

## Readies Online

Craig Saper <cjsaper\_at\_gmail\_dot\_com>, University of Maryland, Baltimore County

### Abstract

The research experiment described in this article, "Readies Online," started as a database to make accessible a rare manuscript of important modernist poets and writers including Gertrude Stein, William Carlos Williams, Ezra Pound, F. W. Marinetti, Kay Boyle, Nancy Cunard, Eugene Jolas, and many others. Each of these contributors had sent works prepared for Bob Brown's machine, and he called the prepared texts *readies*. In the midst of building the collection of texts, the researcher realized that moving the texts through an electronic version of Brown's machine, or through the interface constructed on the website to simulate Brown's machine, changed how one read — even changed the essence of what one read. Speed, pace, direction, and visual cues took on new importance already apparent in reading printed texts, but not stressed. Punctuation now represented an illegible and non-representational, visual cue rather than a direct link to the phono-centric pauses and stops that are more commonly represented by punctuation. The futures of reading, and the use of new devices like e-readers, will have consequences for the definition and practice of what we call reading.

As a matter of principle, the book is illegible, and it calls for or commands reading in the name of that illegibility. Illegibility is not a question of what is too badly formed, crossed out, scribbled: the illegible is what remains closed in the opening of the book. What slips from page to page but remains caught, glued, stitched into the binding, or else laboriously jotted as marginalia that attempt to trip over the secret, that begin to write another book. What is illegible is not reading at all, yet only by starting from it does something then offer itself to reading. [Nancy 2005, 27]

In 1931, in the French Côte d'Azur village of Cagnes-sur-Mer, a group of expatriate avant-garde artists and writers gathered to try out a prototype of a reading machine built by Ross Saunders, according to the plans and designs of Robert Carlton Brown II (1886-1959), known to the avant-garde writers as Bob Brown. Brown, a bestselling writer and international publisher, was part of the modernist circles not just in the late 1920's and early 1930's, but also since 1916 when he first started publishing his avant-garde poetry. After traveling the world for two years with the profits from his publishing empire, Bob spent a few years in Europe, mostly in France, publishing a handful of experimental books with prominent presses as well as with his own imprint, Roving Eye Press.

After publishing two versions of his plans for the machine, Brown decided to invite the most distinguished expatriate modernist writers to contribute to a new volume, *The Readies for Bob Brown's Machine*. The authors included in the original anthology included poets and writers like Gertrude Stein, William Carlos Williams, Ezra Pound, F. W. Marinetti, Kay Boyle, Nancy Cunard, Eugene Jolas, and many others. Each of these contributors was asked to send texts prepared according to Bob's instructions in what he called "readies" style. Bob also transferred at least some of these texts on rolls of paper with one single line of text, and he prepared at least one other sample of a text printed in "readies" style to show to engineers who might build and manufacture the machine. He never found a manufacturer, but his dreams for a reading mechanism were similar to the eventual microfilm machines. Brown wrote to the inventor of

microfilm and microfiche readers, worked with engineers, produced rolls of literary texts (such as one of the novel *Candide*) for his machine, and wrote to many admirers about his plans to produce the machines for a popular market. He later wrote to television producers trying to get them to produce poetry on television that would look much like a proto-*Sesame Street* with visual poetry. Because he never manufactured the machine, one could only read a poor and inadequate printed translation of these texts instead of reading them as readies for, and in, the reading machine. It was as if we had the sheet music to Sean “Puffy” Combs’s song “Come with Me,” but not the sampling machine or player to listen to it. Brown’s readies, like sampling in music, are inseparable from the machines used to play the texts.

I wanted to address that problem of recovering the previously un-publishable readies (because of the lack of a machine). This article is part of a series of my publications and research projects that concern my effort to re-publish and make accessible rare manuscripts associated with the machine, and to make Bob Brown’s remarkable life known to a wider public (and even to scholars who know only about the few years he lived in France). In order to publish works specifically prepared for Bob Brown’s reading machine, I decided the publication of the texts in the anthology should not simply consist of a printed text – even if those texts were a facsimile of Brown’s published anthology. Instead, the project would make these texts available online in a way as similar as possible to Brown’s presentation in the prototype of the machine. I began by constructing a database, using MySQL, to make these works accessible to a much wider audience.

This strategy of using databases online to make otherwise rare texts widely accessible and searchable was in keeping with what we now call “digital humanities” research. What happened next, in the middle of building the database, was a recognition that moving the texts through an electronic version of Brown’s machine — or through the analogous interface standing in for the machine and constructed on a website (readies.org) — did not simply present a database of searchable texts. Instead, it simulated how one might have experienced using Bob Brown’s machine back in 1931 as if it was made in the twenty-first century. That is, the simple database and peculiar interface, changed how one reads; it even changed the essence of what one reads. Now, issues of speed, pace, direction, and visual cues took on new importance. Yes, these issues were already apparent in reading printed texts, but they were not stressed or highlighted as they became in the interactive interface. Mundane aspects of every literary text, like punctuation, now represented an illegible and non-representational visual cue rather than a direct link to the phonocentric pauses and stops that are more commonly represented by punctuation. Usually an em-dash, for example, cues a reader to pause, but in the readies, the em-dash cues the eye to increase the speed and skip to the next word. At high rates of speed reading becomes a visual experience without any sounding out words. Punctuation cues a reader’s voice, whether reading aloud or silently, but in the readies, the punctuation circumvents the voice to cue the reader’s eyes. Suddenly, the “digital humanities” effort looked more like a Derridean experiment in grammatological reading, or what Greg Ulmer would call an “applied grammatology.” That is, the project suggested a future of reading, that will involve new devices like e-readers, and will change the definition and practice of what we call reading and even introduce an electracry.

As the project progressed through iterations, I published critical editions of two other experimental works by Bob Brown designed explicitly for his reading machine. Those critical editions appeared as part of a series edited by Jerome McGann and Nick Frankel on “literature by design,” and they strengthened my appreciation that visual non-phonocentric design might form the basis for literary meaning and a marginalized aspect of literature. My publications received much attention because they corresponded with the release of a number of new (or newly improved) e-readers. *The New York Times Book Review* published an essay that discussed my ongoing research and mentioned one of the new critical editions. That essay also included a link to my reading machine, and on one day I received five thousand hits to the website and many more over the course of a few weeks. The reading machine on my website offers an e-version of what Bob Brown’s machine proposed, in one iteration, in the late 1920s and early 1930s. He called the texts prepared for the machine “readies.” The texts running through the machines on my website include some of the readies produced for Brown’s machine by modernist poets and writers.

As the project continued to attract interest, I published a series of other articles and chapters and continued to do biographical research on Brown’s life and his machine. In the early 1930’s, the beaming out of printed text over radio waves and the televisual poetry that Brown predicted and advocated for had an absurd air of science fiction, which has led many to read Brown’s plans for the machine as simply an art-stunt. In support of that view, in 1931, Brown wrote in

3

4

5

6

enthusiastic hyperbole, similar to the style of other avant-garde manifestos of the time, about the machine's potential to change reading forever. For those interested in the digital humanities now, Brown's research on reading seems remarkably prescient in light of the phenomenon of text-messaging (with its abbreviated language) and electronic text readers. You are no doubt reading this article online with the words beamed out tele-matically. And Brown's practical plans for his reading machine include precise details that evoke both steampunk design and Kindle:

Extracting the dainty reading roll from its pill box container the reader slips it smoothly into its slot in the machine, sets the speed regulator, turns on the electric current and the whole 100,000, 200,000, 300,000 or million words spill out before his eyes [ . . . ] in one continuous line of type. My machine is equipped with controls so the reading record can be turned back or shot ahead [ . . . ] magnifying glass [ . . . ] moved nearer or farther from the type, so the reader may browse in 6 point, 8, 10, 12, 16 or any size that suits him. [Brown 1931, 154]

Brown's reading machine was designed to “unroll a televistic readie” in the style of modernist experiments; the design also followed the changes in reading practices during the first quarter of the twentieth century. Gertrude Stein understood that Brown's machine, as well as his processed texts for it, suggested a shift toward a different way to comprehend texts. That is, the mechanism of this book, a type of book explicitly built to resemble reading mechanisms like ticker-tape machines rather than a codex, produced at least for Stein specific changes in reading practices.

On the one hand, the inspiration for Brown's machine certainly includes Duchamp's machines and poetics. Artists like Raymond Roussel built their own Surrealist reading machines relatively soon after news of Brown's reading machine appeared on the scene. It seems fitting that Brown would call the processed texts the readies, explicitly alluding to talkies and movies, and implicitly to readymades. In light of his own claims in *The Readies* to do for reading what Pablo Picasso did for painting, or what James Joyce, Gertrude Stein, and e. e. cummings did for writing, one might call Bob Brown the Marcel Duchamp of reading. The fascination with machine aesthetics among the avant-garde was very much of the moment in June 1930. In an issue of the modernist magazine *transition*, in which Brown announced his machine, the magazine's editor, Eugene Jolas, declared, “The mechanical surrounds us like a flood. The machine and its relations to man is doubtless one of the major problems of the age. Ever more accelerated becomes the tempo, ever more whirling are the pistons, ever more violent is the influence of this titanic instrument upon the thoughts and acts of man” (379). The context of his literary and artistic tastes and writings make it easy for even the best critics, and sometimes for Brown himself, to think of the project only in terms of the modernist revolution of the word and as a “stab in the dark at writing modernly.”

On the other hand, Brown seemed to consider his machine and the changes to reading in much more practical and even commercial terms like microfilm than like Duchamp's toy-like machines. Unlike microfilm, in Brown's machine the text would roll out in “one continuous line of type”. The magnifying glass, spools of one line of type, electric current, controls and regulators all seem both quaint and futuristic. Using his machine one could see “microscopic type on a movable tape running beneath a slot equipped with a magnifying glass and brought up to life size before the reader's birdlike eye”. One could also control the speed, bringing the usual relaxed pace of reading up to the fast modern speed of the day.

Whether avant-garde provocation or patent-pending application, the printed form of the readies used punctuation marks as visual analogies, and this essay seeks to examine that aspect of textual production usually effaced in tagging, digital humanities databases, and in phonocentric readings of texts whether online or not. Readies function as a printed analogy for what reading will feel and look like “spinning past the eye out of a word-machine,” and, in that sense, em-dashes on a printed page are, for Brown, a “crude” attempt to simulate motion. How does digital humanities account for motion in texts and reading? How does one tag motion? How does one include motion in a concordance? These are not simply avant-garde provocations, but practical questions that digital humanities must begin to confront.

In Brown's readies, the em-dashes have a visual equivalent in the cartoon action lines that sometimes alternatively indicate light, surprise, or inspiration (Eureka). They are also synonymous with the xxxxxxxx of redacted texts. In either case, instead of punctuation serving a phonocentric system, those marks now serve a visio-semantic system much like

7

8

9

10

the system of visual poetry. The style of preparation and reading of these texts led, counter-intuitively, to modern realist novels by James T. Farrell and in Brown's own *You Gotta Live!* In those cases, it did not break with realist illusion, but it suggested the condensed, rapid, and cartoonish qualities of the dark gritty urban novel often of crime and detection. The staccato could find itself as a speaking style even as it suggested the visual equivalent of flickering images. One of the ongoing debates about visual poetry concerns whether the marks on the page should serve the voice, serve to represent what a voice speaks, or should explicitly visual poetry have no syntactic alphabetic translation; that is, the poems, like Bob Brown's work, have no alphabetic equivalent nor a syntactic structure that one can decipher from the visual (and possibly moving) marks on the page (see for example, Drucker 1996, 120). Is writing a slave to speech? Are there poetic and aesthetic effects that have no translation in speech? The visual poets set out to write poetry not intended to represent an author's voice, but to directly imprint a process and a visual aesthetic that has no equivalent in speech. This poetry demands a tactical visceral literacy. Among the avant-garde poets who prepared texts for Brown's machine, F. W. Marinetti sent a visual poem, titled "Words in Freedom!" Marinetti's poem pointed to one lack in the particular machine Brown conceived. One section of Marinetti's poem, "Olfactory Poetry," only suggested smells when the words were read as representations of odors rather than as olfactory objects. The machine did not cue a sense of smell, but if Marinetti prepared his poem today perhaps he would use some digital equivalent to a scratch-and-sniff design.

In Brown's *Readies*, punctuation marks become visual analogies. For movement we see em-dashes (—) that also, by definition, indicate that the sentence was interrupted or cut short. These created a "cinemovietone" shorthand system. The old uses of punctuation, such as employment of periods to mark the end of a sentence, disappear. Reading machine-mediated text becomes more like watching a continuous series of flickering frames become a movie. The reader's ability to recognize punctuation marks as analogies for cinematographic zooms, close-ups, and special effects also allows the scenes in the *Readies* to function as an allegory for the process of reading in the age of machines. *Readies* sought to illuminate the form of a process rather than the form of a medium. Mechanical poetics (like Marcel Duchamp's descriptions of an impossible fourth dimension) magnify reading as a cultural technological medium without a single essential form. Using punctuation in this way as a visual score rather than as a set of cues for reading aloud problematizes traditional literary interpretation. Precisely because punctuation marks usually function to guide the voice to read prosody, the use of punctuation as an analogy for motion and other optical effects moves reading from an interpretation of words in connection with an author's voice toward an interpretation that emphasizes design, visual aesthetics, and movement. *Readies* do not efface expressivity, but they put the tone of voice in doubt. That kind of visual pun logic was common at the time in works by such artists as Marcel Duchamp and the Surrealists. Duchamp, a formative influence on Brown's experimental and visual poetry, designed, built, and found readymade machines that suggested one could build or plan a machine that would never produce the same result twice. They also parodied the conception of machines as being only in the service of efficiency, reproducibility, and market economies. Does Brown's machine simply parody microfilm machines as an elaborate art stunt?

The em-dashes do not make the prepared texts, or *readies*, easier to read or more accessible, rather those marks change the very rules and constraints of what constitutes reading. The visual punctuation suggests the 3-D sculptural apparatus involved in reading and a precursor to future reading machines — perhaps not hand-held, but spatial, sculptural and dependent on the place for the reader's body. In describing how to read digital poetry, Roberto Simanowski describes the process of transforming text into a post-alphabetic object that allows for both reading and playing with a text [Simanowski 2010, 160–164]. One discovers a similar process in the *readies* only when using my version of Brown's machine because only then does the reader move the text at a pace that changes the printed text from representational to an object of perceptual presentation. Without using the machine, the most noticeable aspects of the texts concern their representational meanings. The visceral object-ness of reading as a process is left undiscovered until one uses the simulation. Without the machine, the printed *readies* are, in many cases, unremarkable. When one uses the machine, the *readies* are about the process of reading. In that machine-reading, the illegible aspects of reading, like the perception of speed, pace, directionality (those usually implicit aspects of reading a printed or pdf) become foregrounded. Now, using the machine one notices un-translatable visual effects of pace; for example, moving the text at a high rate of speed creates an optical illusion in which the text direction seems to reverse. This sort of effect is outside the realm of thinking of reading only in terms of literacy and representation. Literacy depends on

thinking of decoding in terms of alphabetic and syntactic equivalents, and dismissing any other “stray” visual marks as illegible.

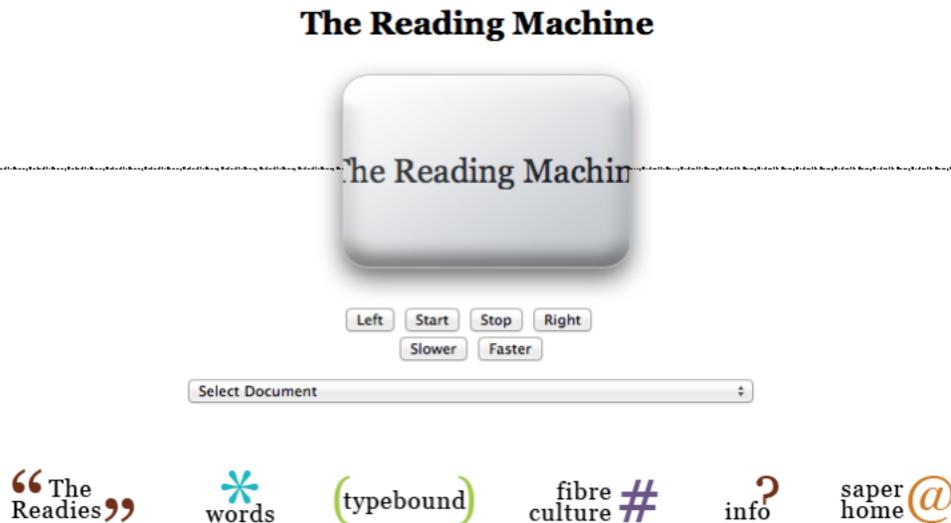


Figure 1.

The electronic project described here began as a mere supplement for my publications and research on Brown. From the initial motivation, work on the project led first to a way to think about databases, interfaces, and mechanized procedures as alternatives to the dominant processing technologies and procedures, and later to a realization that one could simulate reading and experiences much as one simulates running with a Wii Fit; one could experience alternative constraints to the dominant print-based styles of reading — alternative styles and processes (like reading from a scroll) usually only described rather than demonstrated in scholarly studies. So, the Brown machine simulation became a prototype for a series of simulations on other reading situations both in the past and in potential futures.

13

To better illuminate this important moment in literary history, and to avoid the problem that Brown identifies as using printed analogies to crudely simulate movement, the online simulation moves beyond the goal of making accessible and available the works published as readies. I began to suspect this other theoretical aspect when I consulted with Michael North, one of the leading authorities on modernist literature and on Bob Brown's work. North suggested, in terms of my simulation project, that the computer was the machine; so, we did not need to draw a picture of a machine in the machine. The machine should scroll the text. Finally, *unlike* Simon Morris, the British publisher and artist whom I had consulted with about the machine a few years ago, North thought I should model my machine closely on Brown's readies and machine. Morris thought the machine we built should look to Brown for inspiration, but not be modeled closely on the readies. N. Katherine Hayles, a leading scholar of electronic literature, asked me, “Did Bob Brown build the reading machine or just imagine it?” My answer was that the evidence of the works he produced for a reading machine and his patent proposals for the machine make the answer ambiguous. Was it analogous to a ticker-tape machine or a microfilm machine? There is evidence for both and perhaps some combination of these two types of reading machines. That ambiguity of the model of Brown's machine also makes building an actual machine a challenge — perhaps an impossible challenge — a challenge of making a representation, an analogy, a metaphor for a provocation meant to unsettle our facile and received ideas about reading, analogy, and representation itself. This was no simple task.

14

In thinking about the implications of how the machine compiles, cites, and indexes a database of texts, one might overlook other issues, like motion and optical illusions, that we usually do not include in databases. How does one cite the pace of a reading? Is it something that applies only to specific uses and readings and therefore is not cited as part of the text itself? To answer this question, I needed to better appreciate how citation is normally handled in printed on paper literature rather than in the age of machine-reading. I turned to the definitive source for the consensus view of

15

how to cite literary works, the *MLA Handbook*.

As the epigraph from the *MLA Handbook* makes clear, how one accesses a text becomes a necessary component of the text's contours at the very least for the dominant citation system in the humanities. In that situation, the type of reading (a genre of reading procedures) and the mechanisms used to read are no longer secondary to the essence of the word, page, or book. The Modern Language Association has recently amended their guidelines for the style and format of the "Works Cited" section. The word "Print" must now follow some of the references, indicating that the dominant textual medium is not the printed text. The word "print" follows books printed on paper, bound, and published (see the *MLA Handbook*, 7th edition, 2009, 126-128). The change is relatively recent, and appears in the 7th edition of the *MLA Handbook* and the third edition of the *MLA Style Manual* (2008-09). The guideline for authors to specify which medium they cite from seeks to recognize the increasing diversity and importance of non-print media. Considering the increasing prominence of journal services like JSTOR or Project MUSE (subscription services that make available journal articles and other scholarly material online in electronic format), and the fact that sometimes these Web editions may vary significantly from print editions of the same text, the MLA wanted to make it as clear as possible where and how readers retrieved cited documents, and to account for any apparent discrepancies. How you read changes the type or genre of reading practice.

16

In the preface to the latest edition of the *Handbook*, the current Executive Director of the MLA, Rosemary Feal, remarks that in the 1977 *MLA Handbook* the instructions stressed that using "fresh black ribbon and clean type are essential" and that edition of the *Handbook* also advised against using "thin paper except for a carbon copy." Feal notes that "in just thirty years, there has been a dramatic shift in the way we conduct research, find primary and secondary materials, process information, and prepare a paper for submission" [Feal 2009, xv]. Mentioning typewriter ribbon as the index of the shift suggests that the shift concerns production of manuscripts and publications rather than the change in how we read and access texts that the new *Handbook* addresses in the discussion of the formatting of the Works Cited section. The works cited must now indicate how one accessed or read particular texts, not indicate how those texts were produced (but the Preface does mention that parts of the handbook assume "that all students write papers using word-processing software" [Nichols 2009, xviii]). The distinction is crucial — adding "Print" or "Electronic" in a bibliographic record is not indicating anything about how the text was written, prepared, or published originally, but rather in what medium it was read. The inclusion of that one word changes how we cite texts. No longer do we cite its means of production (publisher, author, date, etc.) alone. We now must cite the means of consumption: we cite the technology or the type of reading machine (e.g. printed book device, DVD, microfilm, etc), and that small inclusion shifts the ground of reading and suggests two aspects of the readies.org project that are easily missed. One must now include the word READIES after a citation of a text from that site, and one must recognize a fundamental difference in reading readies in the machine online and reading only the transcript in a printed collection. The texts are different — the meaning, look, affective impact, ideological positioning, and genre are different. Perhaps, in the future, scholars will think of reading (or how we consume texts) as having genres in the way that we readily accept genres of a text's production. Scholars will specialize (and have already begun to specialize) in the machines used to read. Instead of focusing on periodization, genres of production, or languages of literature, the digital humanities are opening the door (and readies.org leading the way) to appreciating genres of practices and their comparative readings, for example, reading a phrase spray painted on a wall versus on readies.org. The readies.org project demonstrates one genre of reading, and it also demands specialized interpretive perspectives.

17

Other critical perspectives, like reader response approaches, stress the importance of the reader, but with the new requirements from the MLA the entire profession of readers (professional readers of the modern languages) makes reading an ontological aspect of the works cited. Reading now has genres, and the future of digital studies will include the study of these genres and their corresponding poetics in the way that literature programs study the genres and poetics of texts (e.g. romantic sonnets, realist novels, modernist visual poetry, etc.). What seemed bizarre, creative, or beyond the structure of a text has now become a widely accepted and crucial aspect of a text's structure. Elsewhere I have coined the term *infrastructuralism* to highlight the new importance of the apparatus — not a singular apparatus like the cinematic one described in ideological film theory, but rather varied and multi-modal access machines (e.g., e-readers, web-readers, search engines, indexing bots, DVDs, iPads, etc.).

18

The key discovery is that how one reads a text (the machine one uses) is part of the works cited, not separate from it. Reading is always already mediated by machines, and therefore, always already virtual, simulated, artificial, and dependent on the illegible mechanism supporting it. As the opening epigraph by Jean-Luc Nancy explains, the binding, glue-marks, the bookbinders markings, and other illegible aspects of the book's apparatus make reading possible. Reading is always already depended on the illegible. In the age of e-reading devices appearing (and changing) regularly, the illegibility of these delivery systems (i.e., the props for reading) have a more obvious stress and exposure. There is no direct reading outside of technology, and the current interest in digital access technologies will open a field of reading different from the histories of reading in the West to examine how the access technologies become essential aspects of the texts themselves. What is the difference between the book and its support (paper, computer screen or vellum, etc)? Or, put another way, how does reading change the database (in books, online, or some other medium)? Digital humanities research focuses on the infrastructure of texts, but almost exclusively on databases rather than on reading interfaces. Much of the research focusing on databases assumes the medium and interface apparatus as a neutral ground, and depends on a monolithic idealized reader.

Throughout the last decade through the current day, much digital humanities research has examined and used databases; in fact, one might argue that the database is the foundation and goal of digital humanities. In the database driven research, of which *readies.org* is certainly a part, digital technology allows not only for expansion of concordances, but also, and more importantly, for new types of tagged, hyperlinked, and radiant texts. The term "database-driven" and "database" are more metaphorical than literal structured data. Databases changed the experience of reading, and that change served as the initial focus on the *readies.org* project. In *Radiant Textuality: Literature after the World Wide Web*, Jerome McGann locates the rise of these new types of database driven reading practices as occurring in the context of a resistance to advances in processing texts; he explains that "[i]f certain features of the new information technologies have overtaken us – for instance, the recent and massive turn to word processing – more advanced developments generate suspicion" [McGann 2001, 53]. The *readies.org* project began as a way to mine the archive of materials related to modernist poetry, but as Peter Sallibrass, in a special issue of *PMLA* on databases in the humanities, explains, "if database has been an incitement to the use of archive, it has changed our relation to the ownership of knowledge." And he continues:

One of the most radical aspects of database is its power to separate knowledge from academic prestige and from its attendant regime of intellectual property. Scholarship, as traditionally conceived, has maintained its prestige partly through its privileged relation to the protection and retrieval of scarce resources. Now, however, millions of people who cannot or do not want to go to the archives are accessing them in digital form. In addition, digital information has profoundly undermined an academic elite's control over the circulation of knowledge. [Sallibrass 2007, 1581]

*Readies.org*, starting as a simple database project, demonstrates an advanced word processing and makes an alternative form of reading available outside of academic publishing systems; that is, the project is available on the web without the protection of the rare and scarce texts. Sallibrass sees this simple situation of access as intensely creative, and he connects it to a necessary step in Shakespeare's creativity. The databases "will also reveal the extent to which the gatekeepers are themselves trespassers who do, perhaps unconsciously, what Shakespeare deliberately and shamelessly did in the construction of his poems and plays. He appropriated for his own use what he read or heard, as can readily be seen in his most famous soliloquy"; Sallibrass goes on to list many variants of to be or not to be — for about 25 years before *Hamlet* appears [Sallibrass 2007, 1581]. He cites Mary Carruthers's argument that "having 'inventory' is a requirement for 'invention.'" Not only does this statement assume that one cannot create ("invent") without a memory store ("inventory") to invent from and with, but it also assumes that one's memory-store is effectively "inventoried," that its matters are in readily-recovered "locations" ([Carruthers 1998, 12] as quoted in [Sallibrass 2007, 1582]). The scholastic tradition taught students to organize "one's reading as a database. In this pedagogy, reading is a technology of inventorying information to make it reusable" ([Carruthers 1998, 12] as quoted in [Sallibrass 2007, 1582]). The *readies.org* project makes reading into an inventory process; it allows everyone to simulate the creative genius's process, who, like Shakespeare, could quickly choose among texts, process them, and produce startling results.

The shift from database to simulation begins in thinking about the *inventory*, since the use of the inventory is not originality, but rather a simulation of invention and discovery. One might argue that there is never a base-line invention, but rather more or less fertile inventories. Readies.org, at the locus between database and simulation, suggests how reading has a usually effaced visual aspect that opens a generative practice of discovery. One needs to run a simulation with the inventory to produce the simulation. Put another way, in *Radiant Textuality*, Jerome McGann argues that “the general field of humanities education and scholarship will not take the use of digital technology seriously until one demonstrates how its tools improve the ways we explore and explain aesthetic works — until, that is, they expand our interpretational procedures” [McGann 2001, xii]. The expansion of interpretational procedures to include simulated reading experiences, as in the *readies.org* simulation, allows for students to conceive ideas “all at once” in simulation rather than “relying on step-by-step sequential processes that auditory learning styles favor” [McGann 2001, 106]. He asserts that the inclusion of both processes advances comprehensive learning, and *readies.org* all at once-ness adds a non-logocentric or illegible aspect to interpretation; one easily missed, dismissed, or ignored without the reading machine. McGann “stresses that learning to interpret literature through visual methods is a skill of increasing importance in a world where images have the capacity to dominate and direct human behavior.” The visual aspects of *readies.org* enter the database-driven digital humanities much like a Trojan horse or Pandora’s box: once the databases’ interface allows for movement, inventory practices, and the non-logocentric visual, then reading and interpretation change; the foundation of the digital humanities changes too.

McGann calls for a move “beyond conceptual analysis into the kinds of knowledge involved in performative operations — a practice of everyday imaginative life” [McGann 2001, 106]. His discussion seems to borrow from a modernist visual poet-publisher-and-inventor, Bob Brown, whose reading machine now appears on *readies.org*. McGann writes that “[Texts] are not containers of meaning or data, but sets of rules (algorithms) for generating themselves: for discovering, organizing, and utilizing meanings and data,” [McGann 2001, 138]. And, in doing so, he suggests that one could use a machine (perhaps the machine on *readies.org*) to not just present a direct and transparent representation of a text, but to move that text through a set of algorithms. In doing so, one would discover aspects of reading usually effaced by the demands of literacy and representation. The online *readies* machine of *readies.org* moves the texts through a set of algorithms (both in the preparation of the texts by eliminating “unnecessary” words, inserting the em-dashes, and in the variable speed and direction available in this online machine), performing precisely this move away from the direct and transparent representation of a text. In the same *PMLA* mentioned above, McGann explains the relationship between database and interface.

No database can function without a user interface, and in the case of cultural materials the interface is an especially crucial element of these kinds of digital instruments. Interface embeds, implicitly and explicitly, many kinds of hierarchical and narrativized organizations. Indeed, the database — any database — represents an initial critical analysis of the content materials, and while its structure is not narrativized, it is severely constrained and organized. The free play offered to the user of such environments is at least as much a function of interface design as it is of its data structure. [McGann 2007, 1588]

Again, what he describes moves close to the notion of what I am calling a simulation in *readies.org* (the online reading machine began as a database); the machine demonstrates this physical narrativization of the absolutely particular reading practice of each user and each specific reading (using the machine). If *database* is a base onto which we put things that are given (data), then simulation involves imitating and building models; the online reading machine (*readies.org*) builds a model, imitates a machine, and sets data in motion using a specific algorithm of constraints, much like an OULIPO experiment. The database sets the stage for simulations, but without thinking of the new role of the humanities as a ground for simulations of creative genius, invention, and discovery. The inventory is available every time we log on, and simply takes a few clicks to set the data in motion as a simulation. The reading machine simulation makes the user aware that reading is not simply decoding a meaning. Instead, reading depends on an inventive visual and physical activity. The demands of literacy usually discount the physicality of reading making it part of an invisible apparatus. My research in the reading machine also involves a database, but the consequence of building this peculiar database led to an investigation of the next major aspect of research on the experience of reading: simulation of reading or moving reading away from literacy and toward something more like an athletic ballet or acrobatic display, a *cirque du*

*lecture*. Of course, pretending to read is like pretending to pretend, it immediately challenges the binary between real authentic modes of reading and simulated, or artificially constrained, models of reading. The distinction between pretending to read in a certain way using the Readies machine online and actually reading is a false distinction that has been deconstructed repeatedly: "To pretend, I actually do the thing: I have therefore only pretended to pretend" (Vincent Descombes, 1980, 137, discussing and loosely paraphrasing Jacques Derrida's writing on Levinas and Bataille, but universally attributed as a direct quote from Derrida in collections of quotes and blogs). The reading machine online asks the user to perform, pretend, and simulate reading even as the user does the real activity we call reading. It allows for what Patricia Clough would call the absolutely particular affective (as opposed to the general abstracted subject positioning usually found in discussion of the politics of reading practices); she explains that "digitization fundamentally changes the idea of recording and transmitting," and now "ideological interpellation and subject disciplining can no longer be the centerpiece of an understanding of sociality, even though disciplining and socializing go on. It would seem necessary that we add to an understanding of sociality the modulations of the affective background" [Clough 2009, 51]. Readies.org demonstrates, and implicitly argues in those absolutely particular performances, that reading depends on the "modulations of the affective background" before and beyond subjective interpretation, as well as on a physicality of eye twitches, enervations, and constant rapid movements.

We usually associate electronic simulations with physical activities like driving, flying, or guitar playing. We also associate simulations with social systems, urban planning, or athletic activity, and products like Wii and Sims suggest a visceral interaction with databases of information. In the humanities, walk through simulations of ancient buildings, art museums, plans for cities never actually built, or historical events like world's fairs are now commonplace. The reading machine online asks the user to consider that sedentary reflective Apollonian thing we call reading as an acrobatic inventive thrill ride. Instead of rolling your eyes, the machine rolls the text by forcing the user to engage muscles atrophied in literacy, waiting to experience the visuality of reading in which serifs, dashes, and (( stray punctuation set in motion an animated cartoon of what reading will look like from the viewers of the future. In the 1950's, Bob Brown suggested to a television producer a children's program that would animate letters and words, and, although the ideas was quickly rejected, animated letters and words later made up much of the content in programs like *Sesame Street*, *The Electric Company*, and *Between the Lions*. The reading machine, beyond Brown's hopes, animated the words in absolutely particular ways with each use; so, if the goal was to use the machine as a tool for teaching generalizable linguistic rules of literacy, then it certainly failed. Now, more than fifty years since Brown passed away, the machine suggests aspects of an emerging literacy, different every time, affective-physicality, and visual non-logocentric reading; it is more APP or game than animated cartoon version of reading.

25

In the midst of building the online reading machine simulation/analogy for a machine built in 1931, and preparing the database of Readies texts, the art-stunt (but nevertheless prescient and practical) aspects of everyday reading became obvious. Speed, pace, direction, and visual cues took on a new importance that was already apparent, but not stressed, in printed texts. When Bob Brown published his proposal for a reading machine, he had been thinking about it for nearly 20 years. He thought of the reading machine as a tool to inventory all literary and non-literary texts. What he did not fully realize is that he also suggested that one could simulate an unfamiliar reading practice [one that might have worked to increase the rate of reading or frustrate it] using something like a reading machine; that simulation is precisely what my online machine suggests. The reading machine set in motion the next great stage of humanities research: using simulations (of reading) to study alternative reading practices — past, future, or imagined.

26

## Works Cited

**Boyle 1968** Boyle, Kay, and Robert McAlmon. *Being Geniuses Together: A Binocular View of Paris in the '20s*. Garden City: Doubleday, 1968.

**Brown 1930** Brown, Bob. *The Readies*. Bad Ems: Roving Eye Press, 1930.

**Brown 1931** Brown, Bob. *The Readies for Bob Brown's Machine*. Cagnes-sur-Mer: Roving Eye Press, 1931.

**Brown 1932** Brown, Bob. Letter, January 5, 1932, to Admiral Bradley A. Fiske. Written in Le Manoir, Cagnes-sur-Mer, France. 2 pages. Unpublished typewritten manuscript.

**Brown 1951** Brown, Bob. "Letters of Gertrude Stein". *Berkeley: a journal of modern culture* 8 (1951), pp. 1-8.

- Brown 1952** Brown, Bob. "Notes for the Life of an American Writer". *Berkeley: A Journal of Modern Culture* 10 (1952), pp. 1-7.
- Brown 2009b** Brown, Bob. *The Readies (Reprint)*. Edited by Craig Saper. Houston: Rice University Press, 2008.
- Brown 2009c** Brown, Bob. *Words: I but Bend My Finger in a Beckon and Words, Birds of Words, Hop on It, Chirping*. Edited by Craig Saper. Houston: Rice University Press, 2009.
- Butler 2004** Butler, Judith. "London Review of Books". *London Review of Books* 21: 4 (2004).
- Carruthers 1998** Carruthers, Mary. *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200*. Cambridge and New York: Cambridge University Press, 1998.
- Clough 2009** Clough, Patricia Ticineto. "The New Empiricism Affect and Sociological Method". *European Journal of Social Theory* 12: 1 (2009), pp. 43-61.
- Descombes 1980** Descombes, Vincent. *Modern French Philosophy*. Cambridge: Cambridge University Press, 1980.
- Drucker 1996** Drucker, Johanna. *The Visible Word: Experimental Typography and Modern Art, 1909-1923*. Chicago: University of Chicago Press, 1996.
- Dworkin 1999** Dworkin, Craig. "Seeing Words Machinewise: Technology And Visual Prosody". *Sagetrieb: Poetry and Poetics After Modernism* 8: 1 (1999), pp. 59-86.
- Dworkin 2003** Dworkin, Craig. *Reading the Illegible*. Evanston: Northwestern University Press, 2003.
- Feal 2009** Feal, Rosemary. "Foreword". In *MLA Handbook for Writers of Research Papers, 7th Edition*. Modern Language Association of America, 2009.
- Ford 1980** Ford, Hugh. *Published In Paris: American and British Printers, and Publishers in Paris, 1920-1939*. Yonkers: Pushcart Press, 1980.
- Ford 1987** Ford, Hugh. *Four Lives in Paris*. San Francisco: North Point Press, 1987.
- Johns 1937** Johns, Orrick. *The Time of Our Lives: The Story of My Father and Myself*. New York: Stackpole Sons, 1937.
- Kittler 1990** Kittler, Friedrich A. *Discourse Networks 1800/1900*. Stanford: Stanford University Press, 1990.
- Kittler 1999** Kittler, Friedrich. *Gramophone, Film, Typewriter*. Translated by Geoffrey Winthrop-Young and Michael Wutz. Stanford: Stanford University Press, 1999.
- Kostelanetz 1991** Kostelanetz, Richard. *The New Poetries and Some Old*. Carbondale: Southern Illinois Press, 1991.
- McGann 1993a** McGann, Jerome. *Black Riders: The Visible Language of Modernism*. Princeton: Princeton University Press, 1993.
- McGann 2000** McGann, Jerome. "Composition as Explanation (Of Modern and Postmodern Poetries)". In J. Rothenberg and S. Clay, eds., *A Book of the Book*. New York: Granary Press, 2000.
- McGann 2001** McGann, Jerome. *Radiant Textuality: Literature After the World Wide Web*. New York: Palgrave Macmillan, 2001.
- McGann 2007** McGann, Jerome. "Database, Interface, and Archival Fever". *PMLA* 122 (October 2007), pp. 1588-1592.
- Nancy 2005** Nancy, Jean-Luc. "The Publication of the Unpublished". In Jean-Luc Nancy, *On the Commerce of Thinking: Of Books and Bookstores*. New York: Fordham University Press, 2005.
- Nichols 2009** Nichols, David. "Preface". In *MLA Handbook for Writers of Research Papers, 7th Edition*. Modern Language Association of America, 2009.
- Noland 1999** Noland, Carrie. *Poetry At Stake: Lyric Aesthetics and the Challenge of Technology*. Princeton: Princeton University Press, 1999.
- North 2002** North, Michael. "Words in Motion: The Movies, the Readies, and the "Revolution of the Word". *Modernism/modernity* 9: 2 (2002), pp. 205-223.
- North 2005** North, Michael. *Camera Works: Photography and the Twentieth-Century Word*. New York: Oxford University Press, 2005.

- Paulson 1988** Paulson, William R. *The Noise of Culture: Literary Texts in a World of Information*. Ithaca: Cornell University Press, 1998.
- Perloff 1991** Perloff, Marjorie. *Radical Artifice: Writing Poetry in the Age of Media*. Chicago: University of Chicago Press, 1991.
- Petrucci 1999** Petrucci, Armando. "Reading to Read: A Future for Reading". In Guglielmo Cavallo and Roger Chartier, et al., eds., *A History of Reading In the West*. Amherst: University of Massachusetts Press, 1999.
- Rasula 1998** Rasula, Jed, and Steve McCaffrey. *Imagining Language: An Anthology*. Cambridge: MIT Press, 1998.
- Saper 2009** Saper, Craig. "Book Type Machine: From Bob Brown's Reading Machine to Electronic Simulations, 1930-2010". *The Bonefolder: An e-Journal for the book binder and book artist* 6: 1 (2009).
- Saper 2010a** Saper, Craig. "Materiality of a Simulation: Scratch Reading Machine, 1931". *Fibreculture* 15 (2010).
- Saper 2010b** Saper, Craig. *The Reading Machine*. <http://www.readies.org>.
- Shaviro 2003** Shaviro, Stephen. *Connected or What it Means to Live in the Network Society*. Minneapolis: University of Minnesota Press, 2003.
- Simanowski 2010** Simanowski, Roberto. "Digital Anthropophagy: Refashioning Words as Image, Sound and Action". *Leonardo* 43: 2 (2010), pp. 160-164.
- Stallybrass 2007** Stallybrass, Peter. "Against Thinking". *PMLA* 122: 5 (2007), pp. 1580-1587.
- Stein 1955** Stein, Gertrude. *Absolutely Bob Brown, or Bobbed Brown* (unpublished). Printed by Claude Fredericks at The Banyan Press in Pawlet, Vermont, 1955. Print.
- Ulmer 1987** Ulmer, Gregory L. "Reading Reading TV on TV". *Paper Tiger TV* (1987).
- Ulmer 2003** Ulmer, Gregory L. *Internet Invention: From Literacy to Electracy*. New York: Longman, 2003.
- Watten 2003** Watten, Barrett. *The Constructivist Moment: From Material Text to Cultural Poetics*. Middletown: Wesleyan University Press, 2003.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.