
THE MANUAL

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Simon Collison
Frank Chimero
Jon Tan
Dan Rubin
Liz Danzico
The Standardistas

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Letter from the Publisher

It's a mild October afternoon, and I find myself in the poorly lit back room of the Brooklyn Inn nursing a pint of Southampton Ale across the table from my good friend Simon Collison. We're in town for Brooklyn Beta, where Simon has just finished presenting a workshop on "Analytical Design," and I have just finished attending it.

Simon's workshop examined the established principles of graphic design and what we, as web designers, can learn from a deeper understanding of them. As the beer flows and conversation continues into the night, we discuss the bigger ideas that permeated the day, especially the definitions of web design and graphic design and where the two do and don't overlap. We talk about the principles that practitioners of our discipline created that are unique to designing for the web and the ones we will need to create as the web changes. We'd independently arrived at these realizations about web design's maturity as a discipline. For me, that evening was remarkable because it was the first time I discovered that another person had been thinking along the same lines.

Similar conversations continue with friends not only at Brooklyn Beta, but throughout Build, New Adventures, and SXSW. It's clear that a number of us are sensing a shift; we feel the tectonic plates of design realigning. Web design is defining itself as a distinct discipline, informed by the principles of other fields, yet growing into its own. We're hungry for great and lasting design, and we're discovering what is truly important and saying so. Our discipline, too, is solidifying even as it must flex and

accommodate the future that is hurtling toward us.

The Manual will serve as an archive of this growing maturity and of the people who are nurturing it. It's a story that cannot be contained in just one issue. It will evolve as our discipline evolves, and none of us know where it will lead. The compelling story of our roots, future, mistakes, triumphs, and motivations will spill across these pages—collected, curated, forming a loose narrative of what we all do. We've spent over fifteen years talking primarily about *how*. Undoubtedly, we've got to stay sharp with our markup and code, but many of us think we now need to focus much more on *why*.

Those who live and breathe design on the web are a remarkable community, and we want the journal to capture many voices—both young in the field and well known. This issue of *The Manual*, as every issue, represents a range of views, not a single voice. Though we may have one love, we are not of one mind. I hope this beautiful archive resonates with you and challenges us all in our work.

Andy McMillan
Belfast, 1st July, 2011

All links to websites, articles, or books referenced throughout this issue are collected at
<http://alwaysreadthemanual.com/issue1/>

Contributors

AUTHORS



Frank Chimero

Frank Chimero is a designer, writer, illustrator, and educator. He is interested in aesthetics, chance, culture, language, process, style, automation, design, seeing, perception, wit, typography, wordplay, tools, symbols, style, identity, form, paradigms, and the future. He is happiest when he forgets himself.



Simon Collison

Simon is a UK-based web designer with over a decade of experience at the sharp end. Simon cofounded the successful Erskine Design which he ran for four years before returning to freelancing. He's written a few books and speaks about design at events around the world. Simon also organizes the New Adventures conference, is working on a new book, and some ambitious top-secret projects.



Liz Danzico

Liz Danzico is part educator, part designer, part editor, and full-time dog owner, who writes part of her time at Bobulate. After more than a decade, she still finds it lovely to live and work in New York City.

**Dan Rubin**

Dan Rubin is a man of many interests and talents. A designer, photographer, and barbershop harmony aficionado, he speaks at conferences around the world, writes about myriad topics, and works with good-looking clients including MailChimp, Google, Yahoo!, Microsoft, Geffen/Universal, and IDEO.

**Jon Tan**

Jon is a designer. He cofounded Fontdeck, and the Analog co-operative, where he works with friends creating things like the new Mapalong web app, and running the Brooklyn Beta conference.

Jon speaks internationally, and writes about design and typography. When he's not traveling, Jon's base is the co-working studio, Mild Bunch HQ, run by Analog in Bristol, UK.

**The Standardistas**

Christopher Murphy and Nicklas Persson teach interactive design at the University of Ulster at Belfast, where they have been active in promoting a web standards-based curriculum. As the tweed-clad duo, The Standardistas, they write and speak regularly on standards-based web design. They've written for 24 Ways, New Adventures, and .net magazine, and a book, *HTML and CSS Web Standards Solutions: A Web Standardistas' Approach*.

ILLUSTRATORS**Raymond Biesinger**

Raymond Biesinger is a multitalented illustrator whose headquarters is Montreal, Canada. He's drawn for everyone from the *New Yorker* to little photocopied zines, and he's now working on prints, books, and an instructional audio LP.

Owen Gatley

Owen hails from the Malvern Hills in Worcestershire and likes to create playful illustrations, often taking inspiration from 1950s color palettes and comic books. Clients include Pan Macmillan, Urban Outfitters, and *The Times*.

Christopher Gray

Christopher Gray is a graphic designer based in Sweden. In 2009 he started the Illustration label Toy and is represented by animation film company Studio AKA. His work uses a minimalist style to convey thoughts, narratives, and concepts. His work has been published by Die Gestalten, *Creative Review*, *idN*, and *Wallpaper**. In the past year he has collaborated with the BBC, Nike, Moleskine, and the *New York Times*.

Jessica Hische

Jessica Hische is a letterer, illustrator, and designer working in Brooklyn. She's best known for her "Daily Drop Cap" project, for which she illustrated an initial cap almost every day for over a year. Jessica and her work have since been featured in many publications, and she has traveled the world speaking about lettering and illustration.

Superbrothers

Superbrothers, Inc. is an ambiguously pluralized art and

design organization located in Toronto committed to creating audiovisual ephemera for a broad, literate audience. They are the co-creators of the the archetypical adventure videogame project for iOS known as *Sword & Sworcery*.

Olimpia Zagnoli

OZ was born in 1984. OZ is an illustrator. OZ lives in Milan. OZ loves New York. OZ listens to T. Rex. OZ eats popcorn. OZ reads Peanuts. OZ drives a Yellow Fiat. OZ is Olimpia Zagnoli.

Ping Zhu

Ping is an illustrator organically grown in Los Angeles and imported to London. She loves animals and speed drawing on Post-its®. When feeling fancy, she combines them.

Maturity and the Weight of Learning

SIMON COLLISON



Beneath the streets of a characterful city, we gathered in a characterless basement. No windows, faulty air conditioning, barely enough space to hold the assembled designers, developers, and client team, yet this was an opportunity to work alongside a number of respected practitioners on a once-in-a-lifetime project.

Following lengthy client presentations, the first opportunity to respond was a short breakout session for personal brainstorming—an exercise to help us each explore how we might approach the complex task ahead.

Most of us remained seated with notepads and laptops. The exception was a designer who stood up from his chair and plastered the wall with large sheets of paper. Armed with colored markers and an acute sense of purpose, he spent thirty minutes sketching his way along the

wall, identifying patterns and starting points, never hesitating, always drawing.

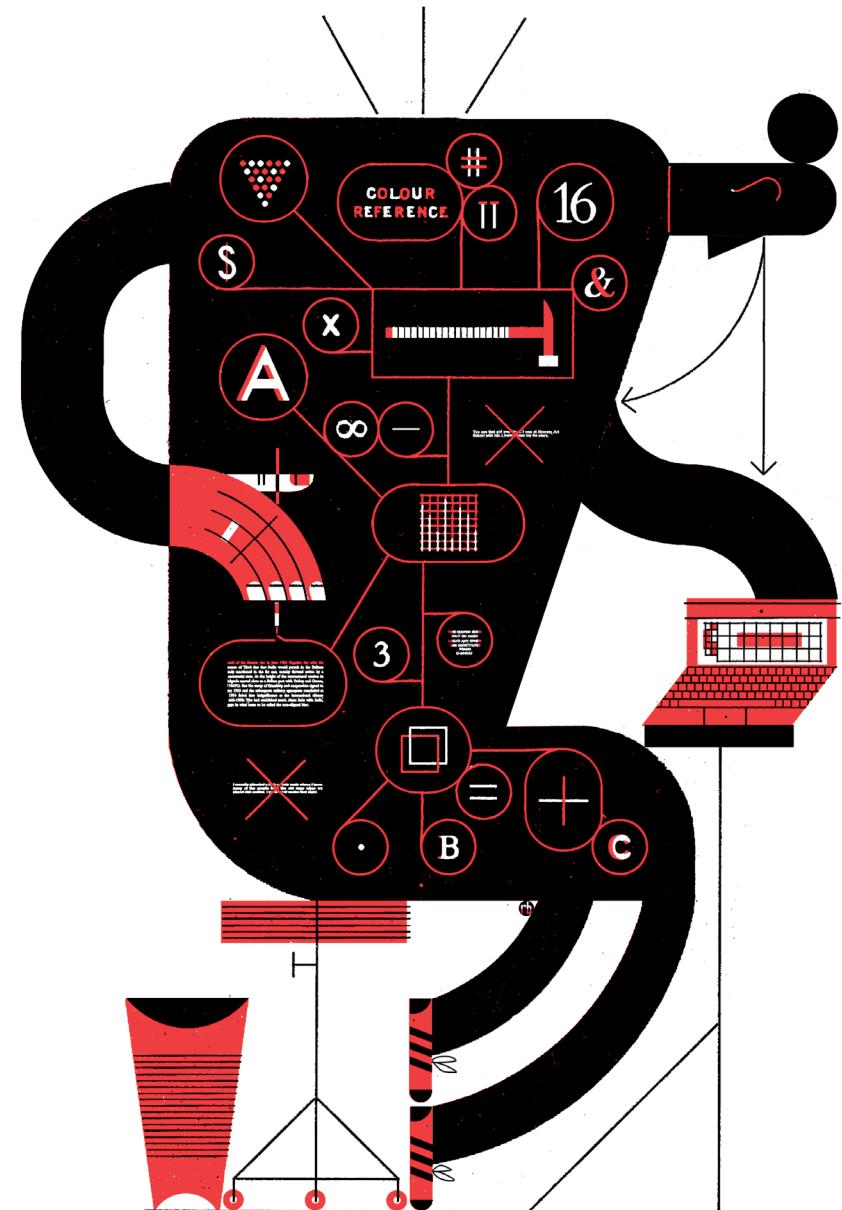
The sheets held no written words, just lines, shapes, forms, colors. Initially, this almost frenetic scribbling appeared idiosyncratic, erratic, perhaps even arrogant. In fact, as proven by his eloquent explanation as we reconvened, it was structured, considered, and methodical. The entire room seemed in awe. To watch someone on top of his game is thrilling. You understand just why some people are regarded so highly by their peers and why their output is so consistently strong.

Here was a designer tackling the problem with a dizzyingly impressive combination of knowledge, confidence, and instinct. Now, confidence and instinct (whether born of experience or natural talent) are all very well, but I was fascinated by the obvious depth of knowledge that informed this designer's response.

STRENGTHS AND VALUES

As part of this epiphany, I considered what distinguishes the great from the good, or what makes some designers more equipped than others. I concluded that they often inquire beyond the necessary to explore other areas, look at things differently, and bring these findings back into their work.

To progress and to create work of substance or even greatness, we each must start by knowing our values, our strengths, and the level of expertise we seek. Understanding this helps us navigate the choppy seas of that glut of information found out there on the web and to sharply define our course through it. The great designers have found



a way to continue to learn, yet focus on what they love.

THE WEIGHT OF LEARNING

In her wonderful article, “The Sad, Beautiful Fact That We’re All Going To Miss Almost Everything,”¹ Linda Holmes looks at how we manage the weight of information and possibilities available to us through what she calls *culling* and *surrendering*. By culling, we decide that certain things are not worth our time, so we rule them out. When surrendering, however, we acknowledge that it isn’t possible to study most of what we’d like to learn, so we choose which lovely subjects to give up.

I choose not to care about things like fine wines, obscure programming languages, and fiction about elves and goblins, so I cull those topics. But I also surrender things that fascinate me, like technology. As someone who still marvels at the concept of radio, I’m not versed in the complete history of the microchip. Likewise, if I try to think about the scale of the universe, it breaks my brain. The upside of this is that technology and the universe are boiled down into a simple concept: they are made of magic. That’s all I need for now.

Our industry is growing so quickly and splintering into so many fragments that we increasingly find a need to specialize and reduce the number of areas in which we might be considered experts or even competent. Knowing our strengths and values helps us cull, surrender, and then understand where we should focus. To attempt mastery of everything inevitably makes us mediocre in many areas. I’m not interested in being a mediocre Rails programmer, just as I don’t seek to have a mediocre understanding of the universe.

As a designer often working in collaborative situations, I need a little knowledge of what other members of the team can contribute. But that’s all I need: a basic understanding. I might want more, but what I need is enough. I cull and surrender; then I focus on my strengths, mastering my core skills and studying other fields and subjects that will enrich and deepen my work and give me insight. This defines my path as a designer and fulfills my desire to develop my craft in a meaningful way.

THE VALUE OF CRAFTSMANSHIP

In his book *The Craftsman*, Richard Sennett proposes that craftsmanship is a basic human impulse: the desire to do a job well for its own sake.² Sennett sees this as a core value, one available to every person working on the web. So the question is: Do I want to simply make a living and move from project to project building websites and getting things done, or do I want to imbue my every process with the skill, integrity, and value of a true craftsman?

Think of the meticulous and careful pushing of individual pixels, or the process of hand-coding. I often consider how automation is robbing us of the knowledge that craftsmanship requires. If I choose, I can load a web-based generator and animate every conceivable CSS3 trick with some dirty copy/paste code. But by doing so, I fail to understand exactly what is happening in that process and how I can apply craftsmanship to manipulate the details and in turn create something more thoughtful, nuanced, or even extraordinary.

Craftsmen and craftswomen discover through doing: honing their skills over a significant period of time with substantial commitment. They understand the impor-

tance of mistakes, and while they are prepared to throw away perhaps 70 percent of what they do in pursuit of the magical 30 percent, they still see that the entire 100 percent is important. Our hope, as we work, is that peers, clients, and audiences will appreciate good craftsmanship amidst the vastness of indifference and thoughtless production by numbers. Craftsmanship makes our work more meaningful to us. It also spreads the perception that our profession is valuable and even irreplaceable.

THE IMMATURE VIEW OF TOOLS

One of the biggest mistakes we make is to lean on the tools of our trade or make our work about these tools. What we do is not about tools—whether programming languages, software, browsers, or mobile devices. Tools are the scaffold for what we produce, the enablers; they help us bring our ideas to fruition. But robbed of our favorite tools, we'd still manage to achieve our design goals. Did the designer in that basement limit himself in that session by worrying if the CMS could do X or Y? Of course not. His physical tools were markers and sheets of paper.

Tools are secondary. As Oliver Reichenstein tweeted, “The tool doesn’t make the craftsman. Choosing the right tool for the right purpose is a technical and personal choice.”³ What designers do is solve problems and enhance communication—whether to the largest possible audience or to a specific audience—and seek emotive responses and actions. To reduce the impact of communication because we feel constrained by our tools or, conversely, to throw in a dozen clever CSS3 tricks just because we can is to lose sight of our responsibility as designers. Fluency with some tools can mask, at least in the

short term, deficiencies in our design education, process, or talent.

It is a human instinct to want to investigate, to know why, and to create something significant or lasting; we learn, we grow, and we transcend the mundanity and limitations of tools.

THE CREATIVE NEED FOR INQUIRY

Truly creative people have an unswerving need to inquire into their craft more deeply. Simply performing the core tasks admirably day by day is rarely satisfaction enough. They desire to broaden their influences, draw upon wider fields of knowledge, make connections and discoveries, and find new outcomes.

The subject matter will vary, but often this inquiry is a single vision and an ongoing fascination with a core subject that informs personal side projects, frameworks, books, and presentations. To proceed without such inquiry is to be a drone unlikely to advance to more meaningful and rewarding work. These individual lines of inquiry are what will, more than anything else, drive us to develop greater maturity in the discipline of web design.

MY OWN LINE OF INQUIRY

Since watching that designer draw all over those walls, I revisited much of what I'd learned at art school and immersed myself in the theories behind the creative process. I rediscovered my passion for the analytical, the process of informed decision-making, the importance of patterns, and the beauty of *visual grammar*.

We can learn a great deal from the visual grammar found in virtually all successful creative work, whether art, architecture, film, furniture design, industrial or graphic design—the list goes on. To best understand why this visual grammar matters, we can look at our close cousins, graphic and product design, and what they tell us about distribution, form, pattern, texture, repetition, color, white space, and typography.

Informing design of all kinds is a rich alphabet of components such as line and point, structure, color, shapes, rhythm, and movement. These elements form a visual language rather than a verbal one, and we use it to shape our messages. The grammar of this vocabulary assists us in finding balance, forming effective composition, understanding interactions, identifying patterns, discovering starting points, and deciding how to approach problems. The graphic designer uses the syntax of this language to communicate.

This grammatical scaffold matters because of the way we humans communicate—how we receive and interpret information. Understanding more about how we perceive meaning can help web designers make smarter decisions. Design is certainly not a science, but coupling visual grammar with the science behind semiotics, mental models, human senses, and emotional response provides us with a far stronger approach to our work than making choices because they just *feel right*. Making arbitrary decisions can lead to wonderful outcomes, but why rely entirely upon chance? What happens when you hit a wall and need to make informed decisions?

We all agree that the web is not print. Yet, despite working with an interactive canvas, we'd be foolish to aban-

don solid ways of thinking without good reason. These days, I think more analytically about symmetries, depth, affordance, juxtaposition, balance, economy, and reduction. I now pay greater attention to the principles of structure in order to be more efficient with wireframes, layouts, composition. Over time and with experience, the study (whether self-directed or formal) of these principles can become second nature. We can learn these principles and then *forget* them because they've become a muscle memory of a sort; they seamlessly merge with our creative process. There's a massive chasm between that type of *forgetting* and never learning these principles in the first place.

BUILDING THE LEXICON OF THE WEB

Though I value what we have appropriated from graphic design—and the parallels are many—I would never advocate the wholesale adoption of terminology from another discipline. There is that which we can and should use. Yet, we are also tasked with moving beyond what is available in graphic design's vocabulary, refining and redefining it, and also creating terminology of our own so that our vocabulary applies to the uniqueness of what we do on the web and the challenges and changes we encounter or invent there.

The maturity of our lexicon matters if we want to do more effective work, communicate clearly with one another and with clients, and build respect for our profession. We rely heavily on our instincts or sensibilities when evaluating our work. That works well for some, but usually best for those who've studied why some things work and some don't and have the vocabulary to think it through. We've made great progress moving our industry forward, but

we've been a bit neglectful of the vocabulary that would enable us to be better at helping, teaching, and critiquing each other—or explaining our choices to those outside our field. A mature lexicon is also a hallmark of a mature profession. Immaturity is glaring; it attracts disrespectful, dismissive, or demanding clients; a life of compromise; lower pay; and the honor of being first to be fired when a company goes through economic hard times.

I believe we share this responsibility to expand our existing lexicon. The task begins with earnestly studying our roots in graphic design and related fields. It then requires taking stock of the unique elements of designing for interaction so we can better articulate what is ours.

For example, Ethan Marcotte's term *responsive web design*⁴ is a successful addition to our vocabulary. It elegantly describes the unique interactions within what we create and successfully defines the parameters of a specific way of working that can evolve regardless of the tools or devices we use many years from now. The responsive approach to design and architecture is nothing new, yet Ethan has looked back at existing principles, understood how these apply to what we do on the web, and applied the all-important name. When we have the right words, we can begin to say the right things.

The terms *responsive* and *adaptive* are distinct yet related and have evolved naturally from outdated web-based layout terminology (such as *liquid* and *elastic*) as we redefine what web design is and how it is viewed across a myriad of devices.

Later in *The Manual*, Dan Rubin will explore and uproot the concept of the *page* and how the use of this word

affects our work. This is a craftsman following his line of inquiry to better understand a problem. He helps us refine our working vocabulary; we can then have sharper conversations about our practice and be inspired to turn other assumptions on their heads.

CULL, SURRENDER, BUT ALWAYS LEARN

We can each strengthen our work by revisiting these foundations. If we are designers, we should each know the principles of graphic design inside out. Beyond that, we cull and surrender and—despite this sifting process—we will still find much to study that will bring intelligence and insight to our work. We might expand our education about the history, art, and craft of type design and typography. We could explore disciplines which are one step away: architecture, photography, painting, book design, and other fields with solid vocabularies, both visual and verbal. We each have the energy and time (yes, *we really do*) to pursue our own related passions, share our findings, and help the discipline of web design reach full maturity.

Some argue that this investigation into traditional and modern visual grammar and knowledge of terminology is unnecessary, saying that for many designers courage of conviction—essentially, *winging it*—is enough. But, aside from a sort of defensive resentment of education, which rarely makes for a strong argument, they've forgotten that design and art are two different things. All design has a job to do; so too does web design.

Education (self-directed or formal) will inevitably enhance any natural talent and help us do our jobs more effectively as will learning to be critical thinkers. Just as

earlier voices advocated web standards and called for order amidst the chaos, we, too, should take the next step, calling for the definition and backbone of the *design* in web design that will continue the maturation of our profession.

I no longer consider the web to be young or markedly immature—it is established and is integral to a modern, functioning society. Communication between real people is our reason for being here. Basically, we are the web. We are the makers, the explorers, the end users. Let's be smart about our decisions and directions, let's work communally to gain respect in the world (the very world we're changing), and let's stand on the shoulders of those who came before us or who work alongside us to shape a discipline that helps us all work with confidence, intelligent experimentation, and, at times, even brilliance. ▶

¹ Linda Holmes, “The Sad, Beautiful Fact That We’re All Going To Miss Almost Everything,” (National Public Radio, 2011).

² Richard Sennett, *The Craftsman*, (Yale University Press, 2009).

³ Oliver Reichenstein, @IA, Twitter.

⁴ Ethan Marcotte, “Responsive Web Design,” (*A List Apart*, 2010).

Lesson

SIMON COLLISON

The university’s Faculty of Art and Design wasn’t known as the premier art school, and I certainly hadn’t intended to study there. But my first and second choice institutions had refused me, so north I sped, up the A1 to capture my final chance at a fine art degree.

I’d been a studious yet directionless artist, but just recently I’d begun to flirt with abstract painting, which I’d eventually practice with proficiency. Two weeks before my interview, I’d managed to produce three canvases successful enough to ensure my acceptance. I sailed through the inquisition and was offered a place immediately. The following autumn, I left home to study in the North East of England.

My problem at art school, alongside the fact that student hedonism had become for the most part much more important to me than education, was that I drew artistic inspiration from the landscape. The tutors considered this thread of the grand art narrative *uncool*, imbued with romanticism, and at odds with the trends of the time.

These tutors were an aloof and passionless bunch, clearly more interested in their own flatlining art careers than in molding forty or so dilettantes into worthy professionals. They taught me very little and were dubious and unsupportive of my line of inquiry. One once told me, “You do realize that you’ll never have an exhibition, don’t you?”

Illumination commonly came from the visiting lecturers,

many of whom were truly successful in their fields, something I always felt the regular tutors resented. For me, these one-on-one meetings were a rare opportunity to sit with an inspirational figure and dreamily imagine how successful I myself could be in years to come.

One day, a world-renowned, widely respected artist walked into my studio space. At fifty-one years of age, gray and bearded, with a kind yet rugged face, he looked wise and thoughtful and made an instant impression on the twenty-one-year-old me.

This man was Ian Breakwell: diarist, painter, collagist, filmmaker, performer, broadcaster, and writer. He was in the North East fulfilling the prestigious role of artist-in-residence at Durham Cathedral. He was the most accomplished person I'd ever met.

Breakwell was born in Derbyshire, four miles across the county border from where I grew up in Nottinghamshire. He pulled up a chair and sat with me for half an hour, and I recall that we bonded over our similar accent and mild disregard for the insignificant small towns where we each grew up. He then asked me to talk about my work, specifically my direction and motivation.

Initially speaking only occasionally to encourage me, he listened intently, all the while making notes on a scrap of paper.

Breakwell understood that I wasn't trying to create a romanticized view of the landscape and that my interest was more about journeys, geology, and what we learn about ourselves by immersion in the wilderness.

"What you're doing is interesting," he said, as I remember it. "And you should enjoy the fact that it's at odds with what everyone else in this building is doing."

This was a significant breakthrough for me. I listened intently as he began to throw more ideas and suggestions my way. Leaning forward as the feedback became increasingly focused, he proffered logical and enlightening suggestions for where I should take my work and how I could draw upon specific influences to better understand my own intentions.

At the end of our meeting, Breakwell passed me the handwritten notes he'd scribbled down. The result was a list of artists whose approaches continue to inspire me today, along with specific references to books and exhibition catalogs. This marked a turning point in my methods of inquiry and thought processes; I learned to narrow my research and to delve deeper into the minds of creative people in order to better understand their own motivations and ways of thinking.

Fast forward to 2003, and after several years of exhibitions and reasonable success, I'd all but abandoned making art as my web career began to flourish. Despite the change of discipline, the way I approach creative output still has its foundations in that meeting almost a decade earlier. In 2005, when I read that Breakwell had died, his passing affected me deeply.

I was, however, delighted to see him receive deserved acknowledgment in the broadsheets. In a thorough obituary for the *Independent* newspaper, Jeremy Lewison describes Breakwell as a man who "saw the extraordinary in the ordinary." This was surely meant as a reflection on

the artist's own work, but I like to think this was also something Breakwell hoped to find in the people he encountered. That's not to say that he considered me extraordinary, but in one short meeting this great man had looked beyond that which others saw and recognized value and potential in what I wanted to achieve.

When I think of such pivotal meetings, they are often serendipitous encounters that continue to resonate with me regardless of where life takes me. They give me guidance that I take everywhere, informing my values and subliminally shaping my choices. Without this collection of lessons, I'd probably be bereft of the motivation and purpose that I hope make me a worthwhile designer at this stage in my life. ♦

The Space Between You and Me

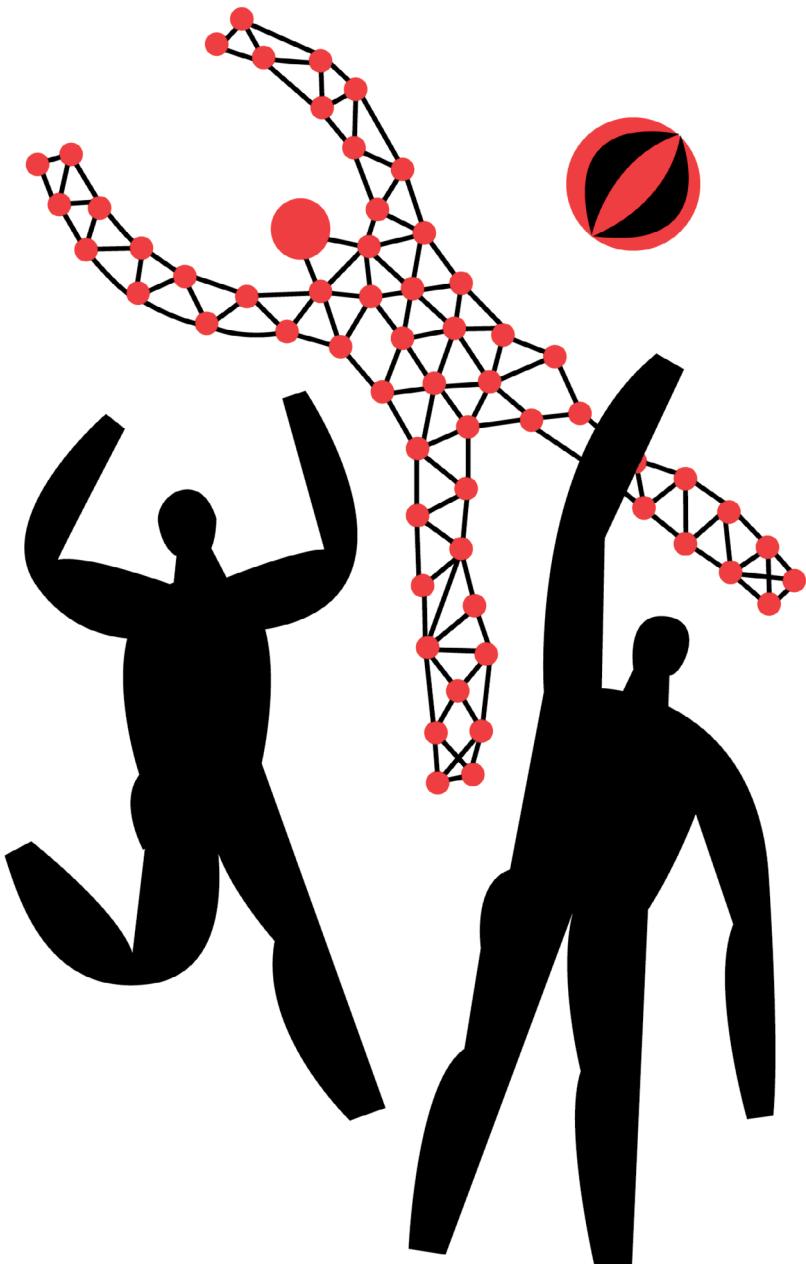
FRANK CHIMERO



I fear that we are beginning to design ourselves to suit digital models of us, and I worry about a leaching of empathy and humanity in that process.¹

—Jaron Lanier

Specks. All of them, even from just seven stories up. We're on the roof, and you can't hear what they're saying. You can't see what they're wearing, or the looks on their faces. You can't see if someone is holding a shopping bag or what may be in it. A red dab follows closely behind a yellow dab. Seven stories up and I can't tell the difference between a kid being dragged along by his arm and a woman being held at gunpoint for her purse. Distance makes the world blurry. There are no identities. There is no vocabulary. The only language is velocity. They are a school of fish swimming through pavement.



It takes seven stories to strip away the humanity of an individual, 143 steps, each one a degree of separation. No longer people, they are dots on a canvas. Remove a person's humanity, and she is just a curiosity, a pinpoint on a map, a line in a list, an entry in a database. A person turns into a granular bit of information.

Information can be manipulated. Jesse drapes his head over the lip of the rooftop. He nods and pulls a quarter out of his pocket. He glances back and forth between me and the coin in his hand. He's looking for permission, and he's not going to get it from me. He knows that, but it doesn't matter; he can do what he wants. It's just information.

Jesse spies an empty parking space directly in front of the building. He presses his middle finger tightly against his thumb with the coin wedged between, and he snaps. The quarter leaps from his hand outward over the street scene, spinning on an invisible axis. Gravity eventually grabs the coin, and it finds its way into the empty parking spot with an assumed rattle and *kerrang*. Just silence from up here.

Information can be manipulated. Jesse looks at me and nods, this time not for permission, but rather in recognition of what is about to happen. We watch like kids at the aquarium when bait is dropped in the tank. We wait.

The specks on the ground stop. They rotate. The bits bump into one another. Some bits begin to oscillate around the coin's final landing spot. A small blue dot accelerates toward the coin, then pauses, presumably to pick it up. Behavior has been modified. Jesse looks back at me pleased, as if he were a deity from above, observing how the world reacted when Zeus lazily lobbed his

lightning bolt from the mountain top. I imagine the scene from the ground. The bits are looking toward the sky asking, “What the hell was that?”

But Jesse is wrong. We are no gods, and this rooftop is no Olympus. Faith isn’t necessary: they can see us perched on the roof. We are seven stories up; we are hazy specks to them. Jesse is a blue bit, I am red. To them, we are not human. Just information. It only takes seven stories.

A scientist once gave a public lecture on astronomy. He described how the earth orbits around the sun and how the sun orbits around the center of a vast collection of stars called our galaxy.

At the end of the lecture, an elderly woman at the back of the room said, “What you have told us is rubbish. The world is really flat, supported on the back of a giant tortoise.”

The scientist smiled and replied, “What is the tortoise standing on?”

“You’re very clever, young man,” said the old lady. “But it’s turtles all the way down.”

Annie is fidgeting in her office chair at a tiny desk with a monitor on top. We’re sitting in a haphazard home office that looks like it’s been converted from a spare bedroom. “You’ve got to hope there’s someone out there for you, as strange as you are,” she tells me as she pushes her hands through her hair. “And, I don’t know. So much has happened over the past year, and I just need something to go my way for once. I need something good to happen to me, otherwise I’m not sure I can keep going. And...” She looks down and smiles the smallest smile she can make,

hoping I won’t notice. “I think this could be it.”

Annie lives at home with her mother, Mary. Mary was a fourth-grade teacher, but her students used to call her Mrs. Blankenship. Some days Mrs. Blankenship can’t remember her own name because she has Alzheimer’s disease. A year and a half ago, Annie’s father died, and her mother’s Alzheimer’s became progressively worse. Annie now lives with her mother in the house she grew up in, tending to the cat and walking the hallways like she’s there by herself. “It’s like living with a ghost,” she says. She is choking up, because she knows that saying that is cruel. Her mother is still here and yet, somehow, not. Earlier, Annie showed me a photo of herself in high school. “It’s embarrassing, really,” she said. “That’s how she sees me.”

Mrs. Blankenship believes that Annie is still sixteen rather than thirty-one. “The situation is really fragile, so I play along. The worst thing would be to make Mom upset.” Annie the thirty-one-year-old has a curfew of nine PM and isn’t allowed to date boys. And that is why we’re sitting at her desk staring at her monitor waiting for something good to happen.

A window pops up on her screen with a ringing sound. Someone is calling Annie. “This could be it,” I say to myself. It’s Brandon and I excuse myself from the room to wander the halls as Mrs. Blankenship sleeps in the next room. The cat rubs against my leg.

Later that night, Annie introduces me to Brandon over the computer, and he and I make plans to get together for coffee at his place the next day. Brandon has an apartment in the city thirty minutes away and a job working

as a legal assistant. He tells me he met Annie on a dating website eight weeks ago. “There’s a certain guilt browsing a dating website because for it to be useful you just have to say no over and over.” I nod but don’t say anything in the hope that he’ll add more. An awkward silence.

“Under 5’2”? No. Blonde? No. No college degree? No. There’s a ticker at the bottom of the page that shows how many results come back after the filter. Mine said about 2,000. Two thousand people I could love. Probably 14,000 more that it didn’t even show me. And yet still, these are all people. They are all looking back, and they want the same thing I do.” He looks down at his black coffee and I notice that he can see himself in it.

“What do they want, Brandon?”

He pauses a moment to think. “To be understood.”

Brandon scrolls through the webpage for me, and it is overwhelming: a cascade of smiles, an immense tide of humanity that goes on forever. The distance makes you forget that these are real people, not just pictures. They secretly love something they can’t tell anyone about. They live for the moment they hold their breath and submerge their head in a warm bath. They are human. On the site, each and every person in the grid of faces has a smile that admits, “I am not yet done.”

I have to shut myself off. My heart is not big enough to hold them all.

“Have you heard the joke about the astronomer’s lecture and the turtle?” Brandon asks.

“Yeah, turtles all the way down, right?” I reply.

“Yes. Scrolling through this page, I never realized it before, but the web. It’s just people all the way down, isn’t it?”

I hadn’t thought of it. The best sorts of insights are like that. When you hear them, they seem so obvious, but until someone says them out loud, they are almost unthinkable.

Let’s just try to have a marvelous time this weekend. I mean not try to analyze everything to death for once, if possible. Especially me. I love you.²

—Franny

A network is a connection of nodes. The history of our network has been a study in how the edges have pushed further out. First our network was for small bits of data transmission. It was for correspondence: short, awkward messages of text sent mostly to people you didn’t know. They were the only people out there; the only nodes who could signal us back, who could answer. Then, the edges pushed out, and the network could share images, and then it crept into other media.

Every shared item became replicated. A full and perfect copy of the content was produced every time it changed hands. All of the copies filled up the room and made waves of content that could be surfed. Then, the network became social. The nodes started talking to one another in much the same way they did outside of the network, and we created a world parallel to that of the real fabric that joined the nodes in physical space.

The nodes are not technology. The web is not an interlinking of servers and scripts. Each node is a person.

Tanya checks her email on her phone and gets a message from her sister. Brad is the systems admin guy who turns on the oscillating fans in the server room. Qian assembles an iPhone at the Foxconn plant in Shenzen. Shannon writes something for her employer's website. Tim curses because he can't find what Shannon wrote. Larry and Sergey make a website so people like Tim can find the things that people like Shannon make. Every little bit that gets pushed through the network passes through a person. The web is technology, but more importantly, it is people, all the way down. People constitute and maintain the network. It is widespread and distributed, but it is very delicate. Like a real web, it needs constant maintenance to keep from tearing.

Technology is a mirror and a crystal ball. The web is a reflection of our desires because it addresses our needs en masse. It is a documentation of how we try to fix ourselves, a study in our self-medication. The web is also a crystal ball because it presents what is to come. Technology is produced to fill our needs, but we are sympathetic creatures. Frequently, we will reduce our needs to feel that the technology is properly serving us, in spite of the inadequacies of the solutions. A half answer is better than nothing at all, and we wish to be satisfied with the solutions at hand, so we shallow our problems, losing sight of their original depth. We shape technology, and it shapes us.

And so our relationship with the social web has gone thus far. It seems silly to say that a network of people may induce person-blindness, but it can and does each day. If the web is a representation of the fabric of humanity, it is a thin veil draped over all of us. The way the web is currently wired accidentally strips the nodes of their personhood because of distance and turns them into odd,

person-like entities. Jesse flings his coin from the rooftop.

It is a struggle to stay human online: avatars of logos (or the very term *avatar*); the phrase *personal brand*; descriptions of the whole of your existence in a little flashing, empty box labeled *About Me*. The social networks that connect us as people accidentally reduce us. Odd that the totality of a person's profile need be described through a list of favorite books, movies, and quotes. Is what I like more important than what I think or what I make or who I love? Is it that people aren't willing to describe themselves as people online. Or is it that we aren't providing a suitable framework for them to do so? We perceive the situation to be technology mirroring our disposition, but it is more a shallowing of ourselves via the crystal ball.

When the nodes cease to be human, we respond differently. A person with reasons becomes a detached opinion that is wrong; actions become annoyances to lash out against; the personality of an individual becomes a *brand* without context. Can providing the human element to the web alleviate these problems? The web documents and doesn't forget, but if users turn into people, can we forgive? Forgiveness is a term I've never heard in relation to the web. Let's not try to analyze everything to death for once. Especially me. I love you.

The connections we make in the course of a life—maybe that's what heaven is, Tom. We make so many connections here on earth. Look at us—I've just met you, but I'm investing in who you are and who you will be, and I can't help it.
—Fred Rogers (Mr. Rogers)³

When the network became social, it was dumb. It lacked

nuance. The social network was based on our idea of ourselves and technology. When we think of ourselves, we picture our complex inner monologues: we believe that we are not simple but rather complex, romantic, self-contradicting—*beautiful messes*. We say this is what makes us human. But what if we’re wrong? What if we pull back the veil to discover that perhaps we are not so complex, but instead we are the opposite?

Technology runs counter to our personhood; technology is complicated and shallow, but people are simple and deep. Our true needs are not complex. I remembered asking Brandon what everyone needed. His answer was profound and human: “To be understood.”

The most exceptional inventions forecast our needs and allow us to realize our full potential. They bring us joy and a sense of brilliance; they make us feel skilled, competent, and more able. Good technology makes us feel like we are inching closer to who we truly want to be. The web has done much to improve our lives, and now it turns its head toward our emotional needs. If it does its job, it can help us to get to Brandon’s idea of being understood: that cyclical process of empathy where one may feel seen, known, and accepted by others, then able to feel the same for them.

Art is the first man-made conduit to this cycle of understanding. The measure of an artist is his ability to place his finger on the face of a feeling; a masterpiece acts as a lens whose focus crystallizes our selves, one another, the world. Can our social network achieve the same? Are our tools adequate for a true *art of conversation*? Most importantly, have we produced a proper representation of humanity for these conversations or a simplified facsimile?

Anything good we may do with this network must be built in a way that utilizes the fabric that binds us, that brings us closer so that our humanness may snap back into focus by eliminating distance. We are all swaddled in the same blanket. By recognizing that, we inch closer to being understood.

We might forget too easily that these nodes, these user-names, are in fact people. People deserve more than the term *username*; they’ve earned a richer biography than a series of labels or a list of favorite movies. We must not allow interactions online to be perpetually stuck in the conversational depth of a first date. We can shun complex and shallow and embrace simple and deep.

We are not there, and yet, I have hope. We can make conduits for meaningful relationships, like the one Annie and Brandon might have. We can feel understood. Jesse and I can come down from the roof. We may empathize and be closer. We, the makers and form-givers of these new technologies, can look someone in the eye and ask “How can I make things that help you to be who you truly want to be?”

See, I’ve just met you, but I am invested in who you are. We are part of a human network. Maybe that’s heaven. ❤

¹ Jaron Lanier, *You Are Not a Gadget: A Manifesto*, (Vintage Books, 2011).

² JD Salinger, *Franny and Zooey*, (Little, Brown and Company, 1961).

³ Tom Junod, “Can You Say...Hero?” (*Esquire*, November, 1998).

Lesson

FRANK CHIMERO

The smell of burnt coffee and copier toner saturated the small room off the computer lab on the fifth floor of the university's alumni center. In the feast of creativity, this is where we broke our bread. The design department was a few blocks further downtown, ostracized from the main campus. We were shoved up to the top of the building like a team of astronauts in quarantine. We were excluded. Then we were forgotten. A harsh atmosphere for education? No. We quickly learned that if you're forgotten, you can do whatever you wish. We were free; encouraged to be reckless and boisterous. We were treated as humans and co-designers by our teachers rather than as mere students.

I was waiting in the spare room outside his office hoping for one last opinion of my portfolio before heading out to present it to the design world. This was my coming-out party; my portfolio was going to be my master stroke to land the best internship I could between my junior and senior years of school. We're all stupid at twenty-one, thinking that humanity is waiting with bated breath for our emergence into the world of commerce and responsibility. Truth be told, it doesn't care. We think it will gasp. Instead, it yawns.

I peered through a gap in a window tiled with postcards from previous exhibitions of his work. He was on the phone but made eye contact and waved me in, motioning with his hand to sit. We had a long history: I had taken six classes with him, and in the next year I would take three more. Our communication had a shorthand—gen-

eral gesticulations that meant tighten it up or loosen your marks, think harder or, at worst, "Start over, Frank, what the hell are you doing trying to play this off as work?" He was a stern practitioner and I thrived on it. This was the first teacher whose standards for my work were higher than my own. He pushed, and pushed hard. Other students broke, they cried, they dropped the classes. They villainized him. Not me. He wasn't impossible to please, but he wasn't happy until you forced yourself one step beyond what you were comfortable doing. No half-measures allowed. If you tried like hell, he mirrored your efforts. If you emptied yourself onto the page, he would empty himself out for you.

He motioned to the blank space in front of him on his desk and signaled me to place my portfolio there. He wedged the phone receiver between his shoulder and ear and uttered the occasional "Yes." "Right." "Uh-huh." He started quickly flipping through the book. Most of the work he had seen before; I was especially interested to see his response to the projects he had not. He turned to one. "Yep. Oh, that's great. Yes. Yah." I pretended he was saying that about my project and not to the person on the other end of the call.

He finished going through my work, and said into the phone, "Janet, could you hold on for a moment?" He covered the receiver with his hand, and I leaned forward in my chair. "You know, Frank, after looking at this..." My eyes widened. Okay, here we go. Finally, some honest feedback. Something other than "looks great."

"Needs more love," he said to me. "Okay, Janet, I'm back. Sorry for that, just have a student in here." He waved his hand to shoo me out of his office. He wished me well on

my trip and said that he would see me next week in class.
He smiled.

“Needs more love.” Best damn advice I’ve ever gotten. You can keep your practicality and your *action items* and your *take-aways*. You can have your instructional advice, your recipes, your prescribed steps to fulfillment, and your ladder-climbing. I’ve got this: this little gem of insight from a man who taught me so much. The only thing that matters is that we care more than we already do about the people and places and projects that we give our time and attention. We’ve got to believe in the stuff.

And, you know? I can forget everything else I ever learned from him and just keep this. I can lose my portfolio, I can lose my clients, my motivation for the work; I can lose my bluster, my attitude, my point of view, my aesthetic. I can lose a million dollars and every client I’ve ever had or could ever hope to get. I can quit design, I can never speak of typography again, I can never put words to another page. I can lose my memory, I can lose myself. All of it can disappear in the next second, and it won’t matter.

I’ve got this. “Needs more love.” ♡

Taxidermista

JON TAN



Imagine: You’re in the Tate Modern. You enter one of the upper-floor galleries. The far wall is covered in pictures. People stand, hands clasped behind their backs, contemplating. Some pictures seem sparse, some muted, others rich with color. Some seem to be all text; others appear to have none. You walk closer and you realize they’re all pictures of websites. Frozen, in frames, on the wall.

You notice a sign set in VAG Rounded, from which the Tate logotype was derived, and you smile in recognition. But then your attention snaps back. Wait a second. Websites, in frames, on a wall.

The sign reads “Web Design Gallery.”

UNINTENDED CONSEQUENCES

Web design galleries have been with us for a long time. Hundreds of sites are added to them every day. They're a common destination for many designers searching for inspiration. They aggregate our work, becoming the default archives of web design. When sites are changed or simply disappear, a gallery screenshot (or perhaps a screenshot in a portfolio) is often all that remains.

The best gallery was the CSS Zen Garden started by Dave Shea in 2003. Updates stopped in 2008. It had a specific purpose: A “demonstration of what can be accomplished visually through CSS-based design,” created in order to rebut a common misconception at the time that standards-based design was boring. It wasn’t just a set of static images. Each page was an exhibit, with identical HTML and text, but with CSS and images submitted by web designers. Only a few were selected to become official entries. The Zen Garden provided education and inspiration to prompt web designers to drop the familiar tables-based layouts and inline styles they were using—and it worked. In tandem with grassroots advocacy from all corners, increasing numbers of web designers embraced web standards. Web design reset itself to a simpler, more usable, more accessible mode.

Other galleries sprang up, mostly imitating the CSS Zen Garden with a requirement for table-less HTML and CSS, but with little or no curation. Then we started to be bludgeoned with blog posts full of so-called design inspiration with titles like “Thirty Awesome Minimalist Designs” and “Fifty Amazing Grunge Designs.” In contrast to the CSS Zen Garden, the web is now littered with galleries of all sizes that pay little more than lip

service to web standards.

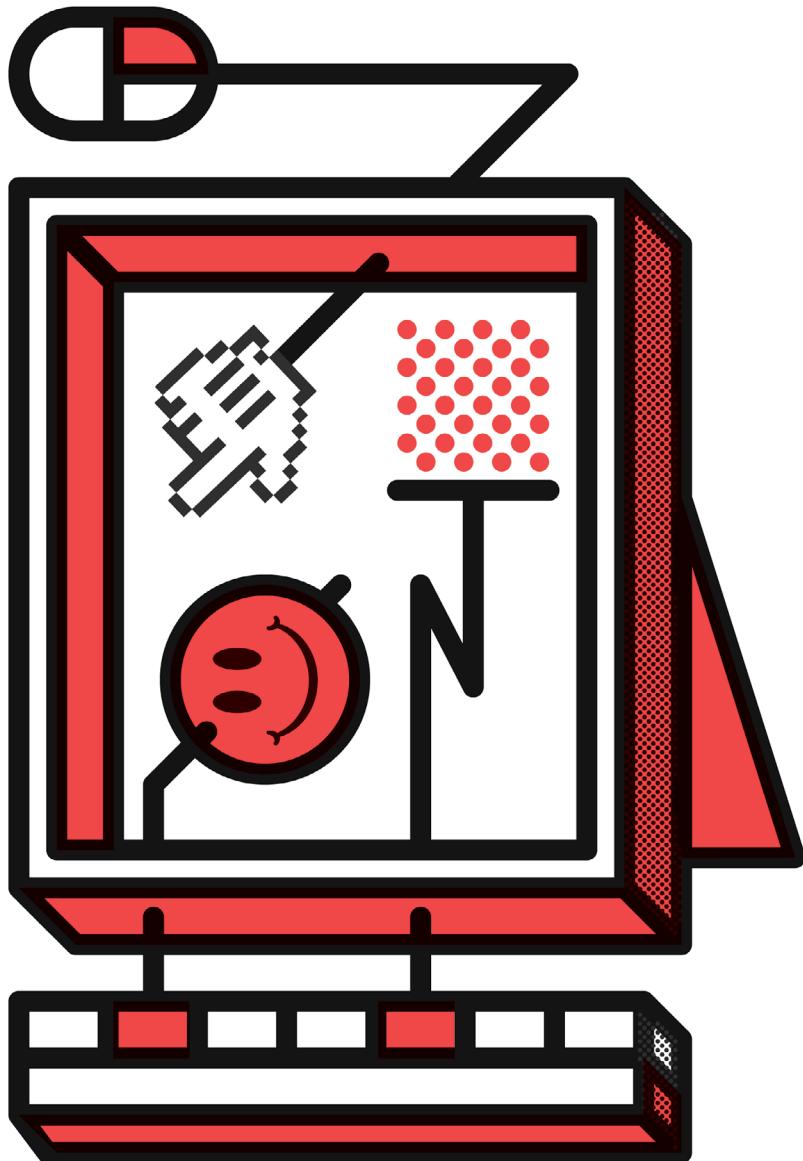
Command Shift 3 is an accidental parody of a web design gallery. It invites viewers to compare two randomly chosen sites at a time and decide which are *hot* or *not*. There’s something to be gleaned from our proclivities by viewing this gallery’s *all-time best* list. Sites with large format stock photography and rich illustrations feature heavily. The rediscovery and enthusiasm for typography is apparent. Votes motivated primarily by popularity, favoritism, or a sense of loyalty are manifest.

Today, the most common type of web design galleries are link farms and the web equivalent of trade magazines. They generate traffic by relying on designers who are looking for inspiration. The attention they attract is converted to advertising revenue. Most have almost no information about the work, just a screenshot, a credit to the designer, and a URL. We can visit the site if it still exists, but any celebration of the craft of web design is absent.

Galleries misrepresent web design as a state, not a process. They divorce what a site does from how it looks. They celebrate *style* and *tone*, not *purpose*.

By *style* I refer to genre. Web design is often a jumble of styles that unconsciously reference different movements and genres in art and design; they range from baroque to photorealistic, to modernist, postminimalist, and postmodern, and often give a nod to Americana.

Tone is emotional nuance. Emotions can be instantiated based on our prior conditioning but are often unconscious, automatic reactions. The emotional seat of our brain is the amygdala. It’s one of the oldest parts, known



as the *lizard brain*. Instincts like *fight or flight* reside there. It can receive sensory input but the *amygdala* has no language. That means we can have an emotional reaction without words to something we see. So when we see a screenshot of a website, we can have an emotional reaction before we have words to describe it. We see this in our use of words and phrases such as *lost for words*, *speechless*, or *dumbfounded*. Sometimes, there are no words, just emotions—positive or negative.

By *purpose* I refer to the appropriateness of the style and tone. Do they fit the project? That question is rarely asked or answered by galleries. The only reaction galleries solicit is an emotional one. Like or don't like. Hot or not.

AND, WE'RE LIVE!

In this era of responsive, adaptive web design, APIs, and free-flowing data, websites are almost alive. We abandoned believing that they needed to look the same across all platforms when we realized that would be like expecting type to print identically on toilet roll and art paper. Websites now respond to the device and the viewport. They can be progressively enhanced. They are ripe with narrative possibility; they emerge and react as people use them to create content and interact with each other.

Websites are like places, not postcards. A postcard of Barcelona will never be the same as being in Barcelona's Plaça Reial, hearing the noise, smelling the pungent odors of the Barri Gòtic, turning full circle by the fountain to catch glimpses between the palm trees of the clubs, bars, and restaurants under the arcades designed by Gaudí. Even a 360-degree interactive panoramic isn't the same. Yet most design galleries don't even give us

that. They present us with postcards to be admired rather than places to be experienced. This leaves us dislocated from the atmosphere, the purpose, and the reality of what the designer created. We're like people trying to hear a record by staring at its cover. The cover art may be beautiful in its own right, but it is not the music inside.

CLIENT MISCONCEPTIONS

Like designers, prospective clients also use galleries for inspiration and research. Some also delve into sites themselves and come up with preferred styles and features. However, in the same way that there used to be a misconception that standard-based methods made for boring websites, there's a misconception among some clients that web design is like graphic design but with bits that move. The difference is, there is no CSS Zen Garden to help disabuse them of this belief.

It's only natural that clients will do their own design research. They will make aesthetic judgments and have their own taste. However, it's worth understanding the difference between the two: An *aesthetic* judgment is often inexplicable, like an emotional reaction; it's instinctive and can defy explanation and resist attempts at persuasion. To the client, something is either beautiful or it is not. *Taste* is more rational and can evolve rationally based on an appreciation of what something is for, why it is designed in such a way, what the result will be, and even how it is made. In a good, collaborative client relationship, we should always be able to influence taste.

Sometimes, rather than asking us to provide solutions and answers, clients ask us to implement theirs instead. My Analog colleague, Chris Shiflett, likens it to clients

who say they want a window in a wall when what they really want is to eat their breakfast in the sunshine.

The best designers educate clients and inform their tastes. They avoid clients who ask designers merely to implement the clients' ideas, and they don't promote the misconception that web design is graphic design with interactive bits. They reset the process to identify the audience, problems, questions, and opportunities of the project before researching or implementing solutions. They refuse to do spec work for free; this work is a costly and damaging legacy from advertising and print. For example, Edenspiekermann helps clients with their creative brief, but only proposes solutions after they've been engaged by the client. I work in the same way and believe we all should. Producing any material whatsoever that provides answers and solutions before engagement should not be part of what we do.

Galleries do not bear sole responsibility for how design is commissioned. However, they do encourage clients and designers to value style more than process. They do promote transient fashion over fit and make trends of movements such as minimalism or styles like grunge or the ubiquitous Apple®-inspired aesthetic. The answers to a project's questions may have something to do with fashion, but not often. Good design does not have a shelf life. The best web designers gently disregard issues of style at the start. They rewind their clients back to asking the right questions, so they can rewrite the brief and understand the objectives before they propose solutions. After all, it's impossible to design solutions that fit the job at hand if we don't really know what the purpose or problem is.

Showing empathy for the audience is an essential part of

what we do as a profession. The best designers advocate for users at every stage and realize the *audience* is the true client. However, there's a flip side to empathy. By being empathetic, designers are often information sinks, absorbing influences from everywhere, and as a result they perhaps are even more susceptible to fashion. It means we all have to moderate, just a bit, our enthusiasm for the new. At the same time, we also must moderate our clients' enthusiasm for solutions before process. By moderating both, we free ourselves to focus on process, to connect the dots between bits of inspiration, and to gain insight into how we might solve the problems at hand.

DESIGNING PLACES NOT POSTCARDS

Galleries can offer us graphic design inspiration from colleagues. We aren't graphic designers, though; we're web designers. There is much more to what we do than combining typography, layout, photography, illustration, and color.

The images in galleries are like flat comps (comprehensive layouts). They encourage a feeling that comps have more value than they actually deserve. Comps are used in graphic design and advertising to present a proposed layout to clients.

Most web designers start by distilling their research and ideas with notes and sketches, either on paper or in pixels. Sketches often evolve into hi-resolution comps in applications such as Photoshop® or Fireworks®, or wireframes in OmniGraffle®, Keynote®, or Powerpoint®. They're useful for mocking up a design while bearing the final medium in mind, but they aren't the end of the story. At the most basic level, the two commonly used graphics applications I mentioned both use their own

text rendering engine, so even the ability to preview type is not truly accurate.

Collaboration between designers and developers is crucial to the final product. Throwing a Photoshop comp over the fence into the arms of a front-end developer is not optimal, no matter how neatly annotated and layered it is. I call it a *throw-over*. It is the most likely point of failure. Substituting collaboration with a post-production review almost always means more revisions. Throw-overs rely heavily on web designers knowing the technical opportunities and limitations of the medium, and on front-end developers having as much skill in design as the designers themselves.

The same goes for wireframes thrown to a graphic designer or front-end developer. Wireframes are not a website. They could be considered hi-res interaction comps if annotated properly, but they still rely on graphic designers and front-end developers delivering the vision of the user experience designer, and the UX designer knowing the medium well.

The web designer's role is to design a website that meets the objectives of the project. Though we are often not the ones configuring server environments, building server-side components, or even building the interface itself, as designers it's our vision that will meet the objectives. If we assume that role of meeting project objectives, effectively we are product managers, and, as such, we have to see the project all the way through to becoming a product.

Whether we work within a team or independently, our understanding of the audience, context, and medium is critical in order to effectively design for them. Galleries don't

show objectives; they don't show the context of the project or the cognitive, behavioral, and technical grammar of the web. Without those components, a website might as well be frozen pixels, in a browser chrome, on a screen.

DESIGNERS FOR THE WEB

In every respect, we have defined our own profession out of the many disciplines needed to make websites. In between making them, we are constantly augmenting and refining what we do and trying to find the language to explain it.

I call us *web-taught* because that's what we are. In 1991, when I was experimenting with plate and press and musing with my brother on this new thing called web design, there were no degrees in web design. They may exist now in some form, but the vast majority of us are still self-taught. We are constantly asking why we do something in a certain way, not just what we should do, or how we should do it, and we freely share what we learn. We see the necessity of combining our creativity with pragmatism, realizing that we must make sites that work—for us, for the client, for the visitor—if we are to be paid. And yet, we've managed to imbue our practice with an abiding sense of responsibility for the universality of the web (as Tim Berners-Lee described it). That makes it even more important that the archives of our work contain more than just images.

The founder of Patagonia, Yvon Chouinard, described himself as an “80 percenter.” In 2007, Dan Cederholm suggested that, as a web designer, he was an 80 percenter, too. I think I am, and many web designers are. We throw ourselves at a discipline to reach an 80-percent proficiency

in a variety of skills our work requires. By being 80-percent proficient in the subsets of web design, we can get very close to achieving 100-percent proficiency in web design itself. More and more, the range of skills we need in order to make websites are distributed across the members of a team. To design interfaces that work in the best possible way, everyone needs at least a rudimentary understanding of what everyone else does and an abiding dedication to this medium we all work with. Molly Holzschlag referred to *silos of thought* at Web Essentials in 2005. Molly imagined our knowledge as a T shape: a broad familiarity across many disciplines but deep expertise in one. Molly nailed it. And by doing so, she neatly illustrated how a variety of effort goes into making every website.

REDUX

Tucked away in the north corner of the Plaça Reial in the shadows of the arcade is a restaurant called Taxidermista. I remember it as a beautiful place to sit, eat, and watch the world go by on a balmy evening in one of Europe's most iconic plazas. It's changed a lot from the taxidermy workshop that used to be there. Except for the Wayback Project and still-functioning sites, the galleries serve as the primary archive of our work, and they are like taxidermists, preserving websites by stuffing them into screenshots. It's time to realign or reinvent how we archive our work.

One day I'd like to walk into a gallery in the Tate Modern and see the improbable: A scattering of old devices running old browsers on old operating systems serving websites of a bygone era from antiquated server architectures to tiny screens at low resolution. The designers may cringe a little—in the way all of us do at some of our old work—but for me it would be a joy to see, touch, and ex-

perience. In much the same way we marvel at the achievements of game designers working with 8 kb of memory, I think we'd marvel at what our peers achieved with an early web browser and a 640 by 480 resolution display.

Until that rather optimistic imaginary exhibit exists, I'd settle for galleries that annotate, explain, and act as a guide to a place, even if the only visual artifact is a screenshot. Many designers already write about their work. I'd like us all to try to work out ways to tell the stories of websites, so that we honor the craft of *everything* we do. I'd like to know what a website is for, what went into making it, how it was built, who collaborated to make it so, but most of all why the design evolved to be as it is. In our offline lives, we can be mentally transported to a place by reading about it, and we can even enhance our physical visit to a place by reading about it. I'd like us to offer ourselves and our clients the same opportunity when visiting these websites, these *places*. We should start with our portfolios; after all, they should be the best galleries. Perhaps as we refine how we archive and exhibit web design, we will also foster a better understanding of our profession for aspiring web designers, our clients, and each other. ♦

Lesson

JON TAN

It's an age ago. I'm on a beach called Haad Rin Nok, on an island called Kho Pha Ngan in the Gulf of Thailand. The beach is deep, pale sand bounded by green steep headlands to the north and south, the sea in front, and wooden bars and bungalows behind.

There's a Full Moon Party tonight.

It's almost dark. Music is everywhere. The beaches and bars are scattered with backpackers. To the south is a small bar with a sand floor, tables running down the right, the bar to the left. It's almost empty. That's why I walked in.

Except it's not quite empty. Four Thai men sit around a table. They're slender and trim, slightly smaller than Europeans the way most Thai people are. Sweating bottles of Chang beer sit in front of them. One man has a long ponytail tied neatly back. His elbows rest on the table as he softly spits quick-fire whispers across it, punctuated with small emphatic gestures as tightly contained as the volume of his tirade. As he speaks he stares intently at the man opposite him, who hunches forward into this storm, arms tucked between his legs, leaving the table to the speaker in an unconscious act of submission. I notice all this in a glance and raise an eyebrow at the barman who returns the smallest of shrugs.

Thai people are renowned for their friendliness. Travel companies describe Thailand as a happy place, "the land

of smiles.” That trite message completely misses the array of emotions a smile in Thailand can convey *other* than happiness. The barman doesn’t smile. Suddenly I’m *very* wary.

Into the bar bounds a Western guy just getting started on his backpacking adventure, to judge by his pasty skin. He’s leaking exuberance in anticipation of the night ahead. He’s massive. Six-and-a-half feet tall with shoulders like beer kegs, and full of friendly energy. He orders a handful of beers and with a broad grin notices the guys around the table as the barman reaches back for them. Just at that moment the speaker pokes a finger in the air as he snaps angrily at his counterpart. The backpacker’s grin doesn’t falter. “Hey guys, c’mon, don’t argue!” he shouts in response.

The guys at the table ignore him without a glance or breaking their conversation.

I try to catch his eye, but he’s already moving over to them. Not used to being ignored, and with an absolute confidence in his presence and the certainty that his good humor is infectious, he feels a sense of righteousness that carries him on in his intervention.

“Hey! C’mon, man” he scolds with a grin. “Quit arguing, dude. It’s the Full Moon Party!”

The table goes silent. The speaker looks up.

The backpacker pauses. Emboldened by finally managing to attract their attention, he throws his huge arms wide in a gesture of invitation. “Hey! C’mon, man, have a dr...”

In a flash, the speaker lunges out of his seat, smashes a bottle of Chang in hand, and pursues the backpacker onto the beach at top speed. The table empties as the other three guys and I follow.

The backpacker tears up the beach at breakneck speed, terror on his face as he casts frantic glances over his shoulder at the speaker flying a few strides behind, broken bottle pumping in his fist. Violent intent rolls off him in waves. The two disappear into the distance. The only indication of where they are is the herd of people craning their necks then stepping back as they run by. People are shouting now. The runners are heading back toward us. Some people laugh. There’s dark humor in the laughter. A tiny, murderous-looking Thai man is chasing one of the largest backpackers they’ve ever seen. The backpacker isn’t laughing. He’s running for his life, and on his face is the absolute certainty of knowing that the guy behind him isn’t laughing either.

They draw level with the bar; the backpacker is fading fast, and the speaker is closer. In a spray of sand, the backpacker sprawls to his knees, turns, and faces his pursuer. His mouth is open, chest sucking air, massive arms held in front of him, palms up. Eyes wide with fear.

“Sorry, man. Sorry! Please, I didn’t mean anything. Nothing. Sorry. Please!”

The speaker halts in front of him. He’s looking down, face twisted with rage, bottle loose in his fist, the jagged edges raw and dark. He glances at the group standing in front of the bar. Then he smiles.

The backpacker’s face rises from fear to relief.

But then the bottle is pressing against his neck. The speaker's smile has gone. The backpacker freezes. People including me shout, "No!"

The speaker smiles again. He steps back, clips the backpacker around the ear and, still smiling, drops the bottle and walks back into the bar. His friends follow. I'm watching the backpacker, slumped on the sand, tears in his eyes. We help him up. He's in shock, too ashamed to speak or look anyone in the eye, and mutters he's fine as he stumbles away. I am shaking, too.

The sun went down fast. In the dark that night, as the music thumped and the SangSom flowed on the beach, my friends and I relived this most savage lesson. I couldn't condone what the speaker did, but I understood him. He could not lose face in front of his peers. He wasn't looking for trouble; it just walked up to his table. I also understood how a Westerner might expect a positive response to a friendly, good-humored scolding. The backpacker learned that in Thai society, some people will go to extraordinary lengths to save face. I learned that the world may seem small, but our cultural differences can be vast. Try to understand people, lest they surprise you with their smiles. ❤

A 3D surface plot showing the distribution of allele frequencies. The vertical axis represents the allele frequency, ranging from 0.0 to 1.0. The horizontal axes represent two spatial dimensions. The surface is composed of numerous small dots, primarily black, with some red dots scattered across it, indicating specific data points or mutations. The overall shape of the surface is a smooth, undulating wave that rises and falls across the grid.

Off The Page

DAN RUBIN



Consider for a moment the beautiful physical artifact you are holding. Caress its cover, marvel at its binding, its spine, the gutter, how the ink flirts with the texture of its paper.

These attributes we use to describe and define a printed book or periodical owe their existence to the physical form of the artifact itself—the constraints of the medium gave life to the solutions employed by the craftsmen responsible for turning desire into reality.

The book as we know it is the sum of its parts; it evolved to serve the needs of its physical form.

Similarly, mapping the concept of a *page* to the web has affected the way we design, create, and curate content. The term carries history and meaning in an unassuming manner, quietly imposing its will on our entire thought process.

By simply existing in our lexicon, the page has influenced our approach to design, layout, navigation, interaction, client communication, widths, heights, folds, advertising, and typography. As with the book, the web as we know it has evolved due to our perception of its form.

The web was never intended to be a replacement for print—an evolutionary step, perhaps, but certainly not a digitally-distributed clone with a few extra bells and whistles. Yet web design in its current state is often a strangely beautiful hybrid, inheriting its principles, typography, and language from decades of print, graphic, and information design, enhanced through layers of interaction, audio, and video yet clearly capable of so much more.

Writing about information design, Edward R. Tufte recognized the dissonance between our physical world and the way we attempt to represent it, explaining one of the conceptual problems we face when designing for the web:

Even though we navigate daily through a perceptual world of three spatial dimensions and reason occasionally about higher dimensional arenas with mathematical ease, the world portrayed on our information displays is caught up in the two-dimensionality of the endless flatlands of paper and video screen. All communication between the readers of an image and the makers of an image must now take place on a two-dimensional surface.¹

The year this was published, Tim Berners-Lee invented the World Wide Web.

The web has been document-centric from the beginning.

When Berners-Lee proposed building a network atop the burgeoning internet to facilitate sharing of information, the format of that information was primarily text—more specifically, hypertext documents following the structure of research papers and scientific documentation. Berners-Lee’s first web browser—a window-based application for the NeXTSTEP platform; initially named “WorldWideWeb,” and later “Nexus”—even determined the size of its windows based on the *Page Layout* settings for printing viewed documents.²

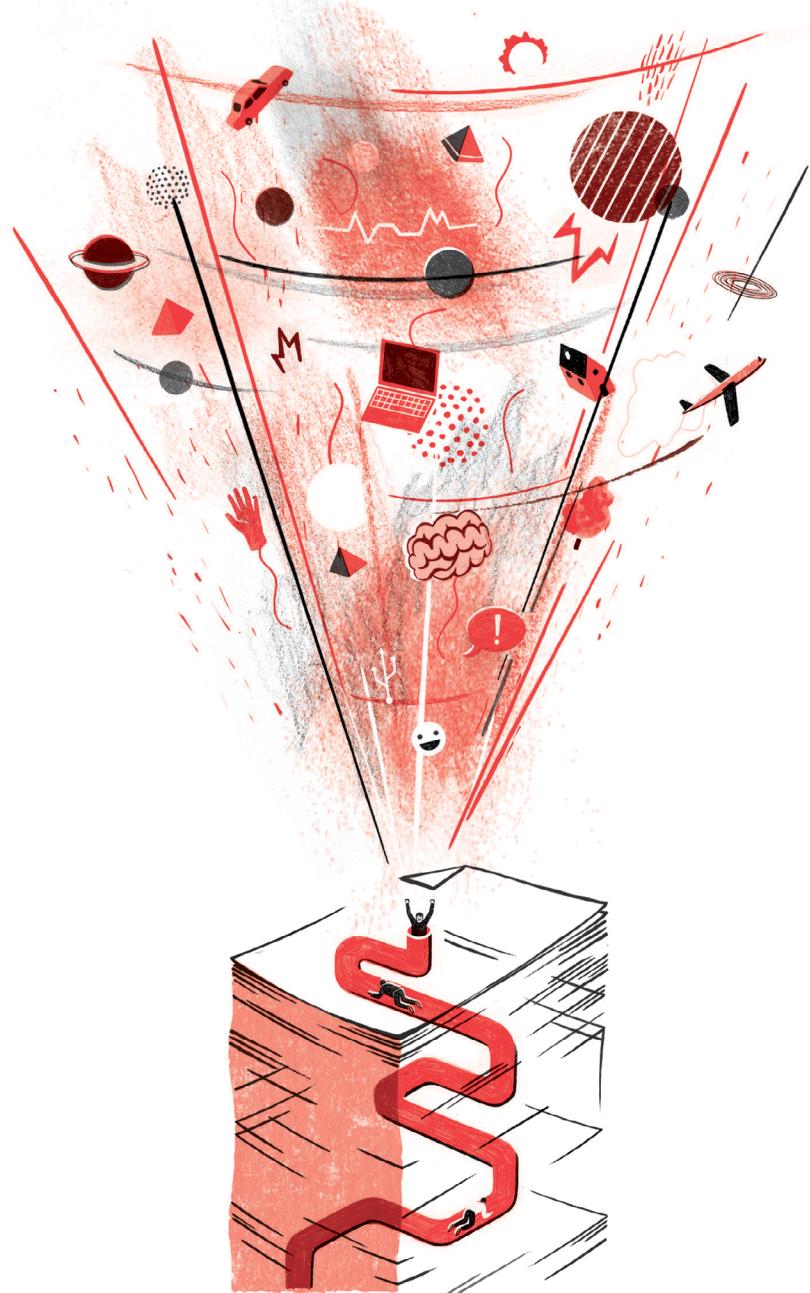
So the web was conceived as a variation on the word processor—a distributed network of linear documents connected by a layer of hyperlinks. It stands to reason, then, that everything we have at our disposal today is somehow a result of this initial vision, that every site we design, every experience we create is an extension of the document-centric approach.

This is why text elements are the foundation of HTML and why everything else—tables, CSS for layout, video, plugins—are merely extensions in response to demand.

If we consider the web as it was initially envisioned, it’s not surprising that we’ve found it so easy to use *page* to unwittingly define our own boundaries.

Page

“sheet of paper,” 1580s (earlier pagne, 12c., directly from O.Fr.), from M.Fr. *page*, from O.Fr. *pagine*, from L. *pagina* “page, strip of papyrus fastened to others,” related to *pagella* “small page,” from *pangere* “to fasten,” from PIE base *pag- “to fix” (see *pact*).³



Exploring the origin of the word *page*, as applied to the web, leads us to an interesting discovery. Of all the carefully selected terminology Berners-Lee used when creating and defining the web, *page* appears to be used incidentally, appearing just once in the *Hypertext Terms* glossary as of 1992 (the earliest existing version) and even then only to assist in defining another term:

Card

An alternative term for a node in a system (e.g. HyperCard, Notecards) in which the node size is limited to a single page of a limited size.⁴

The use of *page* to help constrain the definition of a card to something of a limited or fixed size demonstrates that even for the inventor of the web, the word held all the restrictions of its physical form.

The lack of a specific definition for *page* is also an example of familiarity informing preference, though this time subconsciously. We all know what a page is—especially regarding documents in the scientific sense as used by Berners-Lee—and that's where the problem lies. For on the web, the traditional definition falls woefully short.

In that same glossary, we find two other interesting terms, *node* and *document*, which seem to have been Berners-Lee's preferred choices for defining individual units of information on the web. He even had users in mind when suggesting the use of *document* as the better of the two terms, as it was "the nearest term outside the hypertext world" and thus "the prefered[sic] term in W3 documentation."

The frequency with which these synonyms appear within the original glossary is intriguing: *node* appears thirty-one

times, *document* and *card* six each, all with clear purpose and intent.

Page, however, is only mentioned in passing, its definition secured four centuries earlier.

Trying to imagine a web without pages is like asking, “What if books had never been books?” While not strictly practical, this exercise in imagination leads us down an interesting path.

Let’s use books as our example: what if books never had pages? What if we were to separate the intellectual artifact (the document) from its physical format (the book)? We can follow this line of questioning to an age before pages and leaves, before individual sheets of paper were bound together to form a codex (precursor to the modern book). We find ourselves reading a scroll—still a document: linear, orderly, and structured, yet formed as one continuous physical unit. How did the change in physical format from scroll to book affect the medium? Covers, binding, pagination, indices, even the printing press, all owe their existence not to the document, but to the constraints and requirements of the physical format of the object we know as a book.

Now let’s apply this same line of questioning to the web. What if the web never had pages? What if documents on the web were simply abstract points on the network at specific addresses?

It’s likely the types of content (the intellectual artifact) would be similar; after all, the desire to share *information* led to the creation of the internet and the web. But much like the differences between a scroll and a book, the

physical format—or in this case, the virtual—would lead us to a different set of solutions, perhaps avoiding some of our existing problems along the way.

If we never defined the web as a series of *pages*, would we have needed pagination? Would the debate over the *fold* have made the transition from the world of printed newspapers? Might the *infinite canvas*—Scott McCloud’s concept of the visible area of content on the screen as a *window* instead of a page—have been embraced as the natural approach to designing for our content?

McCloud also suggests that pages are optional, that “without such restrictions...every one of those choices can be made exclusively on behalf of the needs of the story.”⁵ This approach to designing without boundaries has led us to more responsive design practices, but we’re still just skimming the surface of what is actually possible.

We talk at length about experience, emotional design, content strategy, visual grammar, psychology, usability, and standards, but none of them really challenge the way we work, the way we think about the larger concept of what we’re actually capable of doing with this incredible network of wires, satellites, servers, ideas, and people. The conceptual dissonance between what we know we are capable of achieving and the perceived structure of the web has limited our ability to surpass the medium’s current constraints.

The resulting uncertainty has given rise to time-consuming arguments and discussions surrounding the validity of solutions to problems which, had we better understood our own medium, may not have needed solving in the first place.

Perhaps we would have been spared the oft-heated debates over fixed vs. liquid or fluid layouts, a topic directly related to the constant misinterpretation of how, exactly, we define the boundaries of a page on the web.

We might also have avoided clashes with clients born from simple misunderstandings over print industry terms such as *bleed* and *fold* and instead spent more time discussing interaction, content, and usability.

If the days, weeks, and years devoted to these and other discussions were reallocated, imagine the larger, more significant problems we might have addressed in that same amount of time.

Let's revisit the idea of a web without pages. In this alternate history, print-related disciplines—traditional publishing, advertising, branding—would recognize the web as an entirely new medium, unrelated to their existing notions of plane or dimension. Perhaps, under such circumstances, repurposing language and concepts from those media would not result in the confusion we face when communicating with clients and interdisciplinary colleagues.

Much frustration has resulted from the misunderstanding of what, exactly, the web is supposed to be. Our ongoing identity crisis—epitomized by constant discussions of job titles, roles, labels, and lexicon—stems from our medium's document-centric origin and our inability to limit ourselves to headings, paragraphs, and lists.

Yet this seemingly arbitrary constraint has led us to what we consider the modern web to be: images, video, JavaScript, animation, Ajax, apps—and, yes, even Flash. Without the inherent limitations of a system designed to

share simple documents, we may never have realized its enormous potential.

Our approach to designing for the web can restrict us as easily as the misconceptions we, and others, have about how to define the medium. Discussing the advancement of abstract painting in the mid-1980s, artist Frank Stella recognized a similar dilemma:

It is not the problem of perspective, either linear or atmospheric; nor is it the problem of flatness that makes this space so different, although this often seems the best way to describe it. Rather, it appears to be something in the intention, in the acceptance of commissioned configurations, in the attitude toward covering a given surface that held painting back, that actually kept it from creating a surface that was capable of making figuration look real and free.⁶

Perhaps the approach we take, our intention, our attitude toward the medium and how we perceive and define it is what really prevents us from true advancement.

Our canvas is not the viewport, nor is it Photoshop®, HTML, CSS, JavaScript, video, mobile, native apps, or a screen or device of any dimension or capability. It is no longer simply *the web*; it is at the very least the internet, the people and devices connected to it, and the context of those connections.

Yet while we struggle to define our canvas within this virtual construct, we remain unable to manipulate aspects of layout and typography that the printed page has enjoyed—mechanically or otherwise—for centuries. How is

it that we've inherited preconceptions but not application?

For years, web designers have been playing catch-up with traditional print designers; yes, webfonts are fantastic, but print designers have had their choice of typeface for decades, and besides, the web is not print. With so much of our energy focused on becoming more like an existing, static medium, how can we expect to evolve our discipline beyond the confines of the document-centric format?

The answer, for some, involves other media. Are video and audio—Flash, HTML5 or otherwise—the non-document-centric future of the web? This seems unlikely. Television and radio are already acceptable delivery mechanisms, and the web has little to do with the viability of those media on the internet. We already interact with remote content via our TV sets and mobile devices, and although certain APIs and protocols build on top of web technologies, it is naive to assume they would not have evolved of their own accord.

If a few layers of interaction and multimedia on top of previously static documents and content were all the web had to offer, we could have stopped at forms and plugins, and been perfectly content.

Thankfully, we are *not* content with the current shape of the web, though to evolve beyond the page—our flatland—we must try harder, imagine greater, invent more, and break rules. Tufte once again exhibits clairvoyance by explaining two decades ago the task which now lies before us:

Escaping this flatland is the essential task of envisioning information—for all the interesting

worlds (physical, biological, imaginary, human) that we seek to understand are inevitably and happily multivariate in nature. Not flatlands.⁷

Our responsibility is not to replace *page* in our unique vocabulary of web design but to acknowledge that our current understanding of what it means to design for the web is just a single blip in a universe of possibilities. The web is quickly evolving, and as its creators we must explore the myriad forms our medium offers without allowing our perceived constraints to limit its potential. ■

¹ Edward R. Tufte, *Envisioning Information*, (Graphics Press, 1990).

² “Page Layout,” *WorldWideWeb Menus*, (W3C, 1992).

³ “Page,” *Online Etymology Dictionary*, (W3C, 1992).

⁴ “Card,” *Hypertext Terms*, (W3C, 1992).

⁵ Scott McCloud, *Reinventing Comics*, (Harper Paperback, 2000).

⁶ Frank Stella, *Working Space*, (Harvard University Press, 1986).

⁷ Edward R. Tufte, *Envisioning Information*, (Graphics Press, 1990).

Lesson

DAN RUBIN

It was 1 AM. I was twelve.

I was at a weekend gathering of a few thousand men who stood in small groups, much closer to each other than many men would feel comfortable, making music with their voices. It was my first full experience of the fellowship and family atmosphere of the four-part a cappella style called barbershop harmony.

Most of the 35,000-plus members of the all-male Barbershop Harmony Society in the US—the largest singing organization in the world—sing for pure, personal enjoyment, but they can't do any of it alone.

Ensemble singing is all about collaboration: each person plays an important role balancing and tuning, relative to the key and each chord. We form a bond when singing together, becoming one voice, one instrument, but that voice falls apart when even one person doesn't do what he is supposed to. Understanding your place within the group, the role you play from first breath to last chord, as well as your responsibility to the other singers in your group and to the audience, is just as important as singing in tune.

I was up late that night singing tags, an aspect of the hobby to which only members are typically privy.

To fully grasp how thrilling tag-singing can feel, you need to experience it and be a participant. A *tag* is, to para-

phrase the society's oft-quoted historian David Wright, a short passage consisting of an arrangement's ending, learned and sung in sessions of informal chord-ringing. Instead of requiring the foursome to learn an entire song, the tag allows the singers to quickly blend their voices in a few seconds of what he calls "blissful harmony."

I'd been a member for a few months, singing with the local chorus in preparation for competition. We sang tags outside the rehearsal hall after each Thursday night meeting, so the process was familiar. As with any collaborative endeavor, tag-singing is replete with unspoken, unwritten rules we must understand in order to fit in, to be part of the group—rules that often take time to learn and understand. Many types of vocal harmony thrive throughout many genres of music; barbershop has especially strict rules and traditions.

Standing with me that night were four men who, including the director of my chorus, Ed Knight, were each old enough to be my grandfather. Ed must have been in his late fifties back then, graying and balding, and at well over six feet he towered over everyone, especially a twelve-year-old who hadn't hit his growth spurt, but that didn't bother me. I had been made to feel an equal in my few months as a member, and though I had only just met the other men in that room a few hours before, I didn't feel out of place. I was deeply enjoying every minute, realizing that I had discovered something I wanted to do for the rest of my life.

My mistake was simple enough. As the other men were singing a tag Ed had just taught them, I too had learned the tenor part and was standing next to them singing along very quietly. Most of my experience as a barber-

shop singer had been with a chorus of a few dozen men, so singing along seemed perfectly normal to me.

I was, however, joyfully unaware that I was committing tag singing's cardinal sin: adding my voice to the four parts already in play. By singing along, I was interrupting the delicate interplay of tuning, vowels, balance, and placement that contribute to the perfect alignment of each voice's harmonics—the almost magical effect of physics that makes the sum of four voices sound greater than its parts.

The next week a postcard arrived from my chorus director thanking me for my participation in the weekend's festivities. Ed explained what a joy it was for the chorus to have my younger brother and me on stage with them, that he hoped I enjoyed myself, and that he was proud of us. He then added, almost as a postscript, that singing along with a foursome's tag is not appropriate and that he knew I'd not do it again.

That postcard also included five simple words I'll never forget:

"Don't be a fifth wheel."

Teaching is about tone and timing as much as it is about the subject itself. Ed could have scolded, discouraged, or intimidated me. But though direct in his speech, he was kind, and this allowed me to feel comfortable enough to approach him at the next rehearsal to ask for more detail and to apologize for my misstep. By allowing me to enjoy the moment, he protected my positive association with the act of singing. My lesson arrived later: privately and when the time was right.

Teaching—or collaborating, as I have learned in my design career—with kindness and respect allows the other person to learn or act without fear. We can positively affect the behavior of others by building them up rather than tearing them down. We should be looking for more ways to work together and make each other stronger, even when pointing out a fault or mistake.

I still have this postcard tucked safely away in a box of my life's most treasured memorabilia. Its tone still teaches me twenty-one years later as I interact with other people in my role of collaborator, teacher, designer, singer, friend, and perhaps one day, father. ♦

Names and the New Public

LIZ DANZICO



It could be any dinner in any place. Every person around the table wants intimacy. And every one of you, whether you came here with that in mind or not, no matter what your intended investment, wants a relationship of some kind with this group of colleagues and prospective friends you've just met. Yet by dessert and coffee, you struggle to recall either the first or last name of any person with whom you shared this meal. You look around. There are eight of you exchanging personal, public, private information—and not one notices you as you scan the faces. You are thirsty, but you realize you can't recall a single person's name to ask for a refill. You are at once among friends and strangers. Nameless faces together. If asked, you might be able to identify each of their avatars, know where each is a *mayor*, know how to friend each of them in any given social network, but as for their names? Unknown. "Hey," you say out loud to no one in particular, "*I need water.*"

Where once a person's name was his or her primary identifier, we're now seeing the spread of that identity as people intentionally scatter *selves*, supported by social systems in which identities are stored and accessed. As a result, acknowledging someone's name is no longer the same sign of mutual respect or politeness. Nor is it a necessary signifier that indicates you're invested in the person. What we may be seeing is a death of a single primary name as key identifier. It has been decentralized and decondensed. In social relationships, what has replaced it? And in what contexts do we recall and use each identity?

BLURRED BOUNDARIES

In Emily Post's 1922 edition of *Etiquette and Society, in Business, in Politics and at Home*, Post outlines didactic manifestos for interacting with one another. Whether one is a lady or a man, married or unmarried, the queen or the president of a nation, it is clear which fork, which name, and which manner of addressing one another is appropriate. A specific scene in that text dictated the rules for behavior, and each was predictable during a business visit, in a letter, or at dinner.¹

But correct introductions are meaningless in a culture where boundaries have dissolved and situations are defined only by the people present in a given moment. How to behave is not an etiquette we can memorize, it's a sensitivity that starts and ends with being able to read people in an instant. How important is it then to remember someone's name when that sign is retrievable via any social network, any device that is likely within arm's length? There is a new public. The new public is one of context, one perceivable by behaviors. Remembering someone's name, or deciding we don't need to, is no longer a given.

Our business for behaving—as executives, as friends, as inventors and scientists and designers, as *humans*—relies on our ability to be sharply aware of that context and shift as appropriate.

Through the shifts, people want to be polite. People want to call on one another in a way that's meaningful. But they're busy. And memories full. And now, some people bewildered. In a culture where work spills over into play, time zones overlap, and reference points intertwine, people no longer have rules for calling upon one another. The rules, if any were followed at all, have changed, and our behavior for interacting is getting a serious redesign. There's a new public for behaving. And using names as the primary identifier for one another, as one example, is becoming extinct.

ADAPTATION

But before getting caught up in rhetoric of *the death of predictions*, what is more imperative to consider is the role its demise can play—the internet environment has allowed for a larger evolutionary pace. We've already seen radio give way to film, film give way to television, and television give way to the web. Underlying it all is an evolving ecology that shifts and clicks along—humming at times, dragging at others—to keep up with the fast pace that is the shifting nature of the media ecology.

The death of the name is not an extinction at all then; it's an adaptation. Likewise, etiquette is not dead; it's simply evolving. The evolution of any new behavior—similar to what we saw with the introduction of radio, television, film—is bringing with it a whole new range of manners. Where once we relied on a prescribed code of conduct writ-

ten by one and applied to many, that is no longer the case.

We are seeing take shape what Andrew Heyward, former president of CBS News, calls *user-generated context*.² These behavioral and adaptive systems are evidence that the complex dialogues among people are occurring in fundamentally new ways; lines between consumer and creator have merged, and context, not content, is taking over as a guide.

The code of conduct has been replaced with a code of context. Watches have been replaced by the timepieces that are our smartphones. And while no one under the age of twelve is using those smartphones for email, we are using social networks like Facebook and Twitter and LinkedIn at a staggering rate to stay in touch. We're not calling one another but we're talking more than ever before. And with that, we are writing more as well. We can confidently say, as these words are printed on this page, that the physical book is not going away; it too is evolving. To know your audience is not enough.

TO THE CONTRARY

As a culture that trades efficiency as currency, it's curious that we're creating more, not fewer, identities. Contrast that with Mongolian culture which has 300 words for color—and whose horses, as a result, have no name as we know it. They're referred to instead by color and age. Duly practical and nuanced. What we might see and consider as *white* in English, the Mongolians see as variations of *ash white* and *snow white* and so forth. Perhaps we too are developing 300 words for social variation, with no one dominant name.



While technology is certainly affording us the ability to use only one identifier—at least consider the long-standing efforts of Chris Messina and OpenID—and we uphold efficiency as one of our values, it would seem otherwise. Identifiers abound. Redundancy abounds. And we, in spite of ourselves, seem to value this redundancy. Multiple names, then, are a new currency.

Consider any email you might receive on any given day:

October 24, 2011

Give me a call when you're free.

Mike

Mike Rogers
phone: 212-555-3464
mobile: 212-555-5309
skype: mikerogers
gchat: mikerogers
<http://twitter.com/name/>
<http://facebook.com/name/>
<http://linkedin.com/name/>
<http://mywebsite.com/>
<http://mywebsiteproject-one.com/>
<http://twitter.com/mywebsiteproject-one/>

Our signature files have out-charactered the text of our email. It's not enough to sign a note; we must ensure that all forms of contact are known. Our own 300 colors are on display. Yet around a dinner table, it may be rare to remember even one name.

Is this proliferation waste, is it branding, or is it a display of power? Thorstein Veblen, author of *The Theory of the Leisure Class* in 1899, suggested a position on the latter regarding wealth and power. He observed that simply amassing wealth is not enough. One must display wealth in order for it to be powerful as an act of status and power. *Wastefulness*, therefore, was a necessary part of the display of wealth and power. Like the peacock's feathers, he notes,

Throughout the entire evolution of conspicuous expenditure, whether of goods or of services or human life, runs the obvious implication that in order to effectually mend the consumer's good fame it must be an expenditure of superfluities. In order to be reputable it must be wasteful.³

Therefore, in order to be reputable, we must present waste. In other words, the amassing of identities—in part practical—may be in other parts a power move. And it is in display that there is power.

THE NEW PUBLIC

If power is in the display of multiple identities, where are they or should they be displayed? Prior to about 2003 when social networks became popular, the mall and the movies were where teenagers would display their wealth. But since that time, the *networked place* has largely replaced these spaces. Networked publics are not a defined set of people in a bounded space but rather a flexible category where people conceptualize the boundaries but do not control them.⁴ Because of this, networked publics allow knowing people both in the moment (e.g., around a table) and contextually (e.g., only ever at that table).

The boundaries of the contexts online, however, are afforded by technology such that the practice dictates the boundaries, depending on the imagination of the individuals involved.

This new public can play a few roles. First, in contrast to the Emily-Postian public of the past, they help us define ourselves by the boundaries set forth by the context of the group in the moment. The dinner table this evening creates one set of boundaries, and the people present set the conditions for behavior in that moment. The new public of the table made it alright for no one to know names. Change the table, change the people, and the public changes.

Second, the new public helps us define ourselves in relation to the group. Because each group's identity is both momentary and contextual, it is up to the group's imagination to put boundaries on it. If everyone wishes to remain anonymous but only speak about his or her passion about something specific, it can be so. At the dinner table, one person cannot be a name-dropper; each person must image and abide by the same set of social conditions or the public will change.

Third, the new public helps us define ourselves in relation to society. Because each group helps define its context in relation to the context of the culture of a neighborhood or a city, it can do so. Therefore, if citizens wish to protest or to take action on any issue, they can do so. Their allegiance to the group remains strong and their patriotism to the society unchanged.

The new public allows. Context is forgiving. Context is the new public.

KNOWING SOMETHING

At the intersection of people, technology, and context, we have an opportunity like never before to create new identities and shape new publics. Whether it's user-generated context, the display of wealth by waste, or simply the exponential explosion of the name, we now have a new public for behaving.

In a 1963 What is Science? talk, physicist and educator Richard Feynman explained the difference between simply knowing the name of something and truly knowing something.⁵ We have come well past knowing only one another's names. It seems we're 300 colors richer in our understanding of knowing identities as explorers of the particulars of what and where they can be. And now in our new public, at the end of the dinner, we all can say we truly do know someone. ❤

¹ Emily Post, *Etiquette in Society, in Business, in Politics and at Home*, (Funk & Wagnalls Company, 1922).

² Andrew Heyward, "Media Companies Need To Become Marketing," (Blog, Harvard Business, 2009).

³ Judith Donath, "Signals, Cues, and Meaning," (PDF draft for MIT Press, 2007).

⁴ danah boyd and Alice Marwick, "Social Steganography: Privacy in Networked Publics." Paper presented at the International Communication Association Conference, Boston, MA, May 2011.

⁵ Richard Feynman, "What is Science?" (*The Physics Teacher*, vol. 7, issue 6, 1969).

Lesson

LIZ DANZICO

I like things. Full disclosure: a lot of things. More things, perhaps, than can be reasonably liked by one person. To me, rose-colored glasses have always seemed a curious concept as the world seems shiny enough without them. So I steer clear of conditions that might increase the likelihood of increasing the world's sparklehood.

Choice then, becomes the primary tool to navigate *like*, as it gives each thing its priority, assigning an algorithm for liking, for doing, and for being in the world.

You see, for the like-striken, it's hard to say no. Everyone and everything is interesting.

As I suffer from this condition myself, something a friend said to me several years ago has stayed with me:

"It's easy to say no if you love something."

Wrong. Wrong, I thought at the time. If you love something, say yes. Say yes to everything. Yet what did he mean about *loving something*, I quietly wondered. Did he mean to imply that having a focus for one's passion also functioned as a tool to help make better choices?

In a letter to F. Scott Fitzgerald, Thomas Wolfe said there are two kinds of writers: *putter-inners* (like himself) or *leaver-outers* (like Fitzgerald). These categories, like all categories, are of course oversimplified, but they still illustrate a great point. Just like saying yes, saying no cre-

ates your story. It's what you leave out, not just what you put in, that forms a story, that makes a life.

Creative pursuits hold an inherent need for choice, whether we consider music, art, literature, dance, or design. Every great story is surrounded by white space of some kind. Blank spaces are powerful. The author and designer choose not to lay out a page with text to every edge. Its white space is part of the story it tells. What we choose to leave out creates the story.

Consider your favorite novel. You probably don't recall the most memorable character in the book doing the most mundane of tasks—eating breakfast, getting dressed, using the bathroom, tying shoelaces—day in and day out. The author made an intentional decision to leave these details out. He or she, the leaver-outter in that situation, crafted a story about another arc that didn't need those ordinariness.

As a reader, you didn't consider those absences, but that didn't mean they weren't there. Their presence, like the silent subjects of sentences or the silent strength of typographic scaffolding, creates the supporting structure to guide the main story, the primary choices, that the author, the artist, the creator is making.

The same is true in layouts in design. In pauses between crescendos in music. In absences in architectural archways. In blanks in the maps of oceans. Rather than fill the spaces with unnecessary distractions, their creators have chosen to leave these areas blank. And the blanks speak for both what is and what is not there.

Choice-makers are doers. And doers seem to also be leaver-outters.

I've always paid attention to and wondered at the leaver-outers of the world, so I do often come back to that phrase:

“It's easy to say no if you love something.”

No matter what it is—be it a business, a person, a piece of art, a career, a song, a family, a way of life, or a pursuit of any kind—it's easy to say no to all the other choices that will present themselves if you truly love something.

Finding that thing is the hardest part. But that's another lesson. ■

Designing the Mind

THE STANDARDISTAS



Our industry has until very recently been a blue-collar affair: it focused primarily on the mechanics of how things work. As a consequence, *function* has dominated discussion and writing within our field. The canon of literature we have collectively developed has tended toward the *how to*, which at its best celebrates a lively, inventive, and sometimes remarkable method and craft. At its worst, it's represented by didactic step-by-step guides which lead the practitioner down unquestioning pathways resulting in rote learning, an inability to recognize the need for more nuanced choices, and a tendency to accept the *status quo* and be mere copiers.

As our industry emerges from adolescence, our frame of reference as practitioners is inevitably widening. The question we need to pose is clear: How does the designer who is functionally competent grow professionally?

The answer to this question lies in developing analytical and critical thinking—reflecting on what we do, describing it, questioning it, and moving it forward into new arenas. In short, we need to become masters of *criticality*.

In the words of the American social theorist Thomas Sowell, intellectuals are “those whose occupations deal primarily with ideas”¹ as distinct from those who apply those ideas practically. It’s time for our industry to foreground thinking. Ideally, thinking and doing should work hand in hand.

So, with the foundations—the craft of our industry—in place, how do we develop the thinking that is essential to moving our industry forward?

The answer lies in a three-stage process that involves the intertwining of input, synthesis, and output: firstly, widening the field of vision, opening out and looking beyond the obvious; secondly, digesting this newfound knowledge through dialogue and, as a consequence, forming new connections; and finally, outputting thought, resulting in a new canon of knowledge, a canon tailored specifically to our industry’s needs.

LIBRARIES: WIDENING OUR VISION

The first stage in the process is input. For the designer to grow and mature, to move beyond the world of superficiality and style, it’s essential to broaden the scope and widen the frame of reference. Reading acts as a catalyst, broadening a designer’s awareness and understanding; it introduces new inputs and a steady stream of provocations.

We live in an accelerated, connected world at a relent-



less pace. In that context, the tendency, especially among younger designers, can be to rush headlong into *making* when some *thinking* might have been better invested first.

On the Masters course we run, we begin by establishing a rich and varied reading program designed to encourage new thinking. The introduction of this stimuli, this new material, coupled with a period of reflection and discussion, is as much a part of the design process as the moment of picking up a pencil (or manipulating a mouse).

Setting our students a rich and varied reading program, we watch their minds blossom, witness their synapses spark into life while they make new and hitherto unexpected connections. So, what do we, as professionals, draw from this? And how do we map it onto the task at hand? The answer, we believe, lies in adding a new tool to the web designer's toolbox. It's a simple tool rich with potential: a library.

As important as the tools we've accumulated across the years are the books we've bought. They have shaped who we are as designers, and it's telling that most of these books aren't about what would traditionally be perceived as *design*. We need to widen our view, look beyond the immediate resources labeled *design inspiration*, allow ourselves to draw inspiration from a range of sources, and build our own working library.

On commencing this task, we need a wide frame of reference. We need to build our own system for querying these sources and investigating what we can learn from other fields of study, both neighboring and further afield. In his celebrated thesis “A Theory of Human Motivation,” noted psychologist Abraham Maslow describes this process aptly:

The facts that we acquire, if they are isolated or atomistic, inevitably get theorized about, and either analyzed or organized or both. This process has been phrased by some as the *search for meaning*. We shall then postulate a desire to understand, to systematize, to organize, to analyze, to look for relations and meanings.²

Our industry—crafting experiences for the web (and elsewhere)—is moving forward at a dizzying rate. We’re often so busy looking ahead that we forget to look back. In the past lies a wealth of knowledge that we can, and should, draw upon. As a profession, we need to look beyond the tried and trusted sources, cast the net wider and dig deeper. We need to widen our frame of philosophical reference to encompass a panoply of thought.

An industry in its adolescence can learn from other industries, considering how they’ve matured and the pathways they’ve taken to professionalism. Close to home, graphic design is an obvious case; a little farther away (and a little older), architecture also offers ample scope for the transference of knowledge. Both of these industries have developed considerable canons of knowledge; both also value the role of the critics—the thinkers around the topic—placing them on an equal footing with makers.

So, where might we look in our quest for inspiration?

One avenue we should certainly consider is psychology; understanding how the mind works is critical if we are to communicate effectively as designers. Abraham Maslow’s 1943 paper “A Theory of Human Motivation”, mentioned earlier, is required reading, his Hierarchy of Needs—which forms the text’s core focus—is already

falling under the spotlight of a number of well-respected web designers. Don Norman’s *The Design of Everyday Things*³ is also essential to an understanding of why some designs delight while others only frustrate.

Semiotics—the science of signs and how language works—also lies at the heart of communication. David Crow’s *Visible Signs*⁴ is an excellent primer, mapping the often obscure science of signs onto the practice of visual communication in a clear and concise manner. The discerning reader will doubtless also enjoy French philosopher Roland Barthes’s excellent *Mythologies*.⁵ Long a core text on fine art courses the world over, the mirror it held up to society in 1957 remains every bit as relevant today.

The disciplines of ethnology and anthropology are also rich sources for understanding how groups of people function. Our target personae represent more than individuals. Rarely found in isolation, they’re usually representative of one or many on- and offline communities and subcultures. Clay Shirky’s *Here Comes Everybody*⁶ is a perfect primer for understanding the changes occurring in our connected culture and, when that has whet your appetite, Claude Levi-Strauss’s classic *Structural Anthropology*⁷ is an essential foundation to gain an understanding of man and society in terms of individuals, kinship, and social organization.

We could go on—subject areas near and far can, and will, offer considerable potential to the inquiring designer. The important point to note is that the list pushes the boundaries of what might be defined as *design*.

When entering a new subject area, becoming familiar with the established texts provides a great beginning for

contextualizing subsequent material. What we've given you here is just a starting point; a bounty of other material has been published across history. Most reading you do will make for an even richer experience if you have studied the classics first.

Even when the theories aren't directly transferable to our discipline, this reading equips us with new vantage points, ideas, ways of describing and interpreting the world around us.

Armed with this newfound knowledge, what next?

CONVERSATION: CONVERGING SOCRATICALLY

The second stage in the process of developing critical thinking is synthesis. Though acquiring new knowledge is a critical phase in the process of evolving as a practitioner, we also must digest this knowledge, synthesize it, and articulate meaning. Drawing out the connections and mapping the terrain, and applying it to our field can be done in a number of ways, not least through dialogue and the written word.

Synthesis, the activity through which we digest the various inputs and locate, create, and fuse new unions is at the heart of the creative process. The art of discussion remains a superior method, allowing two or more minds to multiply the number of possible connections, leading to new ideas and conclusions thus far unconsidered.

We need to find *forums* in which we can delve deeper than the often facile exchanges over Twitter, or the sprawling comment threads on a blog, which rarely reach the levels of criticality one can quite easily achieve in something

as simple as an everyday conversation. Although possible through means of electronic communication including blogs, articles, and even personal journals, let's not neglect the opportunity for the rediscovery of the lost art of letter writing, used to great effect in centuries past to work through ideas and shape thought.

There is also a place for face-to-face discussion. The old-fashioned debate, where logical fallacies are exposed, meaning is articulated, and ideas are reconsidered should be brought back into fashion.

Systematic inquiry, the persevering endeavor in exploring an argument and its outcomes and offering alternative interpretations, is at the heart of a methodology practiced for thousands of years. Known as the Socratic method, this philosophical pursuit of knowledge and understanding is close in nature to scientific inquiry but also allows the investigation of unmeasurable, subjective quantities, making it eminently suitable for the subject of design, which almost always overflows into a territory where prescribed rules alone cannot provide a satisfactory interpretation.

A tried and trusted technique, it begins by simply asking a question that is then followed by a series of carefully considered challenges aimed at a deepening understanding of both the original question and its many possible answers. On reaching a conclusion, the initial question is asked again, and the process is repeated. By removing certainties and questioning preconceived notions, we can reach a deeper understanding of the subject. We've achieved this using nothing more than a spirited, polite debate.

The systematic process of narrowing in on an issue naturally leads to thoughts and ideas converging. The philo-

sophical pursuit of knowledge and understanding does not, however, require long flowing beards or a Greek agora. In fact, converging Socratically can amount to something as simple and pleasurable as enjoying a fine discussion over a hearty ale. As Sherlock Holmes's reasoning was stimulated and expanded by intoxicating substances, liquor, in moderate doses, can assist us in our pursuit of the truth. By sharing our knowledge, bringing new insights to the table, dissecting and interrogating each others' ideas, we can bring forth unexpected, brilliant results.

With the connections teased out, with newfound knowledge digested, there remains just one phase in the process, that of writing it down.

WRITING: BUILDING A CANON OF KNOWLEDGE

The final stage in the process is output, moving beyond the art of conversation and the fleeting nature of the spoken word towards the creation of a canon of knowledge, articulate and critical. We've considered the pursuit of meaning through dialogue; let's examine the third, closely intertwined, phase: the articulation and manifestation of that meaning through the written word.

Developing the craft of the written word, being able to articulate why what you are doing works, is pivotal to growing as a designer. Analyzing and describing your craft through the medium of the written word enables you to gain another vantage point and another perspective. Through the process of analysis, you acquire awareness, gain new insights, and sharpen your perception. Being able to explain, convince, and inspire are essential characteristics of a distinguished designer, and design—after

all—is in its essence, communication.

Throughout the design process, writing helps clarify, systematize, and structure your work. It sheds light on flaws of logic and exposes brittle foundations. By making a habit of writing, clarifying your thinking, and exposing your ideas to the light, you will grow as a designer.

Although there are great designers who can't, don't, or won't write, there are also great designers who are able to articulate themselves through the medium of the written word. In their hands, we inherit a canon of knowledge, a canon that lives on, in some cases, long after the works themselves have passed on.

When we think of designers like Jan Tschichold, Josef Müller-Brockman, and Wolfgang Wiengart, or closer to home, Khoi Vinh, Tim Brown, and Craig Mod, we see designers who aren't just leaving behind designed artifacts but who are also leaving behind a wealth of knowledge. By articulating their ideas, by *working through* their thinking, they leave a map that others can follow.

In every case, these designers push at the boundaries of accepted norms, pressing outward, establishing new possibilities. Often working at the frontiers, they not only establish new approaches and pathways but clearly articulate why what they are doing works and is important. From their hands, we inherit a canon of knowledge that shapes our understanding and, in many cases, influences the directions our industry takes. In short, they shape thinking.

DEVELOPING A CRITICAL AND ANALYTICAL MIND

Noted cultural theorist John Berger said, "Today the

discredit of words is very great.” In this short statement, truth reverberates. We use words, yes, but en masse we appear to have abandoned them in favor of the glancing blow and the superficial cascade of thoughts. In a world of 140-character missives and ill-considered blog comments, words rarely seem to be used to dig deep anymore or applied to the search for profound truths. Everything is surface, sometimes depressingly so. If we are to grow, our vision must be wider and more educated, our thoughts voiced more carefully and on point, and our thinking and writing process repeatedly put to the test, gaining depth as we practice.

As an industry matures, reflection and introspection emerge as natural and essential prerequisites. We must embrace not only the doing and describing but also the analyzing and questioning of what we do. The development of a more critical, analytical relation to our subject is both inevitable and necessary. To grow as a discipline and as individual designers, we need to devote ourselves not just to the art of making, but also to the art of thinking. ▶

1 Thomas Sowell, *Intellectuals and Society*, (Basic Books, 2010).

2 Abraham H. Maslow, *A Theory of Human Motivation*, (Classics in the History of Psychology, 1943).

3 Don Norman, *The Design of Everyday Things*, (Basic Books, 2002).

4 David Crow, *Visible Signs*, (AVA, 2003).

5 Roland Barthes, *Mythologies*, (Paladin, 1973).

6 Clay Shirky, *Here Comes Everybody*, (Allen Lane, 2008).

7 Claude Levi-Strauss, *Structural Anthropology*, (Basic Books, 1974).

Lesson

THE STANDARDISTAS

Though we both now live and work in Northern Ireland, and have done so for many years, our roots are far afield. When we first met in Belfast, and began our working relationship, we were unaware that we had, in fact, experienced a chance encounter many years earlier.

One of us was born in Hong Kong to Scottish parents, the other born in Sweden to Swedish parents. Our fathers held careers that—uncommon for the time—saw us traveling the world extensively. We both coincidentally moved to Northern Ireland in the same year: 1994. In addition to this temporal coincidence, our lives have shared numerous other similarities.

Heavily influenced by our fathers, we share a passion for literary theory, in particular French structuralist and post-structuralist writing, and have both read extensively on the topic, having been introduced at an early age to the ideas of Barthes, Foucault, and Baudrillard. It was this shared interest that set in motion a remarkable discovery.

It turns out that—unbeknownst to either of us—our paths first crossed at Bombay International Airport where our families were stopping over (one heading east, from Scotland to Hong Kong; the other heading west, from Vietnam to Sweden). Though we didn’t know each other at the time—we would only meet properly for the first time nearly two decades later—we subsequently discovered that we must have passed within mere inches of each other one day in 1984.

Seeped in the clinging heat of the airport—the rattling fans unable to entirely close out the humidity pressing through from the outside—and immersed in the close proximity of people corralled tightly, stranded in that non-space neither here nor there, we both vividly recall seeing for a fleeting moment Louis Althusser. The appearance of this noted French Structural Marxist philosopher—in transit and passing through Bombay en route to a lecture at Cornell University—imprinted itself upon our memories.

Over time, this moment eventually became hazy, indeed, almost forgotten. Sitting down nearly thirty years later, sharing the adventures of our misspent youth, we by chance discovered—through nothing more than the catalyst of Althusser—that our paths must have crossed many years earlier; indeed, we might even have brushed past each other in that distant airport.

Realizing that we had been in such close proximity to each other so many years earlier reshaped the story of our lives. Before we unearthed this fact, our stories were very different. After we discovered it, our personal narratives, the stories we choose to tell, shaped not only the present and future, but also the past.

Though it was just a brief glance that day in Bombay, discovering that shared moment—a moment we have retrospectively woven into our narratives—shaped our futures. Althusser, a point in our separate journeys rediscovered and shared many years later, altered our trajectories and sent us down a shared pathway of influence, one that shaped our beliefs and opinions from that day forward. What we learned in our conversation nearly thirty years later was that in the shared chaos of everyday life there

lies an interpreted history. When historians look back on the movements of time and interrogate the past, they tease out connections, connections that they and they alone decide to make. Just as historians invent the past, we too create our own narratives from those moments we choose to include and connect.

Only in hindsight are the plausible connections possible to comprehend; with just a slight change in the frame of reference, we can see things differently. When cast through the prism of this shared experience, we saw the fact that although we may not be in control of our destinies, we may have some control over the stories of our past and that the act of creating this past inevitably shapes our futures. ■

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