AESTHETICS OF VISUAL NOISE IN DIGITAL LITERARY ARTS

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In this essay, I analyze the phenomenon of digital poems representative of the use of a visually "busy" and typographically dense aesthetic.[1] As my primary examples I investigate three poetic works: *Spawn* by Andy Campbell, *Diagram Series 6* by Jim Rosenberg, and *Leaved Life* by Anne Frances Wysocki. I argue that a dominant aesthetic technique of these works, which I propose to call "visual noise," is generated by a tactilely responsive surface in combination with visual excess which requires an embodied engagement from the reader/user in order for a reading to take place.[2] I focus on *visual* noise, excluding for the moment the common and widespread practice of sonic noise. Analyses of sound and practices of sonic noise in literary practice are an important twin to the analyses I offer here.

Drawing upon the analyses of "a tradition of poetic illegibility" in print poems by, for instance, Craig Dworkin, I find it useful to discuss their digital counterparts. While digital "visual noise" poems employ similar visual layout as those used by poets such as Susan Howe, Charles Bernstein, Steve McCaffery, and Susan Waldrop (to name a few), and thus inscribe themselves into a literary history of experimental poetry that for instance Stéphane Mallarmé with his typographical experimentation with layout, size, and font choices, or Guillaume Apollinaire's calligrammatic poetry "situated at the intersection of legibility and visibility" (Bohn 49), had such an immense impact on, digital technology defines the specificity of digital poems vis-à-vis these print forbears. A

significant and conspicuous difference between printed works and digital works is the motion that is inscribed into the latter works. Finally, digital computer technology offers the poet tools to create works that rely on the reader/user's active participation.

The three digital poetic works I analyze use visual arrangements of density and layering of letters and words which create "crowded" screens. My umbrella term is, hence, based on the effect they have on the reader/user: "visual noise." This "visual noise" is closely linked to the reader/user's movement and to the animation of words and images. Some digital poems use both visual and sonic techniques to create an overall "nervous" work which disturbs reading and viewing. Exploring digital "visual noise" poems with the cursor is often a way to either incur or disentangle the clutter of the poetic surface.

While the word noise linked to vision is routinely used in vernacular speech to describe visual phenomena, I want to define the term "visual noise" as a distinctly definable strategy which combines letters with images, sounds, and, in the case of digital work, kinetic operations to create a sense of excess. Generally, "visual noise" is, first and foremost, a visual strategy that foregrounds the materiality of the works. However, it is not a straightforward autotelic gesture towards the works' digital media existence. Rather, "visual noise" often appears to be a site of struggle between representations of different media with varying results. The concept of remediation can partly help explain what seems to be a paradox of medial self-awareness. As Bolter and Grusin have argued, certain digital applications are "explicit acts of remediation … [that] import earlier media into a digital space in order to critique and refashion them" (53). However, they continue, "digital media that strive for transparency and immediacy … also remediate. Hypermedia and transparent media are opposite manifestations of the same desire: the desire to get past the limits of representation and to achieve the real" (53).[3] Works that employ excessive or "busy" lettering and

visual layout as a poetic/textual strategy, I argue, explore these two manifestations within the same work. As in the words of poet Stephanie Strickland, "one flickers between seeing the viewable and reading the legible" ("Moving Through Me As I Move", 185).

What does it mean, then, to be physically affected by a digital work? In his *New Philosophy for New Media,* Mark Hansen offers a useful account of what he calls the digital image and its relation to an embodied experience. Hansen argues, in brief, that the digital image, as he understands it, cannot be conceptualized as a surface structure alone but must be "extended to encompass the entire process by which information is made perceivable through embodied experience" (10). He sees a shift in artistic digital practice "from perception to affectivity" (13), such as in the work by Jeffrey Shaw, a shift from "a dominant ocularcentrist aesthetic to a haptic aesthetic rooted in embodied affectivity" (12) which is part of artists' effort to "specify what remains distinctly 'human' in this age of digital convergence" (13). Hansen's argument deals primarily with digital art which combines images with bodily activity of the audience in physical installations. His arguments can help understand how readers/users' embodiment forms part of the process of making sense of digital poems. The poems discussed in this paper are not primarily experienced through installation; consequently, the range of bodily activity and physical orientation required of the reader/user is less than that possible through installation in a physical space. I would nevertheless like to follow Hansen's insistence on understanding predominately visual digital works as embodied experiences, even though I am not entirely convinced by Hansen's arguments about human perception and cognition. I am particularly hesitant to make claims, along the lines of neuroscientist Francisco Varela as discussed by Hansen, that "the capacity of the 'embodied mind' to adapt quickly to new virtual realities demonstrates the plasticity of the nervous system and the operative role of bodily motility in the production of perception" (Hansen, 39). I am not

interested here in the possible neurophysiologic effects of these part-digitally mediated experiences. These aspects of Hansen's argument aside, however, the experience of visual noise poems does require a bodily engagement from the reader/user as inscribed into the work and called upon in the event of the poem. This engagement, crucially, involves more than watching, looking, and reading, that is, the employment of sight. However, it is not just a question of what human senses are called upon, but also what illusions and allusions to other senses are made through strategies of synæsthesia.

Hansen's discussion about the necessarily embodied engagement with the digital image is part of ongoing scholarly investigations into the concept of the material. For me, materiality's relation to poetic meaning-making is of central concern for scholarly analysis and assessment of digital poems. We can be reminded of Katherine N. Hayles's articulation of literary materiality as dependent upon "how the work mobilizes its resources as a physical artifact as well as on the user's interactions with the work and the interpretative strategies she develops" (*Writing Machines,* 33). Or, the way in which the reader/user figures in John Cayley's discussion of the relationship between writing and code in digital media:

> Meaning creation and signification as performance are at the heart of a poet's work. New ways of performing and generating—and new ways of understanding these activities—are always of practical interest to the poetic writer, especially where such developments have potential for aesthetic, social, and political affect. … "Machine" here must, of course, be taken to include the "psychic apparatus," as well as the embodied writer and all the prosthetic, mediating devices of inscription ("Inner Workings" n.pag.).

Or, we can evoke Aarseth's notion of the cybertext and its reader: "the effort and energy demanded by the cybertext of its reader raise the stakes of interpretation to those of intervention" (4). Aarseth's reader becomes a player, a user who learns "the rules of the game" as she interacts with a specific work. Some of the works I analyze here may not fit the definition of a cybertext; the interaction is at

times minimal. However, I would argue that the reader/player or reader/user dynamic is an integral part of the reader's experience and understanding of the work. In part there is a sense of learning how to play the work which requires a bodily engagement (programmed by the poet and realized by the computer through the reader/user's interaction). This engagement, in turn, intersects with what the reader/user hears, reads, and sees, and, ultimately, how she understands the meaning(s) of the work. Material and artistic practices (such as striving for immediacy or hypermediacy in representation) can be further investigated. For instance, the poems analyzed in this paper would certainly fit into the category of the hypermediated. At almost every turn, the works either emphasize their digital ontology or make it clear to the reader/user that the remediation of another medium, such as print or typewriting, is only a representation within another medium. But the question must be: how is that hypermediacy, or awareness of the medium, created in the work, and what are its effects?

The aim of the following analysis is to see how visual noise (as a poetic strategy based in hypermediacy) and poetic meaning-making connect. What is it that is being explored through the poems' artifice? In the present analysis, the most pressing concern is the articulation of the differences between what may look like a similar aesthetic choice in printed and digital form, and what effects those differences have on the reader/user's engagement with the work, as it is locally instantiated in a particular medium.

Spawn by Andy Campbell

Let me now move to the analyzing the poems themselves. I will start with a shorter work which uses visual noise as part of a larger poetic construction: Andy Campbell's *Spawn*.[4] The work is visually constructed as an image of a glass jar turned upside down with a

plant in it. Dark circles hover above the plant. If the reader/user points the cursor to one of the hovering dark circles, a text is "spawned" outside the jar. If the reader/user clicks, an extra layer of visual or textual elements appears which flows around, over, and above the jar and the initial text. The black circles (can they be interpreted as flies?) and the texts that are connected to each one have titles such as "*fact (only)," "tackedown," and "||||||||." There are ten of these texts. The titles are "*fact(only)," "Pinned," "Butterfly," "_blank," "*I (as a matter)," "Tinned," "Magnification," "|||||||||," "Tackedown," and "_parent(0)." Some of these titles seem to suggest programming semantics, such as "_parent(0)," similar to the code-infused writing of what we have come to call "codeworks." The blending of letters and numbers with punctuation signs, word dividers, and other typographical symbols enforces

Figure 1. A screenshot from *Spawn* by Andy Campbell.

the multiple coding systems in place; an interference with the conventional reading process which I will return to later.

Clicking on the circles generates a second different text, which moves across the window, spins around, and changes. This goes on until the reader/user clicks again on another black circle, calling up another second textual layer. As the second layer moves and changes, the changing size and placement of letters and symbols oscillate between covering the entire window and shrinking to a smaller size. Since the background in *Spawn* is white in the upper half of the window and gray-black in the lower half and since, in some of the second texts, the letters are white, as they spin around, the letters become invisible over the white background and are only readable when they move across the image of the jar and the darker background. Obviously, then, the movement of the texts makes the reading of them quite difficult. The constant movement of the second texts and the moving black circles require the reader to be alert and to wait for the right moment to read the texts.[5]

In addition to movement and color, some of the texts have unorthodox typography. Some of the titles, as noted, also use typographic marks interspersed with the letters. In the section named "pinned," the following lines in the second text appear:[6]

(i)

( ) – (as)

(Do) – (wn)

)(only)((br)e a(k)-( )

It may not be very difficult for the reader to parse the lines: they can quite easily be read as "I," "as," "Down," "only," and "break." However, the typographical excess in these lines along with the fact that they perpetually shift between a right side up and an upside down alignment, as well as shift position vis-à-vis each other, renders the reading of them challenging at the very least.

*Spawn*requires the reader/user to negotiate the work's animated surface to figure out what is needed for texts and images to appear. This process of learning is, as we have seen, common to many digital poems. Indeed, as Cayley, Wardrip-Fruin and others have argued, it could be considered to be a core characteristic of digital poems at large.[7] The reader/user actions in *Spawn* consist of hovering over the circles and clicking in order for all the parts of the work to play out. But those simple actions are resisted as the cluster of black circles (partially hiding each other) spin around and seem to glide away under the touch of the mouse cursor. Getting to all ten texts requires considerable patience from the reader/user. The reading of the kinetic second texts also requires time. Although the reader/user is free to click on any of the black circles at any time, the playing out of the second texts cannot be steered by the reader/user, but operates according to its own (preprogrammed) time.

Spawn uses visual noise through primarily kinetic means. By making letters move, the work introduces difficulties to reading. This amounts to a resistance which should be thought of as existing on a scale or in degrees which change throughout the work, and, consequently, produce different degrees of difficulty for reading and interpretation. The syntactic relationship between words is rendered ambiguous and the reader/user is left to decide what these textual animations mean in relation to the semantic meaning of the words. The visual noise in *Spawn* is also created through unconventional typography and letter size. Reading the texts and attending to the kinetic features of the works become intertwined activities where one depends on the other. It is through the reader/user's actions, then, that the visual noise is negotiated and the poems read.
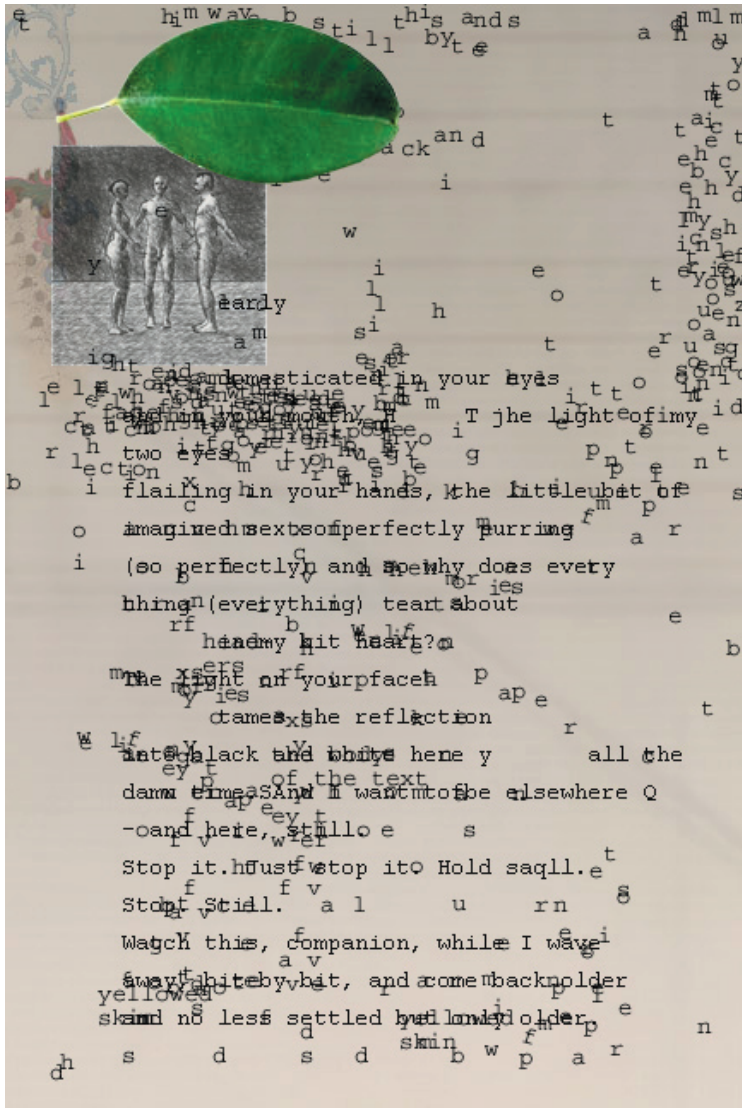
Figure 2. A screenshot from *Leaved Life* by Anne Frances Wysocki.

Leaved Life *by Anne Frances Wysocki*

I now want to turn to a more extensive work: Anne Frances Wysocki's *Leaved Life*. I will begin with a rather extensive description of the poem's surface (visual, verbal, and kinetic) aspects which will be followed by a discussion of the semantic function of these aspects. I will then situate *Leaved Life* in the context of traditional and experimental traditions of poetry as concerns *Leaved Life*'s theme and visual appearance.

Leaved Life is an interactive highly visual poetic work created in Macromedia Director, published on Wysocki's website.[8] For lack of a better word I would describe the work as a cycle of poems which closely connect to each other through repetition. The work's visual and poetic constructions offer a sophisticated interplay between the material and physical elements, the reader's interaction, and the poetic texts. Although it is not the only aspect of *Leaved Life*, I suggest that the dominant feature of the visual and textual composition of the work is exactly that of "visual noise."

Leaved Life juxtaposes the visual style of typewritten or printed poetic texts arranged in lines and isolated single letters with pencil drawings and images of plant leaves and flower petals arranged on a background image of a paper-like document. Surrounding the image of the paper surface the reader/user sees parts of a flowery background. Already, it is evident that the work offers a remediation of other media, in particular paper and print, in a digital form.[9] The work relies in part on the remediation of the printed book and illuminated manuscripts, and the convention of a dedication page underscores that relationship, while the added movement simultaneously gives "a nod" to digital technology.

The reader/user comes to the work via an entrance page with the title and an instruction to "touch twice." The common computer vocabulary of "click" or "mouse-over" is in this work also replaced by the word "touch," in an effort to evoke an illusion of direct

tactility. After the reader/user starts the work by clicking on the "entrance" image, there is a loading sequence after which the words "For you" appear letter by letter on a black background. The reader/user is then met by what seems to be a partial view of the bottom right corner of a larger document. This is indeed the first of sixteen sections which make up a larger document. The sections are, more accurately, a partial view of the whole document that the reader/user has access to at any one time. By moving the cursor towards the edges of each section the reader is transported to another section. In several of the sixteen sections of *Leaved Life* the visual space is full of letters which, apart from a few scattered words here and there, gives the impression of an unordered, messy, and erratic surface. It is possible to make out some words in the array of letters gathered in the top left corner of the view, such as, in one section, "little," "skin," "you," "bye," "catch," "stay," "weary," "reflect," and "yes," but there is no obvious semantic relation between them. Across the image of the paper document that the reader can peruse there are numerous letters which are either scattered irregularly across the surface or arranged in words haphazardly. The letters form visual objects rather than semantic entities by way of their isolated positions on the document. This is, needless to say, not the usual printed arrangement of a poem. There are also images of leaves and flowers whose placement and shadowing, mirror the look of actual leaves and flowers placed on top of a surface.

In seven of the sixteen sections there are small animated pencil drawings of three naked people: two men and one woman. They stand facing each other with their arms swinging back and forth. Not only do these drawn figures move; there is movement throughout the surface. Some letters move slightly in a jittery manner, seemingly without purpose. Other letters are static, but scattered irregularly over the surface, at times forming clusters of letters which only occasionally spell out legible words.

As the reader/user navigates across the letter-littered paper, she will notice that the images of flowers and leaves respond to cursor movements. By simply passing the mouse cursor over them, the flowers wilt irreversibly (unless the reader/user restarts the work). Similarly, the leaves wither when the reader/user clicks on the image, but this change brings about texts. A click on a leaf-image initiates a movement of the letters that are scattered around in that particular section. They change positions on the paper from a state of disarray, randomness, and illegibility to form a readable poetic text in a stanzaic form. There are seven of these "leaf poems."

If the reader/user does not engage with this surface through movement or clicking, the poem will remain in this "messy" state. However, when the reader/user clicks on the green leaf, the surface "comes to life" and starts to change. The leaf turns yellow after the first clicking, and its decay gives birth to a poem with the letters moving across the space and settling in stanzas. By sleight of hand, the reader/user has tamed the nervous, seemingly irreparably "messy" surface into a readable poem. Meanwhile, the drawings also transform. After the first click on the leaf, the two men and the woman move in gymnastic-like manner with great agility. After a while they settle into positions with their entwined bodies forming letters. The figures in the drawing literally and visually form drop-cap letters, reminiscent of older illuminated manuscripts and ornamented printed works.[10] When the movement of the letters ends, the surface contains a recognizable, readable poem. The letters and lines are ordered in a manner which we have come to expect from traditional print poetry. The change, initiated by the reader/user, constitutes, I argue, a transformation in which the letters change from being graphic or visual images which the reader/user *views* to a text one can *read*, and whose visual form goes largely unnoted, except to point to "poetry." We can be reminded again of the oscillation between strategies of visual representations that prompt

their viewers to "look at" or "look through" (as Bolter and Grusin, and Richard Lanham among others have discussed).

In the case of the seven sections where poems can be made to appear (the ones with clickable leaves and animated drawings) the visual noise constitute the "default" state which occurs prior to the reader/user's first clicking as well as after the second clicking when the text reverts back, irreversibly, to its "messy" state. The work as a whole is more often in a state of disarray, not to say "illegibility," than in order since the interaction by the reader/user brings only momentary clarity. If the reader/user leaves one text in its stanzaic, ordered state to visit another section, upon returning, she will find the text, once again, in disorder.[11] There are different types of visual excessive layout in *Leaved Life*. In the "Nearly" poem the lines are already in place, but these lines are overwritten by randomly arranged letters which makes some words discernable "underneath," but the clutter blocks the reader/user from a full access to a text which seems to hide beneath the "superfluous" letters. There is an invocation of layers in the visual layout of the poem which is further accentuated since the reader/user's clicking results in a clearing away of the extra textual layer, making the poem beneath readable, but only momentarily. If the reader/user moves the cursor over any of the letters, they are randomly exchanged for other letters, causing, step by step, the semantic breakdown of the poem. This added "nervousness" pertains to the document as a whole. Even when the poems are not broken up into separate letters, they always seem to be on the verge of changing beyond meaning if the reader/user lets the cursor wander across the surface.

"Visual noise" in *Leaved Life* is created through an erratic, unconventional visual layout before the poems come to order, from densely "overprinted" words and letters, from the animated letters (shaking in their place) and drawings (moving in place while "unattended"), and, finally, from the letters that change into other letters as the reader/user moves the cursor over them. The visual

noise is accompanied by a nervousness in the work which prompts the reader/user to move carefully across the reactive surface.

As we recall, the initial instructions to *Leaved Life* urge the reader/user to "touch twice." If the reader/user complies, for instance by clicking on a leaf twice, it causes the complete wilting of a text and small graphic figures, resembling small leaves or worms, appear. [12] These figures move quickly across the surface seemingly drawing or leaving traces in their path, causing the surface to gradually become even more cluttered, even less decipherable which adds to the overall impression of a noisy, nervous, and illegible work. These smaller figures travel across the entire document and multiply. The result is an increasing visual excess which cannot be undone. Finally, the mess they bring will cause it to collapse.

At this stage, the work seems to enter into another phase. Against the light pink background there are no images of leaves or flowers; only a few words appear at the center of each section. Tantalizingly, the words are all about beginnings: "begin again," "begin reckoning," "begin as pulse," "begin here," begin straightaway," "begin at this moment," and so forth. In this digital remediation of a tabula rasa, however, there can be no beginning again. There is no way out of this space: there is no way back to the previous document, nor a way to come to a new one. Trapped in the constant movement from section to section in what seems to be a seemingly endless vast void the reader/user has no choice but to close the window. Only then can she return to the work by restarting at the opening screen of *Leaved Life.*

Leaved Life's employment of visual and kinetic noise offers a certain amount of resistance to any printed description of it. My lengthy description of what happens in the work, its visual and poetic richness, and the different possibilities for the reader/user to engage with the work reflects the visual aesthetic of the work. How does one describe the simultaneous chaos and disorder that appear in front of the reader/user as she experiences the work, given that

precisely that simultaneity forms part of the visual noise that I argue the poem employs? The literary work's materiality, that complex "*interaction of its physical characteristics with its signifying strategies*" that Hayles argues for (*My Mother Was a Computer,* 103, emphasis in original), informs the meaning the reader/user makes of the experience of the work. And, therefore, it becomes crucial for the scholar to spend time attempting to describe what that process entails.

<u>*Poetic Meaning & Materiality*</u>

What is *Leaved Life* about, then? Given that I claim that the work's material instantiations and strategies are part and parcel of the work's meaning, how can one interpret *Leaved Life*? I have described some of the movements and interaction in the work that lead me to characterize it as visually "busy," overflowing and overcrowded, but now the question is, how does the work's material form relate to its theme? What is the purpose of using overwritten texts, moving letters, and illegible chunks of texts in a poem? Does this visual noise, in a word, have a semantic role? Let me turn to the seven leaf poems in *Leaved Life* which clearly fall into a larger tradition of love poetry. The poems describe love and loss through well-known poetic tropes such as the synecdochic use of body parts in relation to a loved one, and decay and death after love has passed. The bittersweet remembrance of love and a loved one are described in evocations of the lover's body which are repeated throughout the poems, such as in the "Dear" poem:

> *Dear*
> *to be here untimed and wearily blue*
> *kissing your mouth   your eyes up closed to my*
> *skin   my skin paging across your hands and*
> *saying in your mouth   the light on my face*
> *reflects into little spots over skin   stay*

catch this hold this and dont leave me[13]
bit by bit letter by letter and sigh by
bye into the darkness we suspect
if we could only but leave[14]

The speaker's wish to freeze time, "to be here untimed," suggests a moment of remembrance from the future. From this vantage point the line "catch this hold this and dont leave me" can be read as alluding to the leaving that inevitably must (have) come. The poem shows a keen awareness of poetic tradition, both in theme and form. The conventional recognizable form of poetic stanzas cues the reader to indeed understand the work as a *poetic* work (which the initial classification in the title screen before the work opens up obviously invites too as well). Although the texts are not in any traditional verse form, they make ample use of standard poetic devices such as alliteration, visual and auditory rhyme, and repetition.

The speaker recalls moments in short and disjunctive phrases. Much of the repetition occurs across the poems in the cycle. Words and lines are repeated and recombined. Consider the poems "Queer," "Meerly," and "Here." Lines are repeated, permutated from one text to the next, such as the lines in "Queer:"

to be cheery
domesticated light in your mouth
the light in your two eyes
childing in my hands the light on your face

which in "Meerly" turns into:

Cheery
In the light
Of your mouth
Weary in the light of your many eyes
And wary of the child in your hands, I

And, finally, in "Here" becomes:

> it is
> *to be*
> *happy*
> *light*
> *in your mouth*
> *the light*
> *of your two eyes*
> > *childing in my hands*

The emotionally charged poems obviously offer a constant re-vision, or re-visiting, of the same scenes. Sentences, words, and expressions are repeated, mirrored, slightly changed, and reused in the speaker's effort to recreate the scene of love. Limbs and parts of the lovers' bodies are frequently mentioned, "mine" and "yours" interchangeably: "sigh in your mouth," "light in your mouth," "playing in my mouth," or "childing in my hands" and "the child in your hands." The poems repeat similar images, voices, situations, and emotions. The speaker addresses the reader and the lover interchangeably, at times simultaneously. In continuously reworked lines, she or he tries to work out the parameters of memory and love.

An interesting dichotomy is set up throughout the poems between physical bodies and the electronic "physique" of digital technology. The corporeal imagery of eroticism and sex characteristic of a love poetry tradition is both undercut and strangely emphasized by an unlikely partner, the supposedly ephemeral digital technology (but as I have argued throughout, digital technology does have a materiality). In "Nearly," the erotic undertones are at their most explicit:

> *the light of my two eyes*
> *flailing in your hands, the little bit of*
> *imagined sex so perfectly purring*

This intimate moment is immediately followed by a darker thought in which another element enters:

> *(so perfectly) and so why does every*
> *thing (everything) tear about*
> *in my bit heart?*

The "bit heart" connects to lines in other poems with the word "bit," like "leave / me   bit by bit," and "bit by bit letter by letter." The word's meaning is shifting between bit as in computer bit (a contraction of binary digit; the smallest unit of information), bit as in bitten, and bit as in piece. The reader/user is encouraged to keep all these multiple meanings in mind, active at the same time. The repetitions, then, take on the air of permutations, and, moreover, automated permutations. "leave me" in one poem becomes "wave me" in another, and "weave me" in yet another. The minute letter changes easily shift meaning and throw the whole poem, and the poem cycle, into a fluctuation of meaning which is echoed in the kinetic animated screen.[15]

The juxtaposition and counterpoint of technology vs. nature is repeatedly worked through in the seven poems of *Leaved Life.* A triangle of sorts is formed with invocations of technology, nature, and the human being. The three elements are bound together not only as theme, but also through the work's material form which includes the reader/user as an active participant. Lines like "leave / me bit by bit" in "Cheery" and the contrary lines "catch this   hold this and dont [sic] leave me" in "Dear" both turn inwardly toward the poetic diegesis to address the lover, while simultaneously pleading to the reader.

Time is a recurring theme in *Leaved Life*, apparent both in the poems throughout the cycle, and in the event that *Leaved Life* as a digital work instantiates. The remembering of love is persistently coupled with the wish to freeze the moment, to stay "here." The poem again self-consciously turns to the reader with the plea to

> *Please still the reflection into order*
> *that holds here and only here, still. ("Meerly")*

And in "Nearly":

> *Stop it. Just stop it. Hold still. Stop.*
> *Still.*

The pleas for inertia, for an "untimed" place and existence, are juxtaposed with a very nervous, reactive, and constantly changing work, which cannot be stopped. As the time runs out, according to an internal clock that is not made apparent to the reader/user, the work finally disintegrates into complete destruction.

The end of *Leaved Life* can be subjected to multiple interpretations. It seems contradictory and elusive. The visual space is left barren – no leaves or plants, no humans – there are only texts. But those short texts speak of beginnings. They are seemingly unending appeals to begin which paradoxically offer no direct ways back into the work, to read it again. But interpreted from the point of view of the poetic theme of the work this is not the desired way to go. Multiple meanings are suggested, rather than one coherent meaning. "To begin" means turning away from the time of decay, of loss, of remembering, and staying in that remembrance of love. To begin again, anew, and afresh, the reader/user must leave the work and turn outwards. This reading, then, suggests that the ending screens of the work, which the reader/user can navigate endlessly without finding a way – a link – out, are actually soliciting the reader/user *not* to interact with the work anymore, but to leave it in order to do what the biddings suggest. In order to love again one must turn away from the loss of the love that came before. Finally, the end reminds the reader/user of the efficiency – in this particular work – of digital media to hold on to memories: the poems are destroyed. But of course the memory function of several inscription technologies are questioned – drawings in which the drawn figures collapse, paper that cannot hold what has been printed or written on them. We are reminded then about the inevitable passing of time and the intervention by humans and nature alike (here in the form of the reader/user and the worms), which can destroy the printed paper we are in the habit of treating as static and stable.

Tactility & Thingness

Overall the work's visual expression – the strategies of visual noise – point to and remind the reader/user of tactility, of thingness. Indeed, meanings that can be teased out of the title of the work connect to objects. The images of leaves and petals scattered on a paper document which, if of actual paper, could be made from wooden pulp. This, in turn, connects to the leaves of trees, lending the work a quality of the "natural" put in opposition to the computer and the digital medium the work actually exists in. The title can also suggest the leaves of a book. Finally, the poetic texts tell of loss and bereavement which suggests yet another reading of *Leaved Life*: a life after love, being left or leaving, and the life that ensues after that loss.

Leaved Life's intertwined imagery, unstable visuotactile construction, themes of bereavement, loss, and love, and its self-referential qualities resist one coherent interpretation. In addition, in experiencing *Leaved Life* the reader/user must content her- or himself with being one part of an intricate digital instantiation of nervous and ephemeral poetic texts. The question the reader/user is perhaps ultimately left with is: why so much kinetic and "machinic" noise, instability, and nervousness in a poem which deals with human emotions like love, jealousy, feelings of loss and abandonment? What sense is the reader/user invited to make of the combatant, seemingly irresolvable themes of digital technology vs. print, ephemerality vs. stasis, noise vs. order, love vs. lost love, technology vs. nature? And even as these binaries are constructed, the material, visual, and poetic intermeshing of these themes and metaphors through images, functions, movements, and words seems to suggest that coherence, or simple oppositions, is not the desired outcome of experiencing *Leaved Life*.

One answer to the above questions can be found in the work's exploration of material supports for memory: whether paper, digital

technology, or human embodied memory. In her artist's statement, Wysocki discusses the importance of memory and how material supports have facilitated different types of memories throughout human history ("Artist's Statement"), which seems to be an obvious concern of the work, particularly echoed in its visual layout strategies. *Leaved Life*'s exploration of external memory holders is, as Wysocki suggests, an investigation of printed/handwritten document versus programmed computer files executing a series of instructions. It is also about how material strata impact the work's reader/user. However, ultimately, *Leaved Life*'s visual expressions, which offer so much resistance to the reader/user, also remind us that memories are also kept with whoever remembers. The reader/user who has gone through the experience of the birth, decay, and death/transformation of *Leaved Life* is now the holder of these poems, just as the speaker of the cycle of poems holds all the memories of the love and loved one.

Visual Practices of Unintelligible Language

There are of course printed forbears of the general type of visual practice *Leaved Life* engages with. The creation of typographically dense texts or semantically unintelligible or near-intelligible language in poetry is well known. Poets, in particular since the days of the many modernist -isms (for instance, Italian and Russian futurism, Dadaism, Surrealism, and Lettrism) have experimented with different techniques of making the poetic language illegible, unintelligible, or simply unreachable. Modernist experiments and avant-garde sensibilities gave way to postmodern practices – which can be seen as in opposition or in continuance of modernist forbears. Outside of artistic domains, one can think of typographic experiments in works by graphic designers in the 1980s and 1990s (by, for instance, David Carson and Kyle Cooper) play with illegibility and

the thresholds of readability in, what is commonly called postmodern graphic design.[16] Although the digital works obviously remediate other media's visual text arrangements, such as the combination of word and image in illuminated manuscripts in *Leaved Life*, I would argue that the disruption and clutter that dominate the work's visual layout and appearance belong more to modernist and postmodernist literary and artistic experimentation and exploration of "visual noise."

The French symbolist poet Stéphane Mallarmé looms large over contemporary thought on 20th century visual poetics with his 1896 work *Un coup de dés (jamais n'abolira le hasard)*.[17] *Un coup de dés* is often evoked as either a starting point or a watershed moment in relation to contemporary experimental visual poetry. Johanna Drucker aptly notes in her discussion of 20th century experimental visual poetics that "[Mallarmé] made a work whose graphic, visual representation are [sic] indisputably integral to its poetic meaning – thus making an exemplary visual poetic text" (*Figuring the Word,* 115). Partially influenced by Mallarmé, the poetic explorations of, in particular, typographic arrangements and word-and-image juxtapositions could be found in the many –isms housed under the rubric "modernism." In the postwar era, Concrete poetry in particular carried on and expanded the engagement in visual poetic experimentation and innovation. It is by now commonplace to evoke such a general lineage, both in discussions of contemporary printed visual poetry and digital poetry. Mallarmé's work can be seen as one forefather to digital poetry in general, but in relation to visual noise poems, other preceding and contemporary poems can be more useful in shedding light on the particularities of digital visual noise practices.

In his important study, *Reading the Illegible*, dealing with visual operations of erasure, overprinting, and blurring in printed American poetry, Dworkin discusses the medial noise in poems by Susan Howe, Charles Bernstein, and others. Those print poets'

tactics of "illegibility" to destabilize conventional modes of reading resemble the visual strategies of some digital visual noise poems, particularly in the use of layered "overprinting." In addition, different sizes of letters and crowding of letters and words, and a break with horizontal sentence position, which appear in such printed works as Drucker's *The Word Made Flesh* and similar artists' books,[18] are used in digital works as well. At this point, it is important to heed Funkhouser's warning against too easily comparing digital poems with printed works that share a surface likeness which is "not intrinsically supported by shared ideologies or methods" ("Prehistoric Digital Poetry", 26) or, more to the point, do not share cultural positions. Howe, Bernstein, and Waldrop, in particular, were writing their poetry in the context of language poetry,[19] a nebulous school of poetry whose many manifestos and poetics statements defined language poetry as a school of writing as primarily invested in the poetic exploration of "antisyntactical and antireferential" language (Perloff, *Radical Artifice,* 45). Language writers are, in McGann's words, "involved in writing projects which fracture the surface regularities of the written text, and which interrupt conventional reading processes" ("Contemporary Poetry, Alternate Routes", 263). Another arresting visual forbear can be found in Canadian poet Steve McCaffery's *tour de force*, *Carnival*, which was created mainly with typewriters; his particular blend of visual and literal expression in large panels made up of sixteen individual plates point forward to the wholly digital works emerging today.[20] Thus my discussion of print visual poetry has a double, somewhat contradictory goal: to bring forth tradition to stem the impulse to claim "uniqueness" for digital poetry and, simultaneously, to better illuminate what is specific to digital poetry.[21]

If one compares the visual strategies of Charles Bernstein's *Veil* (1976), or Susan Howe's typographical superimpositions and skewed lines of print in "Scattering as Behavior Toward Risk"

(1990),[22] or Rosmarie Waldrop's *Camp Printing* poems (1970), or Steve McCaffery's *Carnival* (1967-1970; 1970-1975) interesting counterpoints to the visual noise techniques of *Leaved Life* and similar digital poems appear. Bernstein's *Veil*, for instance, is composed as a linear and, in one sense, ordered text. However, since several lines occupy the same visual space, overprinted on top of each other, the result is a dense and excessive text. His is a palimpsestic text that is almost impossible to read. Dworkin argues,

> The graphic forms of writing in *Veil* are so difficult, the increased "difficulty and length of perception" so extreme, that the reader is repeatedly made aware of the most minute aspects of visual perception, which the habitual reader can usually afford to ignore: the general situation of the reading space, the sculptural dimensions of the book, and the physicality of the reader's entire body, which can no longer be ignored in an illusion of direct mental engagement with the writing. (57)

Dworkin's emphasis on the optical reception of such an excessive text as *Veil* goes well with Bernstein's own term, a "poetics of optics." Obviously, in a by now familiar move of autotelic reference, the artifice of the work entices and, indeed, requires the reader to reflect upon her engagement with the work which moves reading beyond conventional modes. This engagement, in *Veil*, is then primarily an ocular one.

Diagram Series *by Jim Rosenberg*

I would like to juxtapose the visual excess and readerly disorientation of *Veil* with the digital work of Jim Rosenberg whose poetics of language as well as visual experimentation bear a remarkable resemblance to Bernstein's *Veil*. Although not generally described as "language writing," Rosenberg's *Diagram Series* shares the language writers' investment in disjunctive forms of

writing which break syntactical relationships between words. The *Diagram Series,* now in its sixth installment, uses overlayering of words to create complex sections of text that require reader/user participation in most instances to even be read. In a variety of technical milieus (the first series was done on paper and the latest uses the programming platform Squeak), the *Diagram* poems have grown increasingly dense and layered. Whereas the earlier poems in *Diagram Series 3* and *Diagram Series 4* explore multiple reading paths in non-interactive poems laid out in diagrammatic two-dimensional structures on a singular plane, *Diagram Series 5* and *Diagram Series 6* work with reader/user participation and uses a palimpsestic visual layout. In *Diagram Series 6*, for instance, the nine diagrams are created with several layers of texts consisting of juxtaposed words with tenuous semantic connections. In addition to the visually straining layout, the disjuncture of the words makes a straightforward interpretation of the work difficult. As Arnaud Regnauld and Hélène Perrin noted in their presentation at the 2007

Figure 3. A screenshot from *Diagram Series 6* by Jim Rosenberg.

E-poetry festival, Rosenberg's poetry is characterized by its lack of personal pronouns and its disjunctively arranged nouns and verbs, but for them Rosenberg's poetry is still readable and can yield interpretations. However, disagreeing with Regnauld and Perrin, and, admittedly, reading against Rosenberg's own articulation of his poetics, I would claim that the works' artifice—visual and semantic—complicates the reading of Rosenberg's works. The visual density of the words superimposed on top of each other in Rosenberg's poems adds to the, momentary, illegibility of most of the words. Too much information, as it were, occupying the same visual space cancels out normal reading of the words, and the effect of this visual layout is one example of what I call visual noise.[23]

However, while the printed works offer no solution to the visual conundrum they present their readers with, the digital works often do. In Rosenberg's later diagram poems, the reader/user can disentangle the words, which then reveal themselves to be attached to layers. As the reader/user moves her cursor over the surface, the layers tear apart and the previous translucence which allowed all words to be seen at once is rendered opaque, now showing only one layer at a time. This makes the reading easier; the reading order, however, is still up to the reader/user, and while the visual noise of the surface has been momentarily lifted, the reading that now can take place offers other challenges to poetic interpretation, such as the ones offered by printed language as regards poetic meaning.

In *Diagram Series 6:1*, eleven lines appear, nestled closely together with partial overlap. Some lines can clearly be read such as the first three (from the top):

> *time-mask rake extruded*
> *loose*
> *collide sweep windings*

Other lines are more difficult to discern since they are partially or almost completely covered by neighboring lines. However, as the reader/user moves the cursor, the lines, and, consequently, the

layers to which they are attached break free. The layers now have a marked outline and the outline of a layer underneath can be seen, and "caught" with the mouse cursor. One layer reveals the following words:

> *time-mask rake extruded*
> *loose*
> *clave epiphany railing*

Further down, conjoined by a vertical line with a t-shaped figure, the lines "emerge motion" and "countermind stretch" can be seen. The latter line is partially obscured by the line "kindle flake answer" which also can be "taken apart" by the cursor. Thus, meticulously working through the work's many layers with joint reading and mouse movements, the reader/user can tease apart texts and begin to assemble meaning(s) of the work. The connection between the visual noise created with the palimpsestic visual layout and the reader/user's ability to interact with that layout in order to make a reading possible is particularly interesting in terms of the work's signifying strategies. Here, again, as in *Leaved Life*, the reader/user's movements become integral to the work.

Let me point out that the visuality that *Veil* and *Diagram Series* employ does not constitute a shaped visuality. The pictorial representation of early pattern poetry (for instance George Herbert's "Easter Wings"), or some Concrete poems (for instance Reinhard Döhl's "Apfel") or Apollinaire's *calligrammes* is very different from the overprinting and visual layout of those poems. Similarly, as Dworkin argues, the interpenetrating lines and irregular printing in some of Susan Howe's poems, such as in "Scattering as Behavior Toward Risk" and "Thorow," are meant to destabilize the reader's conventional scanning of the page, the "looking through" the material surface. Howe's horizontally printed lines are at times skewered by other straight lines or words which are set at an angle. Some words are printed on top of another line, causing the letters to encroach on each other's space. What Dworkin calls "a

geometrically strict linearity" (34) disturbs printing conventions but not to the degree of *Veil*, for instance. It would make sense, then, to speak of a range or degree of visual noise depending on the amount of overprinting, visual disarray, and excessive lettering on a confined visual space.

A similar distinction must be made with digital poems. The visual layout and arrangements in *Leaved Life* and *Spawn* are not meant to create a visual shape; rather, the effect is more general. Unsurprisingly, visual arrangements such as in the palimpsestic text of *Veil*, in the unconventional print layout in Howe's "Scattering," and "Thorow," and in the digital works I have presented have an effect on how a reader perceives the poems. However, what that effect is becomes important for the reception of the work as a whole. In *Veil*, for instance, the disorientation of the reader almost precludes any *reading* at all.[24] In *Leaved Life,* the overprinting or superimposition is of much lesser degree, and more importantly, it retains a higher degree of legibility for separate words.

The printed works' visual strategies do share some features with digital poems, and in the case of Rosenberg's work, a similar view of poetry writing. However, it is also clear that there are differences between the visual noise strategies of printed and digital work. There are, I suggest, three main points of difference: movement, reader interaction, and time, which all inform and steer the reader/user's perception of the work. Often, the most conspicuous difference between a printed work and a digital one is that of movement. It is commonplace to invoke "motion" or "kineticism" in printed work's visual layouts. Thus, for instance, Marinetti's typo-graphical experiments in Italy in the early decades of the 20th century are often described as being characterized by a layout which conveys speed and dynamism, *Parole in Libertá* (words in liberty). To continue with more contemporary works which emphasize illegibility, Dworkin discusses Rosmarie Waldrop's work *Camp Printing* (1970) as an animation of print. The work consists of

overprintings of the same poem in different arrangements – ranging from slightly smudged to barely legible, in which "texts appear to vibrate … and sweep across the page in arcs that recall the lines of force in chronophotography and its futurist imitations" (71). Further, Dworkin finds that Waldrop's work is challenging print conventions in particular by invoking movement: "the almost filmic sense of animated print accreting before the reader's eyes imparts an illusion of textual activity to the process of turning pages; the opening sequence emphasizes the codicological structure of the book and at the same time undercuts its usually static impression" (71). Whereas works like *Camp Printing* indeed create an illusion or visual metaphor of movement (instantiates "moving pictures" from a series of static image through manual manipulation of the pages – flipping them quickly to create a filmic movement) the digital visual noise poems include movement which is independent of the reader/user's actions or manipulation.

Digital media forms can incorporate different kinds of movement – for instance through specific coding and visual appearance, such as animated images and letters, or through the coded inscription of the reader/user's possibilities of interaction with the work. The reader/user's movements, such as clicking, passing the cursor over the screen, or, as the case in other works, whole body movements, can be programmed to result in a reaction in the work. By definition, then, the work is not static.[25] In *Leaved Life,* in addition to the animated images and the general structure of reading-as-movement through the visual space I have already described, the most significant movements occur in/with the texts themselves, either as a result of the reader/user clicking on a leaf to spawn a text, or, through the seemingly random movements by the letters' own volition.

Secondly, digital works such as *Leaved Life* require the reader/user to engage with their responsive surfaces; otherwise, the works will remain in their nervously moving waiting state. Through reader/

user interaction, digital visual poems underscore their existence as events and experiences. Reading *Veil*, *Scattering as Behavior Toward Risk*, *Camp Printing*, or, even, *Carnival* is (usually) to take in one visual space. Although all reading or viewing is, of course, a temporal activity, it is still a question of taking in one section, one page at a time, at the reader's own pace and will. In poems such as *Leaved Life*, and "Spawn," on the other hand, the reader/user's interaction with the digital work is crucial in order for a reading to take place. This interaction is not straightforwardly resolving the visual noise that dominates the visual and kinetic expressions of these works, but is rather intricately part of the work's aesthetics. This can result in the reader/user feeling frustrated in her reading. Irrespective of the result, the reader/user's bodily engagement, beyond the visual, is required in these works, as in many other digital poems.

Thirdly, as other digital poems make clear, the material possibilities of controlling time in digital works prove to be an important "feature," as it were, of digital poetry. Reading is not just the temporal, cognitive act of a reader who reads a text with minimal eye movement scanning the page and contemplates its meaning, but a step-by-step unfolding of the work steered by what has been programmed into it and only in part subjected to the will and choices of the reader/user. The effects, however, depend on the work. The reader/user's experience of the digital materiality, in visual noise poems, as in other digital poems as well, is affected by movement, time, and reader/user interaction. In *Leaved Life*, for instance, the work seems to insist upon its physicality, its tactile surfaces and objects, in short, its "thingness" through the inter-functions of these three elements. The visual objects within the work signal a sense of concreteness, which, since the reader/user can interact with the images as interactive (digital) objects, an illusion of "thingness" of letters, flowers, and leaves as objects strewn on top a paper lying on a table is reinforced. Letters are not used to form shapes as in for

instance *calligrammes* or pattern poetry. Digital media allows the poet to visually and kinetically emphasize materials – paper, flowers, leaves, and the now almost old-fashioned look of a typewritten text. The visual re-representation of typewriter style letters points to a duality in *Leaved Life.* There is an attraction or affinity to paper documents – printed, typewritten, and illuminated–which amounts to a nostalgic reverence for these older media. However, this nostalgia is simultaneously undercut or trumped by the opportunities offered by digital media, such as kineticism, actual movements, and the possibility of a resolution of the visual conundrum that the printed poems' visually noisy surfaces present but can only be resolved in the "reader's mind."

The intricate surfaces of *Leaved Life,* "Spawn," and *Diagram Series 6* created through the various visual and kinetic states that I have described, amount to more than technically interesting or visually arresting works. The materiality of the poems closely connects to, enhances, and reinforces the poetic themes. I have suggested that visual noise as employed in these poems is a *poetic* practice, as is evident in printed poems as well. As such, visual noise is constructed by typographic arrangements of excess and superimposition, by the use of and particular positioning of images, but most importantly, in the digital works I have analyzed, by the implementation of movement – of images and letters, and through the orchestration of the reader/user's movements. Beyond metaphor or illusion, as in printed works, in digital poems movement is an efficacious function. This function is integral to whatever sense and meaning the reader/user takes away from the work. It is, therefore, not only an instrumental function—to start a work, or read a text – but becomes part of the process of reading and interpreting the work.

Notes

1. This essay was presented at the Bergen 2008 conference "Electronic Literature in Europe." I would like to thank the participants in that conference for useful comments and suggestions. I would also like to thank Brian McHale, N. Katherine Hayles, Jay Bolter, Danuta Fjellestad, and Rita Raley for commenting and giving useful suggestions on different versions of the essay.

2. I use the term reader/user to invoke the oscillation between reading, scanning a surface, and engaging with it through physical movement, what is sometimes called visuotactile engagement. Although I opt here only to use the terms reader and user, I would like to emphasize that this is not meant to diminish the importance of the viewing and watching that are, of course, part of the experience.

3. Bolter and Grusin define the "real" in this context "in terms of the viewer's experience; it is that which would evoke an immediate (and therefore authentic) emotional response" (53).

4. *Spawn* was also published at *Poems that Go*, in the fall 2002. It is also indicated as part of issue 12, 2003. The issue was devoted to "reactive media."

5. The degree of disturbance can be decreased since the reader/user is given the option to mute the sound (a continuous loop of the amplified, synthesized sound of what might be a droplet landing in water) and remove the graphics of the glass jar. Removing the graphics also renders the background a solid black and white color. One cannot, however, stop the letters' motion or change their color.

6. The first text in "Pinned" is:

> everywhere i look i see ceilings
> arms reach from radiators
> rugs o o o shelves o o o plaster
> between forefinger and thumb

a blue needle pinched
aching

7. In particular, this idea is connected to the notion of digital poems (or art works) as digital instruments which one learns how to play. However, as with most constructions, conventions do form even as poets and artists attempt to break them. What may be considered innovative and experimental may, in time, become standard features, albeit of a local practice.

8. Wysocki works at present at Michigan Technological University and *Leaved Life* along with other multimedia work by Wysocki is published on her website: http://www.hu.mtu.edu/~awysocki/. The work is from 2005.

9. *Leaved Life'*s emphasis on visuality also places it in another tradition, reaching back to medieval illuminated manuscripts, pattern poetry, shaped poetry, and the ubiquitously referenced Blakean illuminations. This connection is hardly coincidental: the work received first prize in a competition called "Born Digital" arranged by The Institute for the Future of the Book. The theme for the competition was "illuminations" and the guidelines for submission gave, among others, the following restrictions and suggestions: "submit a single illustrated page that exploits the unique possibilities of the digital medium while preserving the relationship between text and image. Explore the notion of a 'video snapshot.' Animate an image or a text. Create an interactive or networked illumination that responds to the reader…" ("Born Digital Competition").

10. Throughout my discussion of *Leaved Life* I refer to the poems by the drop cap word.

11. It is important to note that the image state of the letters does not constitute a "pictorial" state. The visual layout of the letters is not to be interpreted as a recognizable form. Rather, they convey a feeling or general characteristic of nervousness, noise, and disarray of the text as

a whole. The reader/user is, therefore, not dealing with a pictorial value, such as in any of the more common references which are suggested as historical forbears to digital visual poetry such as Greek and Latin poems in shapes of flutes, vases etc., George Herbert's "Easter Wings," or, even, Apollinaire's *calligrammes*. Another possible interpretation is that the isolated letters constitute (in their disconnectedness) mere sounds without further meaning than the sound itself can convey. Such an understanding would problematize the notion of *Leaved Life* as a largely visual work, which is not primarily meant for oral performance or recitation.

12. It is not clear what the small banana-shaped yellow objects signify. In keeping with a reading of the paper document as an image of an actual document upon which flowers and leaves are scattered, the figures can be seen as book worms, eating away at the paper.

13. The lack of apostrophe in "dont" is in keeping with the spelling in the work.

14. I have used an approximate spacing between words as they appear in the digital work and the font which most reflects the work's visual appearance.

15. The reader will recognize this exploration of changing meaning through letter replacement from for instance much of John Cayley's work. However, there is at least one significant difference: Cayley's letter changes are algorithmically steered whereas Wysocki's changes are statically imprinted and the oscillation (as well as the connection between the poems) has to be made "in the mind" of the reader/user.

16. Postmodern graphic design and typography emphasize strained legibility over clarity, eschewing grids and coherent font and layout (Meggs, Philip B. *A History of Graphic Design,* 457-463).

    David Carson's work in the magazine *Ray Gun* and on numerous graphic design projects made him famous in the late 1980s and through

the 1990s. He is well known for his unconventional typographic style and saturated pages, often too laden with photos and letters for a reader to take in all the information. For more on Carson, see for instance Blackwell and Carson. *The End of Print*. London: Laurence King, 1995. Kyle Cooper is known for his work with film title sequences, among others in *Se7en* (David Fincher, dir. 1995), and *Spiderman 1, 2* and *3* (Sam Raimi, dir. 2002, 2004, and 2007). For more on Cooper's work, see Andrea Codrington *Kyle Cooper*. New Haven, CT: Yale UP, 2003.

Other possible comparative practices can be found in the traditions of visual and kinetic poetry created in other media such as video, holography, and mixed media. I have limited my comparative analysis partly to focus the scope of this discussion, partly because the works' emphasize a "print" aesthetic through their use of, particularly, font.

17. Henry Weinfield translates the poem *A Throw of the Dice/ Un coup de dés*. Christopher Mulrooney translates the poem as *One Toss of the Dice Never Will Abolish Chance* (Mulrooney's translation is available in UbuWeb's archive). On occasion the publication year of the work is presented as 1897 or 1914. The latter is the year when the work was first published in its intended typographic layout.

18. The work was published in 1989 under Drucker's own press Druckwerk. For an analysis of *The Word Made Flesh*, see Perloff, *Radical Artifice,* 120–129.

19. Sometimes that moniker is written L=A=N=G=U=A=G=E, after the name of one of the magazines associated with the group. Charles Bernstein and Bruce Andrews were the editors.

20. Although the connection is almost too neat, it is interesting to note that both *Carnival* and *Leaved Life* are both set up with 16 panels which are intended to make up one whole document. *Carnival* prompted readers to put the panels together into one, and through its navigation *Leaved Life* allows the reader/user to experience the sixteen sections as part of

one work. The difference is that the latter work does not allow, in its digital form, the reader/user to have an overview of all sixteen sections at once. Of course, the reader/user can get around this by printing out the images and assembling them in paper form. Such an intervention, however, would not be able to capture the different states that the work makes possible, among other things.

21. It is important to note that other selections of both digital and printed poetry could be made. These poets are among many who have used visual noise and illegibility as poetic trope. The four poets, Bernstein, Howe, Waldrop, and McCaffery, engage in quite disparate poetic endeavors and their work should not be assumed to be identical to each other's. However, in the context of poetic visual noise, some of their poems show remarkable visual techniques which, although different in kind, can be illuminating when analyzing the digital counterparts. Most of the poets are American, although McCaffery is Canadian by citizenship, and is known for his involvement in the so called Toronto group, known for its "dirty" concretism, to follow Drucker's use of Stephen Scobie's term (*Figuring the Word*, 129-130).

22. Howe's poems "Scattering as Behavior Toward Risk" and "Thorow" appear in *Singularities*.

23. Let me point out that Rosenberg's *Diagram Series* poems have been primarily discussed as an exploration of structural relations between words for poetic means. Rosenberg is interested in the conditions of diagrammatic writing through the model of hypertext, which for him constitutes a medium of thought, as a "virtual diagram" ("The Interactive Diagram Sentence: Hypertext as a Medium of Thought", 112). As Sandy Baldwin points out, Rosenberg works with juxtaposition of words to create "poetic simultaneities" ("A Poem is a Machine to Think With: Digital Poetry and the Paradox of Innovation", n.pag.). Investigating a different mode of hypertext which relies on the reader/user's mouse-over movements, Rosenberg creates layers of word "skeins" (Baldwin, n.pag.). My attention at this point is

directed towards the visual expression of those "skeins" rather than an investigation of their interrelations as nodes in a hypertext, but it is important to acknowledge that Rosenberg's particular interest lies in engaging in disjunctive and conjunctive forms of hypertext. What I here call visual noise, Rosenberg calls "simultaneities" ("Navigating Nowhere / Hypertext Infrawhere" n.pag.). I do not find the two terms to be mutually exclusive; the text layers are literally on top of each other creating a simultaneous writing space. I suggest visual noise can be thought of as the effect of that juxtaposition.

24. Although one may argue, as Dworkin indeed does, that *Veil* can be read, painstakingly so, and therefore does not preclude, but "discipline usual reading habits" (53), it is also true that this extraordinary effort does not remove the visual clutter of the poem.

25. As McGann has noted, a printed text's material status changes not only as time, wear, and tear affect it, but the textual condition which constitutes a "work" is also defined by a number of historical, cultural, and material factors. A text is, in arguments such as McGann's, never static or fixed. While I agree, I would hasten to point out that the "change" or "stasis" one refers to in relation to printed works is different from the states of change and stasis discussed in digital works. Printed texts can change in many ways throughout the course of their material existence, or, as a result of the invited or uninvited actions by the reader upon the work. There are actions that are inscribed into the work; think, for instance, of books that require the reader to rip up pages, or to disassemble and reassemble a work. In the case of many digital works with reader input, however, the work will simply never appear unless the reader engages with a linked image or text, for instance, to initiate the work as a whole or sections of it. It is arguably so that in order to understand the changes in different works one should investigate individual works, rather than attempt definitions for the medium as a whole (print or digital).

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