had left a note for each of us: my father, my sister, and me. We opened them and read. My note said that she was leaving my father, but that she still loved us as much as ever. I don't know what theirs said, but I looked up at my father and sister and they were both crying. I didn't. They came over and clung to me. She had said we weren't supposed to worry. But we did anyway. It seemed to be the end of *normal*.

I can trace veins of worry running through my life from that day. Everything in my world was redefined. She left home—escaping to or from something of her own, something beyond my reach or understanding—yet she didn't leave me. We were two black sheep of sorts, whispering conspiratorially of love and art and my dreams. Even as she was coming undone, she was the glue that held me together as I continued to live at home where things were still broken in other ways.

Many years later, I'd found equilibrium. I had my wonderful wife, great friends, and a thriving business. I did what I loved for a living, commuting between the bustle of New York and the serenity of Santa Fe. Things finally seemed normal again.

On the weekends, I'd grab a backpack and head out for another unexplored trail. This day, lungs filled and legs burning, the climb was vigorous but rejuvenating. At the top, the endless future stretched before me.

Back down at the truck, I checked my phone and saw a message from my stepfather. My mom had fallen, but she

was “fine” and he’d keep me posted. He didn’t. I finally discovered she was in the hospital.

Hearing this was worrisome. A few years earlier, she had tried to stop. Her body went into shock. I’m circling around the truth here, trying hard not to say it. She was an alcoholic. So was he.

I went to the hospital. I walked into her room. Belly so swollen, she looked pregnant. Her skin, unholy hues of purple, blue, and yellow. Her body was failing, and her mind, too. In an instant, our roles reversed. I had to break through the fog of alcoholism that enveloped my mom and stepfather. I didn’t just have to tell them she was dying; I had to *convince* them.

She did die shortly after leaving the hospital, yet inexplicably not in their suburban, white-picket-fence life where all *seemed* normal. Whatever that means. She died to the tune of “I’ll Fly Away” in the living room of a 1950s-era mobile home belonging to her occasional dog sitter—a tiny, loving, Cajun lesbian spiritualist preacher. Details too rich to be fiction. As she died, the agony on her face finally softened into a smile. My stepfather died shortly thereafter. Just like that, they were both gone.

In retrospect, we were all sick. We saw what we wanted to see. Heard what we wanted to hear. We unwittingly deceived ourselves into thinking that everything was normal. The heartbreak is that this *is* normal in the course of life. Something happened. It happened to all of us who loved her, too. Consequences have no pity, and though the future still seems to stretch out endlessly, still rich and ripe with hope, I’ll never be the same. ♦

As We May Link

JEREMY KEITH



The world exploded into a whirling network of kinships, where everything pointed to everything else, everything explained everything else.

—Umberto Eco¹

I’ll never forget the first time I used the World Wide Web. It was in the early 1990s. I was in America visiting my girlfriend (now wife) at her college in Massachusetts. This was before Mosaic, the first graphical web browser, was released. There were no images on the web, but I was still stunned by the scope of what I experienced. Even back then, the web seemed limitless, without edges. That Encarta CD-ROM sitting next to the computer suddenly seemed pathetically constrained.

I bet you’ve got a similar story to tell. Telling stories is a universal human trait. Every culture in the world has a

history of storytelling. In many ways, a culture is defined by its stories. The details may vary, but almost every distinct human culture has its own story about the creation of the world. These creation myths are often followed by another origin story, that of language.

For the indigenous peoples of Australia, language and creation are intertwined. The land is brought into being through song, and those songs must continue to be sung to keep the land alive. In the Judeo-Christian creation myth, language guarantees man his special place in the world:

And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field.

—Genesis 2:20

Language is power. If you know the name of something, you have power over it. Using the power of language, you can not only name animals but also objects and ideas. Once something has been converted into information like this, it can be transferred from person to person. All I have to do is move the meat in my mouth while passing air over the vocal cords in my throat and I can vibrate the air between us. As long as you understand the codebase in which the vibrations are encoded—English, for example—then you can decode the information. All I have to do is move some air, and I can change the thoughts held in another person’s brain. This is a remarkable evolutionary hack.

There are limits to how much information can be retained inside the head of any one person. That’s where writing, the offspring of language, comes to our assistance. Writing allows us to document things, ideas, and experiences and keep them outside our brains. I can translate a physical object into a piece of information that can be retrieved

later, not only by myself but by anyone capable of understanding my writing system.

There are economies of scale with this kind of information storage and retrieval. The physical world is a very big place filled with a multitude of things bright and beautiful, creatures great and small. If it were possible to use the gift of language to store and retrieve information on everything in the physical world, right down to the microscopic level, the result would be unlimited power. That’s the principle underlying Laplace’s demon, a theoretical being that knows the properties of every particle in the universe and thereby has the power to predict their future states.

An intellect which at a certain moment would know all forces that set nature in motion, and all positions of all items of which nature is composed, if this intellect were also vast enough to submit these data to analysis, it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atom; for such an intellect nothing would be uncertain and the future just like the past would be present before its eyes.

—Pierre Simon Laplace²

This Newtonian idea of a clockwork universe was dented by Heisenberg’s uncertainty principle, but Laplace’s demon remains the logical conclusion to an ongoing human endeavor—the never-ending quest to name and catalog everything we see.

THE GARDEN OF FORKING PATHS

In the eighteenth century, Carl Linnaeus gave us binomial nomenclature as a way of cataloging species. At the

same time, French astronomer Charles Messier was putting together a catalog of celestial objects. Both men were attempting to name specific things: animals and galaxies, respectively. One hundred years later, Melvil Dewey attempted to neatly classify all knowledge into a decimal system of ten main classes with ten divisions of each class and each division further partitioned into a hundred sections. We still use this for wayfinding in physical libraries today. This system was later expanded by the Belgians Paul Otlet and Henri La Fontaine into a Universal Decimal Classification that used punctuation symbols to unlock further subdivisions of categorization. These people could legitimately be granted the title of true information architects but they weren't the first to attempt a classification of everything in existence.

Bishop John Wilkins lived in England in the seventeenth century. He was no stranger to attempting the seemingly impossible. He proposed interplanetary travel three centuries before the invention of powered flight. In 1668 he wrote *An Essay towards a Real Character and a Philosophical Language*, the gist of which is explained by Borges:

He divided the universe in forty categories or classes, these being further subdivided into differences, which was then subdivided into species. He assigned to each class a monosyllable of two letters; to each difference, a consonant; to each species, a vowel. For example: *de*, which means an element; *deb*, the first of the elements, fire; *deba*, a part of the element fire, a flame.

—Jorge Luis Borges³

Borges plays with this idea in his short story “The Library Of Babel.” Here, the universe consists of a single library,

created from an infinite series of interlocking hexagonal rooms. This infinite library, containing nothing more than different combinations of letters and punctuation, holds every book that has ever been written, as well as every book that could ever possibly be written.

The problem with Bishop Wilkins's approach will be obvious to anyone who has ever designed a relational database. Wilkins was attempting to create a rigid *one-to-one* relationship between words and things. Apart from the sheer size of the task he was attempting, this rigidity meant that his task was doomed to fail.

Still, Wilkins's endeavor was a noble one at heart. One of his contemporaries, Gottfried Wilhelm von Leibniz, recognized the value and scope of what Wilkins was attempting.

Leibniz wanted to create an encyclopedia of knowledge that was free from the restrictions of strict hierarchies or categories. He saw that concepts and notions could be approached from different viewpoints. His approach was more network-like with its *many-to-many* relationships.

Where Bishop Wilkins associated concepts with sounds, Leibniz attempted to associate concepts with symbols—an alphabet of human thought. But he didn't stop there. Instead of just creating a static catalog of symbols, Leibniz wanted to perform calculations on these symbols. Because the symbols correlate to real-world concepts, this would make anything calculable. Leibniz believed that through a sort of algebra of logic, a theoretical machine could compute and answer any question. He called this machine the calculus ratiocinator. The idea is a forerunner of Turing's universal machine.

A Turing machine is the brainchild of the brilliant World War II codebreaker, Alan Turing. It has two parts: a strip of tape that contains information, and a table of mathematical rules describing how that information should be processed. It sounds simple, but if you have a strip of tape long enough—and enough time—you could use a Turing machine to simulate anything in the universe, including another Turing machine. At this point it becomes a universal Turing machine—an instantiation of Laplace’s demon.

Turing’s universal machine isn’t *real* in the sense of being an actual physical object, but it is a very powerful idea. To put it another way, Alan Turing told a story, and that story changed the world. By providing a theoretical framework for information processing, the concept of a Turing machine influenced the history of computing.

There’s another story about a theoretical machine. This equally world-changing story was told in the form of an article published in the *Atlantic Monthly* in 1945. Written by Vannevar Bush, it describes the memex, a desk-sized machine for collecting and retrieving vast amounts of information stored on microfilm. He introduced the innovative idea of associative trails. This would allow users of the memex to create their own connections between documents. It’s here in this story of the memex that we find the first stirrings of hypertext.

That term *hypertext*, along with *hypermedia*, was coined by Ted Nelson in the early 1960s. Nelson, the prototypically brilliant mad scientist, produced a series of books that were part manifesto, part comic, and part computer science manual in his pursuit of his vision of a hypertext system eventually called *Project Xanadu*. But the project languished as vaporware for decades.

SMALL PIECES, LOOSELY JOINED

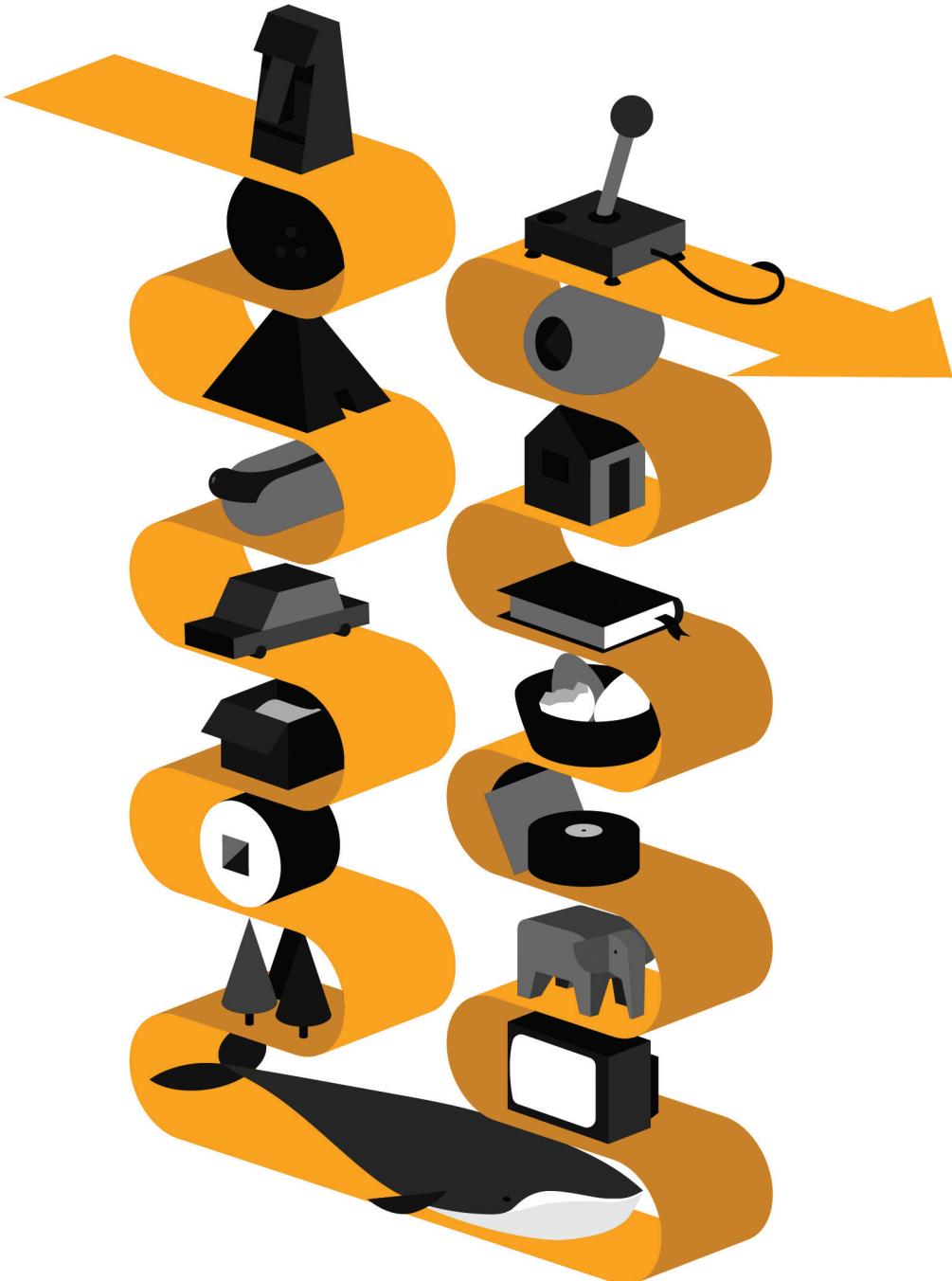
It would take a young engineer named Tim Berners-Lee to turn the idea of hypertext into reality. The World Wide Web began as a story called “Information Management: A Proposal.” Berners-Lee received approval for this from his boss with the scribbled words, “vague, but exciting.”

Like many brilliant ideas, the World Wide Web is deceptively simple. Resources (usually HTML documents) are located at URLs and transmitted via the HyperText Transfer Protocol. If you want to retrieve a resource directly from the web, you need its URL. In other words, you need to know its name. But this way of naming things is very different from Carl Linnaeus’s or Melvil Dewey’s classification systems. While URLs must abide by a particular syntax, deciding what the contents of the URL should be is not predefined.

Instead of trying to create yet another taxonomic system for labeling resources on the web, Tim Berners-Lee left the naming of documents—and therefore the balance of power—entirely in the hands of the individual authors. It was a crazy move that seemed destined to fail.

However, there is one component of the World Wide Web that was predefined: HTML. The HyperText Markup Language that Tim Berners-Lee created was a modest vocabulary of tags that authors could use to structure their documents. It has undergone many revisions over the years, but one element was there from the start and will remain until the end. It is the alpha and the omega.

A stands for *anchor*. The smallest HTML tag is the most powerful. Using the href attribute, the author of one web



document can create a hypertext reference that will point to another resource. The author just needs to know the name of that resource (its URL) and can form a connection without asking for anyone's permission. The humble href opens up an *Einstein-Rosen bridge*, a wormhole between two previously separate places on the web.

For the first time, the power of grouping ideas and objects together ceased to be the province of hierarchical institutions and was placed into everyone's hands. The result was phenomenal. The web's growth was explosive. By the time I was introduced to the World Wide Web in that college dorm room in Massachusetts, it was already an incredible labyrinth of wonders—the collective work of ordinary people laboring separately to create the most astonishing collection of information that the world has ever seen.

There were early attempts to create order out of the chaos. Yahoo! started life as a directory of links, but it became clear that no taxonomy could encompass the diversity of resources on the web, and no company, no matter how successful, could ever hope to keep pace with the growth of the web. Trying to make a single directory for everyone was a hopeless task, but smaller, curated collections of links were more successful. Link-loggers—the precursors to today's bloggers—were the shamans of the early web, wielding the power that came with knowing the URLs of cool and interesting resources.

This was an early demonstration that the web isn't just a web of documents but also a web of trust where personal recommendations and a good reputation really matter. It's a trend that can still be seen in our online social networks today.

PATTERN RECOGNITION

Sufferers of the medical condition *apophenia* are prone to seeing patterns of meaning in random unconnected data. In truth, we are all somewhat apopheniac. We draw constellations in the night sky. We hear music in rivers and streams. We recognize the man in the moon. Hypertext allows us to give full reign to our apopheniac nature.

Take any two random URLs; now publish an HTML page that links to both of them—you've just generated a completely new connection. You have also added a small part to the ever-expanding story of the human condition as expressed through the medium of the World Wide Web.

The web is just twenty years old, and I'm not sure that we have yet come to terms with the power that this new medium grants us. When we create websites, it's all too easy for us to fall into old patterns of behavior and treat our creations as independent self-contained islands lacking in outbound links. But that's not the way the web works. The sites we build should not be cul-de-sacs for the inquisitive visitors who have found their way to our work by whatever unique trails they have followed.

We should recognize that when we design and publish information on the humblest homepage or the grandest web app, we are creating connections within a much larger machine of knowledge, a potential Turing machine greater than any memex or calculus racionator.

In telling this story of hypertext, I have tried to express the grandeur of the endeavor to which we are all contributing. But these words are not enough. They are tethered to these paper pages and strapped to the linear structure

of this book. Imagine how much more powerful this story would be if just some of the words within it were hyperlinks. Those links would act as portals, ready to transport us to related stories that would themselves contain further magical waypoints.

Alas, this is not hypertext. It is simply text.

And so this story ends. ▶

¹ Umberto Eco, *Foucault's Pendulum*, (Bompiani, 1988).

² Pierre-Simon Laplace, *A Philosophical Essay on Probabilities*, (1814).

³ Jorge Luis Borges, *The Analytical Language of John Wilkins*, (Sur, 1952).

Lesson

JEREMY KEITH

Before I settled into making websites, I was something of a drifter. I spent my early twenties busking and hitchhiking my way around Europe. In retrospect, it was as if I were waiting for the web to be invented.

I eventually made my way to the town of Freiburg, in Germany's Black Forest. There was still no sign of the web, so I continued to earn money by playing music on the street. German society has a reputation for efficiency and structure and, true to form, there were even rules for which times of the day were suitable for busking. I could play music on the street between 11 a.m. and noon and between 4:30 p.m. and 6 p.m. Playing outside those hours was verboten.

I sometimes bent the rules. Technically, I didn't play *on* the street outside the officially designated times, but I did play *under* the street in a pedestrian passageway that had particularly good acoustics. I think I could legitimately claim that I was just practicing, and if any passersby happened to throw money into my bouzouki case, well, that was just a bonus.

The underground passageway had one problem. It was close to the local police station, and the occasional police officer would pass through on his way to work. One plain-clothes policeman told me to stop playing the first time he walked past. When he caught me again, his warning was more stern. He recognized me. I recognized him. Even when I wasn't playing music, we would see each other on

the street and exchange glares. In my mind, I filed him in the *nemesis* category.

One day I was walking into town to find a good spot to play (during the appointed hours, I might add) when it started to rain. I didn't have much further to go, but there was a tram stop right next to me and a tram was pulling up, headed in the right direction. "It's only one or two stops," I thought. "I might as well hop on."

The trams operated on a trust system. You could just get on a tram, and it was your responsibility to have a valid ticket. This system was enforced with occasional inspections, but they were rare. I was taking my chances by riding the tram for two stops without a ticket, but it didn't seem like much of a gamble. This was the day that my luck ran out.

Two inspectors got on the tram and started checking tickets. When they came 'round to me, I told them that I didn't have one. The punishment for *schwarzfahren*—riding without a ticket—was an on-the-spot fine of sixty Deutschmarks (this was back in the days before the euro). I didn't have sixty marks; I didn't have any money at all. They asked to see my identification. I didn't have any identification with me. They took me from the tram and marched me off to the police station.

One of the cops sat me down at his desk. He asked me for my details and pecked out my answers on his typewriter. Once he had my name and address, we got down to the tricky matter of figuring out what to do next.

I suggested that he simply let me go so that I could play music on the street during the appointed hours. Once I had busked up sixty marks, I would go to the transport

authority and pay my fine. He gruffly pointed out the flaw with that plan: because I had no ID with me, there was no way they could know for sure that I was who I said I was or that I lived where I said I lived. So if they let me go, there'd be no incentive for me to pay the fine. I gave him my word. He didn't accept it. We had reached an impasse.

At that moment, who should walk into the police station but my plainclothes nemesis. "You!" he said, as soon as he saw me. My heart sank. Now I was in real trouble.

"Oh, you know this guy?" asked the policeman at whose desk I was sitting. "He was riding the tram without a ticket and he doesn't have money for the fine. He claims he's going to make enough money to pay it by playing music on the street. Can you believe that?" he asked mockingly.

"Yes," said the plainclothes cop. "He's good. He's got a really unique voice."

I was flabbergasted! My sworn enemy was vouching for me! He looked at me, nodded, and continued on his way.

His word was good enough. They let me go with a slip of paper that I was to take to the transportation office when I paid my fine. I'm sure they thought that it was a lost cause, but I went out busking that afternoon and the next morning until I had earned sixty marks. Then I rode out to the transport authority—paying for my tram fare this time—and I gave them the money and the slip of paper from the police station. I kept my word.

There's a lesson to be learned here, and it's this: you should always give money to buskers. ♪

Unstirring the Jam

ETHAN MARCOTTE



not for the sake of stealing, but of open borrowing,
for the purpose of having it recognized.

—Seneca the Elder¹

I was probably fifteen when my parents, apparently moved to build a bit of character in their sons, instructed my two brothers and me to paint a newly renovated room at their business and tasked poor Ray, one of the maintenance men, with ensuring we got most of the paint on the walls rather than on each other. (He was not, it should be noted, entirely successful on that front.)

We all liked Ray; despite having been born and raised in the hills of northern Vermont, Ray spoke with a Southern drawl, a slow, easy, approachable rhythm, and we all listened intently as he began showing us how to steadily apply a layer of primer with smooth, easy strokes. After

he was sure his instruction got through our thick skulls, Ray sauntered off, saying he'd be back to check on our progress. It was hot, decidedly unglamorous work, but we made some progress, covering most of the longest wall in an hour or so.

And, after a time, Ray returned to inspect our work, walking up and down the length of the room. He came over to me. Considering my work for a moment, he pointed out a problem area: a bead of primer had coalesced on the wall and had begun slowly rolling toward the floor. As he pointed it out, Ray said, "Here's the thing of it: if that drop dries, the paint will form around that shape. And whether you layer on two or twenty coats of paint, that drop'll shine through."

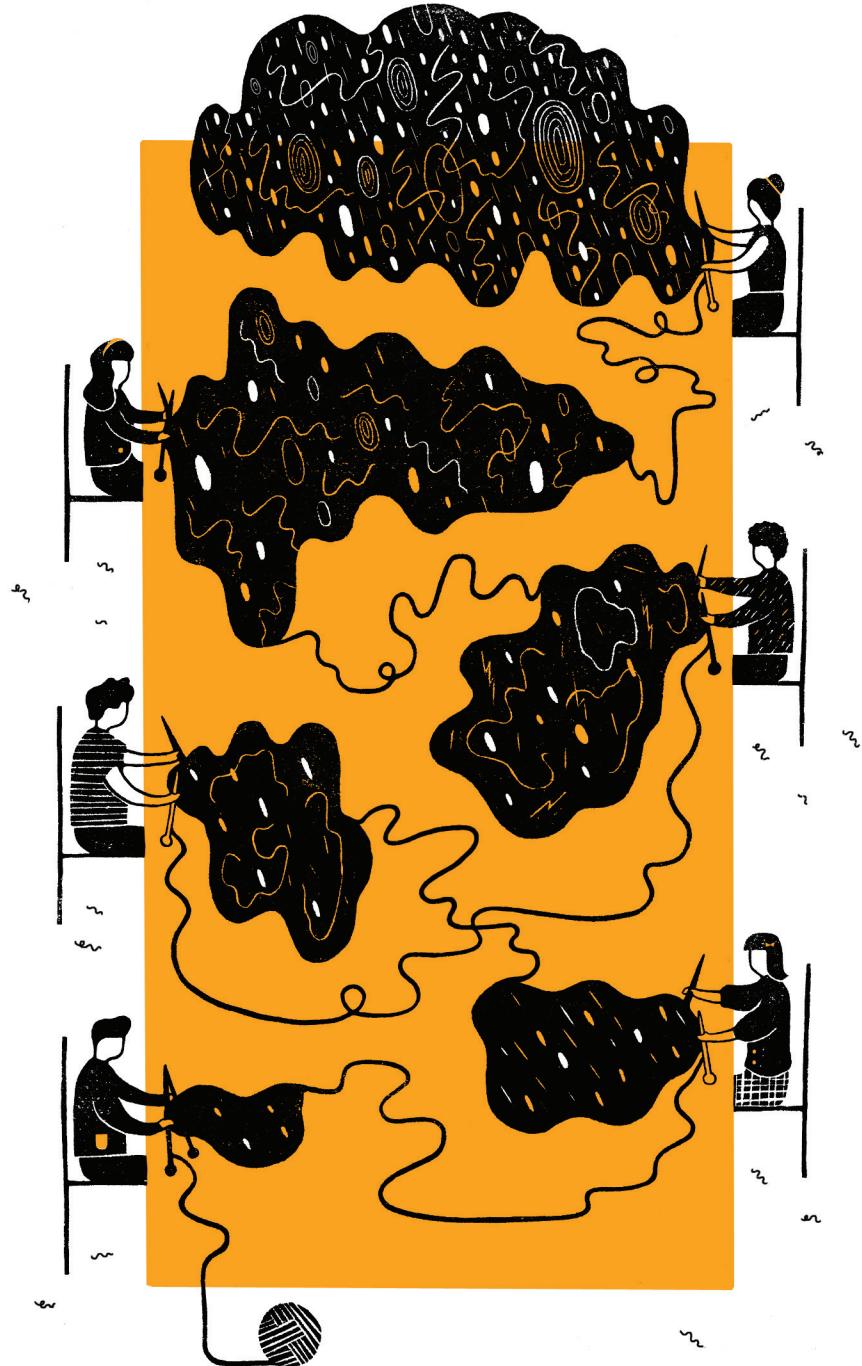
If I close my eyes, I can still see that solitary drop, slowly tracing a gentle line down an empty wall. Even now, as I enter my second decade as a web designer, I think there's something fundamentally evocative about that layering: of a work attaining its form from something that preceded it, carrying the echo of something older within itself.

THOMASINA: When you stir your rice pudding, Septimus, the spoonful of jam spreads itself round making red trails like the picture of a meteor in my astronomical atlas. But if you stir backward, the jam will not come together again. Indeed, the pudding does not notice and continues to turn pink just as before. Do you think this is odd?

SEPTIMUS: No.

THOMASINA: Well, I do. You cannot stir things apart.

—Tom Stoppard²



When I reached college, I found myself surrounded by teachers who were similarly hooked on this idea of layering, of looking at tradition as something that could define the shape of an idea. I remember when my jazz piano teacher hauled out some old records by Coleman Hawkins and Charlie Parker, albums on which Miles Davis had performed as a band member. After playing a few tracks on each, he pulled out some of Davis's later recordings and began showing me how you can hear subtle but unmistakable hints of his former bandleaders' influences—a borrowed phrase here, a quiet moment in an otherwise complex arrangement. And my literature professors were no different, helping me wade through works such as John Milton's epic poem, *Paradise Lost*. They showed me how Milton adopted the imagery of his classical predecessors, invoking the likes of Homer's *Odyssey* and Virgil's *Aeneid*. But specifically, he did so in the first two sections of his poem—passages that were, conveniently, set in Hell. (Nice little dig, that; a bit of a rap battle between dead white poets.)

These professors traced paths between texts, songs, and artwork, and even taught me a name for the connections: “allusion.”

Genres and movements are the forms and philosophies around which creators gravitate. But allusion allows an artist to draw connections between the current work and its predecessors. In its most basic form, an allusion is an intentional reference to an event, person, or concept. I might say that a particularly torturous deadline “was my Waterloo,” perhaps invoking images of a man doomed to crushing defeat. (Or at least, a few sleepless nights.) It’s a kind of rhetorical shorthand, but here’s the thing: it only works if, well, you know what Waterloo is and understand

its historical significance. Metaphorically speaking, there’s something remarkably fragile about allusions, because they rely on the audience to truly *work*. Otherwise the reference is missed, “Waterloo” just sounds like so much gibberish to your ear, and my intended meaning is lost.

That’s not to say that you need to understand an allusion to enjoy a work. One of my favorite examples of this would have to be Alan Moore and Dave Gibbons’s graphic novel *Watchmen*. It’s a tale set in a bleak, alternative version of the 1980s: Earth is seized by xenophobia, fear, and nuclear détente. Its central characters are a band of flawed superheroes reunited by the death of one of their own and attempting to overcome a global threat. The story itself is exquisitely crafted, a beautiful, sweeping work that’s approachable to even the comic book novice. But the first time you read it, you might not realize that the main characters are thinly veiled references to minor characters appropriated from the already-defunct Charlton Comics library, which had been acquired by DC Comics before Moore began writing.

In an interview with Blather.net, Alan Moore once said, “there was a sort of a seed of the original Charlton characters but we took them further.... [It] was just taking these ordinary characters and just taking them a step to the left or right, just twisting them a little bit.” In other words, it wasn’t just that these older characters were templates for Moore’s work. Instead, by alluding to them, by *reshaping* them within the constraints of this new, *Watchmen*-specific universe, Moore created an area for discussion, for interpretation. What are we to make of Steve Ditko’s Captain Atom when we encounter Moore’s Doctor Manhattan, a godlike being who dispassionately regards humans as ant-like and inconsequential? And while Moore’s Rorschach

is a violently insane vigilante, he becomes an indictment of traditional superhero values carried to their logical extreme, especially when you realize he's a pastiche of Ditko's Mr. A.

By adapting these characters into his work, Moore created a kind of hidden space within his own work. It's a little narrative pocket that allows for discussion, for interpretation, but one that's not critical to understanding *Watchmen*. If you've never heard of Charlton Comics, Steve Ditko, or his work, there's nothing lost, and the story's still satisfyingly gripping. But Moore has entered into a kind of critical conversation with Ditko—and with the idea of *superheroes* in general—and invited you, the reader, to participate.

But where is this conversation happening in web design? Do we have the ability to introduce this kind of allusion into our designs, to create these conversations in our work? A significant amount of web design is commercial art, which makes any kind of visual borrowing—no matter how well-intentioned or subtle it might appear to be—an inherently problematic proposition. That moving, thoughtful essays are still being published on the subject of copying versus creating elements of homage suggests we're still trying to define the line between inspiration and blatant plagiarism.

Our closest analog to the use of allusion might be the web design trends over which we so frequently wring our hands. But let's face it: when was the last time you heard the phrase *web design trend* mentioned in a positive light? *Trend* is the key word: whether it's rounded corners or oversized sans serifs, hatched backgrounds or textured patterns, you can practically *hear* the derision drip off of the speaker's tongue. It's a word that implies a short

lifespan, the very fleetingness of an idea, a thing without depth, created without much thought. What's more, a work that's part of a trend doesn't exist in isolation: it's part of a larger thing, a single entity mindlessly trudging alongside the rest of the herd.

I wonder if it would help if we were more overt in acknowledging our sources. A few years ago, in discussing a major redesign of his personal site, Eric Meyer took a moment to acknowledge one concept in particular he'd borrowed and adapted from another's work, the grid-like design of the metadata and comments:

In this area, I was heavily influenced by Khoi Vinh's [new site], and I definitely owe him a debt of gratitude and inspiration. As will be evident from even a casual comparison of the two sites, I took a general design idea Khoi uses and adapted it to my particular situation.³

Like Moore, Meyer looked to Vinh's distinctive design for the seed of an idea and, well, reshaped it a bit to suit his needs. And while you can definitely see strains of Khoi's aesthetic, it's not a direct copy. But additionally, and just as critically, Meyer acknowledges this debt. That's not to say every act of alluding to an established work needs to be additive, or even constructive. In fact, the reverse can also be very, very true.

Everybody needs his memories. They keep the wolf of insignificance from the door.
—Saul Bellow⁴

Even though eyewitness accounts are few and far between, we know that on Christmas Day in 1949, Charlie

Parker strode onto the stage of Carnegie Hall. Behind him sat one of the finest jazz bands to ever share a spotlight: Red Rodney on trumpet; pianist Al Haig; Tommy Potter on bass; and behind the drums, Roy Haynes. By all accounts, and from the few live recordings that survived the performance, it was an astounding bebop performance. Over the course of the set, “Cheryl” came into rotation—not one of Parker’s better-known songs, but a catchy little blues/bebop amalgam in its own right. And about a minute or so in, he began his solo.

Then something interesting happened. The first notes out of Parker’s saxophone weren’t improvised; they weren’t even his. Instead, Charlie Parker started his solo by playing, nearly verbatim, Louis Armstrong’s opening to “West End Blues.”

If you haven’t heard “West End Blues,” I highly recommend giving it a listen. Not simply because it’ll give a bit more context for this anecdote but because it is a *wonderful* song. Written over two decades before Parker’s performance, the song reached extraordinary heights of popularity once Louis Armstrong recorded it in 1928—a recording that’s been lauded as one of the finest moments in American music. And one of the most remarkable parts of that recording was, in fact, Armstrong’s opening cadenza, a dizzyingly rapid succession of notes that soar, fall, and brightly rise again. It’s as distinctive as it is virtuosic, and Louis Armstrong’s signature introduction would have been instantly recognizable to any jazz fan in the audience. And here was Charlie Parker, one of America’s premiere jazz saxophonists, quoting it note for note.

What’s even more striking about Parker’s usage of “West End Blues” is how isolated the phrase is from the notes

that follow it. Instead of appropriating it as a foundation for the rest of his solo, Parker pulls in the line then moves on to another idea entirely as though he’d never played Armstrong’s intro. It’d be a bit like singing the first line from “Twinkle, Twinkle, Little Star” and then continuing on to sing “Mary Had A Little Lamb” as though nothing had happened.

Parker’s solo wasn’t even a minute long, but his Armstrong-enhanced opening made quite the impression—if not with the audience in attendance, then certainly with music historians and scholars who’ve spent the subsequent decades analyzing *why* Parker did it. Not that jazz quotes were uncommon; even today, musicians pull in lines from other works, using the original notes as the basis for further improvisation. But many jazz historians note that by the time of the Carnegie performance, Parker had reached a particularly confident stage of his career and had long ago abandoned the practice of using other musicians’ notes in lieu of his own.

A few things are happening here. First, by leading with Louis Armstrong’s distinctive introduction, Parker pulled an incredibly popular musical phrase out of its original context and placed it in another song entirely—*his song*. Allusion is, on the face of it, an act of a younger author establishing some authority over an older, more recognizable work. And by keying off a musical phrase that would’ve been immediately recognizable to his audience, Parker managed to establish his technical prowess by co-opting Armstrong’s work into his own.

But all that aside, there’s an interesting historical context at work here. There’d been no small amount of animosity between the bebop movement and more established jazz

figures like Armstrong. It'd come to a bit of a head that year, in fact, when Armstrong himself had dismissed bebop as nothing more than "jiujitsu music" a few months prior. So taken in that light, Parker's solo isn't just a masterful act of musical splicing; it's a not-so-veiled rebuttal of Armstrong himself.

Every man's memory is his private literature.

—Aldous Huxley⁵

This is all conjecture, of course. One of the many things I find beautiful, if not downright enviable, about Parker's allusion is that he fearlessly adopts a musical phrase from years before his performance, reaching over two decades into his past to change the shape of his work. And currently, that breadth of history isn't available to our very young medium.

By looking for inspiration in others' work, adapting it significantly, and openly acknowledging those debts, I think we can move that phrase "web design trends" past that stereotype of unthinking, unambitious adoption and set a standard for evolving those trends over time. And, in doing so, we'll invest a sense of memory—of *history*—in our adolescent industry.

That's not to say I'm advocating the wholesale copying of another's work; nor am I suggesting that slapping a "Hey, thanks for the logo!" on your blog will somehow make that copying acceptable. But perhaps your next redesign could acknowledge the work that inspired you and how you learned from it. By becoming more referential designers, we'll begin to develop the methods for following a conversation, for charting a lineage across sites, across redesigns.

After all, Müller-Brockmann didn't singlehandedly create the typographic grid. He, with the help of contemporaries like Emil Ruder and Max Bill, helped formalize and extend Jan Tschichold's *Die neue Typographie* in which Tschichold, in turn, was drawing upon millennia of principles of grid-driven page layout. And years later, Khoi Vinh and Mark Boulton helped underscore how critical the typographic grid was to the web and how to make it accessible to the modern web designer. These aren't isolated events but links in a lengthy chain. As outstanding as these individual links might be, they take their *shape* from their predecessors.

Despite the web's youthfulness, I worry that, with a few notable exceptions, our industry isn't accustomed to looking to the lessons of the past. I've met scores of designers who have never heard of John Allsopp's seminal "A Dao of Web Design"⁶ or encountered Jeffrey Zeldman's work. Now, some of this is complicated by the web's ephemerality. Or perhaps more problematically, by *our* assumption—as builders, as designers, as workers of the web—that what we build won't last. Too often, our work is measured in months, not years or decades. If we can't acquaint ourselves with the history of our medium, much less preserve it, what will we draw upon?

I think the time is now, and the opportunities are here. Maybe this is a problem that will, over time, resolve itself. As the web and our industry age, we'll develop the methods for having these discussions, for creating stronger bonds between our work. But it will take a very real desire from us to look past the *now* of the web, to draw upon its past to improve its future. ▶

¹ Seneca the Elder, *Suasoriae* 3.7 (As translated in the English edition of Gian Biagio Conte's *The Rhetoric of Imitation*).

² Tom Stoppard, "Arcadia," I.1.

³ Eric Meyer, "New Design, New Feeds," (Blog, Meyerweb, February 5, 2005).

⁴ Saul Bellow, *Mr. Sammler's Planet*, (Viking, 1970).

⁵ Aldous Huxley, Attributed.

⁶ John Allsopp, "A Dao of Web Design," (*A List Apart*, 2000).

Lesson

ETHAN MARCOTTE

My grandmother's name is Florence—never “Flo,” but sometimes “Flossie” to a few elderly neighbors with whom she grew up. My mother’s mother is, to say the least, a woman of decorum: a small lady of Irish descent who firmly believes some things shouldn’t be shared outside the family or, in fact, with anyone. That said, I hope it’s no breach of confidence to tell you she was born in northern Vermont early in the twentieth century, shortly before the world first went to war. But despite her age, it’s no exaggeration to say that her mind’s sharper than mine’ll ever be.

One of the earliest memories I have of my grandmother is her cooking. Not the food itself, mind—though that was, and still is, impressive—but rather the act itself. More the *verb* of cooking than the delicious *noun* in which it invariably resulted. In her kitchen, cooking was a symphony of tight orbits; she was an aproned blur as she paced about the kitchen, tracing a well-memorized path around her dining room table, moving from ancient gas oven to refrigerator to wood stove and back again.

And her arms moved nearly as quickly as she did, reaching into the oven to prod a pie or to pull a too-curious grandson away from the stove. Those arms once lifted me up to sit on the kitchen counter as she slid a batch of cupcakes into the oven. They once shooed me away from a bowl of cake batter with a flick of her apron, a flurry of green and white that framed her wry smile. They once offered a fistful of cracked corn to me in her soft, gnarled hand, which I’d then scatter throughout her henhouse; as the chickens

swooped down to snap up the feed in a flurry of feathers and clucking, my grandmother would smile as I clapped and shrieked with delight.

She's a special woman, one who raised me almost as much as my parents did. Two Christmases ago, my grandmother became a bit more special to me, handing me a humble-looking present, a tiny bundle wrapped up in newsprint, possibly from that week's paper, with my name written on the adhesive tag stuck on the top. After a few seconds of wrestling with the manifold layers of newspaper—my grandmother can *wrap*, people—I managed to uncover a stack of three small books, each battered and worn.

I opened the topmost book, and tucked inside was an index card, covered with my grandmother's impeccable cursive writing. The note said these books were her father's diaries and that she wanted me to have them.

The three diaries are small, fragile-looking things, each bound in leather and well-used but not brittle—the newest from nearly ten years before my grandmother was born, the oldest from 1884, a full two decades before *that*. Some mold crept onto a few of the pages in the oldest diary, and its cover is beginning to flake, but that's the worst of the damage; they're in remarkable shape. I sat there, slowly turning them over in my hands, unable to speak.

After a moment, I cracked open the middle volume. The title page is breathtakingly ornate: "STANDARD DIARY" set in an elaborate script; beneath it, a zodiac etched in red and black, with "1892" at its center. Most of the front matter is dedicated to almanac data—lovingly typeset meteorological predictions, time zones, dates for phases of the moon—which would have been of interest to

my great-grandfather, a farmer, whose daughter grew up to follow in his footsteps.

But it's the heart of the diaries I cherish most, the blank pages my great-grandfather filled with his own writing. Each day has nine thin rules dedicated to it, three days per tiny page, each pair of pages spanning from Monday in the top left to Saturday on the bottom right. (Presumably, Sundays were reserved for a different kind of book.) Each day contained a brief phrase about the weather ("Cloudy and v. cold," "Pleasant + warm") with one or two significant events ("Marvin and I drained ice from Center Pond," "Got the sleigh shod"). A few spare words in a sloping, schoolboy's hand doggedly filled in each day over the course of decades.

My grandmother and I talk often, or as often as I remember to call. She makes a show of complaining when she hasn't heard from this grandchild or that in a few days, always with a smile in her voice as she acts mock-aggrieved. She doesn't cook as often as she used to. In fact, a task can leave her tired for days, whether it's a half hour of peeling potatoes, a short drive to the market, or simply a few visitors stopping by for an afternoon chat. A small item on her schedule is an event.

She never says as much, though. Her talk is light, happy, filled with local gossip and questions about my wife and my work. She asks where I'm traveling next; I ask after the latest news from her country church. While we never talk politics or religion, we easily fill an hour with topics we both care about.

But, lately, I've started peppering in some new questions of my own: how well she knew her father, and where her

siblings lived and worked. I ply her for information about life on the farm growing up, and how she met her husband. The music she listened to, the places she traveled, the places she wishes she'd gone. And as she answers my questions, I begin writing in a new journal I've just bought, filling the pages with stories I've never heard before.

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Colophon

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