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In its examination of the dynamic heterarchies of Jim Andrews's *Stir/Fry/Texts*, this essay argues that Andrews's work utilizes interactions between digital text, machine, and "wreader" to investigate the poetics of electronic textuality, as well as to reveal how a database aesthetic operates in the context of network culture.

DHTML Dynamics: The *Stir/Fry/Texts* and the Networked Combinatorics of the Wreader

JAMAL RUSSELL

In an e-mail exchange with Leonardo Flores, Jim Andrews makes what some could call a contradictory statement on the relationship between a work and its reader in relation to "born-digital" writings such as his *Stir/Fry/Texts*. Andrews writes, "X does not mean whatever we want it to mean," explaining that while there may be a range of valid interpretations of a work, "this range is limited" and can form "a combinatorium of possibilities." He explains that such limitations "[evoke] the sense of a space, a set of combinations distributed over a (limited) space" (Flores 134). Given what the *Stir/Fry/Texts* allow a reader to do in terms of reorganizing a number of source texts into seemingly endless combinations of new works with a mere swipe of a mouse cursor, it may seem disingenuous for Andrews to put so much focus on constraining a reader's ability to generate meaning. However, I argue that Andrews's ideas regarding the reader reveal how he sees the *Stir/Fry/Texts*' poetics extending into "network culture," defined by media theorist Tiziana Terranova as "a global culture as it

unfolds across a multiplicity of communication channels but within a single informational milieu” (1).

The *Stir/Fry/Texts* investigate ideas of electronic textuality and how they apply within a larger networked context in three ways. First, the work investigates the properties of electronic textuality by materializing the functions of the texts’ DHTML documents and the mouse used by a reader to navigate and mix the texts that together make up Andrews’s work. The use of both materials reflects Andrews’s concern with the nature of electronic textuality via how a reader utilizes the document and the mouse to construct and read texts in a networked environment. In doing this, the *Stir/Fry/Texts* connect their operations to the constrained, combinatoric textual formulations of conceptual predecessors such as Oulipo and the cut-up experiments of William S. Burroughs. Furthermore, Andrews’s *Stir/Fry/Texts* are indicative of a type of database aesthetic that takes data as “the raw forms that are shaped and used to build architectures of knowledge exchange” and shows how, in a networked environment, data can be manipulated for the purposes of creating new assemblages of texts (Vesna xiii). The process of creating these new texts reflects the influences of Oulipian works by authors such as Raymond Queneau on Andrews’s project, as well as the specific media context in which they were created. Finally, Andrews’s work specifically concerns itself with how this textual paradigm works in the context of the network society at large in that it points to the relationship between the reader that navigates the network society and the information that said reader receives, interprets, and manipulates when he or she is navigating the network culture at large.

Through its investigations, Andrews’s *Stir/Fry/Texts* enable an interaction between a creative reader and the formal elements of the computer for the generation of unique kinds of texts. They also investigate the interaction between reader and computer, revealing the ways in which concepts, actions, and constraints interact to examine the potential of electronic textuality and its relation to network culture at large. Key to Andrews’s concept is his idea of the “wreader,” described by Flores as a “person who manipulates responsive elements in an electronic text to make changes in the text they read” (134). As Andrews notes and Flores reiterates, the wreader manipulates the text within the parameters of both the computer’s functions and the text’s expressive bounds (135-36). In doing this, the wreader can be understood as an actor upon the text beyond the merely consumptive category into which reading is slotted. However, while the tools for combining texts are left to the wreader to manipulate as he or she sees fit, the construction of the tools and materials that will be used by that wreader, as well as the parameters of their use, are almost completely determined by Andrews’s programmes. Wreading, as a function of this process, “[reforms] conceptions” and

“[extends] parameters and dimensions of reception beyond those we ordinarily use to absorb or experience expression” (Funkhouser 6).

Conceived by Andrews and written both alone and collaboratively with various contributors, the *Stir/Fry/Texts* are ten works composed of a varied number of source texts, written between 1999 and 2015, that are arranged in dynamic HTML code to be cut into forty-five separate sections and metaphorically laid on top of one another.¹ Whenever a wreader moves the cursor of his or her mouse over a given section of one of the “texts,” that section is programmed to be immediately replaced with the corresponding section of the text below it. If there is no corresponding text, then the passage will reshape itself to accommodate the fact that the moused-over section of text has no parallel in the source text below it. More commonly, because the sections of the texts do not always correspond in length with one another, the text will reshape itself to accommodate the new piece of text as the wreader mouses over the text and enacts the substitution algorithm of the DHTML code. This can go on for as long as the wreader likes; as long as the cursor is moving over the text, the sections of that “text” will continue to cycle themselves in and out of the Stir Fry and the form of the text will reshape itself over and over again in seemingly endless permutations. Along with this, each of the texts that make up a given Stir Fry are coloured in distinctive, if similar, shades of the same colour, thus making for a disorienting process of recombination when the wreader mouses through the texts and recombines the pieces to create new texts. The resulting text, then, is produced largely independent of a reader’s intentions, but the document that underlies that text simultaneously cannot generate anything without the reader’s inputs. Reading thus fluidly scripts itself back into the composition of the *Stir/Fry/Texts* via the mouse motions of the computer and, by extension, the actions of the wreader. The *Stir/Fry/Texts* serve, then, as an example of what Manuel Portela describes as “the textual engine text making visible the generative structure of language itself” (2), a structure that is not simply at the mercy of the human reader, but one that is both “machine-generated [. . .] and human-written” (310).

An example of how these principles and functions operate can be seen in the Stir Fry “Correspondence.” Made up of a set of five e-mails between Andrews, writer Mary Phillips, writer and mathematician Lee Worden, and net artist Talan Memmott, the correspondences among the four concern the nature of the cut-up in relation to the potential and function of writing in various environments and contexts. The investigations of the piece, however, begin before a single word is ever willfully read or manipulated by the user. When a prospective wreader clicks on the title at the *Stir/Fry/Texts* menu screen, they are presented with not the text itself, but a colophon which, when clicked, sends the wreader to the first text in the Stir Fry sequence.

Notably, the colophon appears in the centre of the screen, and when it sends the wreader to the first text, the mouse cursor ends up in the middle of the paragraph that appears on screen. Unless the mouse is either moved almost immediately after clicking the colophon or not moved at all, “stirring” the text is unavoidable: the wreader puts the DHTML code into operation not involuntarily as a function of the work’s structure itself. As Flores writes, “this is Jim Andrews’ way of showing us the primary mechanism of the poem in action without having to tell us how to activate it through instructions” (193).

Moreover, the content of “Correspondence” reflects its form: the five texts consist of a dialogue about this element of the text as it relates to electronic textuality. Beginning with an address from Andrews to the other three participants, the first e-mail posits the question “why would you want to cut things up?” (Andrews, Memmott, Phillips, and Worden). This is Phillips’s question, but posited in Andrews’s e-mail to the rest of the group. Andrews gives a rapid-fire flurry of answers to the question, which range from “good way of rubbing n texts together to make fire” to “good way of plumbing the language of a paragraph because cut-ups highlight the phrase” to something as mundane as “good way to see what the language is saying.” Andrews presents these as possible answers to the question that Phillips asked him, and then proceeds to throw the question to the rest of the involved parties, asking them if they can think of any others. The Stir Fry, then, materializes the act of cutting up texts in an electronic environment both through its formal makeup and through the discussion between the correspondence’s involved parties.

Before moving on to any of the other source texts, there is quite a bit to consider here in regard to the interactions between the DHTML document, wreader, and the content of Andrews’s e-mail. The core of the e-mail is the question of why someone would want to cut things up, which Andrews asks the participants before providing a bevy of answers to the questions himself. However, by dropping wreaders into the Stir Fry and forcing them to experience its functional properties before examining the language and content of the source text, Andrews gives the wreader an opportunity to come to their own conclusions regarding why a given person would “cut things up,” as well as experience his answers in action before even getting a chance to read the solutions themselves. It is important, then, that Andrews gives the wreader the chance to cycle through the full source texts; by clicking on the colophon below the text displayed on the screen, the wreader will be taken to the next full source text in the sequence. If the wreader clicks enough times, the Stir Fry will cycle back to the beginning, where one can take in the content of Andrews’s text without any interference from the text or the mouse cursor.

From: Jim Andrews (jandrews@speakeasy.org)

Lee and myself and Mary Phillips have been corresponding together about cut ups. There's something about them I'm not getting. Mary asked 'Why would you want to cut things up?' She does a lot of it herself, so the question is not entirely innocent. Same here. Still, it sounds like a good question.

Divination. Most divination techniques involve some random process. (Burroughs says that when you cut audio tape, the future leaks out.) Divination? Well, whatever it is, you do dip into the unexpected and the unknown. Good way of rubbing n texts together to make fire. Good way of plumbing the language of a paragraph because cut ups highlight the phrase, usually. Dull cut ups mean standard language without color. Good way to see what the language is saying. Good way to chop and hack away at style (I renamed the radio program I did from *Fine Lines* to *?Frame?* when I understood that the fine line was usually recapitulating the already said). A fun thing to do like making a painting or such. Treating the words as materials in the same sense that painters work with their materials. Throwing paint around. So can you think of others?

1. Opening e-mail from "Correspondence" by Jim Andrews, Talan Memmott, Mary Phillips, and Lee Worden. *Stir/Fry/Texts*, 2004. Digital image screen capture. Used with permission of the author (<https://www.vispo.com/StirFryTexts/4.html>).

When a wreader does get around to cycling through the source texts, one finds that the formatting of the various texts does not match with one another. Indeed, save for adding different tones of grey to the texts, Andrews has chosen to retain the formatting of the e-mails, as well as any unique syntax choices or solecisms that the e-mails contained. They are each, as source texts, valuable documents within this battery of texts, each espousing a valuable and unique idea regarding the nature of the cut-up. In and of themselves, each of the responses would be worthy of analysis. It is these unique properties, both in terms of content and form, that make the action of stirring the texts up and mixing their component parts a revealing process for the wreader. Worden's ideas on how recombination "allows you to jump way out into unexplored regions of the space of possibilities by splicing together chunks of different people's chromosomes to make something radically new" meld into Phillips's idea of how language is a "medium for human consciousness and, like any symbolic system is 'plugged in' to how we make meaning." These responses then come against Memmott's notion of how, even when he is reading texts while he writes and appropriating ideas from them, his compositions are "not true cut-up[s] because I am not appropriating texts verbatim [. . .]. Everything gets rewritten, written into the third

text, the text I am producing” (Andrews, Memmott, Phillips, and Worden). In all of these quotes, one sees how the function of Andrews’s *Stir/Fry/Texts* and the content of the source texts are used to produce what C. T. Funkhouser terms “hybrid articulations” (51). As Memmott puts it in a later essay, the signifying methods of Andrews’s Stir Frys are “not singular [. . .] not exclusively literary” but occur through “a sort of resonance or harmonics between signs and sign regimes [. . .]. We not only read the text but assist in its de.scription or ex.position” (304). The function of the wreader and its relation to the structure of Andrews’s Stir Frys are not only theorized by his selected source texts, but also enacted and demonstrated by that wreader’s actions, the functions of the DHTML code put into action, and the operations of the mouse that the wreader uses to navigate and stir the source texts up.

This Stir Fry and others are illustrative of what John Cayley terms an “ambiguity of address,” a phrase he uses to describe the function of a work that is addressed “at once to human reader and to machinic processor” to be interpreted (“Text”). While Cayley uses this phrase largely to show how some digital poets are only pretending to address issues of the creation of works meant to be both read and appreciated by human readers and machine-readable “codework,” his definition of what these artists are *not* doing can be applied to what Andrews *is* doing with his *Stir/Fry/Texts*. In essence, by not only making the reading of the texts dependent on both the code of the DHTML document that orders how the texts are organized and substitute themselves for one another, but also making the actions of the texts (and, by proxy, the code within the DHTML document) dependent on the actions of the wreader in reading it, Andrews has created a set of works that fits quite neatly with Cayley’s demand for a digital poetics that recognizes itself both as aesthetic object and as a machine-readable object. Andrews’s *Stir/Fry/Texts*, while keeping these planes separate, allow them to intermingle with one another, bleeding into each other via the stirring operations of the text that are enacted by the actions of the wreader, which are themselves coded by the makeup of Andrews’s work. By functioning in such a manner, the *Stir/Fry/Texts* enact not merely a theoretical notion of computer mechanisms, but a type of technotextual practice meant to investigate the material elements of a text and their relation to the ideas they espouse. As defined by N. Katherine Hayles, a technotext is a type of text that “interrogates the inscription technology that produces it” and “mobilizes reflexive loops between its imaginative world and the material apparatus embodying that creation as a physical presence” (*Writing* 25). By devising a “special type of interactivity” that works to “[create] the character of the work,” the *Stir/Fry/Texts* investigate the relationships between HTML document, interface, and wreader and the influence of those relationships on its material makeup (Funkhouser 52).

From Talan Memmott (talan@percepticon.com)

yes, i agree, that enactment can bring them back to life, sort of like language IS so much more than text--it's the you had forgotten was it is that symbolic-- She does the whole thing.

language, for me, is a medium for we will destine ourselves to making short-sighted, symbolic system is "plugged in" language art is an opportunity to reclaim techniques involve some random process. and to SHARE it. After all-- (also known the future leaks out.) but soon becomes the 4th text Well, whatever it is, Jung refers to the human psyche Within the text above, that it needs sustenance, nourishment of different Kristeva to make fire. as our most narrative space, the intent and experience this that brings us to this discourse/artsite--our ancient swap genes with the help of which serves much the same purpose; I think *Fine Lines to ?Frame? when I understood 'Language is a virus'.*



2. Stir Fry version of "Correspondence" e-mail by Andrews, Memmott, Phillips, and Worden. *Stir/Fry/Texts*, 2004. Digital image screen capture. Used with permission of the author (<https://www.vispo.com/StirFryTexts/4.html>).

While Andrews himself, as well as commentators like Flores, puts quite a bit of focus on the fact that the idea for the *Stir/Fry/Texts* was originally taken from Burroughs and Byron Gysin's idea of the cut-up and the way in which it could be used both as "composition method" and "a type of literary criticism," I would also argue that there is a very strong link between Andrews's poetic project and that of Oulipo, specifically in how the constraints of production and the action of receiving the text is intertwined to varying degrees in both (Flores 185).² Following Funkhouser's analysis of the relationship between Andrews's work and Oulipo's conceptual project, I argue that both work to emphasize the processes by which "texts are constituted and to encourage the readers to take an active role in figuring out its patterns" (189). Furthermore, the *Stir/Fry/Texts*, in constructing a work that is suggestive of "both machine-generated text and human-written text" and of a connection between "the programmable machine as a generator of language and language itself as a combinatorial machine," are made with explicit attention to how the conceptual architectures of a text are related to its material constraints. This extends to the different ways in which those constraints can be mediated, with Oulipian constraints and the results

that they produce being translated from the imaginary to the real by producing the text, and from print to digital through Andrews's application of Oulipian concepts to the makeup of his *Stir/Fry/Texts* (Portela 310).

The connection between Andrews's work and that of Oulipo takes root in the latter's workings with different forms of combinatorics and combinatorial literature. This is rooted in mathematics, as Oulipo member Claude Berge argued in his 1971 work *Principles of Combinatorics*. In the work, Berge defines combinatorics as the study of mathematical configurations in which "one looks for their intrinsic properties and studies transformations of one configuration into another, as well as 'sub-configurations' of a given configuration" (2). This basis for the study of combinatorics made its way into Oulipo's study of literature in various ways. One way can be perceived in Berge, Jacques Bens, and Paul Braffort's ideas of "recurrent literature," which is defined in a short piece of the same name as "any text that contains, explicitly or implicitly, generative rules that invite the reader [...] to pursue the production of the text to infinity" (Bens, Berge, and Braffort 109). Berge goes further in "For a Potential Analysis of Combinatory Literature," stating that the concepts that were produced by the mathematical study of combinatoric processes were "easily transposable into the realm of language" and that the vocation of combinatory literature as it relates to Oulipian projects is situated in the "*transposition* of concepts existing in different branches of mathematics into the realm of words" (116, *emph.* Berge's). Here, one can see how the relationship between the conceptual root of the project and the material instantiation of that project comes to be very closely related, even inseparable; concept shapes material and vice versa. For both Oulipo and for Andrews, the important element of recurrent/combinatory literature lies with the materialization of the mathematical idea in the form of a literary work. Such a focus on the materialization of the idea engenders both a series of combinations within the component elements of a text as well as a movement of the text in accord with the original concept. As Jacques Roubaud notes in "The Oulipo and Combinatorial Art," "a text written according to the constraint describes the constraint" and, by extension, "a text written according to a constraint dependent on mathematical theory utilizes the non-trivial theorems of the theory" (42).

We can see Andrews's debt to Oulipo by comparing a paradigmatic Oulipian text such as Raymond Queneau's *Cent mille milliards de poèmes* (see Rowe) with Andrews's *Stir Frys*.³ Queneau's work consists of ten fourteen-line sonnets written so that each sonnet's rhyme scheme matches exactly. These sonnets are printed on ten separate sheets of paper and are organized so that any one of the lines can be cut out and exchanged for its corresponding line in any of the other sonnets. For example, the first

couplets of each of the sonnets share both the same rhyme scheme and metre: as such, they can be rearranged and made into new couplets at the wreader's whim as long as the wreader obeys the constraints that Queneau lays out for the recombination of lines. Thus, the three couplets "Don Pedro from his shirt has washed the fleas / The bull's horns ought to dry it like bone," "The wild horse champs the Parthenon's top frieze / Since Elgin left his nostrils in the stone," and "At snuff no Cornish sailorman would sneeze / His nasal ecstasy beats best Cologne" can be recombined so that the first two lines of a chosen sonnet would read "Don Pedro from his shirt has washed the fleas / His nasal ecstasy beats best Cologne" or "At snuff no Cornish sailorman would sneeze / Since Elgin left his nostrils in the stone" (Queneau 15-19). From this, one can see how Roubaud's principles are put into practice: by writing the sonnets in such a manner that they can be recombined to a near-infinite degree and explore the limitations (or lack thereof) of recombinant literature, *Cent mille milliards de poèmes* materializes the concept of infinite recombination in a literary context. As a product of mathematical theories of recombination, Queneau's work also investigates how the sonnet "configuration" works, particularly when written as an explicitly recombinant literary structure rather than a fixed literary form. Like Queneau's work, Andrews's *Stir/Fry/Texts* materialize their own connections between theoretical application of the cut-up and the way in which the concept is enacted by the wreader in a digital environment. Specifically, in both works the source texts are manipulated according to the application of the theoretical constraint in question (recombination for Queneau, cut-up for Andrews).⁴ However, as Funkhouser notes, "viewers interacting with *Stir/Fry/Texts* efficiently receive a more refined sense of the possibilities held by permutation" than one would while working with Queneau's "collages of [. . .] fragments [. . .] of text" (53). This connection between the concept of potentiality and the materials of the work shows how, as Andrews writes, "the imaginary and the real are thoroughly conjoined," and that "no distance between the two is necessary" ("Architecture").

However, the technotextual properties of the two works do not end there, nor does the technotextual connection between both works. On the technotextual level, both works foreground the way in which the concept informing the work and the material used to render it converge. This creates a state in which the work in question manifests both the ideas and the processes that structure the work, with both elements being manipulated by the wreader. This feature of Queneau's and Andrews's works makes evident to the reader/wreader what Matthew G. Kirschenbaum calls a work's "formal materiality." Describing this term in a computer-based context, Kirschenbaum uses "formal materiality" to "capture the multiple behaviors and states

of digital objects and the relational attitudes by which some are naturalized as a result of the procedural friction [. . .] imposed by different software environments” (132-33). In this way, the formal materiality of a work “imposes a formal regimen that assigns certain behaviors and affordances and denies others” (133). While Queneau did not compose texts with computers, this concept can be applied to the way in which the physical, codex-bound nature of his work influences the way in which the sonnets can and will be read and reorganized by a wreader. In Harry Matthews and Alastair Brotchie’s *Oulipo Compendium*, for instance, the sonnets that make up *Cent mille milliards de poèmes* are printed on the front side of ten separate sheets of paper and are arranged in such a manner to suggest that the wreader can cut the sonnets into strips and reorganize them at will. Interestingly enough for a bookbound work, this functions both as an invitation to the reader to put the concept of the work into action as well as a flagrant violation of the bounds within which a codex communicates the content of the source texts. The content of a book is ostensibly meant to be read as a whole and in sequence, yet the concept underlying the work implores the wreader to cut the pages out, then cut the sonnets into their component parts and rearrange them at will. In this manner, *Cent mille milliards de poèmes* investigates how all elements of composition, from the source text and the media within which those source texts are contained and organized to the wreader who can choose to receive the work in ways both in accord with and in violation of a given medium’s proper use, create a reading experience that is not static and abstract but procedural and dependent on the active interaction of media and reader/wreader.

Similarly, Andrews’s *Stir/Fry/Texts* ask readers to investigate the formal materiality of electronic textuality, the mediation that digital texts go through in order to be rendered onto a computer screen. For the *Stir/Fry/Texts*, one must not only consider how multiple actors and media converge to create processes of reading, but also understand the complexities of digital reading itself. While I made the point that the process of reading conceptualized by *Cent mille milliards de poèmes* is just that, a process, it must also be said that this is a virtual process that is actualized purely by the wreader acting on the media of the work. The work does not react per se. In contrast, the *Stir/Fry/Texts* are much more explicitly procedural in that, when the wreader mouses over a section of the text and engages the media of storage, the media itself is pushed into action as the code works in accord with the command that it has been given to make “the poem and words that comprise its lines visually expand and contract given the viewer’s movements of the cursor,” which results in the “layers of text [alternating] quickly on the screen” (Funkhouser 51). It is a minor difference, but an important one when considering the difference between the way in which the concept

of recombination operates in Queneau's work and how it operates in Andrews's work. It is the difference between having a form of programming that "runs quasi-invisibly within traditional structures of writing, reading, and interpretation" and a form of coding and operation that "allows us to perceive, if not the coding itself, then the unambiguous effects and consequences of that coding" (Cayley, "Time" 315). For Andrews, the *Stir/Fry/Texts* become "textual instantiations of the workings of the machine [...] through visual and kinetic metaphors that emulate machinic processes" (Portela 177). In other words, Andrews's works make visible on the computer screen not only the concepts with which Queneau worked in codex-form when he formulated *Cent mille milliards de poèmes*, but also the workings of the computer's hardware and the text's underlying code, the formal materiality of the work, as a wreader mouses over the component texts of a given Stir Fry.

The workings of this concept can be demonstrated via an analysis of the structure of the *Stir/Fry/Texts* as seen in the works' DHTML code. Looking into the document for "Correspondence," one discovers the basic structure of the work, and thus can glean an idea into the basic mechanics of its operation. Within the document, each of the five source texts is cut into forty-five different arrays. As the source texts are of varying length, Memmott's contribution being the longest and Phillips's second contribution being the shortest, the sections are of varying lengths accordingly. What is important about the way in which the source texts are cut up is the fact that only Andrews's text utilizes all forty-five allotted arrays for the text of the e-mail. For all of the other e-mails, the number of arrays used for text number forty-one or less, and in each of those other four e-mails, the leftover arrays are used for blank space. Thus, when a wreader mouses over sections of text and stirs it, that wreader is not simply exchanging text for text, but text for blank space and vice versa. When the final sentence of Memmott's e-mail, "I think urban settings have the feel of a cut-up," is moused over by a wreader, the blank spaces written into the arrays of the document replace it just as the final words of the other addresses would.

This constitutes a materialization of the "ambiguity of address" that Cayley says is essential to the understanding of a piece of electronic literature as both aesthetic object and machine-readable object, which constitutes the formal materiality of the work. In other words, Andrews's *Stir/Fry/Texts* foreground the process that creates the formal materiality of a work through its signifying strategies. By foregrounding the process by which a wreader can use the mechanisms of the computer in accord with the DHTML document to combine and recombine individualized components of the source texts, Andrews displays to the reader the processes of the computer through which works are generated and rendered to a viewer. It is a form of what Hayles calls

```

94
95 a = new Array(tpassages)
96 for (i=0; i < tpassages; i++)
97 {
98   a[i] = new Array(tlength)
99 }
100
101 a[0][0] = "From: Jim Andrews (jandrews@speakeasy.org) <br><br>"
102 a[0][1] = "Lee and myself and Mary Phillips  "
103 a[0][2] = "have been corresponding  "
104 a[0][3] = "together about cut ups.  "
105 a[0][4] = "There's something  "
106 a[0][5] = "about them I'm not getting.  "
107 a[0][6] = "Mary asked 'Why would  "
108 a[0][7] = "you want to cut things up?'  "
109 a[0][8] = "She does  "
110 a[0][9] = "a lot of it herself,  "
111 a[0][10] = "so the question  "
112 a[0][11] = "is not entirely innocent.  "
113 a[0][12] = "Same here.  "
114 a[0][13] = "Still, it sounds  "
115 a[0][14] = "like a good question. <br><br>"
116 a[0][15] = "Divination. Most divination  "
117 a[0][16] = "techniques involve some random process.  "
118 a[0][17] = "(Burroughs says  "
119 a[0][18] = "that when you cut audio tape,  "
120 a[0][19] = "the future leaks out.)  "

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3. DHTML document showing Andrews's initial e-mail organized into separate arrays. "Correspondence" by Andrews, Memmott, Phillips, and Worden. *Stir/Fry/Texts*, 2004. Digital image screen capture. Used with permission of the author (<http://www.vispo.com/StirFryTexts/4.html>).

an "intermediating dynamic," which "[links] human understanding with computer (sub)cognition through the cascading processes of interpretation that give meaning to information" (*Electronic* 57).⁵ When a wreader engages the mechanics of the *Stir/Fry/Texts*, they are engaging not just what is created by the movement of the cursor on the screen but also the processes and intermediations by which those mechanics are visualized on screen. It is not just the end result of those mechanisms that are visualized, but the processes through which hardware (the mouse), executable script (the DHTML document), and the wreader's intentions meet in the process and influence one another. As the wreader moves the mouse, the code within the DHTML document performs its functions and manipulates the source texts as it has been programmed to by Andrews; these processes, working in concert, are then rendered visually for the wreader through the movement and restructuring of the text on screen. Process, constraint, intention of code, hardware, and wreader are all displayed on screen, forcing the wreader to "develop a nuanced sense of code as a form of writing with its own stylistic elegances and formal possibilities" that, when working with

the hardware and wreader that execute it, constitute the formal materiality of the work in much the same way that the interaction of concept, media, and reader constitute the formal materiality of Oulipo's bookbound works (Hayles, "Time" 183).

This poetics of electronic textuality have consequences beyond the born-digital literary context: by foregrounding the material conditions of their creation, the *Stir/Fry/Texts* emphasize a form of the database aesthetic in a larger networked context. Defined by Bill Seaman, the database aesthetic "puts the poetic nature of composition, media configuration, sequence, media 'distribution,' and differing qualities of articulation *in line* [. . .] with the constraint-based nature of combinatorics" (122, *emph.* Seaman's). In other words, the database aesthetic takes the combinatoric practices of Oulipo and extends them through the architecture of networks as the formal logic that structures the way in which networks are navigated. At the base of this logic is the notion that a webpage or, in the case of the *Stir/Fry/Texts*, a document is at its most base level a "sequential list of separate elements" (Manovich 41). In this case, it is a collection of e-mails that makes up the source texts of the works, and executable commands written into the DHTML document generate the work. Through the way in which the DHTML document's code functions, however, three more elements can be added to the list: the computer that visually renders the work to the wreader, the mouse used by the wreader to manipulate the work and force the DHTML document into action (in the event that the wreader is using a laptop with a trackpad, these can be one and the same), and the wreaders themselves. Thus, Andrews's work is indicative of a certain type of database aesthetic in the larger networked context, one that is subject to a certain assemblage logic that the *Stir/Fry/Texts* demonstrate in their formal materiality and intermediating dynamics.⁶ The e-mails would constitute the "data" of Andrews's *Stir/Fry/Texts*, and the "database" would be the DHTML document into which the cut-up e-mails are arranged, which results in the creation of an aesthetic through which the component elements of the e-mails will be manipulated and recombined by the wreader into new forms.⁷

The fact that the database is formulated for the sake of being manipulated and recombined into new forms necessitates a consideration of not just the database aesthetic, but the methods through which those carefully selected elements of the "database" are recombined. Manuel DeLanda, in *A New Philosophy of Society: Assemblage Theory and Social Complexity*, provides a suitable definition of the logic of recombination in the database context through his idea of the assemblage: "Assemblages are made up of parts which are self-subsistent and articulated by relations of exteriority [. . .]. Assemblages are characterized along two dimensions: along the first dimension

are specified the variable roles which component parts may play, from a purely material role to a purely expressive one, as well as mixtures of the two. A second dimension characterizes processes in which these component parts are involved: processes which stabilize or destabilize the identity of the assemblage” (18-19). DeLanda goes on to add a third dimension to the two he outlines above: “an extra axis defining processes in which specialized expressive media intervene, processes which consolidate or rigidify the identity of the assemblage or, on the contrary, allow the assemblage a certain latitude for more flexible operation” (19). By extension, in the *Stir/Fry/Texts*, the convergence of media, concepts, and actors creates a state of affairs in which the “database” is constructed and its component parts are recombined based on the actions of both the wreader manipulating the media as well as the functions of the media themselves limiting and constraining the wreader’s actions. Applying both the definition of the database aesthetic discussed above and DeLanda’s concept of the assemblage to a reading of the *Stir/Fry/Texts* shows how the “judicious choosing among phrases, sentences, [and] entire poems” that constitute the initial structure of a born-digital work and the processes that enact it can be extended to the larger domain of network culture (Emerson 178).

Returning to “Correspondence,” the rationale for arguing this can be seen in how the stirring of the component texts mirrors how the internet is, as Terranova defines it, “a network of networks, the actualization of a set of design principles entailing the interoperability of heterogeneous information systems” that are “designed and conceived in terms of dynamic and variable relations between different communications networks” (34-35). At a formal level, this is exemplified by the processes by which the texts in a given Stir Fry are manipulated. It is only when all of the procedural conditions of engagement are met that the document will be rendered on the screen: only when the computer recognizes the wreader’s movement of the mouse, initiates the movement of the cursor on the screen over a given section of text, and then forces the code of the DHTML document into action, which itself must be able to be read and rendered by the machine that the wreader is using, will the document’s functions be rendered on the screen in the form of the replacement (and possible change in shape) of the moused-over text with the next one in the sequence. This network of functions repeats over and over again, sometimes functioning simultaneously, as the wreader mouses over multiple sections of the text as he or she swipes through it.

At the level of content, these concepts are exemplified by the interpenetrations of “Correspondence”’s component parts. While all of the e-mails share the same basic topic of investigating the nature of the cut-up, each e-mail approaches the topic from a different angle. Andrews initiates the conversation and focus on the procedural and for-

mal elements of cutting up texts, Worden focuses on the relationship between cutting up texts and genetic recombination, Phillips focuses on the expressive elements of the cut-up, and Memmott focuses on the relationship between the cut-up and the composition of texts. The main arguments of each e-mail occur at different points throughout, with some introducing their argument or responding to another e-mail before getting into the meat of their point, while others immediately leap into their point from the very beginning. When the e-mails are mixed up via the actions of the wreader and the responses of the computer and the DHTML document, the forms of address and the approaches of the authors to the topic at hand are mixed up as well, producing a varied and multiplacious combination of addresses mixed into a single display. Worden's initial paragraph preceding his point mixes into Phillips's point regarding the nature of language as a "medium for human consciousness," which then runs into Memmott's point regarding the differences between a pure cut-up and the creative "third text." The combination of these four texts serves to emphasize the heterogeneous, networked nature of the text, as well as how the "dynamic and variable" relations between the texts reflect the dynamic and variable relations between information as it is accessed on the internet. In accord with DeLanda's theories, the component parts do not lose their identity as a function of being mixed together into a single, stirred-up text.⁸ However, they do congeal into a whole in which the multifaceted functions of the component parts of the texts, both as they are rendered on the screen via the e-mails and the actual component parts of the work (mouse, computer, DHTML document, wreader), are emphasized via how "multiple surfaces and components layer in the poetry" and work to create new texts to be navigated and recombined by the wreader (Funkhouser 11).

Quoting Myron Krueger, Lori Emerson observes that the relationship between the reader and the work is one in which "every user of the system is also a poet, for simply by virtue of interacting, one creates" (22). The *Stir/Fry/Texts* foreground this notion not simply at the level of electronic text, but also in terms of electronic literature's antecedents and network culture at large. Andrews emphasizes the concepts that inform the structures and functions of the text and the methods through which those functions mimic and translate Oulipian concepts of recombination to the digital arena. Moreover, he shows how those digitally mediated concepts of recombination also constitute textual instantiations or larger phenomena of the functions of heterogeneous information systems in network culture at large. The formal materiality of the *Stir/Fry/Texts* is not only the formal materiality of a given electronic text, but replicates, in a textual context, the heterogeneous structures and functions that inform the way in which network culture is navigated and its elements recombined into new works and materials by its users.

NOTES

1/ In 2004, Finnish concrete poet Marko Niemi helped Andrews update the DHTML of the Stir Frys he had originally written to be more compatible with W3C standards. As of 2015, most of the Stir Frys are now compatible with most mobile browsers (Flores 162, 164, 192).

2/ This is not to say that Burroughs and Gysin's concept is irrelevant to the subject of the *Stir/Fry/Texts*' workings. In *How We Became Posthuman*, Hayles discusses how recording technologies such as audiotape change conceptions of how one reads and conceives of literary texts (207-08). This is directly connected to Burroughs and Gysin's cut-up technique, as the technique finds its roots in the cutting and pasting of audiotape to create new sounds and recordings from existing material. The implications of this technique, as Hayles writes, are that "the voice can be understood not as a naturalized union of voice and presence but as a mechanical production with the frightening ability to appropriate the body's vocal apparatus and use it for ends alien to the self" (211). Burroughs himself discusses these techniques and their implications in "Electronic Revolution," writing that "the control of the mass media depends on laying down lines of association. When the lines are cut the associational connections are broken" (295). These ideas relating to audiotape can easily be applied to the arena of electronic textuality and the relations it creates between interface and reader.

3/ For a full treatment of *Cent mille milliards de poèmes*, see Peter Consenstein (151-56).

4/ This can also be seen in an interactive version created by Beverly Charles Rowe, readable in both English and French. This version of Queneau's poem can be found at www.bevrowe.info/Queneau/Queneau_Random_v4.html.

5/ As Hayles mentions, the concept of an intermediating dynamic has roots in information theory, specifically in how information theory informs thoughts on the production of representations. See Hayles (*Electronic* 55) and Donald M. MacKay (42).

6/ This explanation, however, only holds for this specific form that the database aesthetic takes. The poetics to which Seaman refers can take on different forms while emphasizing the same basic principles he outlines in his definition of the database aesthetic. An interdisciplinary "live hypertext" project formulated at Carleton University, for instance, works with the same general principles of the database aesthetic outlined by Seaman, yet puts an emphasis on *hypermedia* rather than *hypertext*, and the use of "indeterminate content" that is "different every time it is read" rather than the recombination of static e-mails (Greenspan et al. 37).

7/ For a discussion of HTML and XML's actual rather than metaphoric database retrieval functions as they relate to humanistic concerns, see Alan Liu's essay "Transcendental Data: Toward a Cultural History and Aesthetics of the New Encoded Discourse" (209-36).

8/ This can be seen in "non-literary" forms of electronic textuality as well. In his dissertation "Writing Post-Person: Literacy, Poetics, and Sustainability in the Age of Disposable Information," theorist and multimedia artist Kedrick Platon James shows how writing personas become "persona[s] of the network of correspondences," which is then reflected in the works created in these networked environments, where "linguistic conditions have been created by which the heterogeneous voice of the network society can be heard" (3-4).

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