

The Posthuman Reader in Postprint Literature: *Between Page and Screen*

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ABSTRACT

Amaranth Borsuk and Brad Bouse's *Between Page and Screen* (2012) is an augmented reality book of poetry: a codex filled with QR ("Quick Response") codes that activate a networked Internet connection to produce literature *between* the book's pages and the reader's computer screen. The work produces a mirror effect that depicts the human reader incorporated

into the digital network that enables contemporary literature. This essay argues that *Between Page and Screen's* depiction of its human reader offers an opportunity to explore how digital literature complicates traditional, print-based expectations of reading by focusing on how we readers become posthuman along with our postprint literature.

Amaranth Borsuk and Brad Bouse's *Between Page and Screen* (2012) presents a reflection of what reading looks like in the digital age. Literally. The work incorporates a book, computer screen, webcam, and Internet connection to create a visual reflection of the reader in the process of reading the text. The effect serves to hold up a figurative mirror showing the reader that *what* we read and *how* we read are changing with and through digital technologies. *Between Page and Screen* illuminates the materialities and ideologies of print textuality in the process of showing how digital literature offers new ways of reading the self. This work of literature invites us to explore such changes and to revel in the poetic possibilities they produce.

Between Page and Screen was originally produced as a limited edition of handmade, letterpressed codexes, and the Siglio Press edition that I discuss here maintains the feeling of an artist book. It is a lovely little book: a square made of thick card stock whose red textured cover acquires a woven appearance through finely printed diagonal lines repeating, in very small print, the title. When we recall the etymological roots of the word "text" (from the Latin *textus*, which describes a woven texture or web), we can see that the material design of this book's cover visually alludes to the materiality of literature. This bookish aesthetic is important because, I will argue, this work is very much about literature's media, past and present. This is a work of "bookishness," a word that I use elsewhere to describe the artistic strategy of purposefully fetishizing the book medium in and through digital contexts (Pressman 2009). Bookishness serves this work of hybrid media to promote awareness of how media matters to our conceptions not just of individual literary works, but of literature, reading, and readers more broadly.

The book *Between Page and Screen* is an artful object, but, though bookish, it is not your usual small press poetry book. The pages of this little book do not hold text, not a single word. Instead, at the center of each stark white page is a black square containing a white geometric pattern. These images are Quick Response (QR) codes. For human readers, these images signify the presence of encoded digital information; to a digital machine, these images literally reference data to be scanned and decoded. When the reader holds the book up to the webcam on her computer, so that the camera can process the QR code,

and when the computer is connected to the Internet (specifically to www.betweenpageandscreen.com), then a digital connection is made between the printed code on the page and the website on the screen. The result is a projection of text between the page and the screen. The title of *Between Page and Screen* thus describes both the technical situation and the poetic that the work performs. This performance focuses attention on the fact that contemporary literature, and our reading of it, happens between page and screen. Digital publication processes penetrate and produce printed text, and digital reading practices inform expectations of book-based literature. *Between Page and Screen* shows how the codex, rather than standing in opposition to digital technology, can be purposefully connected to the Internet and its networked reading practices to produce new poetics.

Reading *Between Page and Screen*

Reading this book requires a sophisticated digital apparatus: an Internet connection, a webcam, the right Flash-based software upgrades, and, of course, the book containing the QR codes. All of these elements must work together to produce the reading circuit from which the text can be read. Reading this work also requires a certain amount of learning how to operate its various media in conjunction with one another. Reading *Between Page and Screen* is not just about decoding printed text on a paper page or examining “flickering signifiers” (Hayles 30). To read the concrete poetry and epistolary narrative that this work contains requires holding the book a certain way so that the webcam can detect the QR codes on the book’s pages. Such action is not trivial but rather what Espen Aarseth calls “ergodic” (Aarseth 94) interaction. Reading thus includes a certain dexterity and knowledge of how to use the technologies involved, which means that you have to learn how to read this book.

When I first read this work, I found it terribly difficult to make the text appear. I watched the video on the book’s website, which shows the author, Amaranth Borsuk, gracefully moving the pages of her book as the letters dance upon the screen in front of her; energetic music romps in the background. I, on the other hand, was flummoxed. I could not,

for the life of me, position the book into the right location to be read by the camera. And when I finally did that, my text appeared backwards! At first I thought this was a brilliant stroke of engineering on the part of the author and designer—an aside to Leonardo da Vinci’s notebooks and other types of encoded writing; a reference, perhaps, to the various interfaces that affect the ways we see, read, and comprehend. I thought of Marshall McLuhan’s dictum, in *The Medium is the Massage*: “We look at the present through a rear-view mirror, we march backwards into the future” (McLuhan and Fiore 73–74). These words appear on a double-page spread containing a photograph of a car’s rearview mirror in which a stagecoach appears. The image suggests that reading is always some kind of backwards glance; that we move forward by retaining the media-informed perspectives of earlier periods. *Between Page and Screen* illuminates this fact. We focus on the book as we learn to read beyond it, literally and figuratively. My literary mind interpreted the backwards letters as purposeful and symbolic, but they were also a beginner’s mistake. For one can simply turn the book around to change the direction of the projected text. An epiphany. And this epiphany made me realize how set I was in my ways—particularly my way of holding the book so that its content faced *me*. I assumed that *I* was the reader, not the computer; but *Between Page and Screen* aesthetically dispels this assumption, this ideology of the page and of the anthropocentrism that has been associated with codexical media since the Enlightenment.

Between Page and Screen reminds us that in the age of digital reading machines, human readers are only one part of the process of creating, processing, and reading literature. This awareness extends beyond literary studies and is fueling new trends in philosophy such as Speculative Realism and Object-Oriented Ontology.¹ Computers, too, are always processing and translating text in the process of generating digital literature. *Between Page and Screen* reminds us of the role of our computational counterpart in the reading process and, in so doing, the work imparts a crucial lesson: it exposes how reading, in whatever form

1. On Speculative Realisms, see Graham Harman’s *Towards Speculative Realism: Essays and Lectures* (2010).

it takes and with whatever media it involves, is not a natural activity. Reading requires training, practice, and submission to media forms. I was initially exasperated by the experience of trying to access this text, that is, of learning to read this work. But you get into the groove of interacting with this book, of holding it in the right spot, at a particular angle, of tilting its pages and acquiring a pace at which to turn them. You learn how to move with the book like a dancer and her prop, and you realize that reading requires discipline of mind, body, and media use. *Between Page and Screen* teaches that reading is a performance across and through media, a deeply embodied and also technologically augmented activity.

Between Page and Screen employs augmented reality in unique ways but also illuminates how the book is a device for technologically augmenting the human mind and experience and, thus, that augmented reality is part of the much-longer history of reading. McLuhan, like many others before him—from Vannevar Bush back to Plato—understood that media are extensions of man.² Media mediate; they are, by definition, *in between*. In *Between Page and Screen*, the media that augment do so in the service of building a bridge between older and newer media forms, between page and screen. In an email correspondence, Borsuk describes *Between Page and Screen* as “acknowledg[ing] that we are at a significant juncture in the storied history of books and reading, but that this too will pass.” The author’s statement acknowledges both the history of literary media and that history’s influence on her contemporary work. The “significant juncture” that she references and explores in this work is the transition of the book into the digital ecology. She does this by constructing a circuit of hybrid media, which includes the codex and computing technology, but also in text that presents a meditation on the media used to present it. The title of *Between Page and Screen* describes both the location of its projected text and also the content of that text. The text that appears in the space between the book’s pages and the computer screen reflexively explores and poetically puns upon the history of textuality and etymology of literature’s media.

2. See Marshall McLuhan’s *The Gutenberg Galaxy: The Making of Typographic Man* (1962) and Vannevar Bush’s “As We May Think” (1945).

The text generated through the digital circuit of *Between Page and Screen* is of two varieties: concrete poetry and an epistolary correspondence between two entities, P and S. Does P mean “page” and S mean “screen”? Yes, but that is not all. For, as we are told on the last screen, P and S also stand in for “post-script.” “Post-script” implies text that comes after a primary text but also a temporal period, one that follows the end of a certain form of textuality. “PostScript” is also the name of a computer language for describing the presentation of graphics and text in a printed document. The final page of the work complicates any simple designations of what P and S mean, for we are told, as the animation presents Ps and Ss falling like raindrops from the top of the screen to the open page below, “There is no post-script.” This ending, and my teleological reading of the work that it concludes, suggests that the simple equation of P equals “page” and S equals “screen” just might not hold. Neither does the binary view of page and screen as distinct and separate entities, nor the assumption that there are neat eras of textuality that can be arranged temporally with prefixes of “pre” and “post.” We might be in the supposed “post-print” era, but we are not done with pages, screens, or scripts. Instead, as this work shows, pages can be incorporated into screenic literature and looking back at earlier moments in the history of scripted text just might help us understand this latest “significant juncture in the storied history of books and reading” (Borsuk, email).

P, S, and QR

The correspondence between P and S explores an evolving relationship and the evolution of literature’s media. The third page (there are no page numbers included in the book, so these are my own designations) depicts a letter from S to P in which S writes, “I take your point. I didn’t mean to cut.” The rhetoric of pointing and cutting comes from the history of books. Pointing alludes to the *yad*, a pointer stick in the shape of hand (“yad” in Hebrew), used to read Torah scrolls. The unintentional “cut” might have been the result of scraping the calfskin of an early manuscript page to erase unwanted marks in the process of preparing it to receive new text. This diction’s double-edged meaning

illustrates, to appropriate the title of Bonnie Mak's brilliant book, *How The Page Matters*, wherein she argues that claiming that the page matters means "not only [for the page] to be of importance, to signify, to mean, but also to claim a certain physical space, to have a particular presence, to be uniquely embodied" (3). Both meanings are evident in *Between Page and Screen's* formal presentation, wherein the page is meaningful in its physical ability to mediate the presentation of digital text but also in its textual content, which presents the page as a character to know and love.

Between Page and Screen relies upon the materiality and etymology of book history for its playful puns. Let us take an example. The image of a shield projects outwards from a page; it is outlined in text and contains at its center the following words, presented at a slant in large, capital letters: "SCARAMOUCH, SCRIMAGE, SKIRMISH, SCARARAMOUCH" (see fig. 1).

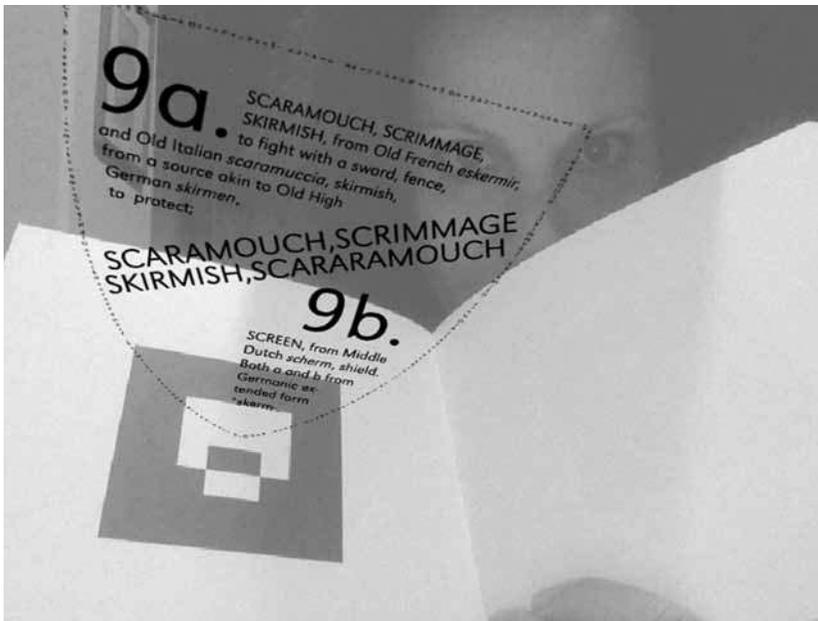


fig. 1. "Scaramouch" poem from *Between Page and Screen* by Amaranth Borsuk and Brad Bouse. Used with permission of authors.

of a pig in profile appears between page and screen. The body of this pig is comprised of horizontal lines of black text; the poem is a calligram formed from words that rearrange the letters of “charcuterie”—a French word for butcher’s shop. “Charcuterie” appears in red on the pig’s rear end, a branding that visually marks the pig for slaughter and signifies the promised use of its flesh to serve human purposes, in this case, becoming a reading interface or page (see fig. 2). The image of the pig, like that of the sword, visually invokes the material history and actual objects involved in producing text and the discourse of textuality.

The pre-print history of textuality is not limited to the visual poems in *Between Page and Screen* but also permeates its epistolary content. To see this in action, let us pursue one metaphor across *Between Page and Screen* and, as the work beckons us to do, back into the history of books. A letter from P to S states, “That trellis is a metaphor—it props me up.” This metaphor—of reading books as a trellis for growing knowledge and identity—has long been part of the history of codexical media. The language of gardening-as-reading harkens back to the Garden of Eden, wherein the pruning of the tree was the original act of gaining knowledge. In the Middle Ages, the metaphor of gardening-as-reading appears in such texts as the fifteenth-century *The Orchards of Syon*, which compares the experience of reading to wandering in the alleys of an “orchard.”³ The garden metaphor depicts the reader wandering, plucking, and meditating. This metaphor, Jan Ziolkowski writes, depicts a type of “reading that aimed at the physical and spiritual incorporation (the metaphor of cud-chewing embedded etymologically in *ruminatio* has real significance)” (528). Such *ruminatio*, such reading-as-ruminating, depends upon the materiality of the book artifact and the visual presentation of content in it—the scripted hand and illuminated images—which, as medieval scholars like Jessica Brantley argue, serve to assist the reader in wandering along the tilled rows of the text.⁴ The concept of reading as wandering in a garden is the opposite of speed-reading or the contemporary hyper and hyperlinked mode of reading associated with the digital technologies

3. See Wogan-Browne, et.al. (1999).

4. See Jessica Brantley (2007).

used to produce *Between Page and Screen*. This work, with its language ripe with symbolism harkening back to literature's pre-print period and its visual design that presents reading as an act of ruminating on the role of media, thus focuses attention on the poetic and technological connections between the medieval page and the digital screen.

Between Page and Screen's exposé of literature's media relies upon an engagement with and reinvigoration of more recent experimentations with the printed page in modern poetry, specifically, visual and concrete poetry. The book's second page elicits a kinetic poem in which the words "to spin" enact the action they signify: the words circle around a circular QR code. The result is an animated homage to Gertrude Stein's circular poem, "a rose is a rose is a rose." Or, consider the short animation produced from page 8 that presents configurations of letters and numbers streaming in a diagonal line across the page, like Wall Street ticker tape. Here, however, the abbreviations and acronyms of companies are replaced by recombinatorial poetry: a few letters and numbers combine and recombine to form multiple words along the moving line that juts out from the page. These examples, considered along with the image of the pig and the sword explored earlier, show *Between Page and Screen* using new media to pursue concrete poetry's exploration of the page space as a place for multimodal performances that combine language, color, topography, and design. In the case of *Between Page and Screen*, however, that page space is not limited to the two-dimensional paper interface. This work engages the history of literature and literary media, from medieval manuscripts to modern visual poetry, in order to focus attention on what lies between page and screen, between P and S—a history of technological change in reading materials, poetics, and readerly practices.

But there is another answer to what lies between P and S. In alphabetic terms, the answer is Q and R. This is an alphabetic truth, but in this work, it is also a formal and technological fact. QR codes enable the correspondence between P and S to appear between page and screen, where they can be read. QR codes are also, as noted earlier, the only type of printed or typographic content displayed on the actual pages of this little book. So, what exactly are QR codes? They are symbols and signifiers that contain encrypted information that can be scanned by a digital reader. For a book to contain QR codes is not odd; they grace the covers of books to sell

advertisements or assist in tracking the distribution of these commodities. But that is not how *Between Page and Screen* employs the digital tool and signifier. The QR codes in this book serve as formal devices to produce literature. These codes must be read in order to read the text, but it is the computer whose reading of them actually produces the literature. Yet, the work does prompt its human reader to consider and even interpret these codes printed on the page.

Because this book is comprised solely of QR codes, these black and white shapes demand attention and analysis. When you look at them as visual and aesthetic entities, rather than just as a means to an end (a technology to use), you see that they are not like the commonplace QR codes that adorn our consumer goods. They are not arranged as visible squares, comprised and centered by three large squares in the corners that act as alignment targets and filled with tiny scattered boxes. Instead, these QR codes are more minimalist and even analog in appearance (see fig. 3).

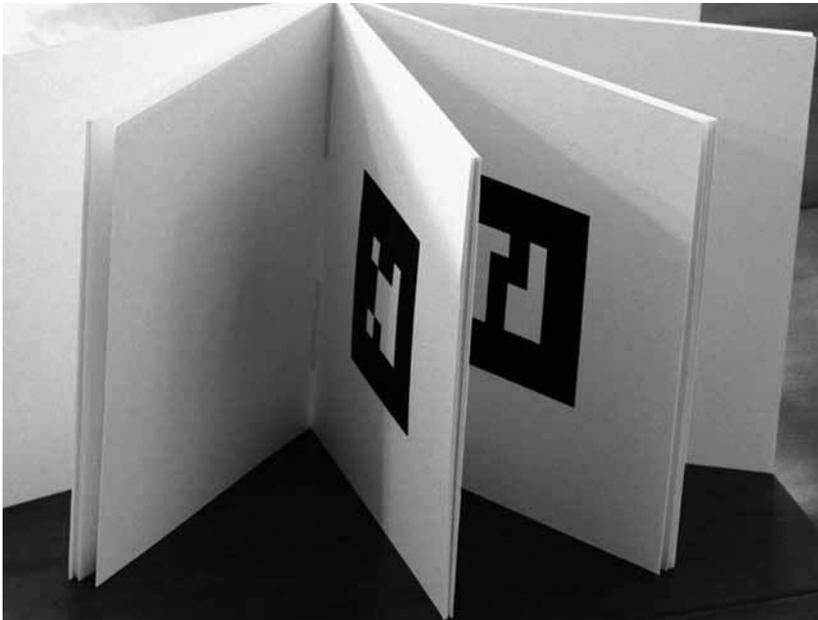


fig. 3. QR codes in pages of *Between Page and Screen* by Amaranth Borsuk and Brad Bouse. Used with permission of authors.

They are white shapes centered on a black square, produced from the negative space of the black background. That black square is then centered upon the white page, producing a series of framed squares for the reader to consider. This framing device presents the QR codes as something to view, read, and interpret. Indeed, these images are visually interesting in and of themselves. They are, in point of fact, the book's concrete poetry. There is often a meaningful correspondence between the shapes of the QR code on the page and content of the text it elicits onscreen. For example, a word sculpture is projected from page 6; it is a pole rising out of the page whose foundation is a QR code comprised of two right angles. These angles present the visual appearance of two "squares," as such instruments are called in construction, squares being the tools that measure exactness of ninety-degree angles and thus ensure the construction of stable buildings from poles set in the foundation. The vertical pole of poetry arising from the page is comprised of the words "PEEL," "PALE," "PAWL," "POLE," which appear as a hollow, rectangular cube. These words all share an etymological root, "stake"; the visual poem conjoins these words to show them connected to their root, literally conjoined in comprising a stake that rises from the page, the pale or pole that centers construction (see fig. 4). The meaningful correspondence between the squares on the page and the vertical pole of poetry arising from them shows *Between Page and Screen* using QR codes as poetic elements, not just as digital tools, thus illuminating the technical protocols that structure literary texts both on and between the page and screen.

When we talk about protocols in our digital age, we usually mean HTTP, TCP, IP, etcetera—protocols that support the distribution of information across the Internet. However, the focus on betweenness in *Between Page and Screen* reminds us that it is not just the digital page that requires adherence to protocols for production; the print page is also an interface with a history of production protocols whose codes inform publication and reception. Jerome McGann made this point in *The Textual Condition* (1991), wherein he argued for the importance of taking into account the materiality of literature as part of literary criticism. He identified printed literature as operating through two layers: a work's words (its linguistic code) and its physical features (its bibliographic code). The symbiotic relationship between these codes

is crystallized in poetry, as McGann writes, “The object of poetry is to display the textual condition. Poetry is language that calls attention to itself, that takes its own textual activities as its ground subject” (10). This reflexive self-presentation is what Marjorie Perloff calls “radical artifice,” which is, she writes, “the recognition that a poem or painting or performance text is a *made* thing—contrived, constructed, chosen—and that its reading is also a construction on the part of its audience” (Perloff 27–28, emphasis in original). *Between Page and Screen* builds upon these understandings of the textual condition and of radical artifice, both of which are foundational concepts for digital literature and digital literary criticism. *Between Page and Screen* puts “forward as the subject of attention” (McGann 10) the technological codes that enable contemporary poetics while also presenting its poetry as “a *made* thing” (Perloff 28). Moreover, the work performs Perloff’s point that “reading is also a construction on the part of its audience”



fig. 4. “Pole” poem from *Between Page and Screen* by Amaranth Borsuk and Brad Bouse. Used with permission of authors.

(Perloff 28) and pushes this point far beyond the pale of Perloff's imagination (at least as she was considering the concept of radical artifice back in the late 1980s). *Between Page and Screen* makes the reader literally responsible for constructing the digital poem, for the reader must make a digital connection between the book's QR codes, webcam, and the Internet in order to actually access the poetry. Updating the concept of radical artifice to include digital poetry and protocols in a work like *Between Page and Screen* thus also requires reconsidering the role of the human reader. For, the metaphorical role of reading-as-constructing becomes literal in this digital circuit of augmented reality poetry. We might say that *Between Page and Screen* reconstructs the activity of reading and the role of the human in reading literature.

The Posthuman Reader

When reading *Between Page and Screen*, you, the reader, see yourself incorporated into the digital network. Like the text culled by the QR codes, you appear onscreen, between page and screen. Your face appears alongside the book and the text projected three-dimensionally from its open pages. You read the book by gazing *not* at the actual pages but at their reflection onscreen. This Narcissus-like experience confronts and confounds you, the reader, with the fact that you are just one of many media involved in producing this literary work: the book, the webcam, the computer, the Internet connection. Moreover, you are not the central node in this reading circuit: you are off to the side as the text appears. It is the computer, not the human reader, who reads and translates this book's content; and this content is, as we have already seen, the QR codes contained on the pages. Reading this work is not a human-centered activity; it is, instead, a posthuman activity of technological distribution that involves human and machinic readers in the production and reception of literature. Understood this way, *Between Page and Screen* presents and promotes a posthuman reading practice.

Between Page and Screen stages a scene of reading that is quite different from the traditional image that we have inherited over the centuries, the "look of reading" that Garret Stewart catalogs in his

book by that title. The scene of the silent, individual reader staring deep into an open book is a known and poignant symbol of interiority and selfhood, a symbol we have come to associate with learnedness, privacy, leisure time, and class. *Between Page and Screen* challenges and complicates these traditional postures of reading and the meaning associated with them. For example, in *Between Page and Screen* we do not stare into this book and dive towards the deepest parts of its spine. *Between Page and Screen* instead disturbs the depth metaphor associated with book-based literature and literary studies. To read this work, you open the book and flatten it out. The ramification of this little, physical detail is very significant. *Between Page and Screen* presents the book as a flat surface for the projection of the digital camera—not the projection of the human self into the text. The reader's attention is directed not into the book but to a space just beyond its pages. This is the opposite of getting lost or immersed in a book. Our attention is directed outside of the book's body, and our own body is shown to be part of the digital circuit. The work makes visual and poetic the fact that its reader—like that older and now defamiliarized technology she holds in her hands—is already, in a sense, posthuman. We humans, our bodies and our cognitive ability to read a book, are presented as distributed across digital technologies and networks.

Marshall McLuhan reminded us, many years ago, that we really only understand print media in the moment of its eclipse because only then do we realize that we need to pay attention to the medium *as* message before that medium is gone (McLuhan *Gutenberg Galaxy*). *Between Page and Screen* encodes that idea literally, visually, and poetically, incorporating the book into the digital circuit in ways that defamiliarize book technology and allow us to see it anew. *Between Page and Screen* teaches us to read it, to flatten its pages and hold it up to our computer's webcam. In the process, it teaches us to see ourselves as part of the media network that produces this scene of reading. The work produces a mirror of sorts, which reflects back to us the fact that literature and reading have changed. But, as the post-script of *Between Page and Screen* tells us, there is no post-script—no end to writing, reading, books, or the human. Instead, our ideas of these terms shift and change as they (and we) incorporate the digital. In the moment of medial shift

from P to S, wherein the omnipresence of screens supposedly threatens the role of books, *Between Page and Screen* returns our attention to the codex to show how this older reading technology can not only participate in but also thrive within a digital reading ecology. As *Between Page and Screen* exemplifies, this engagement is how literature lives and thrives. To see this fact, we just need a new perspective ... along with a webcam, an Internet connection, a computer, the right QR codes and software, and, yes, the book.

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BIOGRAPHY

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Reading Project: A Collaborative Analysis of William Poundstone's Project for Tachistoscope {Bottomless Pit}, with Mark C. Marino and Jeremy Douglass, is forthcoming from University of Iowa Press in 2015.