tapes. That said, there are of course important differences between the two kinds of retail. Unlike copy shops, video stores are repositories; they are warehouses that share the logic of the database at the same time that they have had profound effects on the weight and substance of cinema as shared culture as well as on cinema as an industrial product.[86] Simply in terms of urban geography, there was a period of fifteen or twenty years when every neighborhood had a video store in the same way that every neighborhood still has a dry cleaner, though of course the circulation of videos (owned by the store, a repository of cinema) differs dramatically from that of clothes (owned by customers, a scattered repository of style). The urban geography of copy shops is different; they often cluster around college and university campuses, forming gray zones where a combination of illegal and legal copying helps support the intertwined aims of pedagogy and research.[87]

The idea of the photocopy that emerged in the 1960s and 1970s was structured partly in relation to the question of copyright without being nailed fully to that cross. Concerns about intellectual property arose in selected contexts, while photocopies helped broach questions of openness, possession, and self-possession more broadly. At the same time that xerographic reproduction helped shift the meanings of reproduction from access to archive—toward personal files and other redundancies as bureaucratic norms—the examples of Ellsberg, Lions, and Dundes and Pagter demonstrate ways in which access remained at issue. The transit and potential transit of documents, leaked in or leaked out, worked to mark the organizational structures within which documents were created—were read—as such. The genre of the document grew more capacious, according to the tolerance and agnosticism of the Xerox machine: all documents are not photocopies, but all photocopies are documents. If the relative ease of photocopying aided in the unprecedented proliferation of documents, that proliferation itself aided in and called attention to versioning, helping emphasize and enable documents as potentially "living" sites for continued and collective interpretation and revision, both fluid and fixed, on and as paper. Though typing and typescripts remained ubiquitous, episodes from the early history of xerography show how entwined photocopies and digital documents were from the very first.

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What do files mean to the future of human expression? This is a harder question to answer than the question "How does the English language influence the thoughts of native English speakers?" At least you can compare English speakers to Chinese speakers, but files are universal. The idea of the file has become so big that we are unable to conceive of a frame large enough to fit around it in order to assess it empirically.

—Jaron Lanier, *You Are Not a Gadget*

Today, rather than print and distribute, we distribute and then print. In other words, we send the file electronically to the recipient, who then prints it out. This is underlined by the fact that between 1988 and 1993, the worldwide installed base of copiers increased by only 5 percent, whereas the worldwide installed base of printers increased by 600 percent.

—Abigail J. Sellen and Richard H. R. Harper, *The Myth of the Paperless Office*

Brightly colored advertising inserts spill out of Sunday newspapers these days, touting the latest and greatest, the largest and flattest high-definition television sets. These circulars share certain conventions. The TVs they advertise are typically pictured as if they were all tuned to the same channel. They are arrayed side by side and vary only slightly in size, as if to represent their respective merits through an obscure scalar logic: "Look at this big

beauty," they seem to urge, "and get a load of this one." Of course news-print and color process printing are woefully inept at the job they have been given. Nothing even close to a high-definition television image can be pictured this way, yet every image is pictured, as if picturing were at once essential and completely beside the point. In short, the reason for these illustrations seems to be the very thing they cannot illustrate. We might chalk this paradox up to consumerism, with all of its conflicts, intricacies, and blind spots, but the same sort of problem crops up in other, less com-mercial settings too. Histories of photography, for instance, often illustrate early photographic processes. You can picture a daguerreotype, but a scan of a daguerreotype reproduced as a halftone in a book can never picture it with the process you are illustrating. Captions are almost universally silent on this point: they label halftones of daguerreotypes as daguerreotypes without qualm, since no one really expects an illustration to *be* the thing it illustrates. Except, of course, when they do.

The most spectacular example I have ever encountered along these lines is in Bamber Gascoigne's invaluable reference *How to Identify Prints*. Gascoigne alerts his readers at the outset "that there is no point in look-ing through a glass" or studying the illustrations too closely, since all that doing so would "reveal is the very recognizable characteristic of halftone offset lithography, the process by which the book is printed." The illustra-tions have been carefully "devised" to suggest printing processes they can-not in fact be, and they should simply be held and looked at from a "read-ing distance" for the plan to work.[1] A reminder like this in a field guide to birds would be nonsensical ("These illustrations are not birds," etc.), yet the combined subject and function of Gascoigne's manual—prints iden-tifying prints, not birds—confuses the point. In this instance, as in the TV advertisements, the framing contexts of illustration belie expectation. Those framing contexts are crucially epideictic[2]—that is, relying on rheto-ric of praise that singles out specific visual technologies, technologies that cannot be fully represented by other means but are instead conjured for the eye of the beholder.

In one sense this is a familiar sort of conjuring, based on the indexicality of photographs and the iconicity of figurative images. As Roland Barthes writes, "a photograph is always invisible: it is not it that we see."[3] We tend to look through an image to whatever it represents, at the same time that an intuitive check—some sort of unconscious guardian—typically helps us hold the line between reality and representation. Even a crude picture of a

pipe "is a pipe," we say, even as we understand that it can't be picked up and smoked. The language of mimesis wears thin somehow, especially where the language of the real, of what is, rubs against the pursuits of realism. In another sense, however, the conjured televisions and daguerreotypes arise more subtly. There are some pictures, after all, that *are* self-identical with the subjects they picture: An illustration of redness is red, a picture of a triangle is triangular, an image of the letter $Q$ is that letter itself, and an illustration of pornography is — arguably, at least — still pornographic.[4] The image and its subject are self-identical in cases like these because of the distinctive symbolic characteristics of the subjects at issue, however difficult it may be to describe what those are or what they have in common. (What *do* color, shape, decency, and indecency have in common?) Advertising circulars and histories of photography and printing seem to thread the needle: We're looking at an image of a bird or a pipe, in effect, but encountering it as (an image of) a triangle or a $Q$. It's not that anyone is fooled, of course; that's not the point. It is just that we seem so lulled — that is, conditioned — by norms and expectations that attend the different uses of printed illustrations. This is partly about images, then, and partly about print.[5]

Printing, too, has enjoyed a long and complex association with what is. Even when the printed matter in question is fiction, its bibliographical identity is factual or fixed: we trust that any printed matter at hand was published by the publisher indicated, authored by the author named, and addresses a reading public in an edition of like copies. When two people read "the same" book, they can each read different copies and be sure — even unthinkingly so — that they can compare notes. People are "on the same page," we say, with confident approbation. Certainties like these help make modern texts self-evident, giving them that "air of intrinsic reliability" that today frames print media. It wasn't always so, as Adrian Johns explains in *The Nature of the Book*.[6] "Printed texts were not intrinsically trustworthy," according to Johns, who observes that "fixity exists only inasmuch as it is recognized and acted upon by people — and not otherwise."[7] The defining fixity of print emerged, he argues, according in part to the circulation of natural knowledge (what would become science) in the sixteenth and seventeenth centuries. The self-evidence of letterpress and the universality of science were mutual constructions, as it were, both based on the actions and attitudes of the authors, printers, booksellers, and readers involved. High-definition TVs may be a far cry from early modern science, but printed advertising circulars today partake of the self-same logic

of fixity. We understand them as circulars by understanding print publication as it attends the marketplace, so that the little TVs they so crudely picture are meaningful partly because of the self-evidence accorded to printed texts and the related commonsensicality of advertising wares in print and on paper to a consumer public.

This chapter tackles a related instance: not illustrations that conjure visual media, but rather documents that may be said to conjure themselves. I am interested particularly in cases where the self-evidence or facticity of modern texts becomes variously if often surreptitiously self-conscious, when documents are experienced as pictures of themselves. This is where the media of documentary reproduction come into play, framing and framed by the know-show function. Oscar Harpel's specimens, Robert Binkley's typescript books, and Daniel Ellsberg's Xeroxes have offered earlier instances in curiously different ways, but the most commonplace examples today are without question the digital documents that appear as images on screens, transient and legible forms that are perceived in luminous windows. Whatever else they are, digital and (even more so) digitized documents appear as pictures of themselves. There is nothing simple here. "The computer screen," Anne Friedberg notes, "is both a 'page' and a 'window,' at once opaque and transparent," a flat surface that nonetheless enables "deep virtual reach to archives and databases," to local disk storage and the cloud.[8] Both screen environments and digital documents already have a long history, of course, so one challenge of what follows is to define a selective domain. This chapter focuses specifically on the portable document format, on PDF files. When computer users click to open a PDF, they experience a brief, theatrical moment as their PDF reader opens — the Adobe Acrobat application, for example — and then they likely have a keen sense that they are looking at an image and/of a text, a text that is somehow also an image of itself.

Digital documents take many different forms, of course. They can be *.txt, *.doc, or *.html files, for example, but the *.pdf format differs in a few important ways that make it a particularly apposite and instructive sequel to the documents handled by Harpel, Binkley, Ellsberg, and their contemporaries. PDFs variously partake of the form and fixity of print that other digital text formats frequently do not. PDFs aren't print in the absolute sense that they aren't printed onto the screen, of course, but they look like print when they are open in a PDF-reader application. Better, they look as if they work like print. And, in a way, they do: "today, PDF, which also

can serve as a platform for multimedia production, is the basis of the most widely used workflows for professional publishing," that is, for traditional book publishing.[9] The "look of printedness," as I have called it, has been separated from paper and mobilized online, even in the process of producing printed books. Whether they render digitized text or text that has been born digital, as it were, PDFs present what are called page images; they look something like pictures of pages produced by one printing process or another, or by word processing. Viewed within a PDF-reader application, they are emphatically not "living" documents of the sort discussed in the last chapter. They aren't ongoing or "evergreen": like print artifacts, they are open for reading but closed for any in-text, in-kind revision. (Some PDFs are specifically designed to be fill-able forms, a feature introduced in 1996 that mobilizes an obvious resemblance to job-printed blanks.) The portable document format thus represents a specific "remedial" point of contact between old media and new, one that is particularly important to consider because — at least for the present — PDFs are so widely deployed.[10] They have become "normal."[11] The portable document format is today "the de facto standard for printable documents on the web" and thus part of and party to the knowledge work we do with documents, whether that means the research we conduct, the readings we assign, the manuals we consult, the reports we submit, the forms we fill out, or the tickets we present.[12] PDFs offer a challenge for designers and users of today's hand-held devices with their smaller screens, but they nonetheless remain ubiquitous. Consulting a PDF on your smartphone can be a giant headache, but there is no question that the manual for your phone exists somewhere as a PDF, one you can probably download from the websites of both its manufacturer and your service provider.

E-books today remain framed in large measure by the genre of the novel (not only is the market for fiction e-books stronger than that for nonfiction e-books, but the design, advertisement, and discussion of e-book readers remain tilted toward novels), but it seems clear that PDFs in contrast are and have been framed by the genre of the document. Though it is hardly their exclusive domain or their domain exclusively, PDFs have a special association with the category of so-called gray literature, which includes items like technical manuals, government documents, college coursepacks, reports, and — ironically — white papers. These are familiar genres of internality, at least since Binkley's day, more recently called gray in the field of library and information science because they are typically produced