

Chapter 1

Nostalgic Design

Between Innovation and Tradition

Nostalgia, in my view, is not always retrospective; it can be prospective as well. The fantasies of the past, determined by the needs of the present, have a direct impact on the realities of the future.

Svetlana Boym, “Nostalgia and Its Discontents”

Do not seek the old in the new, but find something new in the old.

Siegfried Zielinski, *Deep Time of the Media*

Revolution. *noun* rev·o·lu·tion \,re-və-'lü-shən\

1. A radical change in society
2. The regular cycle of an object through its orbit back to a point of origin

Archiving the Moment

“Will, we care about you and the memories you share here,” Facebook greets me when I log in. “We thought you’d like to look back on this post from 10 years ago.” In 2015 the social network introduced On This Day, a feature that encourages users to publicly remember pictures and posts from years earlier. “Never miss a memory,” the site warns; “Here’s a way to rediscover things you shared or were tagged in.” Like many social networking sites, my Facebook account is a technology of memory. It propels a nostalgia boom by inspiring users to revisit archived experiences that might otherwise be lost to the past, but it also persuades users to be nostalgic for the present, to see posts written about the here and now as “memories you share here.” That scenic waterfall you’re hiking past? It’s a potential memory—take a picture before it evaporates. In doing so, Facebook fosters an affective culture driven by what social psychologist Constantine Sedikides calls “anticipatory nostalgia.” Under this logic, citizens view the present as an event to be chronicled in hopes it will become a cherished memory and out of fear that without record that chance for meaning will vanish. Instagram’s retro photo filters similarly trade in this addictive anticipation by vignetting, scratching, overexposing, and, thereby, digitally aging pictures taken just seconds ago. Digital weathering lends a

sense of authenticity to memories of now. By housing these archives, technologies of memory acquire a patina of meaning by association, a reification of memorial labor that would be lost if you desert the sites. That is, if you quit, you don't care about all the people and experiences you've shared. But, despite popular sentiment that nostalgia is a fearful response to the new and that social networks manipulate mindless users, it would be careless to label social media users uncritical simply because they enjoy remembering. Because of the archives' publicly intimate nature—compared to private records like photo albums or home videos—we mindfully collage memories to curate an identity for the world. This account is my best me, a golden-age self I long to return to. I use it to remember a world into being. In this way, nostalgia nurtures active, personal, memorable, and, thereby, meaningful designs.

Alienation through Innovation

Google announced its Fiber initiative in 2012 with ambitions of spreading high-speed internet across the United States. For a low start-up fee, neighborhoods are connected to an ultrafast network. Early on, only “Fiberhoods” that voted for the service could join. And if enough residents in a community preregistered, Google would make the investment, even offering free access to local schools. This campaign held the potential to wire low-income neighborhoods; internet access would be freed of income restriction. Paradoxically, Google Fiber intensified digital inequity. In Kansas City, for instance, just two days before the registration deadline, neighborhoods that preregistered and those that didn't split directly down Troost Avenue, a street that divides the city socioeconomically and racially. As Aaron Deacon, managing director of the Kansas City Digital Divide Drive, remarks, citizens who didn't vote for Fiber “focus on feeding people, finding jobs, those end-state social services. There's a little bit of a gap still in people understanding how using technology tools can achieve those end goals” (Velázquez). Perpetuating the recruitment gap, when Fiber was launched there were no Spanish-language marketing materials available for the city's sizeable Hispanic population. In failing to teach low-income Kansas City citizens how the service would benefit them, Google's pro-innovation bias asked users to replace their current concerns and culture with Google's. In this light, initially at least, Google failed to see that innovation without tradition leads to alienation. Google Fiber needed to become a nostalgic design. Though they eventually spoke with low-income users in town hall meetings, they still wanted consumers, not collaborators. After all, neighborhoods were transformed into Fiberhoods, not the reverse. Instead, Google might have considered: What are this community's technological memories, traditions, and ambitions? And how can we redesign to

achieve these ideals? The goal of such nostalgic localization is the creation of technologies that are simultaneously past and future oriented and, thereby, welcome neglected citizens as their first adopters rather than just the young and rich. What if Google Fiber had *originally* been designed with the traditions of lower-income black and Latinx citizens in mind, speculating how it fit into their cherished pasts, current realities, and ideal futures? Such overlooked users should not have to wait for new technologies to trickle down to them only to discover they were designed for someone else.¹ In this way, nostalgic design affords designers a chance to think outside of Silicon Valley traditions for off-modern values, resources, and timelines that reside just outside of mainstream progress narratives but that might make the future more fully human.

Resistant Remembering

Donna, a thirty-something roller derby skater, directs a group of high-tech digital labs at a major midwestern university. Because she was formerly a software programmer, when you pass her office now, you might think you hear the soft click of coding on a keyboard. But when you enter, rather than seeing Donna programming a web of variables and constants, you see a knitter, eyes on her monitor, while her needles weave a binary of knits and purls. From homebrewed beer to DIY house kits, Donna is a member of a generation that nostalgically turned to craft in the face of digital intangibility and ephemerality. When I ask why she thinks this trend is occurring, she theorizes, “There came a certain point where most people’s jobs are about going somewhere and sitting at a desk all day. . . . [Y]our product is pixels. . . . And I kind of felt like there were people who were frustrated with that ‘I came home at the end of this eight hours, and I don’t have anything to show for it.’ And so, knitting was a way of, like, I’m still doing something with my time, but at the end of that time there’s a physical object here I can show you.” Donna’s job was marked by a loss of physical end products to her labor. In response, her knitting is a process of nostalgic design, a tactical drawing upon a past of feminine making—even if it isn’t her own lived past—to resist cutting-edge alienation and reshape a frustrating workplace. By knitting at her high-tech job, Donna claims a nostalgic right to meaningful labor. We look back to the past when we don’t feel at home in the present. But in looking back, like Donna, we’re always creating futures we’re a part of. Nostalgia resists, slows, and reshapes the world.

It’s no surprise that when designers consider nostalgia—*pride and longing for lost or threatened personally or culturally experienced pasts*—their minds rarely leap

to innovation. Whether to increase profit, skirt irrational traditions, or bolster change, philosophers of technology and design have dismissed nostalgics as narcissistically mired in idealized and artificial memories, halting progress through a “random cannibalization of all styles of the past” (Jameson, *Postmodernism* 18). In the pages of *Print* magazine, for instance, typographer Angela Riechers rejects the “misuse of the powers of graphic design” in the nostalgic interface of Churchkey Pilsner, a beer that has to be cracked with a retro churchkey can opener instead of the contemporary pop top. “Nostalgia supplies the rapture of the familiar,” Riechers cautions, “rather than encouraging a venture into uncertain new design territory.” Music critic Simon Reynolds similarly warns that nostalgia halts musical evolution: “[T]he place that The Future once occupied in the imagination of young music-makers has been displaced by The Past: that’s where the romance lies, with the idea of things that have been lost” (“Total Recall”). Theorist of user-centered innovation Eric von Hippel argues that tech firms can learn from the hacks of the first 2.5 percent (Rogers) of technology adopters—“lead users” or “innovators”—ignoring the resistances of the last 16 percent of adopters, unceremoniously dubbed “laggards.” More bluntly, a 2013 ad for the Cree LED light bulb rebukes, “The light bulbs in your house were invented by Thomas Edison in 1879. Now think about that with your 2013 brain. Do you still do the wash down by the crick while your eldest son keeps lookout for wolves? No. You don’t. This is a Cree LED bulb. It lasts 25 times longer. Nostalgia is dumb” (“Cree”). At best, then, nostalgia seems to be the melancholy of the technologically illiterate, a flaw in reasoning to overcome as one learns and grows. How could it ever promote revolutionary futures?

This book investigates just that.

Nostalgic Design argues for using nostalgia to design more democratic, inclusive, innovative, meaningful, and human technologies. It starts from the fact that, psychologically, nostalgia is a homeostatic emotion that arises when people feel left out of the current structure of things. From survivalists who live “off the grid” in the face of new surveillance tech to refugees who turn the smallest pieces of home (a bit of cloth, a cheese grater) into heirlooms that anchor their family in time,² as social psychologists Clay Routledge et al. observe, “nostalgia is incited by psychological threat and serves to bolster or to restore well-being” (809). Building from this observation, this book illustrates how nostalgia can tell designers what different communities of users love about the past, miss in the present, and wish to recover in the future. What if Facebook purposefully fostered conversations between members of dissimilar traditions through On This Day? What if Google Fiber originally had been designed with lower-class black and Latinx values in mind? What if Donna’s

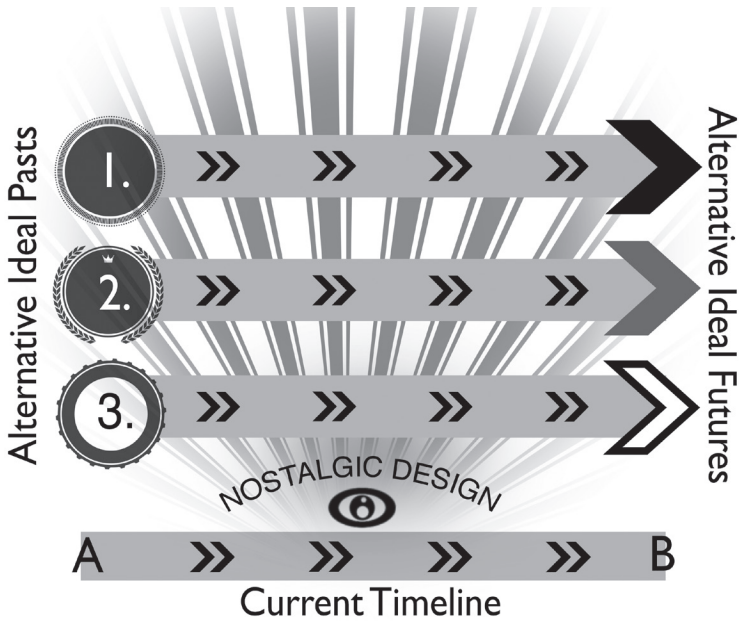


Figure 1.1. Nostalgic design is a set of methods that allows designers to question the inevitability of the current form of things, breaking out of their present timelines in order to explore the possibilities of parallel timelines, alternative ideal pasts, and the alternative futures that stem from them.

high-tech workplace was redesigned around traditions of feminine making? Parallel pasts and futures surround designers every day (figure 1.1).

Nostalgic Design offers a set of tools that helps designers reach the innovative potential of these alternative timelines. To illustrate this process, I survey the nostalgias of several U.S. technology cultures, from software programmers who knit on the job to repair activists who long to return to a time when consumers could fix a broken device themselves. Through rhetorical analyses and personal interviews, I ask each of these groups, *What are you nostalgic for, why, and to which ends?* Ultimately, we'll see that design has a nostalgic heart. That is, despite misconceptions that technology is principally future oriented, all citizens imagine good futures from what they esteem about good pasts.³ When designers address memory and tradition, inclusive designs thrive; when nostalgic ideals are ignored, users are excluded and designs sputter out. Thus, my theses: innovation without tradition leads to alienation and, conversely,

the dialogue of conflicting nostalgias leads to revolution through revolution. Designers make a technology *good* by digging into the humanity of its users—nostalgia is the perfect spade for this archaeology.

Certainly, despite a dismissal of nostalgia by advocates for technological progress, it's been pretty evident to philosophers of memory and history (Halbwachs; Nora; Assmann and Assmann) that different communities inescapably ground themselves in different collective pasts, and sometimes these ideal pasts collide. Still, few memory theorists have studied how the origin of technological inequity is so often this conflict of traditions, unheard clashes of class, race, gender, sex, age, and ability that make access to technology more difficult for some than for others. Designers Carl DiSalvo et al. label this politics “the rhetoric of design”:⁴ “[T]he ways in which the built environment reflects and tries to influence values and behavior and . . . the capacity of people to design artifacts or systems that promote or thwart certain perspectives and agendas” (49).

Observe, for instance, as digital media theorists Cynthia and Richard Selfe do, how the design of the computer desktop is based on a nostalgic remediation of business values (manila folders, files, desk calendars) that subtly exclude users who lack a U.S. clerical mindset. “[G]iven that these technologies have grown out of the predominately male, white, middle-class, professional cultures[,]” Selfe and Selfe write, “the virtual reality of computer interfaces represents, in part and to a visible degree, a tendency to value monoculturalism, capitalism, and phallogoc thinking” (69). User localization expert Huatong Sun recounts her experience with such cultural restrictions: “But what was a file folder, why did she need to organize her files? She had no idea. As someone who was unfamiliar with American office culture, she had never used a file folder . . . Chinese culture was not as obsessed with paper trails” (3). In the design of the desktop, as in all designs, one tradition is normalized, making thinking about computing in other inventive ways difficult. But consider the possibilities revealed by reimagining the desktop through the traditions of a carpenter’s workbench, a surgeon’s operating table, or a chef’s cutting board. Nostalgic design welcomes new old ways of viewing the world—*neostalgic redesign*. In doing so, it smashes technological determinism, the belief that “technical progress follows a unilinear course, a fixed track, from less to more advanced configurations” (Feenberg, *Between* 8).

In exploring both *nostalgia* (longing for a lost past) and *neostalgia* (longing for futures that could have been), this book also argues that the best way to recognize diverse traditions and futures in an era where power is decided by technical enterprise is through design methods that employ agonistic democracy (Mouffe)—forms of deliberative making in which stakeholders from

divergent traditions design together as collaborators instead of enemies (DiSalvo, *Adversarial Design*; Björgvinsson et al.). Unfortunately, as the desktop and Google Fiber examples illustrate, technological design is usually left to engineers and scientists who haven't listened for the clash of user values that makes democracy churn. Such ignorance leads to a technocracy in which a select few voices decide how we live. Furthermore, even when the democratization of technology is theorized, many models don't provide a practical means to mediate the conflict agonistic democracy thrives on. That is, how does one plan a new park when the city council wants one thing, citizens want something else, and local business owners don't want a park at all? Designers might agree with a democratic ethic in theory but struggle to mediate between stakeholders in practice. Geoff Mulgan, CEO of the UK's National Endowment of Science, Technology, and the Arts, critiques designers for this failure to match "their skills in creativity with skills in implementation. . . . [L]ack of attention to organisational issues and cultures . . . condemns too many ideas to staying on the drawing board" (4).

In response, this book explores nostalgia as a pragmatic tool for designers—whether industrial engineers, graphic artists, UX architects, technical writers, physicians, or teachers—to innovate, mediate, and meditate within a global culture of making that is rapidly undergoing a *democratization of expertise* (Hartelius; Nichols; Gee et al.; Collins). "For a century, designers have seen themselves and have been seen as the sole incumbents and managers in the design field," writes Ezio Manzini. "Today they find themselves in a world where everybody designs" (*Design When 1-2*). Expertly trained makers can no longer create in isolation from their users. Citizens want to participate. DIY, maker culture, citizen science—nostalgic self-education on topics from home construction to medicine is at an all-time high in part because citizens feel alienated from, don't understand, and/or don't trust the science and technology they use daily. For others, doing it themselves is just plain fun. Thus, if "design" might be broadly defined as *the methods by which expert makers create some technology to be operated by a specific user, in a specific context, in order to "change existing situations into preferred ones"* (Fuad-Luke, *Design Activism 1-5*), then good design increasingly welcomes the diverse expertise of all citizens affected by it. That is, good design lies somewhere between outsider innovation and insider tradition. In city planning, for example, this democratization of expertise is seen in participatory charrettes, where residents are welcomed to the table (in town halls, etc.) in order to fit a new building into their preexisting neighborhood. In medicine, it surfaces in patient-centered care when, as a woman is dying from cancer, the physician considers *her* ideal notion of life, health, and death rather than doggedly chasing the most aggressive treatment

(Hutchinson; Nuland; Charon). In this new order, where user participation is not just an ethical choice but an obligation, nostalgia urges empathy by revealing and negotiating the backstories of stakeholder desire (Zhou et al.). *What are you nostalgic for, why, and to which ends?*

Ultimately, then, *nostalgic design* is a three-step process of democratic creation by which designers use nostalgia to identify inequities and assets for critical redesign, mediate between conflicting ideal pasts and futures, and design more meaningful technologies. As a scholar and practicing consultant of rhetoric, technical communication, and design research, I specifically seek the new modes of communication, collaboration, education, expertise, and production designers develop to succeed in this age. To begin my search, this introductory chapter examines the historical path of nostalgia from passive illness to critical lens. I then use this lens to provide a glimpse of three nostalgic interactions that can change the way technology affects the world and that, thereby, structure the chapters of this book:

1. *Identifying Exclusionary Designs*: Nostalgic design is a way to listen for users who feel left out of current conceptions of science and technology and harness these users' divergent perspectives to create innovative futures through inclusion. (Chapter 2)
2. *Mediating Technological Conflicts*: Nostalgic design is a platform for designers to mediate between conflicting stakeholders and decentralize their own expertise by uncovering shared logics, encouraging empathy, and concurrently critiquing the present while maintaining hope for the future. (Chapters 3, 4, and 5)
3. *Designing Meaningful Products*: Nostalgic design is a way to localize designs and urge user investment, slowing the pace of technological consumption by actively encouraging citizens to record, recall, and rethink meaningful memories of use. (Chapter 6)

Within these three moves, it's my hope that *Nostalgic Design* will intrigue readers interested in memory studies, design studies, rhetoric and deliberative democracy, technical communication, and user experience architecture. At times, therefore, I ask that you bear with me through unfamiliar (or hyper-familiar) terrain. This book, like its central concept, relies on layering disparate traditions.

Nostalgia: From Homesickness to Critical Method

Nineteen-year-old Swiss medical student Johannes Hofer coined the word "nostalgia" in his 1688 dissertation to describe the homesickness he saw in

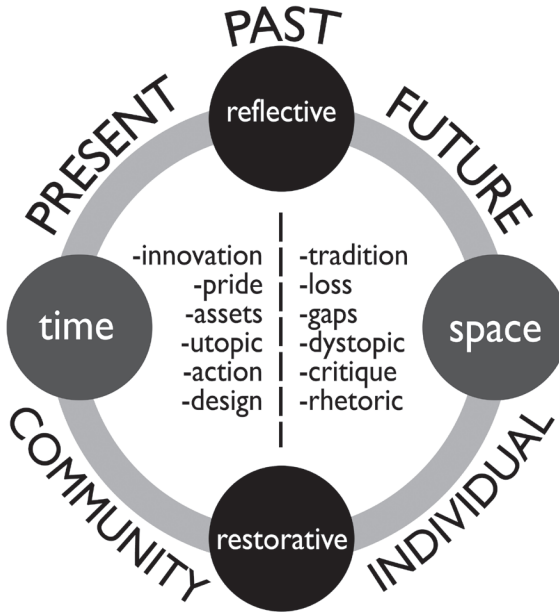


Figure 1.2. Nostalgia’s defining tensions. On the left, one finds the creative elements of nostalgia, whereas on the right are its critical aspects. The boundary between these sides is permeable and, thereby, catalyzes nostalgia’s ability as a critical production method.

mercenaries fighting abroad.⁵ The term is a neologic portmanteau of the Greek *nostos* (return home) and *algos* (pain/sorrow). The root of the disease, Hofer theorized, was “the quite continuous vibration of animal spirits through those fibers of the middle brain in which impressed traces of ideas of the Fatherland still cling” (384). Though contemporary nostalgia tends to be considered a harmless longing, seventeenth-century nostalgia was more akin to modern depression, with symptoms ranging from loss of appetite to hearing voices to suicide. This deep pain of not feeling at home (still studied in refugee and military populations) was medical, real, and life altering. In its earliest days, nostalgia was also focused on spatial rather than temporal dislocation. Soldiers could potentially be cured through *nostos*—returning to a particular place in which they grounded their identities.

Yet, nostalgia always involves the tension between space and time, one of the many tensions that distinguish it from standard tradition or memory and, as you’ll see in this book, make it a constantly moving target for would-be

theorists (figure 1.2). We might recall the nostos voyage of the *Odyssey*, for example, and note that though Odysseus longs to return to Ithaca, once his adventure concludes, his home and identity are irrevocably changed by time. When he finally returns, Odysseus must slay Penelope's suitors to regain his kingdom. Yet, even when he recovers his lost home, he meets a tragic end in the *Telegony*, in which Telegonus, Odysseus's son by Circe, seeks out his father and unintentionally kills him. You can never go home again because people and places don't remain in stasis. Nostalgia is born of the permanent loss of time that is part of all human experience.

Thus, over the centuries nostalgia shifts from a medically defined homesickness, potentially cured by returning to the land of one's youth, to a culturally defined timesickness, as incurable as age. This distinction between space and time becomes particularly important with the advent of modern communication and travel. Though nostalgia would seem to be alleviated by the ability to quickly travel across space—to return home by plane, train, or Skype—it hasn't stopped. In fact, as literary theorist Svetlana Boym writes, "Somehow progress didn't cure nostalgia but exacerbated it. . . . In counterpoint to our fascination with cyberspace and the virtual global village, there is no less a global epidemic of nostalgia, an affective yearning for a community and a collective memory, a longing for continuity in a fragmented world" (*Future* xiv). Especially in our age of digital obsolescence, where technology and the cultures linked to it are constantly changing, citizens long for the seeming stability and authenticity of the past. "I'm actually quite a different person," Ödön von Horváth describes of the technological speed taking over the mindscape of the early twentieth century, "I just never get around to being him" (Rosa 317).

Nostalgia, therefore, inevitably rises with every technological and cultural revolution (F. Davis; Grainge; Boym). It reappears, for example, in nineteenth-century British, German, and American Romanticisms—often read as critical reposts to the technical advances of the Enlightenment and Industrial Revolution. Authors like William Wordsworth, the Brothers Grimm, and Washington Irving wander their childhood landscapes longing to restore losses endured with time by collecting personal and cultural folklore. In design, one sees a parallel anti-industrial push in William Morris's revival of handcrafted textiles and John Ruskin's praise of gothic architecture during the Arts and Crafts Movement. This nostalgic resistance echoes through today's craft revival (the subject of chapter 2), in which a generation that grew up on digital tech looks to physical making as a way to slow time, commune with permanence, and find meaning in knowledge-based jobs. Thus, nostalgia, as argued by Fred Davis, the first modern nostalgia critic, becomes

progressively active, less a physical disease that afflicts a victim and more a critical apparatus to respond to change. It's perhaps unsurprising, then, that Constantine Sedikides et al. describe nostalgia's primary psychological function not as tentative homesickness but rather as a "resource that contributes to equilibrium in the self-system" ("Nostalgia Counteracts" 59). Nostalgia is homeostatic. When identity-disrupting events happen (moving, getting fired, signing divorce papers, having a loved one die), nostalgic reflection is a way to fight loneliness, write ourselves into a narrative of meaning, and create "self-continuity." Nostalgia is a portable safe space from which we can reach into the unknown.

As nostalgia slowly became a self-reflective tool, the motives of individual memory, collective memory, and national history catalyzed in the "memory crisis," from the French Revolution onward (Terdiman) and in the "memory boom" (Huyssen) of the 1980s. In both, cultural theorists debate the merits and failures of textbook histories, probing, "Who wants whom to remember what, and why?" (P. Burke 107). Progressive theorists accuse formal national histories of a politics of amnesia (forgetting the oppression and contributions of minority cultures) and, thereby, attempt to supplant history with the new field of memory studies, which democratizes and personalizes history.⁶ From the oral narratives of Holocaust survivors to the personal archives of former slaves—memory studies unearths the alternative timelines of figure 1.1.⁷ The memory boom also marks a shift in the ways memory is studied in the sciences. In the past, psychologists largely studied memory in terms of the accuracy of individual recall. But in the twentieth century, memory went social: "People's accounts of past events are treated not as a window onto the cognitive workings of memory, but as descriptions that vary according to whatever pragmatic and rhetorical work they are designed for, such that no single, decontextualized version can be taken as a reflection of the 'contents' of a person's 'memory'" (Middleton and Edwards 11). In a word, the act of remembering is always *rhetorical* (Phillips; Whittemore; Casey), designed to communicate a specific message to a specific audience for a specific purpose. We remember to redesign the world.

If we think of remembering as a rhetorical method for citizens to reach towards *eudaimonia*, and we see nostalgia, particularly, as a way to bring past ideals into the future, nostalgia becomes an excellent tool for designers to look for the diverse values of communities that have been ignored in the past. With the democratization of remembering comes the possibility of the democratization of making. Such democratization, Pierre Nora advances, defines the memory boom: "[T]his outbreak of memory is of a social nature and is linked to what might be called, by analogy with 'acceleration,' the 'democ-

ratization' of history. This takes the form of a marked emancipatory trend among peoples. . . . The explosion of minority memories of this kind has profoundly altered the respective status and the reciprocal nature of history and memory—or, to be more precise, has enhanced the very notion of 'collective memory,' hitherto little used" (440). Particularly important to understanding nostalgia, then, is that although it is terminologically about longing for a lost home, citizens long for lost pasts because they feel excluded from the present and, thereby, wish to create a future they are a part of. Hence, nostalgic design.

Still, the majority of research on nostalgic making, largely housed in media studies and advertising, has focused on critiquing (and occasionally deploying) nostalgia as an uncritical longing, a stale recycling, or a nefariously propagandistic weapon. As David Lowenthal comically lists, nostalgia has been accused of being "ersatz, vulgar, demeaning, misguided, inauthentic, sacrilegious, retrograde, reactionary, criminal, fraudulent, sinister, and morbid" (27). Because the memory crisis and boom grew in response to the amnesia of formal national histories and nostalgia is defined by its selective remembering, it is (often rightly) critiqued for perpetuating forgetting. There are reasons to be critical of nostalgia.

One of several catalysts of the democratization of memory, for instance, was Hitler's propagandistic use of German nationalist nostalgia to suggest the historical inevitability of the Third Reich. Art historian Crispin Sartwell traces the political aesthetics of Nazism (e.g., Speer's architecture and Riefenstahl's films) as they combine German romantic nationalism (Wagner, the Brothers Grimm, Herder) and nostalgic neoclassicism (Roman pillars and marble in massive proportions). "Hitler actually tried to develop a crypto-historiography," Sartwell writes. "He traced the Athenians and Spartans to German origins" (16, 25). Under this nostalgic aesthetic, policed by The Reich Chamber of Culture, there was only one nostalgic way to be German—Hitler's way. It's no surprise, then, that the Frankfurt School critical theorists that fled Germany would be anti-nostalgia.

In his *Fantasyland*, journalist Kurt Andersen traces a similar line of nostalgic anti-intellectualism flowing through America's history. Following the destruction of the Southern plantation system by the Civil War, for instance, one finds the myth of the happy slave, represented in Nate Salsbury's 1895 "Black America" traveling show, where one could find, as one *New York Times* reporter notes, "the labors that the Negroes of slavery days engaged in, and the happy, careless, life that they lived in their cabins" (119). Similarly, Andersen recounts Tennessee governor and U.S. senator Robert Love Taylor's nostalgic recollection of his youth on a plantation: "Every sunrise of summer

was greeted by the laughter and songs of the darkies as they gathered in gangs and went forth in every direction to begin the labors of the day” (120). Lest we think that such feelings were limited to the turn of the twentieth century, when asked in 2017 what President Trump’s Make America Great Again slogan meant to him, U.S. Senate candidate Roy Moore longed for the antebellum South: “I think it was great at the time when families were united—even though we had slavery—they cared for one another. . . . Our families were strong, our country had a direction” (Mascaro). Again, we see artificially sweetened pasts, endorsed by those in power, that pave over historical realities.

Moreover, in response to advances in new media, postmodern cultural theorists have criticized nostalgia’s effect on history. Fredric Jameson describes, for example, the “nostalgia mode” of contemporary history in which recollection happens through a rose-lensed pastiche of media in order to call forth uncritical capitalist consumers. With the advance of recording technologies, history becomes “a vast collection of images, a multitudinous photographic simulacrum. . . . This mesmerizing new aesthetic mode itself emerged as an elaborated symptom of the waning of our historicity, of our lived possibility of experiencing history in some active way”—the real past is replaced by a consumerist pastness (*Postmodernism* 132, 135). And, yet, though Jameson may be right, his critique isn’t new (see Plato’s reaction against writing and Trithemius’s distaste for the printing press), escapable, or automatically evil. And in making his argument, Jameson is ironically nostalgic for real history himself.⁸

Postmodern critic Linda Hutcheon traces this unwillingness of her colleagues to accept their own utopian nostalgias to their defining embrace of dystopian irony. She asks of postmodern architecture, for instance, “Was this postmodern recalling of the past an example of a conservative—and therefore nostalgic—escape to an idealized, simpler era of ‘real’ community values? (See Tafuri 1980, 52–9.) Or did it express, but through its ironic distance, a ‘genuine and legitimate dissatisfaction with modernity’[?]” (Hutcheon and Valdés 18).

Importantly, then, as Kimberly K. Smith writes, nostalgia has consistently structured “progressive responses to the questions of whether and whose memory is a reliable basis for political action and what kinds of desires and harms are politically relevant” (505). Quickly dismissing nostalgia as regressive, conservative, and/or nationalist doesn’t relieve us of its influences. Instead, it simply relieves critics of the responsibility of understanding an “illogical” group of constituents who aren’t “progressive,” and by scapegoating these nostalgics, blinds their accusers to their own nostalgic impulses. But, of

course, like everyone, they too are nostalgic: for nature, for authentic culture, for slower precapitalist cycles of consumption.⁹ Nostalgia, then, has been a tool of the powerful—but it has equally as often been a tool of grassroots resistance.

In contrast to these rejections of nostalgia, then, this book focuses on nostalgia's promise as a critical tool to observe and mediate multiple possible timelines. It's often been said that citizens need to know their history to know their future; I argue that designers need to know a culture's longing, pride, loss, and desire to know what's to come. To anchor this exploration, I draw upon a growing area of interdisciplinary nostalgia studies that considers the thoughtful aspects of nostalgia led by social psychologists Constantine Sedikides, Tim Wildschut, and Clay Routledge; political scientist Kimberly Smith; geographer Alastair Bonnett; eco-critic Jennifer Ladino; and designers Koert van Mensvoort and Heike Jenss. Most foundational for nostalgic design, however, is Svetlana Boym's continuum between two types of nostalgia: "Restorative nostalgia stresses *nostos* and attempts a transhistorical reconstruction of the lost home. Reflective nostalgia thrives in *algia*, the longing itself, and delays the homecoming—wistfully, ironically, desperately. Restorative nostalgia does not think of itself as nostalgia, but rather as truth and tradition. Reflective nostalgia dwells on the ambivalences of human longing and belonging and does not shy away from the contradictions of modernity. Restorative nostalgia protects absolute truth, which reflective nostalgia calls into doubt" (*The Future* xviii). To illustrate this difference, Boym describes the renovation of an Italian cathedral. Where restorative nostalgics might strip away layers of soot and superfluous additions, seeking the "original" intentions of the Renaissance architect, reflective nostalgics are "lovers of unintentional memorials of the past: ruins, eclectic constructions, fragments that carry 'age value.' Unlike total reconstructions, they allowed one to experience historicity affectively, as atmosphere, a space for reflection on the passage of time" (*Future* 15).

This distinction was illustrated in 2016, for instance, in a drive to question the historical figures after which many U.S. places are named. One of the fiercest debates was over President Woodrow Wilson's legacy at Princeton University (Hui; Martinez). His name and image adorn many campus sites, including the school of public policy and international affairs. In most textbook histories, Wilson, a former U.S. and Princeton president, is known for reawakening academic rigor in the Ivy League, his WWI reconstruction strategy, and his progressive policies from the Federal Reserve to Federal Farm and Loan. Often forgotten are Wilson's pro-segregation beliefs, expulsion of African Americans from federal office, and soft line on the Ku Klux Klan in his *A History of the American People*.

The rhetorics of nostalgia inundating this situation are deep. One group of *restorative nostalgics* advocated solely remembering the positive effects Wilson had on the campus and nation, dismissing his racism as an inescapable sign of the times. Another group sought to totally remove Wilson's name from Princeton—seeing erasure as a path towards healing. Interestingly, this faction suggested replacing Wilson with a number of black historical figures, such as Martin Luther King Jr., each with his or her own *restorative* politics. Finally, a group of *reflective nostalgics* simultaneously recognized Wilson's positive legacy while using that legacy as a means to critique the politics of amnesia involved in forgetting Wilson's racism in the first place. Artist Titus Kaphar, for example, proposes “amending” public sculptures and monuments: “I’m not saying erase it. . . . I want to make sculptures that are honest, that wrestle with the struggles of our past but speak to the diversity and advances of our present. . . . When we have a situation when we want to change a law in the American Constitution, we don’t erase the other one. Along side that is an amendment. Something that says this is where we were—this is where we are, right now.” What differentiates reflective nostalgia from restorative nostalgia, then, is that reflective nostalgics layer multiple traditions and futures (like layers of paint in a cathedral) rather than replacing one past ideal with another. They use the inescapability of nostalgia as a tool to open dialogues about equitable redesign.

Throughout this book I call such clashes of memory *nostalgic contact zones*, after Mary Louise Pratt's postcolonial “contact zones,” “social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery, or their after-maths as they are lived out in many parts of the world today” (34). Though nostalgia is classically viewed as a means to seek continuity with the past, thinking of nostalgia as a contact zone creates productive *discontinuities* that encourage innovative ways of thinking about the future. Ultimately, then, I don't care if nostalgia is good or bad. That's too simple. We're interested in why people feel nostalgic, how they use their pride and longing to shape the world, and what the feeling can tell us about the types of futures they want.

Nostalgic Techno-Logics: Identifying Gaps and Assets

On December 1, 2015, Facebook CEO Mark Zuckerberg and pediatrician Priscilla Chan authored a public letter to their newborn daughter, Max. “Like all parents, we want you to grow up in a world better than ours today,” Chan and Zuckerberg write. To engineer this better future, they announced the Chan Zuckerberg Initiative, through which they will give 99 percent of their Facebook shares—roughly 45 billion dollars—to redesign the world. As one

might expect, a large portion of this funding has gone towards technology and technology-driven education. Zuckerberg and Chan, like numerous innovators before them, imagine technology, particularly the internet, as a democratizing force: “[S]tudents around the world will be able to use personalized learning tools over the Internet, even if they don’t live near good schools. . . . [The internet] provides health information on how to avoid diseases or raise healthy children if you don’t live near a doctor. It provides financial services if you don’t live near a bank. It provides access to jobs and opportunities if you don’t live in a good economy.”

And, yet, granting universal access to technology doesn’t inevitably cure social inequities. Langdon Winner critiqued this myth way back in 1986: “The political arguments of computer romantics draw upon a number of key assumptions: (1) people are bereft of information; (2) information is knowledge; (3) knowledge is power (4) increasing access to information enhances democracy and equalizes social power. . . . Alas, the idea. . . . mistakes sheer supply of information with an educated ability to gain knowledge and act effectively. (109). There’s a difference between access to *information* (organized observations about the world) and an ability to apply *knowledge* (observations strategically deployed to act in context) (Tuomi). This doesn’t mean that citizens who lack digital skill lack the knowledge to thrive in a digital world; it’s that not all knowledge is valued equally. In a college filmmaking course, for example, a student skilled at creating popular YouTube videos might not be considered literate—despite the vast knowledge on production, virality, and distribution she can contribute (Shipka; Selfe “Students”). There are such layers of expertise everywhere; they grow in the alternative timelines of nostalgic design (figure 1.1). Good designers innovate from them.

Cynthia Selfe elaborates on the failure to see such neostalgic futures: “[B]ecause the push for technological literacy focuses on one officially sanctioned form of literacy, it encourages citizens to discount the complexities of literacy education and the importance of *multiple* literacies within our culture” (*Technology* xx). Equal access to technological things is not the same as equal access to technological literacy because technological inequity is not simply a thing-ed divide. It’s a cultural, historical, socioeconomic, raced, gendered, aged, abilitied divide that sets up one official technocratic eudaimonia (often capitalist efficiency, productivity, profit) and bars others (eco-friendliness, religion, gender equality).¹⁰ Anyone can be a scientist, engineer, or designer, this technocratic logic espouses, as long as you think like everyone else already in those fields. In this way, to democratize technology, beyond looking at access to a technology itself, designers must look to and create for the innumerable sociocultural ways of knowing technology—what we might call techno-logics—

surrounding and built into designs. There's a difference between *technological* equity and *techno-logical* equity. And by asking *What are you nostalgic for, why, and to which ends*, designers might reveal and innovate in this gap.

Given that Zuckerberg and Chan's letter is to their daughter, for instance, it's curious that they don't discuss one of the largest techno-logical gaps in the United States, the dropping number of women in science, technology, engineering, and mathematics (STEM). In 1983 women made up 37 percent of computing professionals; this number dropped to just 26 percent in 2013 (National Science Foundation). In its *Tech-Savvy: Educating Girls in the Computer Age*, the American Association of University Women (AAUW) Educational Foundation argues that girls are less likely to enter computer-centered fields than boys,¹¹ not because of a lack of access or ability but, rather, because girls view STEM techno-logics as male-dominated, isolating, and uncreative: "[G]irls are concerned about the passivity of their interactions with the computer as a 'tool'; they reject the violence, redundancy, and tedium of computer games; and they dislike narrowly and technically focused programming classes. Too often, these concerns are dismissed as symptoms of anxiety or incompetence that will diminish once girls 'catch up' with the technology" (ix). As usual, the emotion of not feeling at home with technology is dismissed rather than embraced as a catalyst for redesign.¹² But frustration surfaces when a technology has not been designed for a given type of user and, more importantly, the techno-logic that the frustrated user is employing.

The AAUW found, for instance, that one foundational gateway to computing that girls felt uncomfortable with was playing, coding, and hacking violent computer games with male main characters and over-sexualized portrayals of women. Girls felt gaming and, thereby, computers were not for them. "In the eyes of many of the female interviewees," literacy theorist Brigid Barron reports, "their male counterparts had 'come in programming since birth,' and had a knowledge base that far exceeded their own. . . . [E]xperience playing games was a significant pathway for a sense of competence. A lack of fit led many students to switch majors" (3). Though gaming culture has changed since the AAUW's 2000 study,¹³ the target demographic for most companies is still men aged 18 to 34. In contrast, literacy gateways that target women's interests are dismissed as personal preference.

Looking at access to literacy through nostalgic contact zones encourages educators to have more diverse conversations about parallel gateways to literacy and, thereby, "provide access without people having to erase or leave behind different subjectivities" (Cope and Kalantzis 18). Currently, for example, there are numerous programs (AAUW, Scientista, WISE) that recruit women to STEM by promoting neostalgic visions of what it means to be a woman

in the sciences. Each responds to the classic adage, you cannot be what you cannot see.

One such approach is pink technology (pejoratively “pink-washing”), a gateway that makes STEM literacy stereotypically “girly.” Pink Legos, computer engineer Barbie—scientists can be princesses, too. There’s nothing inherently wrong with pink literacy gateways; they can cultivate a sense of belonging for women in STEM, remove the stigma that STEM is unfeminine, and, at their best, promote a reflectively nostalgic feminist reappropriation of female stereotypes (see *stitch ’n bitch* in chapter 2). However, this approach *alone* can be restricting and infuriating. *Surprisingly*, not all women value the same feminine traditions. In December 2015, for example, IBM launched its #hackahairdryer Twitter campaign, which urged women to overcome the gender bias of STEM by taking apart a hairdryer to create a variety of science projects.¹⁴ Though well intentioned, there was an immediate backlash by women in STEM against the stereotypes involved. Twitter user @iPeggy responds, “Yikes @IBM! I’m a girl & actually know OS Assembler language & have ‘hacked’ your MVS operating systems. Try again please! #HackAHair-Dryer” (Butler). @TheTrendyTechie directly attacks the restorative nostalgia of the campaign: “How to make progress in equality: start treating women like modern human beings instead of the 1950s housewife trope. #HackA-HairDryer” (Franch). Such essentialism is why nostalgia must be thought of as a contact zone, a tension of numerous right ideals. It’s also why progress and tradition must be carefully negotiated, hand in hand.

Another channel for welcoming women into STEM is raising awareness of the historical and continuing importance of women scientists: a feminist historiography of science that builds a nostalgic tradition of female heroes that future scientists might join (Smith and Erb). By looking into the history of science with an eye to recovering women, one discovers revolutionaries like the first computer programmer, Ada Lovelace; radioactivity theorist Marie Curie; NASA mathematician and physicist Katherine Johnson; and the coders of ENIAC, the first U.S.-built programmable computer. Such feminist historiography is reflectively nostalgic, seeking to remember uniquely positive contributions of women that have been lost through the sexist nature of history in order to create a tradition from which women can act today. If one side of the emotion of nostalgia is loss and exclusion, the other is pride in the past upon which citizens rhetorically construct a positive identity and a space to be included.

An equally vital part of such nostalgic recovery, however, is tracking STEM literacies in places where they’ve been ignored in the past—asking neostalgic questions like, What technological literacy did your great-grand-

mother, who was a homemaker and not a trained scientist, have? In the next chapter, for example, we'll continue to meet Donna, a former programmer who sees knitting as a gateway to software programming. As Leah Buechley, designer and MIT professor, describes, "Knitting, crochet, or yarn textile crafts are very algorithmic activities. . . . There is a pattern that you follow that involves repetitions and looping and if-then. It's really an engineering discipline to turn a 1-D thing, a string, into a 3D thing" (Kraft). Thus, knitting becomes a new old way—a *neostalgic mode*—of teaching and rethinking engineering.

In the end, one of the primary reasons for bolstering techno-logical diversity is that inclusivity leads to better designs. Without female engineers, design errors have been made from early voice recognition software that couldn't identify the tones of women (Margolis and Fisher) to airbags designed for large male crash test dummies that killed children and small-statured adults (Shaver; Vinsel) to womanless senate committees writing female birth control legislation. One of the central goals of inclusion, therefore, is to transform the dominant techno-logic to benefit everyone. Currently, for example, as women are increasingly recruited to STEM, there has been a challenge to the way that Silicon Valley's new capitalism—from all-night hackathons to weekend volleyball games—excludes workers with children. What if nostalgic ideals of motherhood were designed into high-tech workplaces? By layering traditions of womanhood and workerhood, several companies (Facebook, Google, Netflix) are leading workplace reform towards better-paid maternity and paternity leave. Nostalgia encourages designers to consider what other better futures—excluded pasts as redesign assets—like this might be recovered.

Nostalgic Deliberation: Rhetorically Mediating Traditions

And, yet, such inclusive design is easy in theory but tricky in practice. Once multiple nostalgias and the techno-logics they embody are identified as signs of struggle and assets for redesign, a designer has a critical question to face: If my goal is achieving inclusive and equitable designs, what do I do with conflicting stakeholders with dissonant nostalgic ideals? This is a defining question for the field of rhetoric, the art of designing unique texts for unique audiences with unique eudaimonia to produce unique reactions. Rhetoric is indeterminate; it thrives in alternative timelines. There are always multiple right futures and, as theories from Protagoras's sophism to Kenneth Burke's identification argue, ethical makers create from, for, and with that indeterminacy in mind. "If technology is in some fundamental sense concerned with the probable rather than the necessary—with the contingencies of practical use and action, rather than the certainties of scientific principle—then

it becomes rhetorical in a startling fashion,” writes designer and rhetorician Richard Buchanan (“Declaration” 6-7). “It becomes an art of deliberation about the issues of practical action, and its scientific aspect is, in a sense, only incidental.” Thus, given the democratization of expertise and a parallel surge of collaborative, user-centered, and participatory design, it’s increasingly the designer’s job to urge and mediate arguments (Schön; Forester; Faga; Monteiro) by unearthing *stases*: shared questions, problems, and values. In such deliberations, nostalgia’s ability to generate empathy, reveal tradition as foundational to expertise, open stakeholders to change, and encourage agonism is invaluable.

Take, for example, a 2011 episode of the radio program *This American Life* in which host Ira Glass interviews Erin Gufstafson, a conservative high schooler who believes “global warming is propaganda.” As an experiment, Glass enlists Roberta Johnson, a climatologist and executive director of the National Earth Science Teachers Association, to persuade Gufstafson that global warming exists. Johnson lays out the best evidence she can, but in the end, the teen is not satisfied. In one of Johnson’s final remarks, we see why the experiment failed: “My point is that this is really not a question of belief. This is a question of science. We look at the evidence, we use our scientific knowledge, and we come to science-based conclusions” (“Kid Politics”). Johnson is baffled that Gufstafson sees global warming as debatable.

In rhetorician Sharon Crowley’s terms, Johnson speaks at Gufstafson through a *fundamentalism*, “a general imperative to assert an absolute, singular ground of authority; to ground your own identity and allegiances in this unquestionable source; to define political issues in a vocabulary of God, morality, or nature that invokes such a certain, authoritative source” (12). Note the echoes of restorative nostalgia. Though many listeners may hear Gufstafson’s rejection of science as biased, more crucial for designers, Johnson speaks from a “liberal fundamentalism,” a refusal to negotiate with “tradition, authority, or desire” (Crowley 15).

A similar rejection occurs when I ask writers in my technical communication courses to explain a scientific argument to nonbelievers or, alternatively, to negotiate with a client who wants a weak design. These writing students initially turn to rhetorical fallacies and hostile rebuttals that poke holes in their audience’s reasoning: “Let me tell you all the ways you’re wrong.” Indeed, when faced with conflict, an expert’s first response is often such tribalism, a restoratively nostalgic defense of her training. Holding tight to expertise as truth, she views potential collaborators as enemies in a zero-sum game (Ball et al.). Why should scientists have to teach, persuade, and collaborate with idiots? Because science doesn’t exist in a political vacuum, and harsh denials

don't foster productive working relationships with the citizens and legislators who control how science and technology are funded and enacted. Successful designers, then, can't ignore Aristotle's chief rhetorical edict: "Rhetoric forms enthymemes from things that seem true to people already accustomed to deliberate among themselves" (*On*, 1.2.11, 1356b). Good alliances start from what is true to stakeholders.

If designers, as Manzini describes, "today find themselves in a world where everybody designs and . . . their task tends to be to use their own initiatives to help a variegated array of social actors to design better," then (as chapters 3, 4, and 5 explore) they must study rhetorical tact in understanding, adapting to, and occasionally refusing the expertise of their stakeholders (*Design when* 2). But even refusals start from knowing an audience and locating rejections within their goals. It's in this light that nostalgia becomes an invaluable tool for mediation because it develops *empathy*, urging designers to understand the non-logos-based techno-logics of emotion, pride, loss, and tradition from which many of their collaborators' (as well as their own) ideals harken. In fact, psychologically, nostalgia primes productive alliances because feelings of nostalgia usually relate to special people during positive events. That is, as psychologists Xinyue Zhou et al. found in a series of five experiments, "nostalgia recreates the meaningful bonds one has with other persons and, in the process, fosters a renewed sense of social connectedness and secure attachment (Sedikides et al. 2008, 2009; Wildschut et al. 2006). Processes that increase social connectedness and secure attachment, in turn, provide the foundation for empathy, willingness to help others, and helping behavior (Mikulincer et al. 2001, 2005)" (Zhou et al.). Thus, nostalgic mediations start by listening to back-in-the-day stories (Forester, "Beyond"; Forester, *Deliberative Practitioner*; Winslade and Monk): *What are you nostalgic for, why, and to which ends?*

In the case of Gufstafson and Johnson, for instance, rather than vaulting straight to scientific facts, Johnson might have realized that the teenager's techno-logic was based in conservative tradition and, thereby, addressed the teenager's "moral foundations" (Haidt): environmental protection is humanity's God-directed duty as stewards of the Earth; the pollution that causes climate change is an attack on individual liberties; it is patriotic to conserve the country's resources and the tradition of the national park service (see Lardino; Feinberg and Willer; Feygina et al.). All these arguments are posed so that Gufstafson feels climate protection advances her nostalgic ideals of biblical tradition, life, liberty, and the pursuit of happiness. She doesn't have to reject her conservative ingroup identity in order to protect the environment. Nostalgic exploration reveals she already is someone who should believe in climate change. The goal, here, is not pulling the wool over an audience's

eyes but exposing layers of reflective nostalgia, common ground, stases, the convalescence of truths (Bush and Folger).

The need for such tact reveals a key complication of design expertise: the distinction between *epistemic technê* and *mêtis*-centric *technê*.¹⁵ In *Nichomachean Ethics*, Aristotle marks episteme (ideal knowledge) as discrete from technê (experience-based craft). The field of design seems squarely situated in technê, “a state of capacity to make, involving a true course of reasoning. All art is concerned with coming into being.” (6.4.10, 1140a). Yet, designers obviously draw upon theoretical knowledge—their training in best practices. Thus, design is *epistemic technê*—a form of making that relies on theory. At its best, epistemic technê is well-reasoned design, adaptive reflective nostalgia in which designers use theories as chords to improvise upon. At its worst it’s what Manzini calls “big ego design” in which, as we’ve seen, the designer falls defensively into restorative nostalgia: the Eiffel Tower wouldn’t have been built through design by committee; my training and experience are the only reasonable way to see things; it’s my way or the highway!

To counter big egos, productive collaborations balance epistemic technê with user knowledge: *mêtis*. In Greek mythology, Metis was Zeus’s first wife, the titan of cunning intelligence, know-how, and trickery (de Certeau; Detienne and Vernant; Dolmage). Because he fears her guile, Zeus devours Metis, and she, thereafter, lives up in his head as wise counsel. Theorist of user-centered design Robert Johnson argues that *mêtis* might be thought of as the tactical and contextual expertise of the user. In operating a design, users learn it, hack it, adapt it, redesign it and, thereby, know it in a singular way. Where an architect may be an expert in designing a house, for instance, the homeowner adapts the house to their specific needs by living in it. *Mêtis* makes a house a home. But where the dark side of epistemic technê is big egos, the dark side of *mêtis* is a customer-is-always-right philosophy in which professional designers simply defer to users rather than interjecting their own skill. The strongest designs come from the agonistic collaboration of multiple expertise—and agonism relies on conflict.

The field of design has employed a host of methods to foster such collaborations (see chapter 3), frequently based in user-centered (Norman and Draper), human-centered (Buchanan, “Human Dignity”; LUMA Institute), and participatory/co-design (Simonsen and Robertson) traditions. For example, defining participatory design for years to come, Pelle Ehn and Morten Kyng’s early-1980s action research in the UTOPIA project introduced new digital technologies into a traditional newspaper production industry. Swedish computer and social scientists co-designed with printshop union workers (Ehn; Ehn and Kyng). Through this alliance the designers melded epistemic

technê and mêtis, creating digital programs that highlighted and harnessed the expertise of workers rather than replacing it. They created an alternative future by creatively layering multiple pasts.

And, yet, contrasting rhetoric's embrace of turbulence, many user-centered and participatory design methods have strayed from their emancipatory foundations, skirting conflict because it costs time and money. Ehn, Elisabet Nilsson, and Richard Topgaard challenge, for instance, "Inventive as it may seem, this new paradigm is surprisingly traditional and managerial. The main challenge put forward is still how large corporations can harvest users' and consumers' innovations into safe and profitable mass-market products" ("Making" 3). In the index of my *Routledge International Handbook of Participatory Design*, the words "conflict," "mediation," "argument," and "debate" are conspicuously absent.¹⁶ In contrast, to foster productive diversity, nostalgic design actively complicates ideal scenarios by situating multiple ideals in contact zones.

At roughly the same time Ehn and Kyng were working on UTOPIA, for example, Mutirão 50 (Cabannes; Faga) was a participatory housing project in Fortazela, Brazil, where millions squat illegally in *favelas*, or makeshift homes. The goal of *mutirão* (collective effort) was development through empowerment, teaching residents to build not only safer houses but also sustainable communities. There had been attempts at *mutirão* programs in the past, but where Mutirão 50 differed, as coordinator Yves Cabbanes explains, was that "the land should be given to the organization, existing grassroots groups are respected and there is no creation of a new one" (35). Mutirão 50 sought to innovate through tradition, empowering the mêtis of preexisting organizations and using ideals already in the *favelas* rather than forming new ones. To do so, Cabbanes's team carefully mediated the traditions of the state, architects, local gangs, and households in a nostalgic contact zone.

Cabbanes describes, for instance, how he responded to one clash of nostalgias—designer versus community: "You need to accept that you can be wrong even in your own field. . . . When your nice model with its tiny verandah and its expandable capacities is publicly rejected and a simpler square-shaped one proposed by a resident with no education is chosen, some young professionals would simply leave. But the community was right" (Faga 185). From a nostalgic design viewpoint, Cabbanes understands that his ideal design, based in his epistemic nostalgia of good architecture, clashed with homeowners' nostalgic notions of design, based in their mêtis of *favelas*. This is the democratization of expertise. Nostalgia brings a self-awareness to our place in time—seeking out the origins of our identities as experts. That is, viewing expertise as nostalgic denaturalizes it, ideally opening it to change. Indeed, as researched by

van Tilburg, Sedikides, and Wildschut, because nostalgic thought processes remind citizens that they have a place in the world, they psychologically make citizens less defensive and more creative and open to new experiences: “Nostalgia instigates approach tendencies (Stephan et al., 2014) and optimism (Cheung et al., 2013) both of which reduce conservatism and diminish aversion to risk (Anderson & Galinsky, 2006; Friedman & Förster, 2000, 2002); these effects, in turn, are positively associated with openness (Hinze et al., 1997; Van Hiel & Mervielde, 2004)” (“Mnemonic Muse” 3). Such openness is crucial for collaboration.

Ultimately, what’s acutely useful about nostalgia for democratic mediations, then, is how it reveals motivations for and tensions between multiple simultaneously right traditions and, thereby, multiple right futures (figure 1.1). Where previous Kuhnian models of technological progress were based on a replacement model—scientists discover something new (the world is round, revolves the sun, etc.) that replaces an older idea—this is no longer the case. Today, as argued by Cynthia Selfe and Gail Hawisher, “[L]iteracies accumulate rapidly. . . . During such periods of rapid change, humans value and practice both past and present forms of literacy simultaneously” (213–14).

Nostalgic Designs: Meaning through Memory

So far, I’ve described how nostalgia enhances the *process* of design, from locating gaps and inequities to mediating conflicts. In contrast, the third stage of nostalgic design discussed in this book is planning for nostalgic products and experiences. From this perspective, nostalgic designs are creations that foster long-term emotional investment, encourage slow reflectiveness, and engage the traditions of their users. Nostalgic designs plan for, record, and evoke meaningful memories of use.

In the vignettes that preface this chapter, for instance, I described the power of Facebook and other social media as nostalgic designs that inspire the active collection of events to be reminisced over in the future. Sites like Facebook advocate for the “musealization” (Lübbe) of the self—defining one’s identity upon a curated public archive and, thereby, living life in a state of anticipatory nostalgia. The sway of this triggering shouldn’t be underestimated; it’s a form of intimate labor that encourages investment in a design and discourages neglect. One sees this persuasive attachment in the message that appears if you try to delete your Facebook profile: “Are you sure you want to deactivate your account? [Your friend’s name] will miss you. Send [your friend] a message.” As behavioral designer Nir Eyal argues, by referencing a user’s friends, Facebook underscores the value of “the collection of memories and experiences, in aggregate” and, therefore, prevents you from leaving (147). Of

course, though Eyal appreciates the benefits of such nostalgic persuasion to a company, the ethical designer sees its pitfalls as well—overwhelming users with collection, distracting them from living in the present. Nostalgic designers must take care.

Indeed, as a “technology of memory” (Sturken; Erll; Radley; Van Dijk; Van House and Churchill), the features of Facebook (receiving likes, friending, On This Day, etc.) inspire users to remember a certain kind of memory and, thereby, be a certain type of person. Because they want to make themselves look good, users, for instance, are much more likely to publicly recall positive memories than negative ones. The site, thereby, causes the psychological effects of “Facebook envy” and “Facebook depression” (Tandoc et al.; Steers et al.). Everyone on Facebook is seemingly and constantly receiving promotions, getting married, having babies, buying houses, looking their best, and eating gourmet meals. Continually viewing others’ nostalgias—their best versions of themselves—causes users to reflect negatively on their own lives.

Even more intriguing, one’s nostalgic self remains after death. Facebook “memorializes” accounts when their creators die, essentially letting users write their own eulogies (Moreman and Lewis; Church; Kalan; Vealey). As one Facebook help page describes: “You can tell us in advance whether you’d like to have your account memorialized or permanently deleted from Facebook. Memorialized accounts are a place for friends and family to gather and share memories after a person has passed away. . . . The word Remembering will be shown next to the person’s name on their profile;| Depending on the privacy settings of the account, friends can share memories on the memorialized Timeline;| Content the person shared (ex: photos, posts) stays on Facebook.”

Yet, at the same time that we are becoming a culture of nostalgia, saving bits of our identity to reminisce over, there’s a tension between collecting an identity and accumulating memories we wish to forget. “What shall we dream of when everything becomes visible?” theorist of speed Paul Virilio asks. “We’ll dream of being blind” (Wilson). In response to this tension, citizens of the European Union implemented a legislatively defined “right to be forgotten.” They can legally request that search engines remove links to information that they feel misrepresents them (European Commission; Toobin; Rosen). The tensions, politics, and disparities of power revealed when technology is examined through nostalgic contact zones highlights the troubles of such a right. On the one hand, individuals now have a direct route to removing destructive content, from faulty tax information to revenge porn. On the other hand, powerful corporations, politicians, and the like have a legal way to remove information about themselves—fraud, racism, sexism—that is critical to public decision-making.

Beyond engaging personal memories, another key quality of designs that harness the power of nostalgia—from a cherished childhood teddy bear to an antique armoire—is that they last long enough to pick up memories of use. Consumers are less likely to throw something away if they have a nostalgic attachment to it. Ideally, then, nostalgic designs age with grace and encourage a mindfulness of the lifecycle of consumption. Use becomes stewardship. Contrasting the “archival fever” (Derrida) of Facebook, for instance, design collectives Eternally Yours and SlowLab promote *slow design*, a revolutionary harnessing of nostalgia to slow the pace at which objects are consumed and, thereby, increase the rate at which they become meaningful (Fuad-Luke; Hallnäs and Redström; Strauss and Fuad-Luke; van Hinte; Grosse-Hering et al.). Creating shoes and handbags that are easily repaired, choosing materials (e.g., leather and wood) that pick up character (and memories) as they age, teaching skilled consumption like wine tasting, which values age and decay as cultural capital—“Stop, wait, think,” slow design advises.

Consider making a cup of coffee. Where one user may deploy a Keurig coffeemaker to quickly produce a cup with the least thought (and most waste) possible, French press coffee is a slow design alternative. As consumers grind the beans, boil the water, and deal with the mess of leftover grounds, coffee becomes ritual, even religion. The French press slows consumption; it makes consumers mindful of and take pleasure in coffee as an experience. In many ways, slow design parallels the Japanese concept of *mono no aware*, “an empathy towards things,” a wistful awareness of the decay and ephemeral beauty of the world. *Mono no aware* is present, for example, in the *wabi-sabi* aesthetic, which finds beauty in natural cycles of growth and decay, such as aging wood and the leisurely development of rust on metal. In slow design, things become actants in their own plays away from human users and pick up an “aura,” in Walter Benjamin’s terms, a unique object memory that no other design possesses. Such individuality is prized in an era of digital replicas.

Though nostalgic designs encourage users to meditate over the life cycle of their possessions, they also encourage users to reflect on their own life-cycles—seeing that designs might need to transform to help consumers themselves age with grace. Matthias Hollwich, for instance, is an architect who designs spaces with elderly occupants in mind, a concept he calls “new aging,” which reminds designers: “[T]he interesting thing about ‘the elderly’ is that they are YOU and ME in a few years—so, in the end, we design for our own future! And, yes, architects should have long-term thinking in mind—but they should turn the issue around and use aging as inspiration.” Hollwich considers what—accessibility, independence, community—the elderly nostalgically long for and how designers, through anticipatory nostalgia, can create

rooms, homes, and communities now that prevent this loss later. Such an ethic of aging in place might be called *anticipatory design*—collaborating with our future selves.

Chinese *bāilínghòu*, East German *ostalgie*, U.S. hip-hop's old school—a final feature of nostalgia as an inclusive design asset is its universality. Erica Hepper et al. have found similar feelings of nostalgia across eighteen countries and five continents. Such cross-cultural presence makes *nostalgic localization*—the use of a community's nostalgia to make technologies and designs fit a preexisting tradition—especially fruitful. The camping company BioLite's HomeStove, for example, is a cooking stove designed to reduce the amount of smoke inhaled from open cooking fires. In creating their stove, BioLite knew that they would be distributing to different cultures with different needs and, thereby, turned to anthropologists to localize their design. These anthropologists turned to cooking *métis*. They realized that innovation without tradition would lead to alienation and that their product would fail if it wasn't adapted. In the Indian state of Gujarat, therefore, HomeStove would have to successfully cook the staple bread *rotla* (World Design). At first, the stove cooked the bread unevenly and was rejected: "In response, BioLite is developing a cooking attachment to spread the flame even wider for rotla preparation. . . . [U]sers were pleased that the clay tawa on which the rotla was prepared fit snugly on the top cooking surface. However, BioLite decided to increase the number of supports on the surface from 3 to 6 to enable pots to fit even more securely and to accommodate a wider range of pots reflective of our diverse target customer base." HomeStove underwent a nostalgic localization by way of delayed differentiation; the stove was adapted to fit into a preexisting cultural ideal to prevent the types of nostalgic loss typical innovation creates.

In contrast, Sun explains that when altruistic designers attempt production *without* localization, designs can fail before they even begin. She describes how a group of designers attempted to build an electric well inside a small Indian village to aid women in fetching water. But the well kept getting mysteriously destroyed. "It turned out," Sun narrates, "that in an Indian village, married young women have the lowest status in a big family and they must listen to the orders of their mothers-in-law. Walking one hour to carry water was tedious and laborious; however, that was the only time in the day they could enjoy friends' company and have some time for themselves" (20). Again, the designer must be aware of nostalgic contact zones. Ideal practices (e.g., those of mothers- and daughters-in-law) often conflict within communities and are nostalgically protected.

Of course, though I value nostalgia enough to write a book about it, it's no panacea. As we'll see, nostalgic design has its pitfalls—especially when it's

restorative or monolithic. To counter opinions that the company has become too corporate, for example, the coffee giant Starbucks began tailoring individual shops to fit each city it enters by employing local artists and styles. The irony of this localization is that the presence of Starbucks in a neighborhood often drives out existing local coffee shops (Thompson and Arsel). Because it hasn't started from an ethic of participatory design nor taken into account the uneven power dynamics of the nostalgic contact zone, Starbucks builds an artificial notion of the local and ends up with less localization and more gentrification and appropriation. Throughout this book we need to remember, as Boym warns, "Nostalgia can be a poetic creation, an individual mechanism of survival, a countercultural practice, a poison, a cure. It is up to us to take responsibility for our nostalgia and not let others 'prefabricate' it for us. The prepackaged 'usable past' may be of no use to us if we want to co-create our future" ("Nostalgia" 456).

In the end, then, rather than exploiting niche markets, nostalgic design ideally leads to a transformation of the dominant techno-logic. Nostalgic design, as craft theorist Glenn Adamson writes, "affords an opportunity to think otherwise" through an anachronology of the past in which designers look for lost techno-logics and timelines that might make the future more fully human (136).

Over the course of the next five chapters, I continue to lay out the key moves of nostalgic design—identifying (chapter 2), mediating (chapters 3, 4, 5), and designing (chapter 6) within nostalgic contact zones—with the goal of illustrating how nostalgia's ability to revolutionize through revolving back can humanize all stages of the design process.

Chapter 2 explores nostalgia as a form of technological resistance and commemoration as a type of user redesign from which creators can learn. Specifically, I analyze the rise of do-it-yourself craft nostalgia in an era of digital work and ephemeral products. To do so, I explore how and why three women—Donna, Jo, and Kit—use nostalgic crafting on the job to rhetorically resist the overreach of new capitalism into their home lives, pose feminine identities in masculine workplaces, and materialize labor in jobs that primarily result in intangible products. Donna, Jo, and Kit use nostalgic *métis* to reshape their worlds. Through this analysis, I develop a method of *critical nostos*—a technique by which designers analyze nostalgic returns home for exclusions in designs and assets for redesign.

Where chapter 2 argues that designers can make their products/texts more inclusive through analyzing nostalgic resistances, chapter 3 describes how designers might mediate the conflicting nostalgias of designers, clients,

and users that critical nostos reveals. To do so, I juxtapose the ways the fields of design and rhetoric imagine democratic making. On the rhetorical side, I examine how Aristotle, Kenneth Burke, Krista Ratcliffe, and Chantal Mouffe conceive of deliberative democracy. Through audience analysis, identification, listening, and agonism, each rhetorician distinctively theorizes how communicators should interact with their audiences, who should make decisions in a collective, and, thereby, what role epideictic nostalgia plays in keeping a community together. On the design side, I examine how several deliberative design theories—user-centered design, participatory design, empathic design, and agonistic design—map onto and complicate each rhetorical perspective. Ultimately, this chapter develops *rhetorical design*, a theory of deliberative production that encourages stakeholders to debate, persuade, and deliberate before, during, and after a design is created.

Chapter 4 delves into the caverns of design mediation, testing how the ideals of nostalgic design and inclusivity developed in chapter 3 succeed or fail in a highly controversial medical co-design forum: the U.S. anti-vaccination movement. Currently, numerous physicians simply refuse to see children whose parents decline vaccines (Opel et al.)—but this fundamentalist reaction is far from rhetorical, not considering its audience or why vaccine refusals occur. It doesn't resolve the problem of vaccine hesitancy. Instead, by examining the nostalgic rhetoric of anti-vaccination celebrity parents Jenny McCarthy and Jim Carrey, vaccine inventor Paul Offit, and a public hearing over the pro-vaccination California Senate Bill 277, I demonstrate how the equitable question-asking process of *nostalgic stasis theory* unearths logical narratives, destabilizes closed professional expertise, promotes empathy, and builds common ground. In doing so, I work from narrative mediation experts John Winslade and Gerald Monk's concern with "the opportunity that might be missed in the process of quickly dismissing stories as unreliable. What might be missed is the work done by stories to *construct* realities, not just to *report* on them, apparently inaccurately" (2). Ultimately, this chapter demonstrates how a nostalgic analysis of conflict can help develop rhetorical strategies for co-design between even the most polarized parties.

Chapter 5 continues to fill in gaps on how to pragmatically achieve democratic technologies by investigating how nostalgia appears and assists practicing designers in client negotiations, focusing on tactfully adapting, adopting, and refusing client expertise. I interview three designers—Lux, a freelance brand designer; Grant, a graphic designer and university instructor; and Mason, an ER doctor. Each has unique methods of interacting with good and bad clients by developing trust, running through rituals of co-education, and opening space for client co-design. When one looks carefully at Lux's, Grant's,

and Mason's most meaningful collaborations, they are almost always based in a rhetoric of memory, tradition, and expertise. That is, each designer creates a transactive memory system by which they overtly illustrate the memories behind their expertise and ask clients to do the same, an ethic I call *memorial interactivity*.

Finally, chapter 6 steps back from design deliberation and communication and ponders how designers (especially at a mass scale) can create designs that collect memories and become increasingly meaningful when used—a blueprint I call *nostalgic user experience architecture*. From a favorite pair of faded blue jeans to one's Facebook account, meaningful designs record, store, and emit memories of use. But how can such memories be planned? And what are the cultural and technological implications of wielding nostalgia in this way? To answer these questions, I catalogue, rhetorically analyze, and derive best practices from designs that spark three nostalgic desires: (1) narratability (the appetite to tell stories about meaningful interactions), (2) craft (memories associated with building an object), and (3) connoisseurship (participating in consumerism that requires memorable protocols as badges of membership).