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# New Media Poetry — Theory and Strategies

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Going beyond the mere employment of new communication technologies in the production of poetic texts, new media poetry integrates characteristics of the new media in the theoretical basis of its poetics. This paper outlines this basis and shows how it affects poetic and verbal conventions, particularly with respect to the constitution of texts and the roles of author and reader, and with regard to its implications for our views on language. The author thus contends that the innovative force of new media poetry lies not in the communicative channels used (e.g., computers, video, holography) *per se*, but in the exploration of their ramifications for syntactic, semantic and pragmatic aspects of verbal/poetic communication in general. This view is further developed through a discussion of some writing strategies of new media poetry.

## New Media Poetry - Theory and Strategies

New media poetry is innovative poetry created within the environment of new communication and information technologies. This observation is, of course, all right and all wrong. It is all right in describing the new media as environments for the creation of poetry, as offering technological possibilities for experiments in writing poetic texts. That is what is documented, for the first time, in this anthology. But it is all wrong in suggesting that the basis for new media poetry is merely to adopt these technologies as writing, publishing and reading tools. Computers, word processors, modems, communication software and the Internet all take part in the writing and reading of poems published in online literary periodicals such as *RIFT* — but they do not necessarily partake in their poetics. Many poems scattered over the Internet appear to ignore their electronic environment as much as they possibly can, aspiring to the conditions of print poetry. And that is evidently not what new media poetry seeks to achieve.

So we must expand our definition. New media poetry is innovative poetry created and experienced within the environment of new communication and information technologies — and it could not have been created and cannot be experienced in other environments. It is a poetry based on the integration of characteristic features of these technologies in the strategies that underlie the writing and reading of poetic texts. In terms of the labels often attached to new media, we are dealing with a virtual, dynamic, interactive, immaterial poetry. This appears to be a much more valid description of new media poetry — but what does it mean?

Well, one answer could be: That is precisely what the various poets represented in this anthology attempt to find out in and through their explorations of the poetic domains offered by the new media. But we will attempt to go a little further than begging the question in this way. We shall try to develop an account of the basis of new media poetry, or at least to sketch the contours thereof. We call this basis theoretical rather than poetical because it expands the habitual domain of poetics to include considerations on communication and information theory, semiotics and interart relationships. Also, we will discuss some characteristic writing strategies of new media poetry. But in all this, we are well aware that we must leave many important questions unanswered.

We shall focus on what is new in new media poetry — but what about the links with the tradition of (experimental) poetry? Surely new media poetry did not come to us unprecedented. What has given rise to its present development? What is the reason that in our time many poets from completely different backgrounds, often — at least initially — unaware of each others existence and works, in such remote parts of the world as Brazil, France, Argentina, the United Kingdom, Germany the United States, Portugal, the Netherlands (the list could of course be expanded), envisaged a future for poetry in the context of the new media? What is the relationship between their poetic work and their literary, socio-cultural, ideological and historical environments? We shall focus on the common traits of their poetry — but what about the differences between their *poetries*; what about the variety of forms to which new media poetry has already given rise and which will surely increase in the years to come? We can only hope that such questions will be taken up soon and that our thoughts may be of some use in answering them.

In what follows, we shall often use the term “communication.” We believe that communication is the focal point of both the new media and the new poetry that make up new media poetry. Since we do not advocate a particular model of communication, the reader is free to supplement our views with his/her opinions on the structure of the communication process. But there is one proviso: “Communication” must *not* be read as denoting a process the success or failure of which depends on whether or not the intentional objectives of a “sender” are “understood” by a “receiver.” It should *not* be envisaged as a unilateral relationship, in which the “sender” bears sole responsibility for his “message” — or claims full control over it — and the “receiver” is nothing but a decoding agent. As we will make clear, such a view would contradict the very basis of new media poetry. Or, reversely, the innovative explorations undertaken in this poetry are invariably aimed at generating a different communicative space.

## **New media, new poetry** **- the theoretical basis**

We may take that notion of “space” quite literally. Writing, J. David Bolter reminds us,<sup>1</sup> always is and always has been a topical affair — i.e., an affair determined by the space of writing. Writing on paper pages, codex format or writing with a printed book in mind differs from writing on clay tablets or papyrus scrolls not just in employing other tools. It means that the writer is engaged in an activity that takes place in a different environment, organized by a different set of rules and conventions. These environments are crucially important: status, nature, structure and use of the written work are determined by them.

In the process of being established as such a “writing space” a new medium like hypertext affects all these “concerns,” to use William Dickey’s term,<sup>2</sup> which, as he sums up,

include multiplicity of perspective, variability of the structures and vocabulary of language, including the extension of the idea of language to non-linguistic elements ..., rejection of a single rhetorical authority and of linear causative organizations as providing the appropriate pattern for a work of literary art, admission of aleatory organizations and relationships as more accurate representations of experience, and at least an effective illusion of the simultaneity of experience.

In their concern with the interplay between text and space, hypertexts are therefore “tentative, fluid, changeable.”<sup>3</sup>

Dickey's triad may serve to mark the generically important distinction between poetry that merely addresses and poetry that genuinely adopts the new media as a writing space. This distinction becomes obvious when we very briefly compare the kind of poetry represented in this anthology with the kind of poetry discussed, for instance, by Marjorie Perloff in her *Radical Artifice. Writing Poetry in the Age of Media*.<sup>4</sup> Perloff's is an eminent analysis of the ways in which contemporary experimental poetry addresses new media and communication technology and confronts itself with the semiotics of (electronic) mass media. But the poetry discussed is invariably print poetry. The writing is done on the page. Concepts like tentativeness, fluidity and change may very well become relevant for both the reading processes and the reconsiderations of habitual thoughts on language, poetry and verbal communication to which this writing gives rise — but the written poetic text itself is given, static and fixed. That is what print tends to do to writing.

Surely, the L=A=N=G=U=A=G=E poetry, John Cage's mesostic writings, Steve McCaffery's typewriter experiments, Oulipian devices and other works presented by Perloff all question the concept of the poetic text as a conduit, aesthetically valuable because of its construction, through which some pre-encoded message is transmitted from author to reader. And surely that view on poetry as an aesthetic process of encrypting and decoding messages had already been challenged by experimental poets of the past. In this respect, such poetic works share an interest with new media poetry. But in all these former instances — from the dada sound poem and the futurist *parole in libertà* to the hybrid works of visual poetry, even to the texts produced by the programs of the first computer poets — the poetic text itself is already there; it is presented to the reader in a fixed, final format. New media poetry offers the reader the opportunity, the means and the information (e.g., digital data) to bring a text into virtual existence. In new media poetry, the poetic text is not already there; it is not a package for but a parameter of the poetic communication process.

This, of course, is not to say that there are no messages, no meanings, no aesthetic values in new media poetry at all. The point is that they cannot be thought of as being contained in the text and being delivered to the reader through this text, for there

1 Bolter, J. David. 1991. "Typographic Writing: Hypertext and the Electronic Writing Space." In Delany, Paul and George P. Landow, editors. 1991. *Hypermedia and Literary Studies*. Cambridge, Massachusetts: MIT Press, 106. See also Bolter, J. David. 1991. *Writing Space: The Computer, Hypertext & the History of Writing*. Hillsdale, New Jersey: Lawrence Erlbaum and Associates, passim.

2 Dickey, William. 1991. "Poem Descending a Staircase: Hypertext and the Simultaneity of Experience." Delany and Landow, editors. *Hypermedia and Literary Studies*, 144.

3 Dickey, "Poem Descending a Staircase," 145.

4 Perloff, Marjorie. 1991. *Radical Artifice: Writing Poetry in the Age of Media*. Chicago: University of Chicago Press.

is no text independent of the reader's search for it.<sup>5</sup> Messages, meanings and values are created alongside and with the text.

Nor is this to say that bringing a text into being is the only objective of new media poetry. It is, rather, a point of convergence between the various activities of poet and reader that, in their mutual dependence, constitute the poetic communication space. What really counts in new media poetry is the way in which the ramifications of these activities transform the entire field of poetic communication. In the remainder of this section, we shall discuss four aspects that we consider particularly important: first, the exploration of *interrelationships between* constitutive factors of that field; second, the role of *unique features* of the new media in this respect; third, the *reconsiderations of conventions* that inevitably arise from such explorations; fourth, the *shared responsibility* of author and reader in all this. Together, these aspects constitute the theoretical basis for new media poetry.

5 Perhaps we should have said: there is no text-*sequence* without the reader constructing one. But then again, what definition of "text" in the ordinary, verbal sense of the word does *not* implicitly or explicitly rely on some notion of sequentiality?

6 Györi, Ladislao Pablo. 1995. *Criteria for a Virtual Poetry*. Buenos Aires [self-published broadsheet].

7 Bolter. *Writing Space*, 37, our italics.

8 Landow, George. 1992. *Hypertext. The Convergence of Contemporary Critical Theory and Technology*. Baltimore, Maryland: Johns Hopkins University Press, 37-40.

9 Another lesson is that to adopt new media is not necessarily to adopt them as a writing space in Bolter's sense of the word. The second, not the first, is what counts in new media poetry.

Given the nature of the communication channels employed in new media poetry — e.g., computer, video, hologram — the signs out of which the poetic text is (to be) constituted are immaterial. The virtual domain of this poetry "exceeds all the more or less established techniques of channeling poetic messages, because it breaks in a definitive way with the first support that produces and maintains them: real physical space," Argentinian poet Ladislao Pablo Györi writes.<sup>6</sup> This break is really a dramatic one; it opens up a world of new possibilities for the composition and combination of signs and for their electronic manipulation. (For brevity's sake, we refer to other essays in this anthology for examples.)

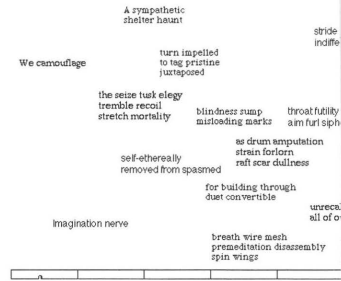
As new media poetry centers on the exploration of these possibilities, it may appear that the channels employed are its constitutive source all by themselves. But in fact, they

are only part of the story. What is really at stake here, in Bolter's words, is that "[t]here is a *dynamic* relationship between the materials and the techniques of writing, and a less obvious but no less important [and no less dynamic] relationship between materials and techniques on the one hand and the genres and uses of writing on the other."<sup>7</sup> Particularly the second of these relationships is crucial for new media poetry. But one should keep in mind that Bolter's dynamics are not automatisms!

We referred earlier to the many poems drifting in cyberspace that would work just as well in a print environment. The poetic conventions and writing strategies that underlie their composition have nothing to do with the medium through which they are transmitted. Similarly, a Shakespeare sonnet does not become a hyperpoem merely by including it on a hypertextually organized CD-ROM. Even Tennyson's "proto-hypertextual" *In Memoriam*, a poem that "anticipates electronic hypertextuality," had to be "adapted" in order to work in its new environment of the intermedia web created by George Landow and his students at Brown University — the quoted terms are all Landow's.<sup>8</sup> The inclusion of links required decisions on what parts of the text should be linked with what other parts and with what other texts, and this, in turn, required reflections on context, poetic codes and conventions, literary history and the reading process. A holopoem, in Eduardo Kac's conception, is typically *not* a holographic rendering of an ink-and-paper based text; a videopoem is typically *not* a videotaped reading or video scanning of printed poetry.

The most significant lesson to be learned from these and similar observations is that the channel and other constitutive factors of the process of poetic communication should not be conceived of as independent units.<sup>9</sup> On the contrary, the relevance of innovations with regard to the channel of literary communication depends on the influence of such innovations on other factors. These factors go from the employed codes (including generic codes) and the syntax of poetic texts, via the newly generated possibilities of semantic valuation thereof, to the pragmatics of poetic communication and the experiences integrated therein. *Exploring the very interrelationships of all these aspects* could be considered an overall objective of new media poetry.

It is in this respect that the immateriality of new media poems truly transforms the field of poetic communication. There are two main reasons for this. First, the conditions for such exploration prevalent in virtual writing spaces are unavailable in a print environment, or only available to a very limited extent. Their employment triggers a reevaluation of potentially every convention on the level of sign construction. Consequently, *new* interrelationships between the aforementioned aspects of poetic communication arise. Second, in responding to the new media poem, the reader therefore cannot but engage in a similar reevaluation. In their immateriality, the explorations of new media poetry may thus offer a new perspective on language itself and, ultimately, on our verbal behavior. Let us now consider each of these points in a little more detail.



It follows from the above that in new media poetry the poetic texts will be endowed with features that are *unique* to the virtual environments in which they are written and read. Surely one of the most important of these features is variability. Jim Rosenberg’s hyperpoems, Eduardo Kac’s holopoems, Melo e Castro’s videopoems and other works represented in this anthology are all characterized by a fluctuation and change that cancels

the self-contained invariability of printed texts.

10 The complexity of that web and the possibilities of navigation differ substantially from hypertext to hypertext, depending on such factors as the number of lexia and links, or whether or not there is a fixed “beginning,” or whether it is a “read-only” text or allows the reader to construct links and change lexia, and particularly on the way in which the hypertext is organized: with fixed links, random links or conditional links.

11 Rosenberg, Jim. 1991. “Openings: The Connection Direct. Personal Notes on Poetics.” On line via <http://www.well.com/user/jer/openings.html>

12 Unpublished as yet, but see <http://www.well.com/user/jer/diff.html> for an example. Rosenberg’s characterizations of the hypertextual principles involved in this work are quoted from “Navigating Nowhere / Hypertext In/raewhere”; cf. <http://www.well.com/user/jer/NNHI.html>

In Rosenberg’s poems, as in all hypertexts, the reader has to find his/her own textual path by navigating through a web of linked lexia.<sup>10</sup> In theory, this already questions the validity of the concept of *the* literary message as a syntagm of textual units presented in fixed and permanent linear sequence, transmitted in a process of literary communication from author to reader. But in practice, at least according to Rosenberg,<sup>11</sup> “hypertext does not go nearly far enough.” The reference is to those hypertexts



Variation and change take place in time; the introduction of time as a feature of the written text is another innovation uniquely realizable in the new media writing spaces.

Time and time manipulation are explored in various ways throughout new media poetry, particularly in Melo e Castro's video poems, in Kac's holopoems and in the animated poetry of authors like Jean-Marie Dutey, Patrick-Henri Burgaud, Tibor Papp, Philippe Bootz.<sup>13</sup> It must be stressed that this time is genuine — albeit virtual — text-time, not real time, as in poetry performance, nor read-time. In fact, text-time and read-time need not coincide at all — for instance in looped videos, or in works with reversible time vectors — and precisely that will then be one of the operative factors of the poems at stake. But then again, read-time may determine text-time: in all of Kac's holopoems, the duration of momentary configurations of the texts and the tempo of their transition depend on the (eye-) movements of the reader through time as well as space.



The employment of such features as variability, fluctuation and temporality will result in a *reconsideration* of communicative habits, with more or less dramatic results. This concerns not just conventions of poetic writing, for instance with regard to prosody or poetic closure — it particularly concerns conventions of verbal communication and its organizational infrastructure in general, for instance on the levels of graphematics, morphology and (text-) syntax.

For Rosenberg<sup>14</sup> and many others involved with hypertext literature and poetry, phrase structure is the bottom line when it comes to hypertextual organization of language. But evidently, other orientations are feasible. Eduardo Kac's *Storms* is a poem that *does* take hypertextual organization to the level of morphologic and graphematic structure, with links that blend one word into another: "scene" into "scent," "face" into "trace." Kac's orientation is towards "motion, displacement and metamorphosis."<sup>15</sup> This is particularly clear in holopoems such as *Adhuc* (cf. *figures 2a to 2f*), in which the constituent letters of a fairly limited number of basic words float through holographic space, generating a realm of morphologic possibilities.<sup>16</sup> Now, as one word turns into another on the computer screen or

13 See especially the electronic journal *Alire* (Paris: L.A.I.R.E.) for samples of this animated poetry.

14 As he writes in "Non-Linear Prosody": "Even I would balk at taking hypertext inside the word. The words are given to us, by and large; it does not seem reasonable to me to intervene in that natural process with an external administration of hypertext structure."

15 Kac, Eduardo. 1995. *Holopoetry. Essays, manifestoes, critical and theoretical writings*. Lexington, Kentucky: New Media Editions, 64.

16 Kac. *Holopoetry*, 49. "Still" images from this and other holopoems are included on Kac's www site (<http://www.uky.edu/FineArts/Art/kac/kachome.html>).

17 Bootz, Philippe. 1994. "Poésies en machinations." In: *Littérature*, vol. 96, 65. See also his contribution to this anthology.

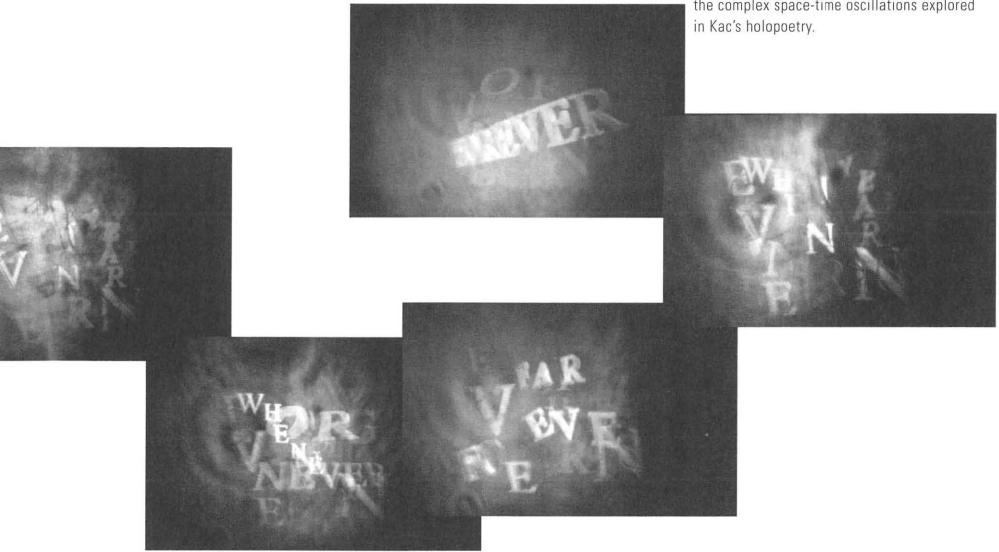
18 Bootz. "Poésies," 68

**Figures 2a to 2f**

*Adhuc*

Eduardo Kac, 1991

These six photographs of the holopoem *Adhuc*, taken from six different angles, reveal the complex space-time oscillations explored in Kac's holopoetry.



within the holographic space, the most intriguing question is: what happens in between? Merely to state this question, to suggest that this notion of in between could be imported into the framework of linguistic organization means to reconsider much of what we thought we knew about the language we are accustomed to use.

Commenting on the text generators developed by members of the French group L.A.I.R.E. and other authors, Philippe Bootz suggests that we can no longer uphold the concept of a "text written to be read."<sup>17</sup> Rather, it dissolves into a "text-written" (*texte-écrit*) and a "text-to-read" (*texte-à-lire*) or, alternatively, a "text-to-see" (*texte-à-voir*). The "text-written" is not to be confused, as Bootz emphasizes,<sup>18</sup> with the storyboard or the computer program for the generator. Rather, it is an "abstract structure compiled of a logic applied to the functional rules of conceptual material," usually language. Although text-written

and text-to-read are closely entwined, their syntactic status thus differs completely, at least according to Bootz's conceptualization. Grammar, in particular, only applies to the latter, for "grammar is an element of the material and not of the logic of functioning," Bootz writes. But obviously, that logic determines the syntactic structure of the text-to-read. What, then, is the status of that syntax? It is an aspect of a "modality of realization" (*modalité de réalisation*).<sup>19</sup> Couldn't we read "modality" here in the logical, grammatical as well as procedural sense of the word? In any case, Bootz's comments on text generators point to the interdependence of these three levels. The consequences thereof need to be considered in a reevaluation of our views on *the* structure of language and of poetic texts.

Poetry/text generators such as Pedro Barbosa's and Abílio Cavalheiro's *Sintext*<sup>20</sup> — offered to the reader as a computer application that combines a choice of fifteen source texts with permutational procedures, some parameters of which can be set by the reader — evoke fundamental questions with regard to the identification of *the* text, as a syntagmatic construction. Is every generated text a self-sufficient unit? Or are they, rather, samples of *the* text, which should be regarded as an indefinite or even infinite continuum of possibilities? Is the source text or vocabulary part of *the* text? Whoever is inclined to answer the latter question with a straightforward "no" should be reminded that the selection of that source is of crucial importance for the outcome of the generative process. Quite possibly, there are no straightforward answers to these questions — all answers depend on perspective, and recognizing that may be an important part of the generated text's meaning. Again, all this has far-reaching consequences for what we believe to be

texts and for what we believe we can do with them.

Finally, as the contemplation of the interrelationships, features and evoked transformations of conventional views sketched in the above are part and parcel of the process of poetic communication, the realization of this process

19 Bootz. "Poésies," 69.

20 Barbosa, Pedro and Abílio Cavalheiro. 1994. "Sintext. Gerador de Textos" [1993/94]. *Alire* 8. Paris: L.A.I.R.E.

21 Less elementary, the reader always has an interpretive task, in print as well as new media poetry. The difference between the two lies in what is offered for interpretation.

22 Kac. *Holopoetry*, 113.

becomes a *shared responsibility* of poet and reader. At first sight, this may appear to be nothing new. In a sense, the reader has indeed always been the one to decide whether or not a poem or any other text can fulfill its communicative function, for instance in the very elementary sense that he or she must decide whether to read a text or leave it *unread*.<sup>21</sup> But that comes uncomfortably close to the view on communication that new media poetry (and experimental literature in general) challenges; the view that holds that communication is the transmission of a “meaningful content” through some message that the “receiver” has to accept for the communication to succeed. In new media poetry, as we see it, an entirely different *rapport* between author and reader prevails.

In new media poetry communication becomes negotiation. It is not the text that fulfills its communicative function or fails to do so. Rather, the merging activities of poet and reader fulfill poetic communication, and in that process a poetic text is created. The previously indicated characteristics of new media poetry, from the navigation through hypertext webs to the modalities of computer generated poems, all point to the same conclusion that Eduardo Kac draws from Baudrillard’s philosophy of the media:<sup>22</sup>

If something is totally predetermined there’s no communication. It is nothing but unilateral transmission. Communication must imply openness.... When Baudrillard talks about restoring responsibility to the media,... it refers to the social responsibility that the media have, but it also opens up the idea for the artist to restore the responsibility of the media, in the sense that the media must allow people to respond,... to interact, to share, to discover together, rather than be at the end as consumers.

## New media poetry - some writing strategies

By way of example, and thus far from pretending to develop an exhaustive typology of forms of new media poetry, let us now briefly consider some writing strategies developed in this poetry. The poetical focus is on syntax, on the procedures involved in the production of signs, and on the employed sign continuum, respectively. Of course these are abstractions from tendencies — in practice, poets will amalgamate and vary such writing strategies. Their momentary distinction may be useful in order to show some of the fundamental means and methods used in new media poetry.

New media poetry often relies on the *confrontation and integration of various syntactic systems* — not so much in the sense of combining various natural languages (although that may be the case), but of integrating altogether different types of syntactic organization. This, in turn, undermines these organizational structures. In fact, it would not be too far off to envisage new media poetry as a collective attempt to *challenge the notion of the syntagm as something given*, particularly as something determined by the conventionality of a single, unequivocal syntactic system and also as something *not* determined by choices of the reader.

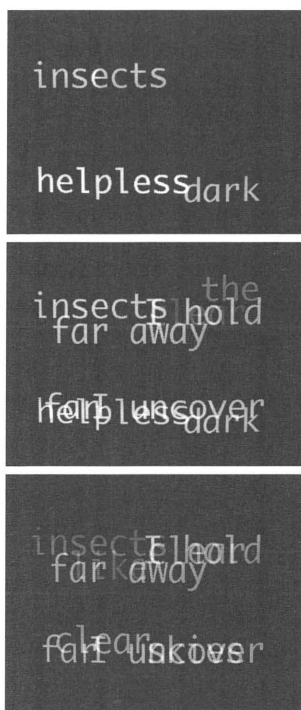
We have already hinted at this when we discussed hypertext poetry and poetry generators. Other examples are ready at hand. Many new media poems involve the *juxtaposition* of verbal — and other — elements, whether in two dimensions or three (for instance, in some of André Vallias's multimedia digital works) or four (the latter in most of Kac's holopoems). When regarded as the complete absence of any syntactic structure, a "structural zero" in Jim Rosenberg's terms,<sup>23</sup> juxtaposition is disjunctively opposed to syntagmatics. But the new media writing spaces allow for

other combinational procedures than verbal syntactic structure only, e.g., hypertext links, (virtual) diagrams, holographic metamorphosis, video transformations. As unresolved, or not-yet-resolved, structural relationships, these enable an *interplay between* rather than a diffusion of various possibilities of text construction. Thus conventional verbal syntax "becomes an option but not an obstacle," Rosenberg continues; "poetry is given the openness that has been taken for granted in the other arts for decades, without giving up the richness that syntax provides as a vocabulary of structural descriptions."

23 Rosenberg. "Openings."

24 It is impossible to reproduce even an aspect of this work accurately in print. Kac's www site (cf. note 16) gives access to the poem. The images of the poem reproduced here were shot off the screen with shutter open, in an attempt to represent the passage of time.

25 de Melo e Castro, E.M. 1996. "The Cryptic Eye." In: Jackson, K. David, Eric Vos and Johanna Drucker, editors. *Experimental, Visual, Concrete. Avant Garde Poetry Since 1960*, Amsterdam/Atlanta: Rodopi. "Infopoetr" is defined by Melo e Castro as "poetry made with the use of the computer"; it "thus adds the virtual reality of the poetic images to the virtual, dematerialized substance of the synthetic imagery and writing produced by the computer." In doing so, *The Cryptic Eye* relies on the computer's capability to create a video image.



Figures 3a, 3b, and 3c

*Insect.Desperto*  
Eduardo Kac, 1995

In an attempt to capture the dynamic quality of Kac's "Insect.Desperto," these three photographs were shot off the computer screen with the piece running. These three images do not reveal static configurations, but instances of fast-paced apparitions.

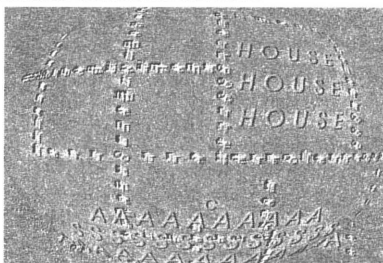
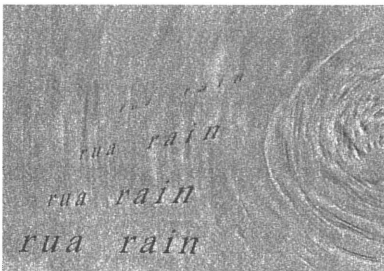
A complex example of the combination of various syntactic possibilities can be found in Eduardo Kac's *Insect Desperto*.<sup>24</sup> In a very rapid succession of flashes (figures 3a, 3b, 3c), that revert direction halfway through the poem, English words and brief phrases appear, disappear and reappear, scattered over the computer screen, while a spoken, synthesized Portuguese text is heard. The confrontations here are simultaneously between visual and aural language, between spatial and temporal development, between various natural languages (taking linguistic capacities and incapacities of the reader/viewer/listener into account), and between linear and non-linear verbal processes. While, as Kac writes in the "ReadMe" file accompanying this poem, "the elusive movement of the words on the screen can be read in many ways," for instance as "unresolved hesitation concerning the construction of syntagms" but also as "reflecting the fleeting behavior of flying insects," its combination with the temporo-linear Portuguese text doubles the "evoke[d] inconsistencies and undecided aspects of life," verbal and otherwise.

New media poetry often involves a confrontation of *continuous and discontinuous systemacies*. The ordinary verbal syntagm, grounded in the alphabet, is always a combination of discrete units (letters, lexemes, phrases, etc.), whereas, for instance, the video image covers the whole range from radical fragmentation, e.g., in montage, to total density, e.g., in color transformations. Every attempt to reconcile or negotiate these

systemacies implies that our semiotic habits need to be reconsidered. As Melo e Castro writes with regard to his series of "info-poems" *The Cryptic Eye*: "A counter-semiotics will be required to establish new and unexpected relations between the tools and the means we use to communicate: the words and the colors."<sup>25</sup> The juxtaposition of words in English and Portuguese as part of the color spectrum in the computer-video image" address[es] the question of readability and, ultimately, our capacity to read by using our eyes" (cf. figures 4a and 4b).

New media poetry finds one of its pillars in the *interactive production of text/sign units*. An extreme ex-

Figures 4a and 4b  
*The Cryptic Eye*  
 E.M. de Melo e Castro, 1995



ample of the interactive poem (or narrative text, for that matter) is the one that, literally, does not exist as a readable text without a reader's act.<sup>26</sup> In their simultaneity, Rosenberg's poems are almost completely illegible — they require the reader to reconstruct legibility through selecting text planes. In Kac's holopoetry, the reception process required for the production of a readable text involves a range of physical and sensorial activities. What text the reader/viewer sees depends entirely on his/her physical position relative to the hologram and, especially, on his/her body and eye movement:<sup>27</sup>

When the viewer starts to look for words and their links, the texts will transform themselves, move in three-dimensional space, change in color and meaning, coalesce and disappear. This viewer-activated choreography is as much a part of the signifying process as the transforming verbal and visual elements themselves.

Undermining the concept of the text or even the verbal sign as something given, something preordained, such works exemplify the reader's part in bringing the poem, its text and its meaning into existence.

One might be inclined to object that this latter observation overlooks the fact that the reader's activities are always limited by parameters set by the poet. The choice of words or letters, their number, their relative position within the holographic or screen space, the size of that space — all these determine the choreographic playground of the reader at least to some extent. But first of all, this only points to the *shared* responsibilities of poet and reader in developing a process of poetic communication. And furthermore, expansions of that playground can be conceived quite easily.

One already often explored possibility is to subdue the mentioned parameters to chance, through *aleatoric devices*. Of course aleatorics have been employed in poetry before the new media were available, but the computer, for instance, opens up many new vistas in this respect. An example can be found in the collaborations between Kenneth Sherwood and Richard Kostelanetz on their *Monopoem Workings*.<sup>28</sup> First, Kostelanetz's monopoems — single word texts that serve as a source vocabulary — were "sent through a series of near-random cut-paste and alphabetization procedures" offered by an ordinary word

processor. Then, the resulting texts were “amplified ... in accord with the computer’s ear,” expanding them “by addition of words that a standard word processor designates as phonetic matches.” But what word processor — and in which language? Just suppose that not only the source and resulting texts of these “workings” but also its program were down-loadable (and what could the technological impediments to that be?). Suppose that the “workings” would continue on our personal computers. Then the resulting texts would differ from computer to computer, as the poem makes use of, or at least could make use of word processor’s dictionaries compiled by their individual users, the readers of the poem, all in their own language. Telecommunications and tele-presence installations could be added. It would even be conceivable to let a poem lead a virtual life of its own on the Internet, through procedures similar to the ones employed in artificial life projects. The ongoing development of the work, i.e., the continuous change of the parameters once set by its author, would then depend on such factors as the number of readers who care to connect to this poem and the size of the disk space they wish to provide it with. Language acquires yet another form of being!

These and quite a few of the aforementioned examples point to yet another writing strategy of new media poetry that we want to mention here: the *effectuation of sign behavior*, particularly motion. The Dutch-French poet Patrick-Henri Burgaud employs computer *animation* on the most fundamental of all writing levels, *graphematics*, in his poem *La Mer*. The noun phrase “Les vagues de la mer” is performed (that seems to be the right word) in what one could call animated calligraphy, and its complying verb phrase “dansent au chant des pierres” in a print-like screen font (cf. *figures 5a to 5e*).<sup>29</sup> Burgaud is well aware that implementing motion on this basic level is not so much a goal in itself but a means to achieve new expressive possibilities on all levels of poetic communication.<sup>30</sup>

Animated poetry allows the exploration of all sign virtualities. The letter is no longer a zero space, non significant, absent. It is an image, a form that may be charged with meaning and values. This provides a range of opportunities to amalgamate word and image, from stylized pictograms to highly realistic representations. Motion, spatio-temporal development allows the introduction of a novel informative element, a narrative or discursive dimension that in turn orients and enriches the reading process.

26 It does of course exist as — digital — information stored on a computer disk or other storage medium.

27 Kac. *Holopoetry*, 85.

28 See <http://wings.buffalo.edu/epc/riif/riif01/kost0101.html>; Sherwood’s following comments on “Monopoem Workings” are quoted from this source.

29 “The waves of the sea/dance to the song of stones.” The “floating” letters of the first phrase, especially the bird-shaped “v” and the surf-like “m,” and the print-like blocks of the second phrase are clearly linked with semantic values. Realized in collaboration with Jean-Marie Dutey, this poem is included in *Alire* 8.

30 Burgaud, Patrick-Henri. 1995. “Multimedia-poëzie/La poésie multimedia” Lecture presented at the Hogeschool voor de Kunsten at Arnhem, the Netherlands. Our translation.

Others, for example Philippe Bootz in *A bribes abbatues*,<sup>31</sup> use *animation* as a *morphologic* and *syntactic* device: word parts and phrases move over the computer screen to combine into new words and phrases, to change from nouns to adjectives or verbs and so on. William Dickey's tripartite description of the condition of electronic writing as tentative, fluid, changeable can, arguably, be exemplified no more literally than through this poetry.

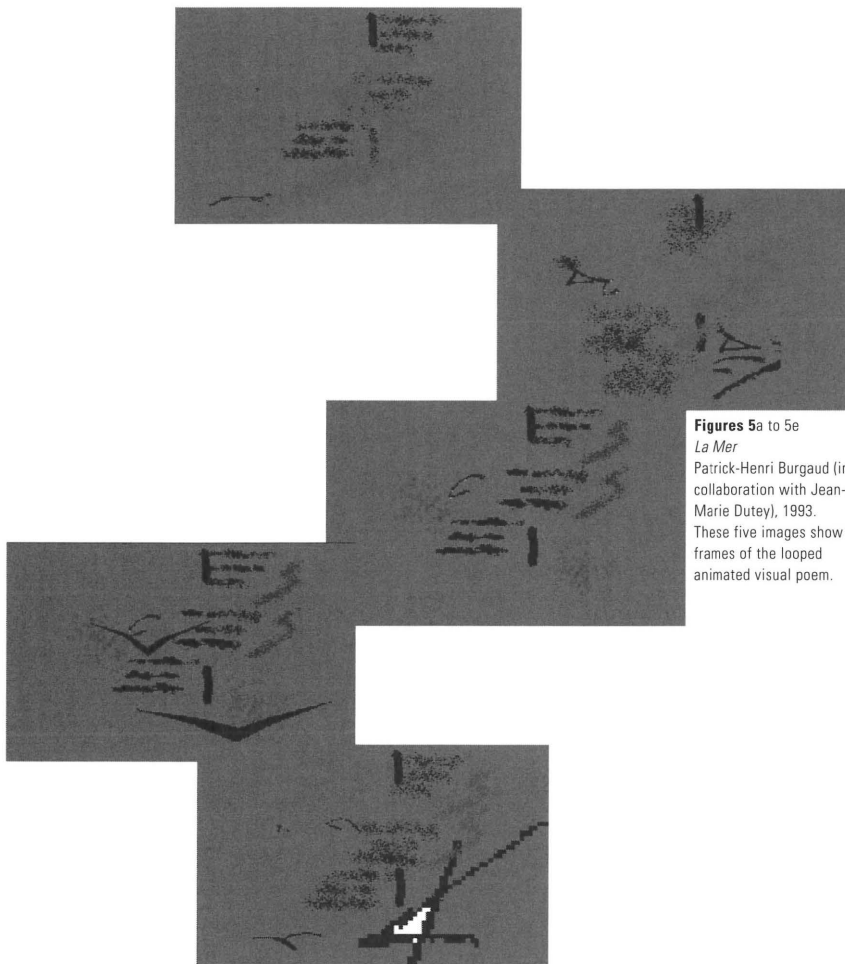
All in all, it appears that many of the new media poetics, as they go all the way down into the fine structure of language as Rosenberg would say, at least in part aim at *repletion of the verbal sign*. They stress that there is, indeed, a sign *continuum*, out of which our verbal signs are distilled. This proto-semiotic environment is fully replete; it does not discriminate between sign features that are and those that are not charged with a semiotic function. But verbal practice is different. Considerations of shape, color, permutation, position in and movement through time and space and other such qualities of the written sign are perhaps not entirely neglected in the institutionalized writing spaces of printed texts, but they are certainly codified into patterns that seem to reward us for *not* paying attention to these non-alphabetic aspects of our languages. Nonetheless, these are the aspects that directly link our languages to the sensorial procedures through which we achieve understanding of the environments in which we live. The reward, allegedly, comes in transparency, clarity, unequivocality, rapid understanding, stability, vindication, authority. But there is also a loss of potentialities, of a potential understanding of both language and the world in which it is used as spaces in which we need *all* our sensorial capacities in order to find our way, or rather: in our never ending attempts to find our way.<sup>32</sup> The signs of

31 *Alire* 9, 1995. Paris: L.A.I.R.E.

32 This should not be read as a disqualification of print literature; we do not believe that print has exhausted its potential, as quite a few advocates of the new media claim. Still, new media environments allow and in fact invoke the use of sign features that are very hard to employ, if at all, in a print environment.

33 Kac, *Holopoetry*, 85.

Rosenberg's simultaneities, Kac's holopoems, Melo e Castro's video poems, Burgaud's computer calligraphics, Györi's virtual poetry, Bootz's animated texts, Cayley's cybertexts, Vallias's digital and diagrammatic works and a rapidly growing number of other media-poetic innovations restore a part of that loss, all in their own way, through their



**Figures 5a to 5e**  
*La Mer*  
 Patrick-Henri Burgaud (in  
 collaboration with Jean-  
 Marie Dutey), 1993.  
 These five images show  
 frames of the looped  
 animated visual poem.

own channels. As Kac writes: “Language plays a fundamental role in the constitution of our experiential world. To question the structure of language” — through the means offered by the new media — “is to investigate how realities are constructed.”<sup>33</sup>