Hypertext Poetics: Encounters with Indeterminate Texts
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Introduction

The following review of Jim Rosenberg's *Intergrams* is a necessarily tentative discussion of the aesthetic explorations in Rosenberg's hypertext poetry. Hypertext, though relatively unknown to the broader public is the subject of a rapidly growing critical literature. Despite general agreement on the origins and early development of hypertext systems, disagreements over current theory and practice are the rule rather than the exception. (1) Hypertext poetry as a literary form exists as a direct result of technical developments in personal computing and computer mediated communications. It has roots, however, in avant garde art, music and writing going back to the turn of the century and is explicit in its embrace of an experimental stance toward composition and the act of reading. It is, in addition, a reflection of the trend towards interdisciplinarity in the humanities and the sciences. As such it demands a high degree of attentiveness to a complex and constantly evolving set of metaphors, principles and practices from a variety of fields. These include the natural and cognitive sciences in addition to the theoretical concerns of writers and critics of literary texts. Jim Rosenberg's work is sometimes identified with the concerns of the "Language" poets, a linking with which he expresses profound discomfort(2), but which raises two related issues: 1) Where and how can hypertext poetry be located within contemporary experimental writing?; and 2) How will the effort to answer this first question help us to understand the current poetry scene as a whole? These questions are, unfortunately, far beyond the scope of the present paper. Following a brief discussion of the history of hypertext in general, I will concentrate instead on the questions likely to be of primary importance to the reader encountering hypertext poetry for the first time:

"What is it?" "How does it work?" "What (and how) does it mean?"

These questions, though they may feel under-nuanced and crude after the reader develops some familiarity with the environment of hypertext poetry and poetics, are inevitable given the radical levels of abstraction in the works themselves.

A brief history of Hypertext

The term hypertext was coined by Ted Nelson in 1965, though most critics and chroniclers cite Vannevar Bush's 1945 article "As We May Think" (3) as having had a seminal influence on their thinking. It's development is then traced from Bush's vision of the "memex", a mechanized database to help scholars keep track of information, through the ideas and works of Douglas Englebart and Ted Nelson. Even a quick study, however, of the variety of its contemporary expression reveals a confusing mix of models. It is sometimes conceived of as a stand-alone application which allows a degree of interactivity by the user/reader, and is sometimes more closely associated with systems of networked communication. The most likely first encounter with a hypertext system for a newcomer to computing is likely to be either an on-line help system or the navigation system of the World Wide Web (WWW, also often referred to as "the web"). The primary elements of such a hypertext
structure are nodes and links. Nodes are also described as "lexias" or "writing spaces", a series of which are connected by links to create the system, visualized as a net or a spider's web. On that portion of the internet now referred to as "the web", nodes consist of series of pages. As Jim Rosenberg has noted, these pages or lexias are usually considered containers for ordinary linear text. (4) They frequently contain words which also function as links allowing the user/reader to jump or link through the text to references on other pages. Obviously this type of system can be very useful as a reference tool, and hypertext is increasingly common as the medium of choice for technical manuals. It has also been embraced, particularly in networked forms, in schools and universities as a means of fostering collaborative learning. Literary texts are increasingly available in a variety of formats, and the borders between student texts and research texts used in linguistics and literary analysis are increasingly porous. Although genre-bending by nature, most literary texts authored or published in hypertext forms fall clearly in the categories of fiction and non-fiction. A number of works, classical and contemporary, originally published in codex form, are now available in enhanced, multi- or hypermedia versions. Examples include "electronic books" available as HyperCard stacks from Dartmouth College or the Voyager Publishing Company, CD-ROM reference collections ranging from dictionaries and encyclopedias to extended essay/anthologies for history and literature students. (5) Increasingly common also are games and original multimedia texts published by contemporary artists committed to the integration of sound, text, video, and graphic design in the creation of object/experiences for aesthetic contemplation and enjoyment. A number of these works, available on CD-ROM or on the World Wide Web serve to confirm in dramatic fashion Brenda Laurel's argument in Computers as Theater that we should not think of the computer as a mere tool, but as an entirely new medium of aesthetic expression. This proposition is, I believe, confirmed by the rapidly emerging variety of texts as vehicles for the exploration of poetics.

In "Toward a Literature Moving Outside Itself: The Beginnings of Hypermedia Poetry", part of a website designed to act as an anthology for the emerging forms of hypertext poetry, editor Chris Funkhouser divides hypertext poetry into five types:

- Hypermedia - a mix of graphics, possibly including sound, with text;
- HyperCard - alphabetic and visual texts on digital file cards;
- Hypertext - usually limiting itself to linked written texts;
- Network hypermedia - found on the World Wide Web (WWW); and
- Text-generating software - programs which randomly arrange words and images for display.

He also notes that these five types are likely to be used in combination along with new inventions in the manipulation of virtual text and imagery to produce a growing variety of new forms. (6) As noted above, however, hypertext poetics has significant roots in the collage and cut-up techniques of earlier avant-garde movements, and there has already been a great deal of mixing of forms and traditions in experimental writing for the page and the screen. (7) Jim Rosenberg's present works clearly fall into the second category, but his compositional methods include the use of algorithms in the pre-composition phase, a practice he has been developing for more than twenty five years.
**Intergrams for the first time**

The reader encountering *Intergrams* for the first time is greeted by a welcome screen which contains the message "Welcome to Intergrams", copyright information, a table of contents, and the logo and contact information for the publisher, Eastgate Systems. (See figure 1)

![Welcome to Intergrams](image)

(figure 1)

Fittingly for a work concerned with the materiality of language, whose layers of unintelligible text will be explored by the reader, this entry way is opaque, and gives the reader a limited range of choices: To enter the text, sequentially or non-, to quit the application all together, or to stay in HyperCard, the programmable authorware package for Macintosh computers with which the poems have been realized. If one chooses to explore, there is the "Introduction to Intergrams", the first choice, at the top of the left hand column of the table of contents, continuing through intergram 11, or one can go "home", the geographical center/table of contents for the Hypercard environment itself. The introduction contains information crucial to understanding navigation within the stacks, and gives important clues as to the assumptions held by the author about the text, and how it is to be read. The cursor, or pointer, will obviously interfere with the reader if it is held in the middle of the screen during a reading, so the author has kindly suggested that the fingertip on the cursor be placed just below the active text screen, so that the entire contents of the layer can be read as a whole text. The use of two syntactic symbols is also described. (See figures 2 and 3, below)
Several more cards in the introduction stack further describe the diagrammatic syntax. The reader is told that the logic of each sequence makes beginning with the inner layer and working one's way back out the natural way to read the poems. At the conclusion of the introduction is an icon linking the reader to the table of contents. From there one can move throughout the text. See, for example, one layer of text from Intergram 2 in Figure 4.
The content of the poems is indeed unfathomable. There is nothing recognizably personal – relating ordinary or even extraordinary human experiences, nothing for the reader to grab hold of and declare that he has broken the code, and knows what the sequence of poems is about. In short, there is no subject matter, and no ordinary attempt by the author to communicate or convey his wisdom or point of view to the reader. There is, however, a unique texture of language in layers, whose qualities, though difficult to hold in mind, do through repeated readings take on an almost indescribable yet tangible, pleasureable "thereness".

The reader is confronted here with an apparent paradox. Interactivity, the touted means by which reader-response theory is to be made concrete, the reader empowered as co-creator - author of her own constructed/read text is severely restricted. Intergrams is a locked set of HyperCard stacks, and even the copy and paste functions have been made unavailable. The author is in control and has created through aleatory means an environment in which neither the writer's nor the reader's authority is absolute. The reader is free to explore, but within limits. This is as it should be according to Judith Kerman in notes accompanying Volume 2, Number 2 of The Eastgate Quarterly, who quotes from Jim Rosenberg’s own statement, “Openings: The Connection Direct”. Turning, more than once, to that essay and other statements on poetics available on the World Wide Web, allowed me finally to make what I called with relief, a breakthrough in my reading of Intergrams.

It is hard to reduce Jim Rosenberg’s already concise statements on poetics further from their original forms, but much of his message to potential readers can be gleaned from the first paragraph of "Openings: The Connection Direct”. The practice of his art is based on four premises:

1. any possible circumstance of language is a possible circumstance of poetry;
2. it is the reader’s job to be open to any possible new environments or circumstances of poetry;
3. the role of the avant garde is to expand the possibilities for making art; and
4. “The house of poetry has room for everyone.”

He emphatically does not reject traditional modes of artistic expression. He has, however, chosen to reject what he sees as the identification of the arts with a stereotype of communication as a field of meaningful practice. Instead he presents his readers with “energy transactions”, committing himself to creating art that stimulates the reader to bring “resources already there in the receiver’s mind ... together in a useful way.” He rejects, thereby, in a few swift statements, the notion of the artist as a special person, whose presumably special experiences can be consumed or possessed for the personal benefit of the reader/receiver. His view of art as highly charged material that may function as touchstone for the aesthetic/spiritual renewal by the reader/receiver is however, consistent with the Romantic view of art as the appropriate field for the expression and exploration of the spiritual or religious impulse in human life.

In all of his essays on poetics these messages are clear, and receive further amplification. His evolving practice seeks to explore aesthetic dimensions explored first in music and the visual arts. His academic background at the undergraduate and graduate levels was in mathematics, and he has made his living as a computer programmer. At this point in his career he is presenting his poetry through the medium of the computer, though he has worked with electronic music and constructed installations which explored the relationships of textuality and sculpture in the past. In addition to John Cage, whom he cites as a primary inspiration, he mentions discussions with Robert Duncan on prosody. Music, visualization, mathematics and an emphasis on the materiality of language are clearly the dominant aspects of his thinking as he maps environments designed to provide the reader/receiver with opportunities for discovering new ways of thinking. In an email interview with Judy Malloy and several other hypertext authors he made his goals explicit:

My ultimate interest here is hypertext as a medium of thought. To me that *doesn’t* mean hypertext as a medium of organizing *thoughts* – linear thoughts – but rather as a medium in which one “thinks native” thoughts that are hypertext all the way through: hypertext extended in the fine structure of language. This is a very difficult idea, on which so far I’ve got very few takers.

A Close Reading

Rosenberg’s method of composition makes use of what he calls pre-composition. This involves the use of programs or scripts which take phrases or lexical chunks from predetermined vocabularies through feedback loops as part of the aleatory or improvisational process of composition. A thorough study of his texts and the patterns they create would require a thorough deconstruction of his texts with concordance tools, and considerable analytic stamina. My impression is that there may be a build up of energy in the sequence of the Intergrams themselves, though I have yet to determine if it is possible or even desirable to attempt a quantitative assessment of how this/these effects are achieved. As a first step toward discovering the nature of the Intergrams’ appeal, I offer the following rough explication of the phonological qualities of one layer. I hope only that my readers
may be inspired to explore and perhaps enjoy this hypertext *terra incognita* as I have.

from “〈〉 Intergram Number 2”
terrified fingers not yet designed
to be ignited from the inside
for the light that makes
that forced leap to the liberty flight
a string contest played against
an enemy with wires

ig2.h (first cluster, 3rd layer in, top left, "subject" position a)
(See Figure 4)

In this passage, an aspect of *Intergrams* that becomes more pronounced in later sequences is already making a strong appearance: a density of internal rhyme and alliteration/assonance. Consider the frequency of /l/, /l/, /l/-short i, and /l/-long i and /r/ in the passage cited:

terrri\textsc{f}ED de\textsc{S}IGNED ig\textsc{N}ITED in\textsc{S}IDE LIGHT FLIGHT WIRED
terrified fingers Ignited Inside liberty string with
...Fied Fingers Forced Flight
light -> flight

Even using the relatively crude technique of repeating the key words with reiterated sounds in upper case letters, it seems quite clear that these sound clusters are playing a significant structural role in creating the aesthetic effects of the poem.

This is not merely a poetry of phonetic and prosodic complexity, however, it is a poetry exploring the language from a perspective which ignores genres and seeks through the creation of an alternative aesthetic practice to do away with the distinction between sense and nonsense. A perspective, as the author makes clear in his poetic practice and in his critical writings, which is abstract and seeks to create through the presentation of aesthetic objects, an environment/experience in which the reader is directly challenged to engagement and discovery.

Footnotes


3. Vannevar, Bush. "As We May Think", originally published in the July issue of *The Atlantic*
Monthly. As a seminal text in the development and criticism of hypertext systems and hypertext writing it is now available in a variety of electronic forms. I read the HTML version by Denys Duchier, University of Ottawa, April 1994. Updated August 1995, Simon Fraser University. URL <http://www.isg.sfu.ca/~duchier/misc/vbush/>


5. The Dartmouth archives of Hyper Card literary stacks, ftp://ftp.dartmouth.edu/pub/Hyperbooks, for example, include the works of Dickens, H.G. Wells, Sir Arthur Conan Doyle, Shakespeare, and Mark Twain, among others. Commercial etexts include HyperCard stacks such as Moby Dick and Emma and CD-ROMs such as Who Built America and American Poetry, The Nineteenth Century from the Voyager Company.


Bibliography


- "Poetics and Hypertext: Where are the hypertext poets?", http://www.well.com/user/jer/ht__poetics.html, (October, 1996).


