









In a recent lecture, Ed Fella references a collage he made earlier in his long and prolific career as both a self-proclaimed “commercial artist” and iconoclastic figure in the graphic design avant-garde. It shows various tools: a T-square, a compass, a bottle of ink, a cup of coffee, a burnisher, an ashtray—re-creating the work surface of a typical graphic designer, circa 1975. He deadpans to the audience: “The only thing left is the coffee.”<sup>1</sup> Today, the typical desktop of the graphic designer is a virtual one invented for them in the famed confines of Xerox Park and Apple Computer: some folders, a ticking wristwatch, a trash can, and a bomb. Perhaps nothing better illustrates the transformation of a profession from handicraft to technocrat, from skilled labor to managed service, than this metaphorical transformation of a workspace.

What supposedly distinguishes humans from their primate ancestors is their ability not to use tools but to integrate them into everyday activities, find fresh uses for them, and to create new ones. This evolutionary sequence was famously immortalized on the silver screen in Stanley Kubrick’s *2001: A Space Odyssey* (1968), which opens with a group of early apelike humans learning to use a bone as both a tool and a weapon. After they triumphantly defeat a rival group, the bone is tossed into the air and transforms into an orbital satellite, a scene set some four million years in the future. The film’s main characters, Dave the astronaut, and HAL, his spaceship’s computer, eventually play out another cautionary tale about technology, as the human triumphs over the machine only to discover even higher-level and functioning extraterrestrial life, setting the stage for humankind’s next transformative evolution. Dave reborn as a kind of “star child” fetus gazes back upon the whole Earth—two spheres filling the screen, an amniotic sack and the proverbial big blue marble. (Of course, this creative vision would not have been possible without the invention of the tools for fetal photography at one extreme, and satellite imagery taken from planetary orbit at the other.)

Later in the same year as this epic film’s release, counterculture guru Stewart Brand would publish the first edition of *The Whole Earth Catalog* (1968), aptly subtitled “access to tools.” This sixty-four-page premier issue, which would eventually grow to more than four hundred pages, brandished a cover image of our entire planet taken from a satellite. This compendium of the latest ideas, best practices, low-cost technologies, and useful tools of its time was

part lifestyle bible and part workaday reference manual. Its lofty objective stated: “We are as gods and might as well get good at it. So far remotely done power and glory—as via government, big business, formal education, church—has succeeded to the point where the gross defects obscure actual gain. In response to this dilemma and to these gains a realm of intimate, person power is developing—power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested.”<sup>2</sup> *The Whole Earth Catalog* presaged the introduction of the ultimate tool, the personal computer, and the technological ethos of today’s Internet culture that it would spawn: the world of self-publishing, user-generated and aggregated content, open source systems, distributive platforms such as app stores, and the networks and connectivity of social media, cloud computing, and file sharing. As Steve Jobs explained it to a graduating class at Stanford in 2005, “It was sort of like Google in paperback form, 35 years before Google came along.”<sup>3</sup>

Human use of tools has been theorized as an explanation for human evolution stimulating such things as increased brain size coupled with the unique human ability to mimic behavior and thus spread ideas and techniques, which led to the rise of agriculture, the domestication of animals and, well, civilization itself.<sup>4</sup> The tool in effect transforms our material and virtual realities and, by doing so, it transforms us. Despite the grandiosity of the vision, the typical segregation one sees in the culture at large and in the design profession in particular, between hand skills and head skills—making and thinking—seems therefore both regretful and artificial. Nevertheless, this segregation of conception and production remains at the heart of much professional discourse and angst.

Graphic design was the first profession to be impacted by the introduction of the personal computer in the 1980s; its strategic objective was, after all, “desktop publishing.” More precisely, it transformed and eventually eliminated the work of various production artists, photomechanical technicians, keyliners, paste-up artists, typesetters, color separators, and even some printers. It disrupted a field that has always had a rather confused and conflicted relationship between the spheres of creation and production, often separating conception from the labor and skill required to transform intentions and instructions into reproducible mass commodities. This separation reflected the divide created be-

tween the white-collar world of intellectual labor and the blue-collar world of manual labor—a division that continues to play itself out. However, what the personal computer took away from the workforce in jobs, it gave back to the graphic designer in ways both good and bad by increasing the ease and speed of visualizing ideas while simultaneously shortening the expected turnaround time of projects. The computer’s efficiency exponentially increased both the number of variations designers thought possible and the amount of changes clients deemed necessary. Its synthesis of formerly discrete functions in the process of designing promised designers a return to control over the craft and execution of work without properly preparing them for the types of skills that were formerly outsourced.

Optimistic by nature and eschewing initial angst, graphic designers embraced the computer as just another tool on their creative workbench rather than as a replacement for them or their colleagues in the production process. Writing in 1998, about a decade after the personal computer was introduced in graphic design, Lorraine Wild would note the paradox of the situation at hand: “... many designers believe that our futures depend on our ability to deliver conceptual solutions; but, ironically, digital technology has driven production back into the office, requiring constant attention. Design practice today requires the intellectual power of a think tank and the turnaround capacity of a quickie-printer.”<sup>5</sup>

Of course, this new tool was made not just for designers, but targeted at a general audience. Graphic design had emerged as a professional service similar to fields such as industrial design and architecture by relying on a cadre of skilled technicians and industries to realize its products. The sudden open access to the tools of producing graphic design meant that the traditional gatekeeping function of the profession was eroded and would eventually be circumvented. On the upside was demystification: not only did lay people such as your mother know what a font was, but general awareness of the activity of designing also increased, thereby fueling broader interest and producing more designers. This, in turn, produced a corresponding downside for the profession, which experienced increased competition, cheaper wages, a flood of amateur work, and an erosion of craft. Perhaps the most ominous effect for designers was the recasting of graphic design as just another tool.

Of course, the computer is not just another tool, nor is it simply a combina-



tion of discrete tools, a kind of digital Swiss army knife. Rather, the computer is a meta-tool: it makes other tools. Or as Jonathan Puckey, creator of tools such as Text Pencil and the online dictionary for the Stedelijk Museum Bureau Amsterdam (SMBA) states: "Instead of collectively agreeing to the same streamlined tools sold to us by large software companies, we need to reclaim the personal relationship we used to have with our tools. We need to reintroduce interesting points of friction in our highly optimized software. We must learn to create tools ourselves. After all, the computer is exactly that: a tool for creating tools."<sup>6</sup>

A new generation of designers is doing precisely this. For instance, Jürg Lehni wrote *Scriptographer*, a program that translates digital vectors to more analog devices such as *Hektor*, a robot-operated spray-paint device; *Empty Words*, a machine for making die-cut message posters; or *Viktor*, a chalk-drawing machine. Casey Reas and Ben Fry created Processing, an open source programming language that many other designers have used to create visualizations. Nicholas Felton and Ryan Case's app Daytum, which can help track personal data, was originally created for use in his personal *Annual Report* projects. These examples point to a new phase of maturation for design's relationship to technology, when the definition of design extends to the creation of new tools that enable and empower others to design.

Ever since the demise of the medieval craft guild, modern design had sought to separate itself from one-off hand production in favor of mass-produced objects that bore few traces of the hand and more of the machine, the new laborer. Freed from production, the modern designer had to devise methods so that his intentions could be faithfully realized by others. Drawings, pasted-up layouts, instructional overlays, coordinated color systems, standardized ink formulation and paper sizes, prototypes, models, and reprographic proofs were just some of the instruments invented to ensure that the faithfulness of a designer's vision was executed according to plan. The separation of conception and planning from making and production were therefore part and parcel of being a modern designer. Craft, as such, did not disappear. It remained with acts of manual fabrication and was called precision in the case of machine production. For the designer, the values of craft were personally embodied in the acts of designing—all the processes and techniques necessary to envision and produce executable plans: drawing, ren-

dering, making comps (a collage of materials used to simulate a printed piece) and mechanicals (a layout of type and images that was photographed for reproduction). Knowledge about production was a necessary part of any design education, gained in the classroom through books such as James Craig's 1974 classic *Production for the Graphic Designer*, or in the workplace, whether it was how something was printed or bound in the case of graphic design, or manufactured and engineered in the case of products.

Wild's aforementioned essay offered another definition of craft for graphic designers, one positioned against the prevailing wisdom of the marketplace and the winds of technological change sweeping through the profession in the 1990s. Her essay was not a nostalgic impulse to save graphic design; rather, it articulated the value of craft as integral, tacit knowledge, the type gained through direct experience and know-how, just as valid as theoretical knowledge, which is more distanced and descriptive. She quotes Malcolm McCulloch from his book *Abstracting Craft*: "The meaning of our work is connected to how it is made, not just 'conceived.'"<sup>7</sup> For Wild, the ultimate value of craft is tied to how we view the work of graphic designers over many years and across disparate projects. It is the connective thread that makes sense of so much labor and identifies that body of work with a particular person: "When craft is put into the framework of graphic design, this might constitute what is meant by the 'designer's voice'—that part of design that is not industriously addressing the ulterior motives of a project, but instead follows the inner agenda of the designer's craft. This guides the 'body of work' of a designer over and beyond the particular goal of each project. So craft is about tactics and concepts, seeking opportunities in the gaps of what is known, rather than trying to organize everything in a unifying theory."<sup>8</sup> While Wild's definition of craft made sense for graphic designers, it was not enough to halt the juggernaut of self-doubt that plagued the profession, which wasn't so worried about the loss of craft as much as the perceived devaluation of their skill.

After all, if what you used to produce could be done by anyone with a computer, what does anyone need a designer for? Or, in business-speak: as a designer, what's your value-added? The natural instinct for self-preservation on the part of graphic designers required a new story about the value of design. Since the immediate impression was that the computer simply

devalued traditional skills, the answer was to be found not in production, but in the realm of conception. This path was chosen despite the fact that the computer could not immediately demystify the more intangible aspects of design work: the craft of typography, the form-making skills honed in years of education and practice, the passion and devotion to an activity that many likened to an artistic pursuit, or the problem-solving skills, communication strategies, and ideation techniques learned typically through experience. Despite these important distinctions between novices and professionals, the field pursued a trajectory that emphasized its more verbal (as opposed to visual) and businesslike (rather than artistlike) attributes.

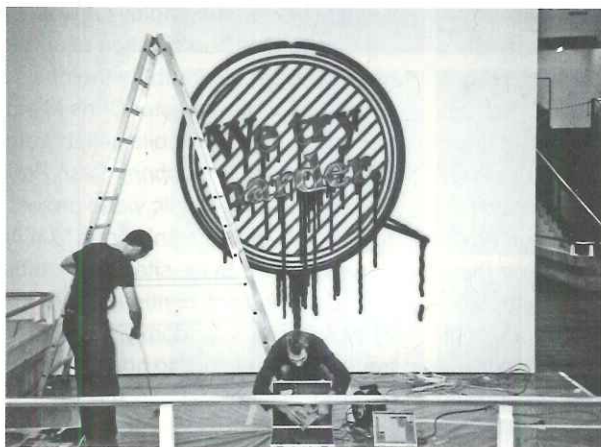
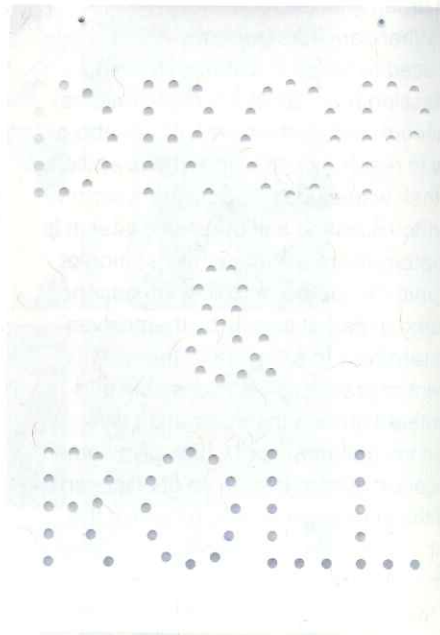
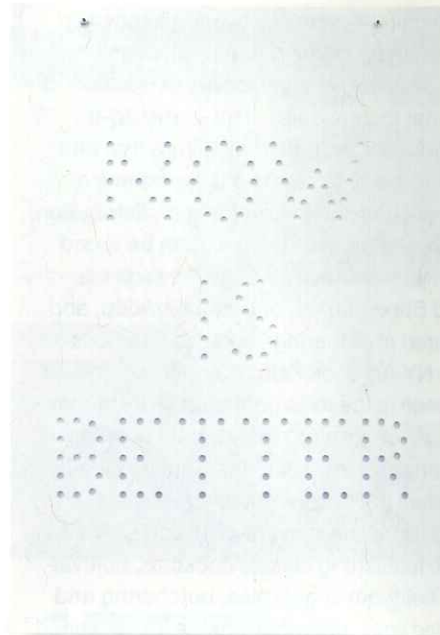
Entire new sectors emerged devoted to left-brain pursuits such as design management, design strategy and innovation for business, and the design of services and systems, including consumer experiences, whether in bricks and mortar spaces or online. What these kinds of practices share is a belief in the power of ideas, words, and research to shape design, one that recasts design's productive labor as a primarily conceptual and managerial activity. Sometimes inadvertently, and occasionally purposefully, this pursuit devalues the formal, the visual, and the material aspects of design as it shuns what it considers the more decorative, trendy, and superficial characteristics associated with design. If only they had taken a page from critic Virginia Postrel, who argues for the virtues and importance of aesthetics, style, and surface in an age dominated by the visual: "This new era challenges all of us—designers, engineers, business executives, and the public at large—to think differently about the relation between surface and substance, aesthetics and value. Designers have long lived in fear that people will think that they're frivolous, treating their work as 'pretty but dumb,' denigrating their hard-won expertise, and putting them first in line for budget cuts. Nearly every definition of *design* starts emphatically by stating that the profession isn't just about surfaces."<sup>9</sup> But of course, graphic designers are in fact producers of surfaces, millions of them. This production is so vast that it is comparable to the built environment, as Metahaven notes: "The production of surface is design's equivalent to the production of space."<sup>10</sup>

Perhaps ironically, just as graphic designers were making their way out of the wilderness of "dumb" form to a higher conceptual plane, many other people—amateurs, lay people, and younger





Above and right: Jürg Lehni and Alex Rich, installation view of *Empty Words* and posters, Kunst Halle Sankt Gallen, 2008, furniture by Martino Gamper Courtesy the artists



Jürg Lehni and Uli Franke, creators of *Hektor*, executing a wall drawing for Cornel Windlin's contribution to the exhibition *Public Affairs*, Kunsthalle Zürich, 2002 Courtesy Jürg Lehni

**Scriptographer**  
 Graphic designers typically employ a standard suite of software products. Jürg Lehni's *Scriptographer* is a JavaScript plug-in that extends the prepackaged features of Adobe Illustrator with functions both useful and unusual. Lehni's website, *Scriptographer.org*, is a place for sharing and downloading new scripts. Contributed by an international community of designers, *Scriptographer*'s mouse-controlled tools range from a Lorem Ipsum generator to *allMaze*, which automatically fills a given space with a perfect maze, complete with entrance and exit. In his own work, Lehni employs *Scriptographer* to drive a variety of mechanical drawing machines, from *Hektor*, a spray-paint device, to *Empty Words*, which produces die-cut posters. —EL



2x4, wallpaper installation design for the Prada Epicenter Store, SoHo, New York, 2010 Courtesy the artists

**Prada Wallpaper**

The design consultancy 2x4 has collaborated with the Italian fashion house Prada on the design of store graphics, websites, books, exhibitions, and more. 2x4 began creating temporary wallpaper installations for Prada's New York flagship store in 2001. Covering a wall 200 feet long, the wallpapers have adorned Prada's SoHo epicenter with themes ranging from pornography and guilt to the museum as mass media. 2x4 has also created wallpapers for Prada's Los Angeles store and other locations worldwide. —EL



Jürg Lehni and Alex Rich, *Things to Say* installation featuring *Viktor*, Kunsthalle St. Gallen, 2009, produced with Defekt GmbH, with support of Swiss Federal Office of Culture and Migros Courtesy the artists



designers—were discovering a renewed passion for making, largely through hand processes and occasionally in reaction to digital technologies. This is the do-it-yourself entrepreneurial culture that has found a way to seize both the means of production and the systems of distribution, whose immense inventory can be found on websites such as Etsy, Threadless, and Supermarket, or bought, traded, and shared at gatherings such as Flatstock or the NY Art Book Fair. A “handmade nation” is seen in the resurgent popularity of more hands-on printing techniques such as letterpress and silkscreen, but is equally present in the general cultural renaissance of artisanal endeavors of all sorts, whether it be fashioning classic cocktails, cultivating heirloom vegetables, butchering and curing your own meats, or the impassioned fringe production of guerrilla gardening and urban knitting.<sup>11</sup>

Where an older generation of designers used to worry about transforming professional (i.e., conventional) practice to accommodate their work or fret about how to reach a more sympathetic audience for their wares, today’s designers simply produce now and ask questions later. It is symptomatic of a younger generation of graphic designers who have in essence created a market largely by themselves and targeted to people like them. This torrent of production is accessible and circulated around the Internet on various sites, the names of which give some indication of both the sense of discovery and the seemingly ad hoc nature of the hunt: Tumblr, StumbleUpon, Flickr, VWork, Ffffound!, Behance, ManyStuff. This is the twenty-first-century version of show-and-tell, or more appropriately, make-and-post—a visual, self-perpetuating archive of millennial portfolio culture.<sup>12</sup>

The atmosphere and tone of these sites and the work on them is quite different than it was in decades past. Gone is the air of skepticism, criticism, and even pessimism of the 1990s. In its place is a newfound optimism, the ecstasy of production. As Experimental Jetset notes: “It’s almost a punk/DIY explosion of graphic design: bold geometric forms, bright colors, large sheets of printed paper, experiments in folding. People proudly displaying posters that they made, by simply holding them in the air. Work that is unapologetically graphic. When we look at all these young students, shaping their immediate environment in such a concrete, direct way, we feel really happy.”<sup>13</sup> And who wouldn’t? The attitude, like a smile, is infectious. But if I could channel my old ’90s-era skeptical

self for a moment, I would note how most of this work circulates in a free-floating, contextless, post-critical space (or less charitably, I would use the word “vacuum” or “bubble”). The speed of information and the constant flow of new material and reactions to it create an intense feedback loop, like a call-and-response of graphic design. It isn’t surprising then that so much of the work looks and feels of the same spirit. However, I wouldn’t want to judge by past standards. Old-school concepts such as original, copy, and imitation make little sense in this new postproduction world. It isn’t about what is trendy (forms) as much as what is trending (topics).

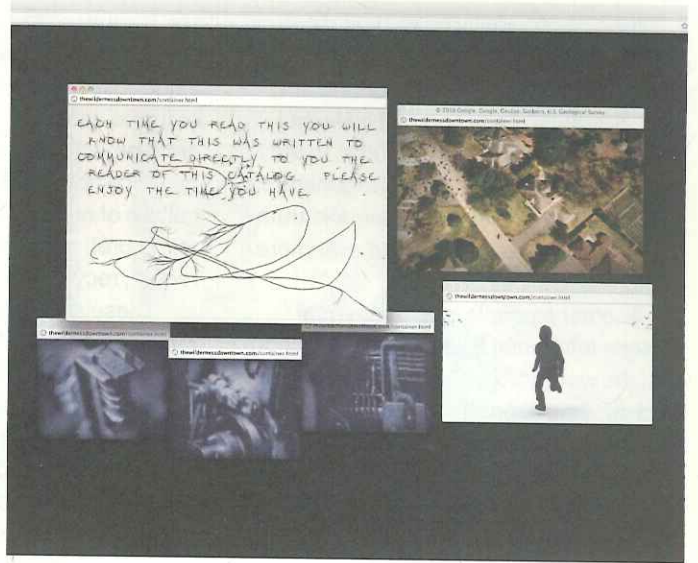
The old world of graphic design and production was, in effect, a preproduction enterprise. Design was everything before the reproduction of it: ideas made visible and intentions made transmittable. Today, for graphic designers, there is little debate or angst about this sphere of activity. Of course, designers are still expected to know about aspects of production, and many tasks are fully integrated into the layout and design software itself. Rather, the action lies elsewhere. On the one hand, we see the activity of an all-encompassing, self-sustaining concept in the renaissance figure of the designer-as-producer—the creator and maker and perhaps even the distributor of the work.<sup>14</sup> This activity still carries with it overtones of authorship, originality, and singularity. Its reference points are often premodern. On the other hand, we have the realm of postproduction, which is characterized by notions of coauthorship, reference, and collectivity.

As its name suggests, this is an after-market world of preexisting forms that are in effect remade by the designer who stands in the position of the user, which is to say as the recipient or consumer of an existing work. But unlike traditional ideas of consumption, the object of postproduction is no longer simply consumed or used up, but rather extended, remade, and transformed. In this way, postproduction adds value to the product, occasionally through new use value (recycling, upcycling, or downcycling of products, for instance), but it more often gains in symbolic value. Take, for example, a competition sponsored by Greenpeace UK to redesign BP’s logo in the wake of the Gulf of Mexico oil spill.<sup>15</sup> Hundreds of people submitted new versions based on BP’s official (award-winning) logo, and a kind of virtual tar and feathering of the corporation ensued. Approaching the project in the same way they would an official brand redesign, these designers needed to trade carefully and strategically on the so-called

brand equity of the original mark: too much transformation and the connection to the original mark would be lost; too little and it might go unnoticed. For the 2008 US presidential election, the campaign of Barack Obama employed a critically acclaimed logo that soon found its way to myriad reuses: hand-rendered on everything from yard signs and temporary tattoos to jack-o-lanterns and home-baked cookies.<sup>16</sup> This spread of unintentional usage is what ad industry types call “viral,” a cultural meme that finds its way into the hearts and minds of consumers. It’s a coveted strategy that money can’t buy—literally.

The designer in the realm of postproduction is a producer or orchestrator of frameworks, systems, and actions that enable design to happen. The traditional role of the designer as the sole creator of a work has been displaced; usurped by “contributors,” sometimes thousands of them. Take for instance three recent music video projects that employ crowdsourcing through the participation of numerous users who each contribute their part of the collective whole. Director Chris Milk and media artist Aaron Koblin collaborated on the creation of *The Johnny Cash Project* (2010), an online music video project set to the late musician’s song “Ain’t No Grave.” Visitors to the site can contribute to the video, which is continuously updated, by drawing over randomly selected key frames. Users can also choose several options for viewing, such as the highest rated frames, a director’s cut version of selected or curated images, or by style: realistic, abstract, etc. Both Milk and Koblin also collaborated on *The Wilderness Downtown* (2010), an online film for the band Arcade Fire. Exploiting the browser capabilities of Google Chrome, the project asks viewers to type in their childhood home address. Using Google Maps aerial and street views of the location, the video integrates this specific geographic information into the narrative of Arcade Fire’s “We Used to Wait.” Both projects emphasize not only the desire for personalization of content and customizable viewing options, but also the underlying capacity of collective creativity. Designers Jonathan Puckey and Roel Wouters have created a participatory interactive video for the band C-Mon & Kypski entitled *One Frame of Fame* (2010). Viewers can select frames of the video that accompany the song “More or Less,” and using their webcams shoot a replacement frame and upload the result. More than 34,000 users have struck their pose, contributing a piece of themselves to the collective whole. The project’s philosophical





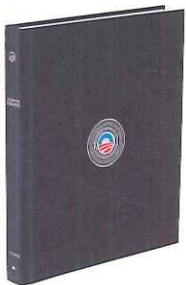
Aaron Koblin and Chris Milk, *The Wilderness Downtown*, 2010, for Arcade Fire, featuring "We Used to Wait" Courtesy @RadicalMedia

**Crowdsourcing**  
 A method of generating intellectual property by throwing out a question, problem, or task to an un- defined group of people and choosing among the responses that come in. Crowdsourcing can be an effective and inclusive way to tackle complex social and environmental problems, sidestepping the typical reliance on known networks of experts. Crowdsourcing is also a cheap way to generate intellectual property. The organizers of a crowdsourced endeavor benefit in several ways from this arrangement. In addition to acquiring low-cost content and ideas, they can use the interactive process to connect with their stakeholders, making participants feel personally involved with a brand or issue. The results of a crowdsourced endeavor form a body of market research, offering a snapshot of what a group of engaged people are thinking about a particular product, problem, or topic. Finally, a crowdsourced endeavor has the potential to tap into the so-called "wisdom of crowds," yielding insights and solutions arising from a distributed population with diverse experiences and viewpoints. Contributors to such endeavors can benefit from each of these outcomes as well, but they may also leave the experience feeling exploited, underpaid, and underutilized in a process that favors breadth over depth. —EL



Jonathan Puckey and Roel Wouters, *One Frame of Fame*, 2010, for C-Mon & Kypski Courtesy the designers

Aaron Koblin and Chris Milk, *The Johnny Cash Project*, 2010 Courtesy @RadicalMedia



Scott Thomas, *Designing Obama*, 2009/2011 Courtesy the artist



Various artists, "Behind the Logo" competition sponsored by Greenpeace UK, 2010

**BP Logos After the Spill**

The explosion of the Deepwater Horizon oil rig, operated by BP, in April 2010, led to eighty-seven days of oil spilling into the Gulf of Mexico, causing extreme damage to the coastlines, wildlife, economy, and population of Alabama, Florida, Louisiana, and Mississippi. BP's reputation was deeply damaged as well. Its logo—designed in 2000 by brand and identity consultancy Landor and quite celebrated at the time—became an icon that represented BP's environmental malfeasance, eliciting a flurry of satirical versions from people around the world. Greenpeace UK corralled most of these through a competition inviting everyone to design a new BP logo that "shows that the company is not 'beyond petroleum'" and a logo that is "more suitable for their dirty business." Over the course of one month, more than 1,900 submissions were posted on Flickr, offering everything from professionally designed to amateurishly composed satires. Execution didn't matter; volume and opinion did. And the now ironically sunny, leafy, green icon of BP and its acronym proved to be too good of a conduit for people's frustrations. The BP Helios, as the icon was originally nicknamed after the Greek God of Sun, will never be seen as it once was. —Armin Vit and Bryony Gomez-Palacio



gravity seems to exist somewhere between Jean-Luc Godard's claim that cinema is truth twenty-four times per second and Andy Warhol's prediction that everyone will be famous for fifteen minutes. In the aggregated, participatory, user-generated content world of Web 2.0, cinematic truth is not stranger than fiction, but ever more compressed slices of reality.

Another example is Experimental Jetset's influential Beatles T-shirt design with the words "John & Paul & Ringo & George" emblazoned on the front, which soon became so enticing and useful that it spawned variations running the gamut from knockoffs to homages to parodies.<sup>17</sup> In its broadest terms, the world of postproduction design can be stretched to encompass the design of otherwise preexisting but blank objects: tote bags, wallpaper, T-shirts, buttons, plates, posters, coffee cups, and so on. This is the projection of graphic design to every sort of surface. It is not by coincidence that these surfaces tend to be the commodity forms of design itself—available and handy formats, empty vessels waiting to be filled—affectionately known in the marketplace as "merch." It should be noted that (also unlike it was in the '90s) there is no sense of shame in engaging consumption in such an overt way. Thus, designers are like rock bands that sell their merchandise at concerts to their fans (which for many bands is a major source of revenue).

Typically, the concept of postproduction in design comes from the world of film and media production, where prerecorded bits of cinematography, sound, special effects, and so on are brought together and edited to form an integrated whole. But this analogy suggests that the new product is greater than the sum of its parts. I don't think that this can be said of postproduction in the cultural sense. In terms of art, postproduction is said to be about riffing on, reproducing, even reexhibiting existing artworks or using objects outright that, in a context other than a gallery, might be called design. This suggests a kind of equivalency or tacit relationship between the preexisting work and the new one. Nicolas Bourriaud, who has written about these ideas in the context of contemporary art, invokes the DJ and the programmer as quintessential figures of postproduction. He writes positively: "These artists who insert their own work into that of others contribute to the eradication of the traditional distinction between production and consumption, creation and copy, readymade and original work. The material they manipulate is no longer *primary*."<sup>18</sup>

The language of postproduction speaks of sampling rather than appropriation, sharing as opposed to owning, formats instead of forms, curation (i.e., selection) over creation, and context as the prime determinant of form rather than content. It is a culture of re- : remix, reformat, reshuffle, reinterpret, reprogram, reschedule, reboot, repost, recycle.

These strategies can be seen within the world of publishing in the form of the reissue or bootleg edition—material previously out of print, but not necessarily out of copyright. Miriam Katzeff and James Hoff of Primary Information republish "lost" historical material that expands contemporary discourse, such as their facsimile edition of the *Great Bear* pamphlet series (2007), a 1960s art journal. Four Corners Books reissues literary works in a series called Familiars, which are done in collaboration with artists who provide a new spin on classics such as *Dracula* (2008), *Vanity Fair* (2010), and *The Picture of Dorian Gray* (2007). The more surreptitious bootleg strategy can be seen in works such as St. Pierre & Miquelon's *Sexymachinery Issue A: Super Replica* (2008), a facsimile copy of a journal originally created by members of Åbåke; in Winterhouse Editions' *The National Security Strategy of the United States of America* (2003), which simply republished and distributed the official document from the US government that would become known as the Bush Doctrine; or Rollo Press' *How to Build Your Own Living Structures (Revisited)* (2009), a one-color, Riso-printed copy of Ken Issacs' classic 1974 book on DIY furniture, which can be obtained only by exchange, not purchase. The remix or extended play strategy can be seen in *Extended Caption (DDD)* (2009), a reinterpretation of the content from the influential design-cum-art magazine *Dot Dot Dot* that Bailey published and from which forty-three artifacts and essays were selected for display and inclusion in the book as captions.

Just as the introduction of the personal computer opened the sphere of publishing to broader access and participation, the Web 2.0 world not only blurs the distinctions between designers and users but also between production and consumption. Labor is no longer discrete but dispersed, creation is no longer autonomous but interdependent. Consider three examples: 99designs is an online service that provides buyers a logo design for the low, low price of \$99 (or, if you want exclusive rights to a design, then add another \$199). Here, the art comes before the horse. Like earnest profiles on a dating site or a catalogue

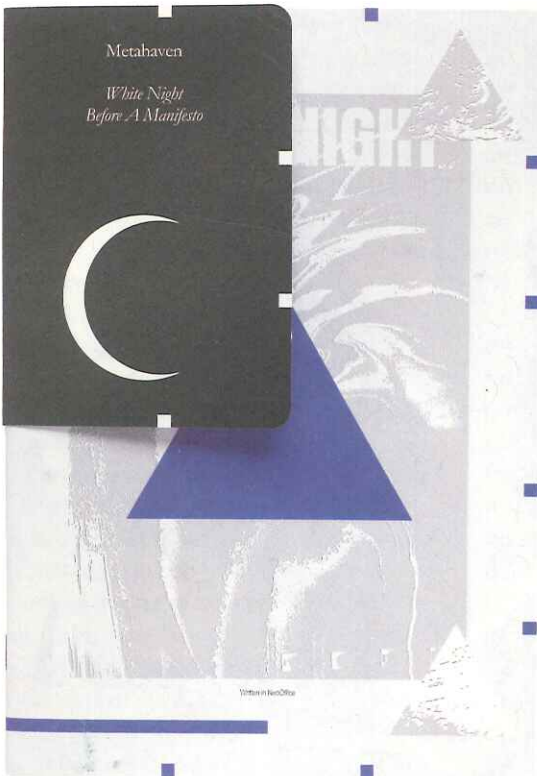
of mail-order brides, more than 13,000 preexisting logo designs are waiting for your "match." Choose one and the name of your business will be added to the design, which can be further customized to meet your needs. Mechanical Turk is a service offered by Amazon.com that brings together people who need simple, so-called human intelligence tasks performed that cannot be done yet by a computer (such as judging the quality of images, identifying singers on music CDs, writing product descriptions) with those who perform them for a small fee, often just a few cents per job, resembling the digital equivalent of piecework. In both situations, the labor of thousands of freelancers (i.e., contract workers) has been aggregated: outsourcing through crowdsourcing. The dubious quality and the ethical ambiguities of these enterprises aside, both of these examples are symptomatic of a larger cultural transformation around the notion of increasingly immaterial labor and atomized work, and their effects on production and consumption.<sup>19</sup> Philip M. Parker, a business professor, is a prolific self-publisher who has produced more than 100,000 books using an automated process of online research, writing, and layout. He issues printed books and digital reports on a staggering range of topics, from a history of anime and medical sourcebooks in areas such as restless leg syndrome and cataract surgeries to business reports about everything from the demand for wood toilet seats in China and lemon-flavored bottled water sales in Japan to golf bag sales in India. Parker uses a "long tail" approach of selling fewer copies of many more books to niche customers.<sup>20</sup> This strategy, coupled with the near elimination of human labor, have produced an inverted publishing venture, one in which a detailed report highly beneficial to just a few or even one person can yield a profit with prices in the hundreds of dollars. These tasks are often accomplished in less than thirty minutes using fully automated systems, most often including print-on-demand (eliminating inventory expense), whose production expense can be measured as "12 cents of electricity."<sup>21</sup>

The old schism between intellectual and manual labor that seems at the heart of the graphic design profession's internal debates is outmoded not only because this division is theoretically suspect, but also because it considers only the actions and possible roles of its own official agents (designers) instead of the complex and fluid social relationships and networks in which they are entwined with other players,









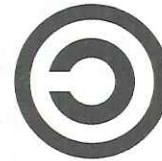
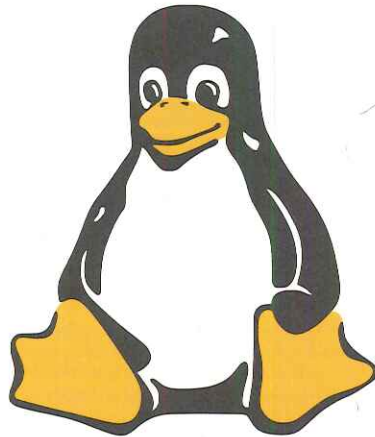
Metahaven, *White Night Before A Manifesto*, Eindhoven: Onomatopoeie, 2008. Courtesy the artists

**Immaterial Labor**

Hardt and Negri define immaterial labour as producing "an immaterial good, such as a service, a cultural product, knowledge, or communication." For the sociologist Maurizio Lazzarato, the immaterial labour of advertising, fashion and software development, comprises "intellectual skills, as regards the cultural-informational content; manual skills for the ability to combine creativity, imagination, and technical and manual labour; and entrepreneurial skills in the management of social relations (...)." ¶ A new common ground for designers and users is provided by the changing links between production and consumption, of which immaterial labour is the "interface." The products of immaterial labour not only materialize "needs, the imaginary, consumer tastes, and so forth," but also generate and produce new needs, imaginaries, and tastes, so that the act of consumption is not the destruction of the commodity but the establishment of a relationship which links production and consumption (read: designer and user) together. Lazzarato holds the social, aesthetic and communicative aspects of immaterial labour (which for him extend into the act of consumption) capable of producing direct social and political ties which escape traditional capitalist appropriation. —Metahaven, *White Night Before A Manifesto*, 2008

**The Origin of Tux**

The concept of the Linux mascot being a penguin came from Linus Torvalds, the creator of Linux. Tux was created by Larry Ewing in 1996 after an initial suggestion made by Alan Cox and further refined by Linus Torvalds on the Linux kernel mailing list. Torvalds took his inspiration from a photograph he found on an FTP site, showing a penguin figurine looking strangely like the *Creature Comforts* characters made by Nick Park. The first person to call the penguin "Tux" was James Hughes, who said that it stood for "(T)orvalds (U)ni(X)". However, *tux* is also an abbreviation of *tuxedo*, the outfit which springs to mind when one sees a penguin. Tux was originally designed as a submission for a Linux logo contest. Three such competitions took place; Tux won none of them. This is why Tux is formally known as the Linux *mascot* and not the *logo*. ¶ Tux was created by Larry Ewing using the first publicly released version (0.54) of GIMP, a free software graphics package. It was released by him under the following condition: Permission to use and/or modify this image is granted provided you acknowledge me lewing@isc.tamu.edu and The GIMP if someone asks. A Little Penguin, also known as the Fairy Penguin in Australia and the Blue Penguin in New Zealand, inspired Torvalds to suggest using a penguin as the Linux mascot. According to Jeff Ayers, Linus Torvalds had a "fixation for flightless, fat waterfowl" and Torvalds claims to have contracted "penguinitis" after being gently nibbled by a penguin: "Penguinitis makes you stay awake at nights just thinking about penguins and feeling great love towards them." Torvalds' supposed illness is a joke, but he really was bitten by a Little Penguin on a visit to the National Zoo & Aquarium, Canberra, Australia. Torvalds was looking for something fun and sympathetic to associate with Linux, and a slightly fat penguin sitting down after having had a great meal perfectly fit the bill. ¶ In an interview Linus commented on the penguin bite: I've been to Australia several times, these days mostly for Linux.Conf.Au. But my first trip—and the one when I was bitten by a ferocious Fairy Penguin: you really should keep those things locked up!—was in 93 or so, talking about Linux for the Australian Unix Users Group. —Wikipedia



Copyleft symbol



Aurelio A. Heckert, GNU symbol, 2005

**Copyleft**

This symbol is a play on the word *copyright* to describe the practice of using copyright law to offer the right to distribute copies and modified versions of a work and requiring that the same rights be preserved in modified versions of the work. In other words, copyleft is a general method for making a program (or other work) free (*libre*), and requiring all modified and extended versions of the program to be free as well. ¶ Copyleft is a form of licensing and can be used to maintain copyright conditions for works such as computer software, documents and art. In general, copyright law is used by an author to prohibit others from reproducing, adapting, or distributing copies of the author's work. In contrast, an author may give every person who receives a copy of a work permission to reproduce, adapt or distribute it and require that any resulting copies or adaptations are also bound by the same licensing agreement. ¶ Copyleft licenses require that information necessary for reproducing and modifying the work must be made available to recipients of the executable. The source code files will usually contain a copy of the license terms and acknowledge the author(s). —Wikipedia



Installation by Werkplaats Typografie at the NY Art Book Fair, MoMA PS1, 2009. Photo: Dante Carlos



Tux, the Linux mascot ©Larry Ewing, Simon Budig, and Anja Gerwinski

**Copy Shop**

The Werkplaats Typografie, a graduate program of graphic design based in Arnhem, installed a copy shop in their project space at the 2009 NY Art Book Fair at MoMA PS1. One wall featured a display of publications designed by the acclaimed Dutch program, which were available to browse. Visitors were invited to make their own bootleg catalogue from the available content by bookmarking their favorite pages (dubbed "editing"). A student would then copy, print, and bind two copies: one for the visitor and one for the school. —AB



who may or may not perform their own creative and productive roles. Metahaven, in *White Night Before A Manifesto* (2008), explores the inability of design manifestos to effect change: "Now that the principal tools of design—the computer and its software—have been homogenized among practitioners and democratized among people, professional distinction is an unlikely perspective for a future design manifesto to gain support. User-generated content accounts not for an amateurish supplement to a stable, professional core, but for a fundamental transformation of the workforce and the value it creates. The professional core of designers will not regain the central role it once could claim based on its mastery of tools and services unavailable to users. It seems instead more probable that among those professional designers, a gap will increase between those who design as celebrity, and those who design as labourer. Such a gap has already appeared in the architectural profession. Subsequently, for a design manifesto, a new alliance between designers and users may be a potentially more successful way forward." 22

Metahaven goes on to cite the "GNU Manifesto" (1985) by Richard Stallman as a successful example of radically rethinking the entire notion of commissioned work, intellectual property rights, and collective ownership. Stallman's proposal was one that would form the basis of the free software movement, and would inspire the open source computing, filesharing, and copyleft movements. All of these take as their foundation the rights of creators to form an alliance directly with users to share their work. This declaration originally took place within a social framework very different from today's, but prescient of its emergence. Its radical yet simple proposition, offered by a programmer—the symbolic figure of postproduction—declares: "I consider that the golden rule requires that if I like a program I must share it with other people who like it." 23 ☒

#### Notes

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3. Steve Jobs, commencement address at Stanford University (June 12, 2005), accessed June 20, 2011, <http://news.stanford.edu/news/2005/june15/jobs-061505.html>.
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6. Jonathan Puckey, "On Tools," unpublished manuscript provided to the author, June 11, 2011.

7. Wild, "The Macramé of Resistance," 23.
8. *Ibid.*, 20.
9. Virginia Postrel, *The Substance of Style: How the Rise of Aesthetic Value Is Remaking Commerce, Culture, and Consciousness* (New York: HarperCollins, 2003), 178.
10. Metahaven, *White Night Before A Manifesto*, (Eindhoven: Onomatopoe, 2008), unpaginated.
11. See Faythe Levine and Cortney Heimerl, *Handmade Nation: The Rise of DIY, Art, Craft, and Design* (New York: Princeton Architectural Press, 2008); and Ellen Lupton, *DIY: Design It Yourself* (New York: Princeton Architectural Press, 2006).
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13. Interview by Mark Dudlik, Adria Robles-Morua, and Tanner Woodford with Experimental Jetset, *Fill/Stroke Magazine*, January 2008; republished 2011, accessed June 20, 2011, <http://www.experimentaljetset.nl/archive/fillstroke.html>.
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15. A Flickr set of submitted BP logo redesigns can be viewed at <http://www.flickr.com/photos/greenpeaceuk/sets/72157623796911855/>.
16. Scott Thomas, *Designing Obama* (Chicago: Post Press, 2009/2011).
17. Experimental Jetset, "T-Shirtism" (October 2005), accessed June 20, 2011, <http://www.experimentaljetset.nl/archive/t-shirtism.html>.
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19. See Maurizio Lazzarato on "Immaterial Labor," and Michael Hardt on "Affective Labor," texts available at [generation-online.org](http://generation-online.org) and in Michael Hardt and Antonio Negri, *Empire* (Cambridge, MA: Harvard University Press, 2001).
20. For an explanation of the long tail theory, see Chris Anderson, *The Long Tail: Why the Future of Business Is Selling Less of More* (New York: Hyperion, 2006).
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22. Metahaven, *White Night Before A Manifesto*, unpaginated.
23. Richard Stallman, "GNU Manifesto," 1985, [wikipedia.org](http://wikipedia.org).