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Word Processor Art: How “User-friendly” Inhibits Creativity

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Abstract

My paper contains original “Word Processor Art” compositions and an explanation of the theoretical grounding for my work. I compose visual images (comprised of words primarily taken from advertisements about the object they construct) in a program not intended for that purpose (Microsoft Word). I break from the expected form of the “Word Processor Document” to scrutinize how machines, especially computer programs and the graphical user interface (GUI), influence the consumer's utilization of computers. In particular, my project questions how machines influence users' thinking and how the “user-friendly” inhibits creativity. The process disassembles the notion of “user-friendly” as a transparent influence and reveals how media shapes the author's imagination and creations.

The ever-present PC, in many ways, parallels the presence of the typewriter in the 1950s, 60s and 70s, which led artists to experiment with the grid-like form of mechanical type to create concrete and, eventually, dirty concrete poetry. My work is inspired by these artists and the typewriter poetry they composed. My work also references art collective JODI's compositions and how our contemporary society resists the limitations of the GUI.

My intent is to draw attention to the media of the composition. My work disobeys the prompts of the GUI to emphasize the idea that pre-packaged programs elicit conditioned responses and stifle genuinely creative uses of computing devices. Nietzsche writes that “our writing tools are also working on our thoughts” (quoted in [Kittler 1986, 200]). My purpose in producing this work is not a rejection of computing or the GUI, but to draw attention to an interface’s existence and influence on its user. My work points to a creative space outside of conditioned responses to the GUI.

Nietzsche writes that “our writing tools are also working on our thoughts” (Nietzsche, cited in [Kittler 1986, 200]). Avid users of technology justify their reliance on technology, because they believe that these devices facilitate, speed, strengthen, or seemingly eliminate the unnecessary or unproductive from commonly occurring activities. However, this relationship between the user and the device is anything but one-sided. Rather, a user begins to anticipate the exclusion of these processes, trading cognition for output. Nietzsche’s observation translates to the 21st century: our digital tools work on our thoughts, and the result is undesirable. The standardization of “user-friendly” and its seemingly invisible presence teaches its users, through inculcation, to respond to machines' prompts. Users engage particular programs for prescribed purposes and anticipate a predictable type of product. Contemporary, American, techno-centric culture accepts the incredibly specific role “creators,” the makers of machines and their programs, design for consumers of computers. The constant exposure to media as tools for communication and expression dulls creative thought processes by training users to simply respond as the program's designers expect. This does not have to be the case. 1

In the following paper, I disobey the conventions of Microsoft Word to demonstrate that, despite the corporate intention of its marketers, the controlled ways users interact with their machines need not be obstacles to creative thought; rather, these mechanisms, programs and the Graphical User Interface (GUI), can serve to assist in the creation of new forms of expression. In my project, I create visual images out of words, using a program not intended for that purpose (Microsoft Word). By breaking from the expected form of output, which resembles what I am creating in this text, I ask the audience to scrutinize how machines, especially the GUI of modern computers, limit the consumer's creative utilization of computers. The GUI utilizes visual icons (trash cans, menus, etc.) as an electronic platform through which users 2

interact with technology in lieu of command-line interfaces. My work questions how the manufacturers' notion of "user-friendly", both through programs and the GUI, deliberately inhibits creativity in the effort to create passive, unthinking consumers, who use uniform products in predictable and prescribed ways. Resisting this level of corporate control, I manipulate a program in ways not intended by its creators. By fighting limitations inherent in the average consumer's personal computing experience, I disassemble the notion of "user-friendly" as a transparent and benign influence. Rather, digital tools, which *should* aid the user, hazard becoming potentially disruptive censors, which discourage exploration of the digital page and stifle the author's creative imagination.

3 The first digital poetry surfaced in the 1950s and surged with the emergence of the personal computer in the 1980s. As digital compositions evolved from the printed page to include generative, kinetic, interactive, and multimedia work, these pieces continued to rely on the computer screen as a space for composition. Since my work draws much inspiration from the work of concrete and dirty concrete poets, my poems rely on the "shaping of the poem [as] an embodiment of its content," or in some cases as the foil of its content [Funkhouser 2007, 13]. This qualifies my work as what Christopher Funkhouser names static visual digital poetry. He states that

> Static works – or poems that do not move – are made from one of two distinct approaches: they are either shaped by an artist (presented to readers in print or in an exhibition setting) or built as viewer-activated work (viewed onscreen or printed out). Digitally rendered poems portray at least three different traits: words are arranged into literal shapes; words show patterns that represent dispersal or displacement of language; or words are combined with images (as in a collage). [Funkhouser 2007]

4 I shaped my work as a static presentation, meant to be viewed, not altered, by the reader. The "literal shape" of my compositions alters the way in which the reader engages with both the text and image, and draws attention to how form and content intertwine. Rather than simply reading the words that make up my compositions, a reader must grapple with the shape the poem has taken. According to Funkhouser, the diverse body of static visual poetry relies on both shape and text in its composition, but engages with the visual and textual in widely different ways.[1] My own work expands on the body of currently existing visual digital poetry, through my method of selecting and arranging textual material.

5 On the most basic level, my poems purposefully layer media to deconstruct the marketed purpose of their medium (Word Processor). Their new construction creates a place where printed advertisements, physical objects, producer intentions, interface restrictions, and user creativities collide. First and foremost, my poems undermine the comfortable and familiar constraints of the word processor. Instead of using Word to compose the expected products (8.5 x 11 inch page after page), I imitate hacker-typewriter artists of the dirty concrete movement like Steve McCaffrey, bp Nichol, John Riddell, and Robert Zend, who relied on the grid of the typewriter page as a canvas for their creations. Much like these authors reimagined the grid of the typewriter page as a place where typographical rules might or might not apply, I envision the digital page as a place for something other than prose compositions.

6 In my own compositions, I draw attention to the limitations and requirements of the computer as media and the word processor as a program, when it is obeyed. As I deviate from the expected format, a remarkable number of red, green, or blue squiggly lines alert that my composition has not behaved well. Spellchecking and grammar warnings initially mar these reconstructions. Becoming an unfriendly user, I click through layers of menus and disable the bulk of the surface-level constraints Microsoft Word imposes and continue composing.

7 Distributers prime consumers to be receptive to their product long before it is ever in their hands. That is, consumers use a product in the way producers instruct them to use it; they color within the lines. In order to simplify production, minimize user error, protect copyrights, and make money, producers standardize not only their products, but also the marketed uses of these products. They eliminate access to the product's inner workings to promote only particular utilization of the machine. They teach their consumers obedience, which *The Oxford English Dictionary* defines as "compliance with or performance of a command, law, etc." [OED Online]. The producers of a machine rely on the willingness of its customers to comply with the marketed use of the machine and its applications, in order to achieve a product that universally appeals.

By disobeying machines' prompts, a creator can use constraints as a source of inspiration to rediscover a space for creativity that has long been ignored, in lieu of mass-marketed, user-friendly technology. My compositions criticize the media's self-promoted user-friendliness by using its original product advertising as the foundation of each poem. I reassemble old advertisements, articles, and instruction manuals in the two dimensional shape of the product on the pages of a word processor. Visual icons and rhetorical devices, meant to seduce the user into "properly" using this newly available technology, confront the user in this new construction, which takes shape in a program intended for prose-like compositions. In *Media Parasites in the Early Avant-Garde*, Arndt Niebisch informs that the "abuse of media" requires one to "(ab)use media technologies… in the system in a way not intended by hegemonic powers" [Niebisch 2012]. Rather than conforming to the expectations of the digital page, one ought to defy them. This deliberate, albeit limited, subversion demonstrates the author's awareness of processes behind the most accessible interface. Working against these constraints creates opportunities to think critically in forgotten, invisible spaces, and to shirk off the often unacknowledged influences of user-friendly. 8

But why resist these constraints in this way? Well-meaning producers of products, who want to sell lots and lots of their products, inhibit (intentionally or unintentionally) the creative uses of their products by stressing their user-friendliness and cutting off the user's access to the product's inner workings. Although this logic follows from a marketing standpoint (why *not* protect the interests of the company through copyrights and closing off the system?), it involuntarily circumvents the machine's processes, writing them off as necessary and seamless. The old adage, "It's about the journey, not the destination" surprisingly simplifies what should be obvious to the consumer. In always skipping to the end, the user misses opportunities for creation and innovation. In his chapter "The Unworkable Interface", Alexander Galloway revises McLuhan's idea that the "medium is the message", writing: 9

> Politics thus reveals why the door or window theory of the interface is inadequate. The door-window model, handed down from McLuhan, can only ever reveal one thing, that the interface is a palimpsest. It can only ever reveal that the interface is a reprocessing of some other media that came before.
>
> On this point I will be absolutely clear; a palimpsest the interface may be; yet it is still more useful to take the ultimate step, to suggest that the layers of the palimpsest themselves are "data" that must be interpreted. To this end, it is more useful to analyze the intraface using the principle of parallel aesthetic events, and to claim that these parallel events reveal something about the medium and about contemporary life. [Galloway 2012]

Galloway stresses the idea that each "layer" of the medium reveals something about the culture in which that medium exists. If we are to follow the layers of traces that he describes, then we should expect to access some essential truth by sifting through the effaced, the constructed, and the erased. The fact is, consumers have been taught to accept that there is nothing to excavate below the surface of the GUI. The GUI masks the product's processes under the guise of facilitation, not inhibition. Does this make the processes and programs of our computers and smart phones faster and more accessible? Sure. Do users feel like unimpeded, even liberated, creators, who need not be bogged down with the particulars of messy programming? Mostly. However, this compulsory system, which reveals nothing to the vast majority of users about what happens between input A and output Z, provides almost no opportunity for an individual who might find meaning in what occurs in between. That space is a missed opportunity to create, expand, and innovate, if the user is willing to fight the system rather than merely conform to conditioned expectations. 10

Fighting the system is difficult, especially when the producers of the systems are working hard to make working with their products seem effortless. Galloway describes the artistic impulse of these programmers, stating "Today's ludic capitalist is therefore the consummate poet-designer, forever coaxing new value out of raw, systemic interactions (consider the example of Google). And all the rest has changed to follow the same rubric: labor itself is now play, just as play becomes more and more laborious […]" [Galloway 2012, 29]. The overlap of work and play conflate our society's ideas about the boundaries of those two worlds. To take Galloway's example of Google further, if he is correct, then the makers of Google's seemingly infinite algorithms, maps, search engines, etc. are the ultimate magicians. The data-mining, the prioritization of information, the masking of processes all disappear behind the blank white search page of 11

Google. When users play, they supply user-generated content that producers need to develop and market a new product back to that very consumer. These moments of play become essential to development, production, and consumption. These interactions are camouflaged in the most accessible interface. As consumers, we consume the simplicity of the product.

I designed my poems as easy to view, but tricky to read. The in-your-face simplicity of the GUI functions in a similar way. These compositions emphasize the presence of a GUI in the “user-friendly.” They are products of the program in which (and artifacts from which) they were composed. If the observer interacts only superficially, casually observing the image with no interrogation of the words, the item remains “user-friendly.” It appears a jumbled amalgamation of letters that presents a cohesive picture. With this approach, the composition remains merely visual, masking the meaning of its text. However, as the reader transitions to reading the project actively, work becomes vital to discovering what occurs underneath the most accessible interface. To marry the meaning of the text with the visual image it constructs, the reader must link words across gaps and lines, unearthing meaning along the way. The process of reading is necessarily enhanced and disrupted by the visual form of the composition. Funkhouser describes the experience of reading static visual digital poetry, stating “Reading the embedded text is not as fluid an experience as reading it on a blank page without visual distraction. Readers are more likely to scan the compacted version, receiving the language in bits and pieces” [Funkhouser 2007]. This method of excavation rewards readers, as they work to link shape and content. In my compositions, this process reveals history about the product and its marketing. Much like Galloway’s layers of the medium, each layer of these compositions shows how producers portrayed, marketed, and utilized these machines. Moreover, the marketed uses of these first computers contrast starkly with the black-boxed programming inherent in many devices today.

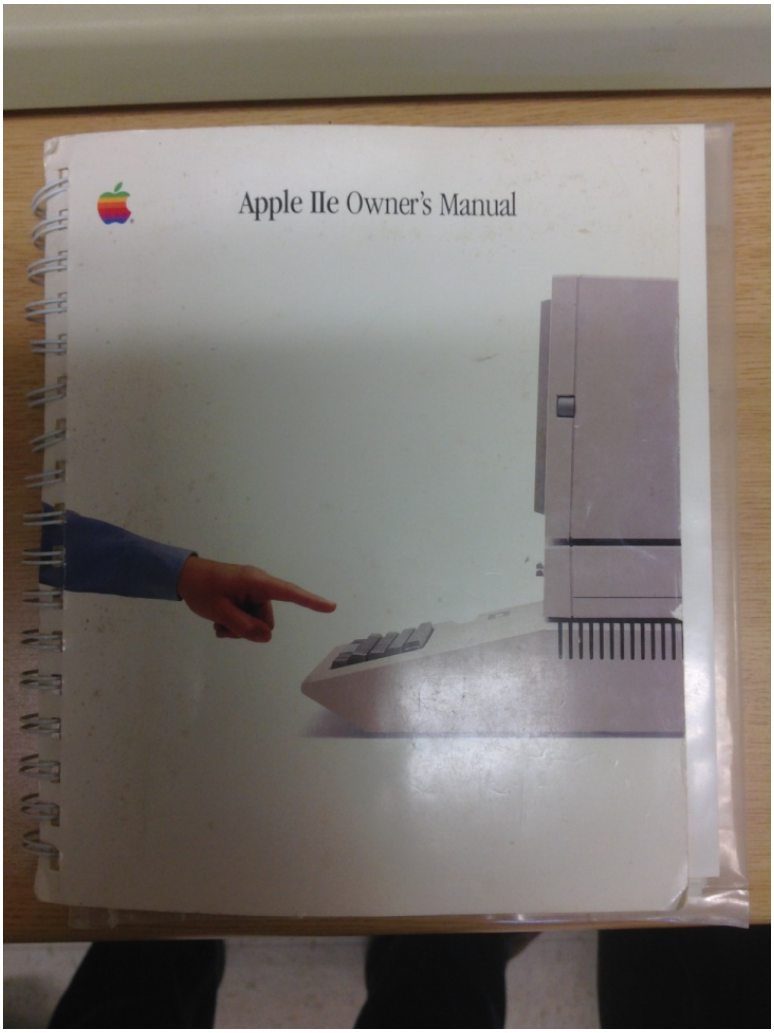

Figure 2. Apple Computer 1980, Apple IIe Owner's Manual. Apple Computer, Media Archaeology Lab at the University of Colorado, Boulder. Personal photograph, 2013.

In my composition "Simplicity (Apple II)," I focus on Apple's marketed simplicity: simple design, simple to use, and simple to purchase. When Steve Jobs introduced the Apple Macintosh in 1984, he designed his product with "user-friendly" in mind. The Macintosh was the first personal computer marketed specifically for the masses. The Macintosh features a GUI, which allows the user to initiate computer processes by using a mouse to navigate the visual images on a virtual desktop, in lieu of textual commands.[2] These substitutions allowed a user to master the machine with minimal training. For the shape of the poem, I imitate the profile of the Apple IIe that is on the cover of its user manual (see fig. 2). This photograph is white and tan, a single finger hovers over the keyboard. This image, reminiscent of Michelangelo's "The Creation of Adam" suggests that humans have now stepped into the ultimate role of creator. This machine is developed as a divine extension of our own selves. For the text, I draw from three advertisements (Figures 3, 4, and 5). Each of these texts boasts the sophistication, user-friendliness, and simplicity of the machine. For example, in "How to buy a personal computer," the advertisement states that

> And kids of all ages are finding how much fun computers can be, and have no time for TV once they've discovered Apple. The excitement starts in your local computer store. It's a friendly place, owned by one of your neighbors. He'll show you exactly what you can use a personal computer for…. [How To Buy a Personal Computer 1979]

The machine is so simple that kids can use it. It is such fun that it can replace passive entertainment of the television. Just as Galloway earlier suggests, the lines between work and play overlap in this medium. Instead of elevating this machine to perform solely adults' work or minimize it as a venue only for play, the user is encouraged to search

instruction on “exactly what you can use a personal computer for[,]” which includes programming, “expansion capability,” and “a personal computer that can grow with you as your skill and involvement grow” [How To Buy a Personal Computer 1979]. Ironically, in this phase Apple celebrated Apple IIe as “the one you can program yourself. So there’s no limit to the things you can do” [How To Buy a Personal Computer 1979]. Shortly thereafter, Apple developed the Macintosh, which severely restricted the user's access to the system, starting a trend that made the GUI of its operating system nearly impermeable for the average user.

Figure 3.

In a blog post excerpt from the second chapter of her book *Reading Writing Interfaces: From the Digital to the Bookbound*, Lori Emerson outlines the effect of contemporary GUIs on the consumer. She points to the accepted and prevalent model, originating in the Macintosh, as a point of man’s exclusion from the functions of the machine, which the user accepts because of his illusion of control. She writes that:

> “user-friendly” now takes the shape of keeping users steadfastly unaware and uninformed about how their computers, their reading/writing interfaces, work let alone how they shape and determine their access to knowledge and their ability to produce knowledge. As Wendy Chun points out, the user-friendly system is one in which users are, on the one hand, given the ability to “map, to zoom in and out, to manipulate, and to act” but the result is a “*seemingly* sovereign individual” who is mostly a devoted consumer of ready-made software and ready-made information whose framing and underlying mechanisms we are not privy to. However, it’s not necessarily the GUI *per se* that is responsible for the creation of Chun’s “*seemingly* sovereign individual” but rather a particular philosophy of computing and design underlying a model of the GUI that has become the standard for nearly all interface design. [Emerson 2013]

Modern personal computers rely on the popularized GUI model to cultivate the consumer's superficial relationship with the product. Instead of the user imagining what a computer might do and programming it to do so, that individual surveys the list of available, ready-made programs and uses one for its intended function. A user, for example, might not understand how a search engine like Google shapes his experience of information. This user might equate a search on Google to searching the entire internet (or the entirety of human knowledge, for that matter). Because of this assumption, he remains unaware of websites Google excludes from its database and oblivious to how Google presents and privileges information. Furthermore, the user gains access to this database by responding to the keyword prompt Google's search engine requires. The “user-friendly” design shapes how the user searches and filters his experience of information. In spite of the seemingly infinite expanse of information presented, the program limits the creativity of the user and the diversity of the resultant information. Emerson explains that “Without a fully open, flexible, and extensible architecture, the home computer becomes less a tool for learning and creativity and more a tool for simply ‘handling information’” [Emerson 2013]. User-friendly transforms into a tool of unquestioning passivity. Its systems stifle originality. The system allows users to control, access, and move information, but it trains the user to react to prompts. The user composes on word processors, calculates in spreadsheets, and draws in *Paint*. And, since the use of these machines saturate our society (at the time I composed this, I had a PC, a tablet, and a smart phone within three feet of me), it is natural that the habit of interacting with these machines increasingly influences users’ cognitive processes and patterns.

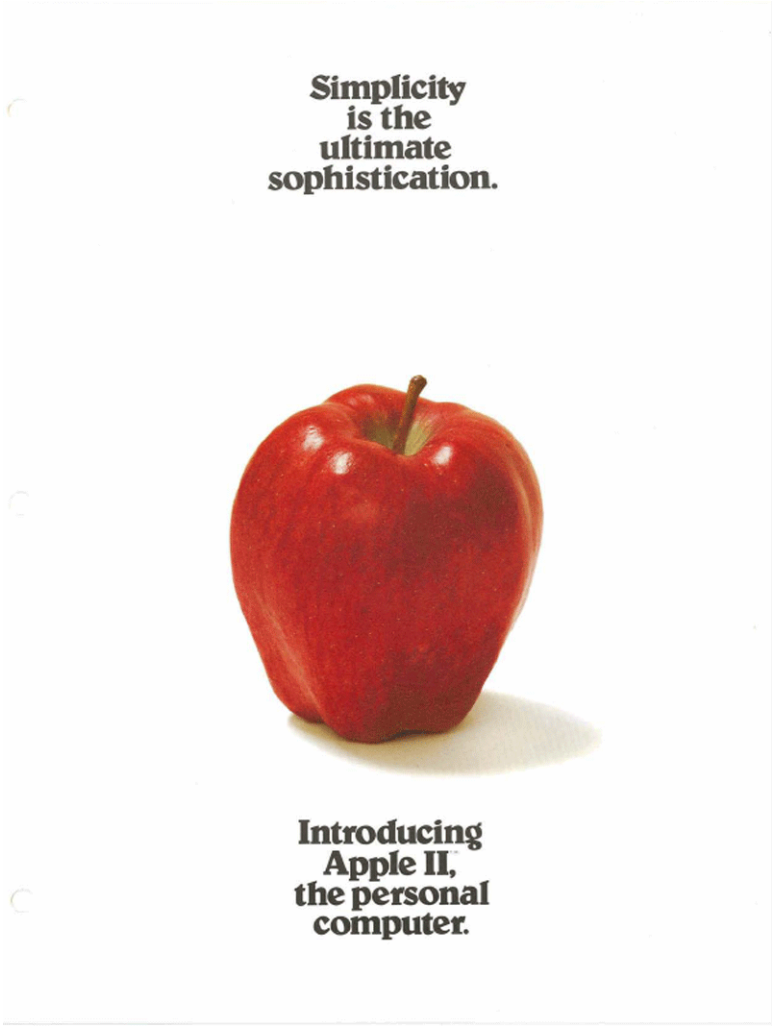

Figure 4. Simplicity is the ultimate sophistication, 1977.

Figure 5. Sophisiticated design makes it simple, 1977.

Figure 6. How to buy a personal computer, 1977.

The term user-friendly is of course loaded and slippery. It derives from consumer desires and creator requirements. Consumers want to be masters of their machines without feeling dumb or discouraged. Moreover, many resist investing the time, energy, or attention it requires to become experts. Computer corporations devote themselves to creating user-friendly GUIs and programs for their devices, which make the consumer believe that they control their product and that the device empowers the consumer. Creators construct the glossy illusion of user-friendly with intense labor. In a 1995 issue of *Forbes*, an article titled “New Hope for Computer Illiterates” cites the general manager of IBM personal systems division Richard Thoman's estimate that one in three personal computers taken home “fails” [Pitta 1995]. This overwhelming failure rate motivated creators of personal computers to improve how the consumer both interacts with computers and anticipates interacting with computers. 15

Creators devoted themselves to discovering how average consumers consume computers. Kelly Stapleton, leader of one of Microsoft’s “usability” think-groups cited in “New Hope,” says that her research division works towards understanding what types of frustrations “novice” users encounter while computing. She relates that “We found surprising things, like people doing budgets in the word processor rather than a spreadsheet because the spreadsheet was too intimidating” [Pitta 1995, 89]. The article stresses that “It’s not enough to establish standards so that different parts of a computer system can talk the same language. You have to get inside the mind of the consumer and figure out how to make that language intelligible to him, too” [Pitta 1995, 89]. In order to achieve “user-friendly,” programmers watched consumers through one-way mirrors, product teams met for tens of hours with computer-using families, and companies fluxed telephone support lines. Designing computers that spoke and were understood became a manufacturer priority. 16

Creators trumpeted the “user-friendliness” and transparency of their machines, which came increasingly under criticism as “novice” consumers bought their way into personal computing. “New Hope” laments the “unfriendliness” of computers still experienced in 1995: 17

> Mail merge lets Microsoft Word, the company’s popular word processor, add names and addresses ‘instantly’ to a form letter. But there’s nothing instant about mastering the feature: Walking a perplexed user through mail merge typically takes 30 minutes. Computer pros might have laughed off such problems a few years ago, when most computers sat in offices that had in-house help. But now that the personal computer business is moving to the home market, murky, quirky software and hardware can lose a customer forever. Some marvel that consumers keep on buying, despite their disappointments. [Pitta 1995, 88]

The economic impetus of “user-friendly” certainly gained momentum in the 1970s and 1980s, but the battle against “murky, quirky software and hardware” waged on through the 1990s [Pitta 1995, 88]. It continues today. In fact, Microsoft's redesign of the time-tried, user-trained, classic desktop has met mixed receptions. In response to complaints about Windows 8's user-unfriendliness, classicshell.net created a program, which simulates the previously existing, familiar PC desktop. Classic Shell boasts that it provides “free software that improves your productivity, enhances the usability of Windows and empowers you to use the computer the way you like it” [Classic Shell 2014]. They laud their product's popularity, showcasing 12,000 Facebook likes and 15 million downloads over four years. The threat of losing consumers, through a not-so-transparent GUI model, drives software development and determines the marketability of a machine.

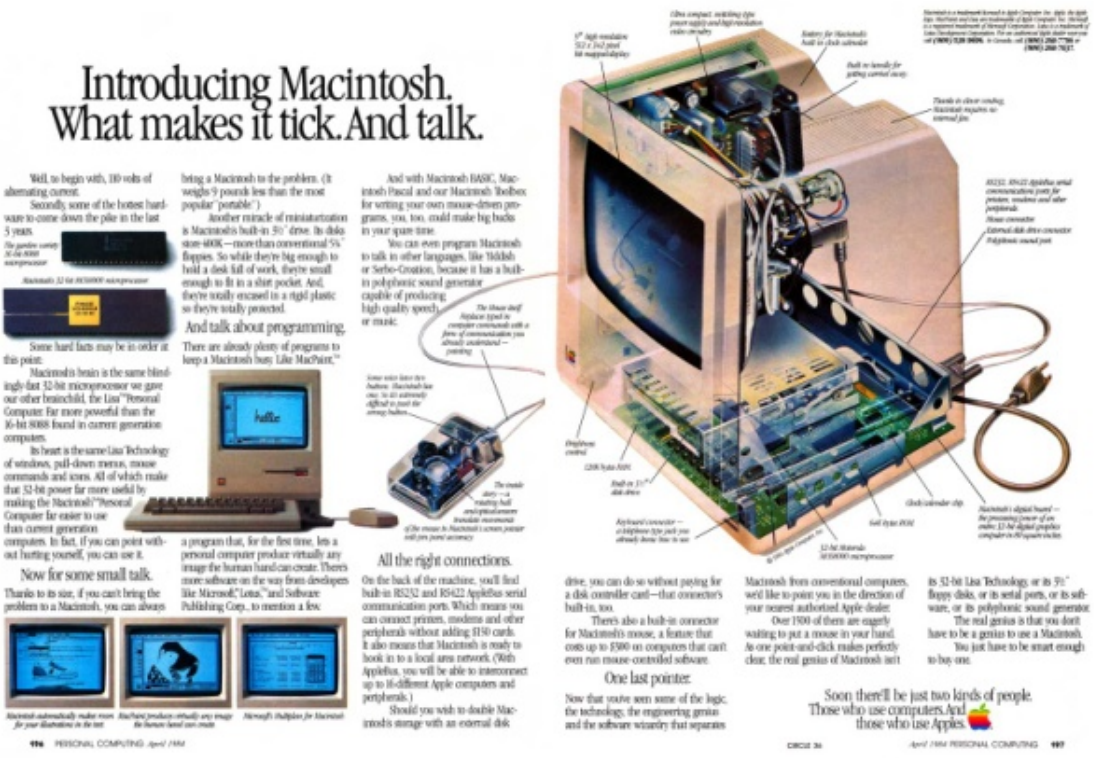

Figure 7. Introducing Macintosh. What makes it tick. And talk., 1984.

In my composition “Lisa,” the intersection of simplicity, individuality, and technology reflects the manufacturer’s focus in its advertisements. I excerpted the text from an advertisement entitled “Introducing Macintosh. What makes it tick. And Talk” (see figure 5) [Introducing Macintosh 1984]. Hoping to allay technological resistance, Apple personifies its machine, dubbing the Macintosh 512k with a domestically appealing name (Lisa) and emphasizing her dexterity. In the advertisement, her name is scrawled across the screen in cursive. The advertisement boasts of Lisa’s creative and cognitive capacities with interfaces

> Like Mac Paint, a program that, for the first time, lets a personal computer produce virtually any image the human hand can create. There’s more software on the way from developers like Microsoft, Lotus, and Software Publishing Corp., to mention a few. And with Macintosh BASIC, Macintosh Pascal and our Macintosh Toolbox for writing your own mouse-driven programs, you, too, could make big bucks in your spare time. You can even program Macintosh to talk in other languages, like Yiddish or Serbo-Croation, because it has a built-in polyphonic sound generator capable of producing high quality speech or music… [Introducing Macintosh 1984]

Apple clearly moves towards using its computer as a human improved extension of the self. This extension draws exquisitely, speaks foreign languages with ease, and produces prodigious music with the click of a mouse. By focusing the user on the ease of navigating visual icons, the efficiency of the machine to produce specific output becomes to the focus of the personal computer, not the adaptability for personal use.

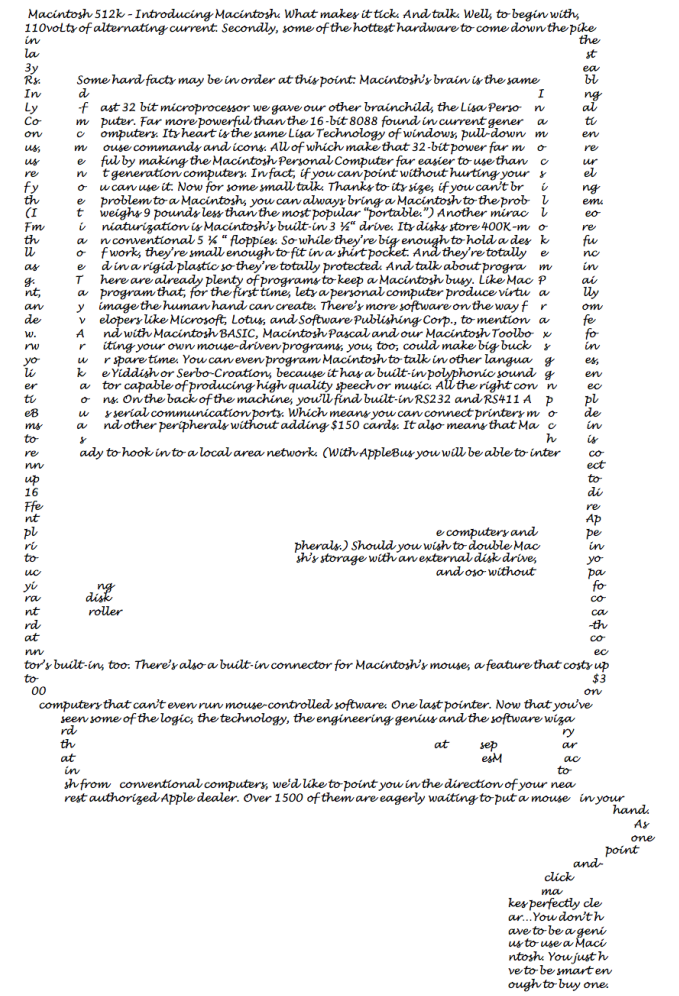

Figure 8.

In order to create this type of system, which runs more efficiently and is therefore more universally user-friendly, the system of variables must be closed. Creators need to standardize the production of computers and their components and relegate users to their place as interchangeable parts of the system. The concept of conforming to new media rather than controlling it, although cultivated in computing in the 1980s and 90s, has been an element of how mankind experiences media for as long as media have existed. Systems of writing, paper, and writing utensils standardize written language. Humans, as consumers over time, become increasingly passive in mediatic participation, especially as systems become more complex. In Jonathan Crary's essay "Techniques of the Observer," he discusses Sir David Brewster's kaleidoscope, which was invented in 1815. According to Crary, Brewster views "productivity and efficiency" as essential to this visual machine (Brewster, cited in [Crary 1988]). More importantly, he considers it a "mechanical means for the reformation of art according to an industrial paradigm" (Brewster, cited in [Crary 1988, 22]). The resultant art form, a reflection and collection of still images, orders seemingly common objects into a beautiful narrative. As the observer interacts with the machine, minimal work creates endlessly original forms to admire. This action and its product is, of course, limited. For the machine to function properly, the user maintains distance from the inner workings and plays the role expected by the designer. Evolving visual and industrial technologies require users to play a specific part in the functioning of the machine.

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No longer the maker, the user becomes an element of the apparatus, a cog in the machine. Crary justifies this move by applying Marxist theory to elucidate human-machine relationships, "In the factory, Marx contend[s], the machine makes use of man by subjecting him to a relation of contiguity, of part to other parts, and of exchangeability… the apparently passive observers of the stereoscope and Phenakistiscope were in fact made into producers, by virtue of specific physical capacities, of forms of verisimilitude" [Crary 1988, 33]. By becoming necessary not to the functioning, but to

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the purpose of the machine, the user becomes part of the machine itself. In order to create the artwork these machines were designed to produce, the user must actively contribute. That is, the observer must work to observe. The consumer continually embraces illusions, which deceive him into thinking he maintains control: “An apparatus openly based on a principle of disparity […] inevitably would give way to a form that preserved the referential illusion more fully than anything before it” [Crary 1988, 35]. The user depends on the illusion of natural, human privilege to structure his consumer existence. For our current society, the ways in which consumers want and expect the quick, accessible, and “user-friendly” still denote these individuals as components of the machine. They become increasingly dependent on technologies as self-explanatory extensions of themselves. Users engage with digital technology in much the same way that the observer engages with the phenakistiscope. In both cases, the user works as an element of the machine in order to produce beautiful objects that are limited by the medium of their creation.

No one exemplifies how to defy the limits a medium, using its constraints as a source of inspiration, better than the makers of concrete poetry. Concrete poetry became internationally significant beginning in the 1950s. In her seminal work entitled *Concrete Poetry: A World View*, published in 1968, Mary Ellen Solt traces the emergence of concrete poetry on the international stage. The movement originated simultaneously in Switzerland, with poet Eugen Gomringer, and in Brazil, with the Noigandres group. In her introduction, Solt offers a broad definition of concrete poetry:

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> Generally speaking the material of the concrete poem is language: words reduced to their elements of letters (to see) syllables (to hear). Some concrete poets stay with whole words. Others find fragments of letters or individual speech sounds more suited to their needs. The essential is reduced language... the concrete poet is concerned with establishing his linguistic materials in a new relationship to space (the page or its equivalent) and/or to time (abandoning the old linear measure). Put another way this means the concrete poet is concerned with making an object to be perceived rather than read. The visual poem is intended to be seen like a painting; the sound poem is composed to be listened to like music. Concrete poets, then, are united in their efforts to make objects or compositions of sounds from particular materials. [Solt 1968]

Concrete poetry breaks with traditional forms set out by canonical poetry and constructs previously uncharted structures on the page. Juri Valoch, a Czechoslovakian poet, states that concrete poetry permits “as much freedom as possible” and that the concrete poet’s goal is “to move as far as possible from traditional poetry” and write his “own things, unhampered, yet with a sense of form” (Valoch, cited in [Solt 1968]). This focus on structure occupies the focus of the artist, but form must be of the artist’s own creation, uninhibited by the formalities and expectations of the existing canon of literature. The concrete poets revise what it means to compose. They rethink and revise the literary, historical, and media expectations in order to create a space for their own creative imaginations to flourish. In *Culture is Our Business*, McLuhan describes creative composers as the ultimate visionaries. He writes that “Poets and artists live on frontiers. They have no feedback, only feedforward. They have no identities. They are probes” [McLuhan 1970, 44]. These individuals, like their work, accept no boundaries. Concrete poets compose with multimedia, often appealing in diverse ways (through writing, sound, and sight), in what the Noigandres refer to as “verbivocovisual.” These “experimental” poems serve “as an act of protest against... traditionalism” (Ernst Jandl, cited in [Solt 1968]). The authors of these often intense compositions use concrete methodology to reject prescribed methods of creative thinking.

The typewriter fulfilled a central role to authors' rising interest in composing concrete poetry. Charles Olsen describes the appeal of the technology, “It is the advantage of the typewriter that, due to its rigidity and its space precisions, it can, for a poet, indicate exactly the breath, the pauses, the suspensions even of syllables, the juxtapositions even of parts of phrases, which he intends” (Olsen, cited in [Solt 1968]). Emerson writes that the pervasiveness of the typewriter made it “invisible to its users. The point at which a technology saturates a culture is the point at which writers and artists, whose craft is utterly informed by a sensitivity to their tools, begin to break apart that same technology to once again draw attention to the way in which it offers certain limits and possibilities to thought and expression” [Emerson 2014b]. Poet Ronal Johnson supports Emerson's theory, when he admits, “As I am unable to think except on the typewriter, my poems have been, from the beginning, all 8 1/2" X 11” (Johnson, cited in [Solt 1968]). The ever-present typewriter so completely permeates this time period that concrete poets, resisting the formalism inherent in the tradition of the poem, come to reject the normalized use of the typewriter, too. Instead of obeying the restrictions of the grid, they disrupt the

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expected pattern to draw attention to their intentional misuse of the apparatus.

23 In spite of this radical refusal of traditional verse, concrete poetry attracted attention as being overtly academic and excessively “clean.” bp Nichol coined the phrase “dirty concrete” to describe a less prescribed, more authentic style of composition. These poets achieved “dirty” by “court[ing] a visual and linguistic non-linearity and illegibility by putting the typewriter to the test. As these poets created smeared letters with inked ribbons or different carbons while turning and twisting the page, the result was often the imprint of letters that appeared literally dirty or rough around their edges” [Emerson 2014b]. Authors like bp Nichol implemented these compositional tactics to avoid falling into the “trap” of “clean” concrete. He stresses that the author must remain “open and flexible... willing to keep seeking new exits and entrances with regard to the poem” (Nichol, cited in [Emerson 2014b]. By resisting the strict concrete poetry or even Solt's suggestion that a generalized definition exists, dirty concrete remains aggressively counter to its ostensibly mainstream counterpart.

24 The ever-present PC, in many ways, parallels the presence of the typewriter in the 1950s, 60s and 70s, which led artists to experiment with the grid-like form of mechanical type to create concrete poetry. Perhaps the most obvious reincarnation of these dirty typewriter artists and their goals is through glitch art. Glitch art or glitch aesthetics has its roots in the most basic malfunctioning of electronic equipment (glitch). Its aesthetics reside in those moments when the digital, visual, or auditory performs in unexpected ways: the “wrong” colors, extreme pixilation, a skipping recording, an alien-like photo, an upside-down video, a link that leads nowhere, etc. Glitch aesthetics, then, as Emerson explains it in *The John Hopkins Guide to Digital Media*, “involves experimentation with the visible results of provoked or unprovoked computer error” [Emerson 2014a, 235]. The artists who “glitch” rely on the unanticipated, and often anxiety-producing, behaviors of technology as the foundation of their art form. That is, theirs are compositions focus on what usually creates unease in the user, something other than the standard, anticipated construct of the GUI.

25 Disobeying through art, especially digital art, is nothing new. Art collective JODI, comprised of Joan Heemskerk and Dirk Paesmans, chose the Internet as its medium in the mid-1990s and, since then, have built one of the most expansive collections of digital art, radicalizing what is expected, respected, and produced. JODI revels in the inconstancy of technology and machines. Its creators juxtapose any number of tools (glitch art, unseen hyperlinks, familiar formatting, uncomfortably distorted interfaces, etc.) with the user's expectations for what the interface should do. They masterfully and unpredictably upset those expectations. On March 17, 1999, Christiane Paul wrote, “There are interfaces so commonplace that we hardly notice them anymore. The computer presents itself as a desktop, with a little trash can bottom right, pull-down menus, scroll bars, system icons. With its 'interface in your face' approach, the website of jodi.org might be an antidote to our obliviousness to interface standardization” [JODI 1999]. Users have been so successfully trained to interact with their machines that responding to the interface requires hardly any concentration. It is second-nature. As true as Paul’s observation of the commonplace, invisible interface was in 1999, how much more so might it be today? In this age of smart phones, tablets, laptops, and (increasingly) wearables, the pervasiveness and touted user-friendly, self-explanatory nature of these multi-media devices has become the norm for any who can afford it and many who cannot. Perhaps Paul is correct, maybe our society needs JODI to draw attention to the processes in which the user partakes. When a user clicks “I Agree” under a “User Agreement,” the system is not supposed to shut down (as it inevitably will at wwwwwwwww.jodi.org). When the user mouses over nothing, that mouse should not encounter a hyperlink. That very hyperlink should, the user is taught, direct the computer’s flow to a new, recognizable interface.

26 JODI does not subscribe to these “shoulds,” rather they revel in glitch to disrupt the user’s passive compliance to their machines. In *Technology and Industry News – Chicago*, tech-artist Nick Briz explains that “Where technology attempts to be transparent and nonintrusive, JODI makes it obvious, abrupt, unsettling, confusing” [Briz 2011]. As JODI provides opportunities for an individual to toy with their creations, they interrupt the user’s expectations of the interface. The user must confront the idea that the apparent transparency of the taken-for-granted GUI is actually a disguise for many complicated processes, which lie beneath the surface of the interface and which overtly shape what the user creates. When a user encounters JODI’s work, that individual is made “forcefully aware of the role technology is playing in [his/her] relationship to the world (or at the very least aware that it is playing a role)” [Briz 2011]. Through their disruption of the norm, JODI highlights how distant the user is from what happens behind the interface.

To distract the user from his or her ignorance of a device's inner workings, manufacturers place humanity at the center of a device's advertising. My "iPhone" composition shows how the element of community became central to "iPhone mania." Unlike my previous compositions, I drew the text for this poem from Rob Kelley's article, titled "iPhone mania hits flagship stores" [Kelley 2007]. This piece hearkens back to the human qualities Apple began to emphasize with Lisa. Instead of recognizing this device as an extension of an individual's cognitive and creative abilities, the iPhone morphed into a promise of "connectedness" and community. Although smart phones supply knowledge at the swipe of a finger, they (more importantly) reconnect the isolated with the community. Kelley points out that when this new technology (the iPhone) came out, individuals lined the streets for days in advance. However, the technical prowess of the machine was rarely the focus:

> At the Apple Store on Manhattan's tony Fifth Avenue, the man who was fifth in line was planning to propose to his girlfriend with a ring and an iPhone. For lunch Friday, a 44 year-old graphic designer who was No.88 in line, ordered foie gras and sparkling lemonade delivered. "Half the fun is the experience of the line," said Herman, adding that there was talk among the iPhone hopeful of having a post-purchase celebration. [Kelley 2007]

This article points to engagements, shared meals, and celebrations, as the appeal of purchasing an iPhone. Although ease of use and technological capabilities certainly play a role in convincing consumers to purchase a device, it seems undeniable that the calculated inclusion of human capabilities, including social connectivity and individual creativity, remains central to the lure of these products.

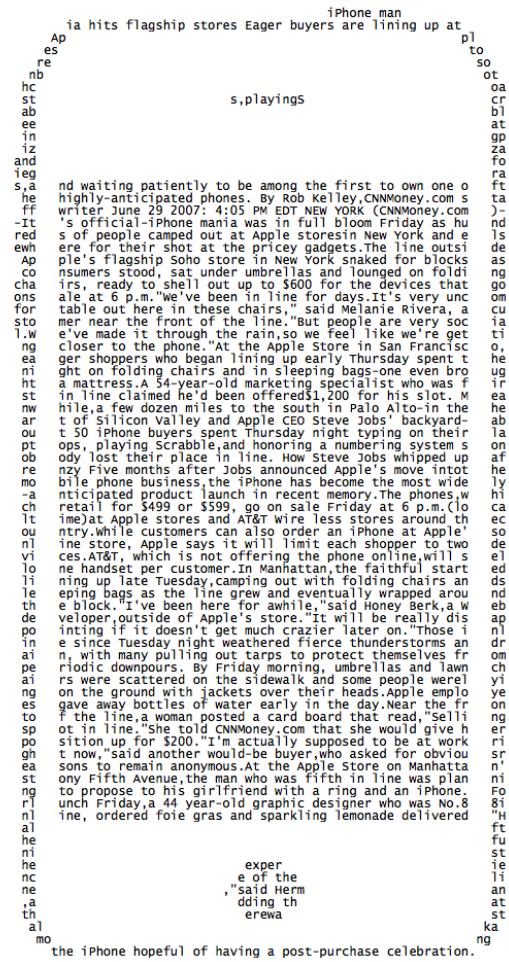

Figure 9.

Considering Apple's successes invoking humanity to market their technology, shouldn't a move which allows for less-

impeded creation be the next step? Rather than continuing the process of packaged, disjointed functions, creators *could* unlock the interface for its users. They *could* design more flexible, penetrable programs. By opting for transparency in the GUI, allowing their users to meddle and make mistakes, developers could remove some obstacles to creative production, which have been in place for decades.

29 In spite of my criticisms, I do not suggest personal computing would be better off without user-friendly programs or GUIs. In fact, I doubt that a realistic alternative to user-friendly currently exists. In some way or another, every device since the beginning of time has appealed to its user for the purpose of being (often easily) used. My aim in producing this work is not rejection of our computers' limitations, but awareness. My compositions point to the creative space neglected by users as they blindly work in supposedly invisible interfaces. My poems encourage users to acknowledge how machines influence their thoughts and creations. The intent is to draw attention to the media of the composition and the constraints and expectations built into that program or interface. My work disobeys the prompts of the machine to emphasize what the user sacrifices for user-friendly.

30 I acknowledge that my poems may not stir Apple, Microsoft, or any of the other technological monoliths to make the inner-workings of their products transparent and accessible. As the authors of *Electronic Civil Disobedience write*, "Since revolution is not a viable option, the negation of negation is the only realistic course of action. After two centuries of revolution and near-revolution, one historical lesson continually appears – authoritarian structure cannot be smashed; it can only be resisted" [Critical Art Ensemble 1997, 24]. That is, I am not deluded. My poems and what they stand for are not going to start a revolution. However, they *may* make people think. Again in *ECD*, it states that changes "can happen in a realistic sense, not because of a corporate-military ideological shift, but because it would be cheaper to reform than to continue the battle" [Critical Art Ensemble 1997, 25]. In a battle there is the effort of fighting. So, my goal is individual effective resistance: resisting machines' default settings, denying information access, unearthing what goes on behind even the most basic programs, and thinking creatively outside the "page." I hope to inspire the idea that, although functionality and user-friendliness are comfortable and convenient, they should not only be available at the cost of lock-boxed, streamlined, productive output.

Notes

[1] For example, in David Daniels' work "The Flying High Tail Longhorn Gate" from his collection *The Gates of Paradise*, the shape of his poem inextricably intertwines with and, arguably, dictates the content of his poems.

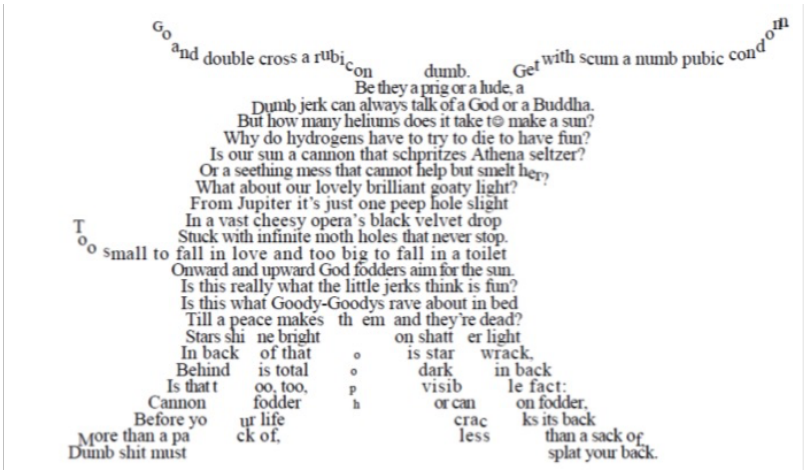

Figure 1. David Daniels. "The Flying High Tail Longhorn Gate." Illustration in Funkhouser, 2007. Prehistoric Digital Poetry. University of Alabama Press. Tuscaloosa, 2007, 105.

[2] Doug Engelbart, inventor of the mouse, created the keyset in the 1960s. This device, although initially difficult to use, allowed individuals to manage both the functions of the keyboard and the mouse, without needing to physically move their hands from one to the other. Engelbart's focus was to amplify the user's control of the computer's capabilities. He envisioned the keyset as essential to unlocking the potential of the computer. However, when Steve Jobs encountered both the keyset and the mouse in 1979, he selected the mouse for use at Apple. He preferred the mouse, because it required far less instruction, and therefore time, to learn to use. The mouse was ultimately the "user-friendly"

option [Mars 2015].

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