T e c h n o p o e t r y   R i s i n g : Essays & Poems 1993-2006

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Selections 2.0 / Technopoetry Rising: An Overview

   Since 1993, I have been intensively involved as an author and publisher of poetry in digital space. [1] In 1994, while working on my Ph.D., I started writing a series of articles, gathered under a rubric I called technopoetics; by 1996, many of these articulations were posted at my Electronic Poetry Center (http://epc.buffalo.edu) author page on the World Wide Web (WWW). However, not willing to adhere to a precise agenda or definition, or take responsibility for the term, I abandoned the moniker in favor of other titles, such as cybertext and digital poetry. Meanwhile, topics of my essays and lectures continued to address issues related to my initial viewpoints. Now, years later, I have been encouraged by colleagues to gather some samples of critical and artistic materials I've produced that reflect a sense of the widespread development of poetry's rapport with computer technology through my own perspective and work. I return to the term "technopoetry" because of its encompassing breadth and to review how it has matured. The essays included in the "Technopoetry Rising" section of this CD-ROM will be published in a bi-lingual volume (translated into Portuguese by Jorge Luiz Antonio), with the title *Technopoetry Rising: Essays and works 1993-2005* (São Paulo, Brazil: Musa Editora, 2006); the writing will be accompanied by a CD-ROM containing the media works also found in this collection. The edition you are now looking at contains an additional eight lectures prepared for students and faculty in the Faculty of Creative Multimedia (FCM) at Multimedia University (MMU) in Cyberjaya, Malaysia. *Selections* 2.0 is the second volume of media works I have released; the first (2003) was a very limited (and different type of) edition (e.g., it contained no essays). This new "e-book" is being produced in consultation with various MMU professors during my stint as a Visiting Fulbright Scholar; each of the "MMU Lectures" features a companion website located at http://web.njit.edu/~funkhous/mmu/mmulectures.html.
   Critical explorations such as Caterina Davinio's *Tecno-Poesia e realtà virtuali* (Editorale Sometti, 2002) and Jorge Luiz Antonio's doctoral thesis *Poesia eletrônica: negociações com os processos digitais* (Pontificia Universidade Católica de São Paulo, 2005) promote the term technopoetry. In a broad sense, the views and fundamental conditions of text perceived by both of these scholars correspond with my original and sustained views. Clearly, a loosely connected, international community of electronic poets has been busily staking out creative and critical ground for literary works produced using new media devices; some have opted to use technopoetry as a moniker.
   My early articulations, such as "Takes a Lot of Voices to Sing a Millennial Song," although suggestive, are unwilling to establish, or argue for, a broad, exclusive definition for technopoetry because I felt it is a matter that should be necessarily left open for growth and interpretation; this inclination sustained itself for many years, until I was essentially forced to define the genre of digital poetry in a recent academic scholarly monograph entitled *Prehistoric Digital Poetry: An Archaeology of Forms 1959-1995* (University of Alabama Press, 2007). In a poststructural world, and at a genre's birth, there are definite advantages to leaving intellectual and artistic matters open for discussion. Thus, in the initial essay, technopoetry is proposed as a loosely specified pursuit, and it is interesting to look at the statements made in this essay more than a decade later and discover how the premises set forth for the endeavor have and have not been developed over time. I am pleased by the transcontinental proliferation and variety of electronic works that have ensued, and that

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[1] In 1993, I co-edited one of the earliest Internet poetry publications, *We Magazine* Issue 17; in 1995, I edited *The Little Magazine* Vol. 21, the first literary journal published on CD-ROM in the United States.

artists have steadfastly endeavored to blur genres in digital poetry. However, the sense of inclusiveness that I had hoped for has not been a predominant feature of texts that have been produced during this period. Most digital poems are still largely insular. I always return to Ted Nelson's concept of hypertext as connecting *everything*, and am disappointed in the glaring neglect of this pursuit, though I realize that this may come at a later juncture in the form's development. Practical manifestations of Nelson's vision of hypermedia now have the potential to become manifest in Hypervideo, Virtual Poetry, Holopoetry (i.e., formations of animated texts), but the branching qualities Nelson envisioned have not been widely cultivated. At this point, I continue to promote the idea that digital technology enables a poetic literature that effectively "moves" "outside" itself. There are multiple channels through which to implement this type of practice, which indeed furthers the idea of a "poetry in motion;" the equipment's capabilities could be used to extend the historical limitations of discretely produced literary titles. Programming, as well as the use of networks and software, can be used to create an environment that mechanically emulates the intertextual complexities of poetry. Such an approach would permit linking texts to exterior sources, and bringing together texts of disparate origin into a hybridized articulation.

I am somewhat surprised that some of the other ideals that were envisioned in the first essay have also been largely ignored. For instance, while a few collective efforts have been made (notably works by the group "9 Way Mind" and by Lori Talley and Judd Morrisey at the International Festivals of E-Poetry organized by Loss Pequeño Glazier in 2001, 2003, and 2005), poems that can be considered as group constructions have not been a predominant force. This is surprising, since technologized poetry has unquestionably shown the capacity to promote collaboration. Long before the WWW came into existence, Brion Gysin's permutation poems were enlivened in digital form due to the intervention of a programmer, Margaret Masterman and Robin McKinnon Wood pooled their knowledge to create automated haiku, and graphical poems emerged as a result of collaborations between Lillian Schwartz and Ken Knowlton. The hypermedia publications *Alire* [*Le Salon de Lecture Électronique: 1989-1995* CD-ROM] and *The Little Magazine Volume 21* [CD-ROM, 1995] present multiple joint efforts; the *Internalational Dictionary of Neologism*, initiated by mIEKAL aND, is the product of dozens of contributors (aND is one of the few artists who is committed to collaboration), as were my own works produced in MOO space and with the Purkinge group (see Ch. 1, *Selected Technopoems*, and works in *Media Poems*). Artists, writers, and programmers working together to conceive and produce digital poetry is not a novel approach to composition, though this mode of implementation has, finally, been less than profuse. Because of the complexity and aesthetic density enabled by new media technology, digital poetics almost inherently calls for a collaborative methodology: ideally, artists with expertise in particular areas would work together to formulate digital works programmatically. Frequently, however, individuals produce compositions. Further considerations of the potentials for collaboration are especially relevant at present, as constructive tools such as WIKI, bulletin boards, and chat rooms are convenient mechanisms that enable artistic collaboration despite geographical separation. For now, only a few examples of such electronic poems can be found.

Technopoetry is not a frivolous pursuit, but rather a creative and thoughtful one, as seen in this definition I composed with Nick Lawrence and Kenneth Sherwood, published in the journal *Chloroform: An Aesthetics of Critical Writing* (Buffalo: SUNY, 1997):

TECHNOPOETICS. Vt(rans/formative). Pl. That which connects mind (vision) and machine by way of finger's tips, voice, and everything in between; discrepantly

engages and links various pre- and post- industrial worlds [Beginner's Mind: "Takes a Lot of Voices to Sing a Millennial Song" (*I Am a Child.* Buffalo: Tailspin: 1994) starts a phase of writings and conversations about "technopoetics." {As a label, it is unessential. With all due critical self-reflexivity and levity: to separate an integrative poetics by foregrounding its attachment to technology seems to hold no purpose other than to create further divisions within the field of North America poetry}]. Co-labor/ation between people and machines enacting changes in notions of "author" and "publisher." Actively, if loosely, promotes the decentralization of singular entity as author. Resists the exclusive aspects of technology in general, and maintains a historical awareness that it is merely a forerunner to what will be customary activity to future generations of writers and artists in the post-electronic age. Interaction and action between artists and engineers, technicians of the sacred, technicians of the mechanical, and hybrids of the two. CF

2. (*Letter to CF*): Once past the pro-/anti- cul-de-sac, the question shakes loose its component parts, technology and poetry, inviting us to consider separately: (1) what poetic(s) inheres already in the development of the new electrocommunications technology? never "just a tool"—tools are made for specific purposes, even if they can be appropriated for other such, undreamed of by the initial applicators; what the source, and in what direction streams the mainstream of this cyber-flow? (2) what is the technology *in* our past and current poetic operations? not just "I used a typewriter, but now I have moved on to color markers," but what assemblages of social reproduction and distribution are built into poetry's conceptions and particular address?

Address: say merely that the Net accelerated the conditions of what poststructuralism has identified as constitutive of all forms of writing, its capacity for near-infinite decontextualization, citation, iterability, and dissemination—what horizon do we therefore speed towards? Not the death of the author-function, for sure, nor of contention, power struggle, ideology. Instead—viz. the newly discovered Poe-esque hymns—a multiplication of authors within what was formerly considered the singular authority of the individual writer, an authority continually, ineradicably reproducing itself in the unlikeliest places, a conception of "readership" increasingly constituted by the disjunctive event rather than stabilities of genre, market-niche, tradition. And "event," albeit disjunctive, comes in spurts and flows. Maybe the prefix "hyper" (replacing the favored '50s era modifier, super-) refers not to the transport to a different place but to the faster reproduction of the same place, right here/right now—as that elusive point, the Now, recedes ever further from view.

If we could read all poetry as inescapably multiple in its composition and address, instantaneous in its passage, infinitely susceptible to appropriation and re-versing, would that remove the utopic pregnancy that is technopoetics? No; rather confirm its arrival. NL

3. (*Letter to CF*) Technopoetics can seem to have a hard edge, a hard drive, a drive to lose itself in the machine, deferring bodies to a dream of fluid discourse, which of course is a mirage, a death perhaps Sun Ra would warn against. Not a poetics of technology, but the perhaps redundancy that poetics *is* technology, just as the quill pen scratching beautiful arcs on handmade paper comes from *techne*, making, craft, skill, and tools.

Technopoetics is not simply a formalism either, like looking to the screen to SEE. But a continuum that finds possibility of poetry in and from pen to VGA monitor, from prayer to pirate radio broadcast, the poetics of the sacred or the celluloid. In these senses expansive, and as home to Robert Grenier's handwritten pieces as to Katie Yates' etchings or Blake's visual poetry as David Antin's talk pieces and the like.

But perhaps of technopoetics excludes, it is a poetry of densities over transparencies, a poetry that loves syllables and words and paper and modem-sounds and improvisation and typos enough that it does not heed the siren call of Wallace Stevens' "the reader becomes the book."

Technopoetics would perhaps also, rather than universalizing in a symposium of the whole, see the need now, in this time, for a constellation of difference—a dynamic, tense as well-tuned cat-gut. So for my situation the situation of the screen, the modem, electronic poetry—while for Nate Mackey a series of different traditions and musics, and these are not—via technopoetics—somehow available to me suddenly, when before they weren't. Technopoetics, what I share with the mystic horn society, is the tension, the relationship between difference and love. KS

In these statements, a liberal, multi-perspectival, collaboratively produced poetics of technopoetry is offered. Whether or not such ideals can be realized remains to be seen.

Instead of arguing for a specific aesthetics, I have for many years attempted in my writing and artwork—which also extends to non-electronic concerns—to build a context for an expansive, collaboratively oriented potentials that result from the implementation of digital technology in processing poetry. In some essays, such as "Hypertext and Poetry," I consider the pedagogical implications of fusing technology and poetry, or build frameworks based in literature and art. For example, in the lecture "Origins of Multimedia and Interactive Art in the United States," I contextualize the proposition of hypermedia as an extension of historical artistic expression, given new means. "Radical Artifice Beyond *Radical Artifice*" considers the importances of Espen Aarseth's stellar concept of cybertext to describe analog manifestations of cybertext in particular visual works. Aarseth's seminal idea is revisited in the lecture "Digital Literary Arts," which reinforces the utility of poems that contain an "information feedback loop" (Aarseth 1). "Bridge Work," a review of Stephanie Strickland's book *V: WaveSon.ets/Losing L'una* further discusses the potential relationship between printed and electronic texts.

In this collection, the materials range from being speculative ("Net time eyebeam: stretching corporeal conduction") to explanatory ("Digital Literature and Repurposing: Publishing Screen and Page," "Notes on the Body in Relation to Technopoetry: A Historical View"). My report on E-Poetry 2003 and the Multimedia University lecture "Digital Poetry Today" provide up-to-date assessments of contemporary efforts being made in the field; works included in the Appendix and on the accompanying CD-ROM provide a few examples of my own productions and collaborations. Throughout these manifestations, I resist establishing a polemic regarding the tenets of technopoetry, intending to project instead a panoramic perspective that more appropriately reflects the multi-faceted results that emerge given the possibilities inherent to the modes of expression at hand.

At the 2001 E-POETRY festival, I encountered fascinating Brazilian poets. Our exchanges led to intensive cultivation of scholarship, refinement of my poetry, and respect for language, as I hope will be reflected in the trajectory of my narrative, particularly in an essay that was prepared for the 2004 Convention of the Modern Language Association, "Interpoetic Intermediation: Brazilian Digital Poetry." Indeed, my association with Brazil

has profoundly influenced the contents of the second half of this collection. I owe sincere gratitude to my South American comrades who accepted me into their milieu, including: Lucio Agra, Jorge Luiz Antonio, Wilton Azevedo, Giselle Beiguelman, Sheila Cabo, Augusto de Campos, Lucia Leão, Katia Maciel, Artur Matuck, André Parente, Marcus Salgado, and André Vallias. I have had the great fortune of presenting research at various institutions and events, and express my appreciation to the following institutions for their support: Universidade do Estado do Rio de Janeiro (2002), Universidade Presbiteriana Mackenzie (2002, 2003), Universidade de Estadual de Feira de Santana (2003), Festival Internacional de Linguagem Electrônica III (2003), Hipersônica 2003 (São Paulo), Acta Media II Simpósio Internacional de Artemídia e Cultura Digital (Museu de Arte Contemporânea da Universidade de São Paulo, 2003), Instituto des Artes Universidade Estadual Paulista (2002, 2005), Pontifícia Universidade Católica de São Paulo (2002, 2005), Faculdade Senac de Comunição e Artes (2002). Three additional technopoetics essays are published in Brazil: "Caminhando para for a de si mesma: a poesia hipermídia de lingual inglesa," forthcoming in the Proceedings of II Colóquio Internacional: A Crise da Poesia no Brasil, na França, na Europa e em Outras Latitudes (Universidade de Estadual de Feira de Santana, 2006); "Projecting Onto the Machine the Machine Projects Back," forthcoming in Wilton Azevedo's *Poéticas das Hipermídias*; and "Digital Media and Cybertext Poetry," forthcoming (Universidade Presbiteriana Mackenzie, São Paulo: 2006). Needless to say, I have greatly benefited from the enthusiastic response my works has received in Brazil. What an honor to have the opportunity to encounter such engaged producers of (and audiences for) digital poetry.

At Multimedia University, I have had been privileged to work with several outstanding members of the Faculty of Creative Multimedia (FCM), each of whom has contributed to the technical construction of these materials in some important way. Without the guidance of Khong Chee Weng, who was instrumental in my residence at MMU to begin with, this CD-ROM would have never been launched; Khong was supportive of the publication of my work even before I arrived in Malaysia. My lectures for MMU students were initiated by Dr. Ahmad Rafi (Dean of the FCM); Nor Hazleza Binti Mohamad and Mohammad Rozi bin Amin suggested the topical areas they felt would be worthwhile to pursue. FCM faculty members Hilmy bin Abdul Rahim, John Hii Ing Kieng, Wong Chui Yin each contributed substantive aesthetic and methodological ideas, as did Patricia Leong Wee Tsui (Limkokweng University). Encouragement and enthusiastic dialogical exchanges with Yap Sau Bin have also had a meaningful effect on the formation of these materials. Without the technical support of Ziaulhak bin Md. Saim, the lectures and research capability in my apartment and office would have unquestionably suffered. While the works contained on this CD-ROM are my compositions, I consider the overall effort to produce them for a wider audience a collaborative effort; without the individuals mentioned above, this publication would not exist in such a form.

I have been part of the digital poetry subculture for many years, and have attended several international festivals as both researcher and performer. Two-thirds of the *Technopoetry Rising* essays were prepared for conferences or professional presentations; others were prepared for specific performances or publication. As we proceed into our highly technologized, global communities, such discussions and events seem extremely pertinent, as we need to cast as much light onto the subject as possible. I am hoping that this western exposure may be a catalyst for further excursions into inventive digital forms.

Chris Funkhouser, Cyberjaya 2006

1. "Takes a lot of voices
to sing a millenial song."[2]

     The majority of poetry people are familiar with small, relatively intimate scenarios, and many truly like it that way. Nevertheless, with hi-tech communications capabilities, and various forms of electronic text processing, the potential topographies of our interactive communities and activities have widened substantially over the past few years.[3]

     To begin to bring what is a newfledged concept out in the open, it is important to stress our use of the idea of technopoetics as a specific term, the concerns of which in this instance can be made very clear. Technopoetics proposed here is not a literary movement. It involves collaboration, with other people as well as the machines. This process itself is changing and dividing pervasive notions of what "author" and "publisher" are.

     "The electronic age now enjoys this time of awkwardness before
     the age itself disappears along with its name into the day to day
     of what at Xerox Park they've taken to calling 'Ubicomp,'
     ubiquitous computing..."[4]

     As the field(s) we find ourselves before expand, we remember what was written in *Convivio A Journal of Poetics*: "Poetics is a labor and a threshold where we are working to make an actual thing...," which "is a continual reformation.... Above all it treats of inclusion,...poetics, 'in the plural,' as Robert Duncan says."[5] To echo these notions, as we move into time, and, as a culture, succumb to technology (television, automobiles and such, as well as computers and digital intermedia), the work, our actions must be pluralized in order to maximize the potentials of the technology and not let them contribute to social fragmentation. In no way would we want to speak purely of technopoetry or the technopoetic. "Poetry," "technopoetry" is now, in its potential, something more than a poem, or a book of poems, in its blending with other forms and other media. Will Alexander, introducing a segment of the *We Magazine* Issue 18, describes the work presented as "...a mix of the poetic and essayistic...like opening up an artery of twilight, and opening up and walking through this vast new expanse where one is neither one [i.e. poetic] or the other [i.e. essayistic] but something completely different."[6]

     To state the apparent, this report comes from what considers itself a "first" world. As one writer has already pointed out, I am speaking from the perspective of an "unintentional elitism," of a "...live by the modem die by the modem future of poetry as an electronic medium."[7] This is true, but needs to be contextualized within the reality of the newness of this technology. We flail through the infancy of new technological spaces. New electronic networks begin to enlarge their envelopes beyond the corporate, military, governmental,

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[2] Don Byrd, *The Great Dimestore Centennial* (Barrytown, NY: Station Hill Press, 1986), p. 109. The concept is echoed in other places in the poem (i.e. "Takes a lot of penny whistles to play/a millennial tune." p. 13, etc.).

[3] Topographies is a term I've heard used in this context by Michael Joyce and others.

[4] Michael Joyce, "(Re)Placing the Author: 'A Book in the Ruins," SUNY-Albany, March 23, 1994.

[5] Louis Patler, "A WORD/AN INTRODUCTION," *Convivio A Journal of Poetics* No. 1 (Bolinas: Tombouctou Books, 1983), p. 7-8.

[6] Will Alexander, *We Magazine* Issue 18 (Santa Cruz: We Press, 1993).

[7] Tony Door, *The Poetry Project Newsletter*, October/November 1993, p. 9.

academic milieu which it has benefited until now. My position is a result of the privilege of birth and guidance, of research and exploration, and is accepted as responsibility.

Among the things revealed in the processes of technopoetics is a new kind of wear and fatigue of the body. We are in the age of a physical and mental/consciousness transformation caused by technological phenomena. In fact, sitting in front of video screens and computer monitors especially might be likened to what George Oppen once described as "the bright light of shipwreck" in the poem "Of Being Numerous." Clearly, the predominant scenario in this and future age is a movement towards "The absolute singular/The unearthly bonds/Of the singular", our own type of "Insanity in high places..." in our homes, with the beam of the computer's screen on our faces as well as those of the police helicopter searchlights above our cities and suburbs..."By the shipwreck/Of the singular."[8] This points to one of the obvious advantages of collaboration: that the time spent by any one individual can be spread out over a collective.

There is little chance that our civilization is ever going to be less reliant on computers. "Ours is a time in which ontological questions of truth and falsehoods are less relevant than issues of control--control of meaning, control of context."[9] Thus, some of us have been inspired to "seize the media."[10] The alternative would be to leave it to the disposal of the military industrial complex.

As managing editor for *EJournal*, an on-line (Internet) academic magazine concerned with electronic communication between computer users and the implications thereof, as editor with We Press (where a group of editors conspire to "publish" poetry on compact disc, cassette, video and Internet as well as on paper), in addition to my role as a teacher, I am intimately involved with high-tech approaches to both poetry/poetics and the presentation of electronic text. In the spring of 1993, We Press used the Internet (harbinger of the so-called "Information Superhighway") to circulate a poetry journal. After this experiment I wrote an essay regarding the frontier of cyberspace, "We Maga/zine XVII: (A) Textual Experiment." The essay is a theoretical and practical investigation of the po(e)tentials of producing a magazine on an electronic network and the attempt to incite a global community instantaneously through network connections. The essay's simple conclusion is that there is not a doubt that any publisher with a computer connected to the Internet (or the digital--video and audio-- networks which are soon to come to many, many households in America, and the much of the rest of the "first" world) can exponentially increase the circulation and audience of their publication--and otherwise make connections which they would not normally make--by transmuting what they are already involved with to include cyberspace.[11]

Of course there are severe socio-ideological concerns with regards to access to the technologies now available, and any fully legitimized network system must make room and provide equal access for everyone. This is not nearly close to being a living reality, but with "Ubicomp," and other systematic plans such as the Information Superhighway, it is likely that we will see millions more Americans become reliant on on-line services over the course of coming decades. It is important that we concern ourselves with equilateral space and

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[8] George Oppen, "Of Being Numerous," *Collected Poems* (New York: New Directions Books, 1975), pp. 152-60.

[9] Gene Youngblood, "The New Renaissance: Art, Science, and the Universal Machine" p. 15.

[10] Advice and phrase Peter Lamborn Wilson, Naropa Institute, 1989.

[11] Among other previously unknown correspondents for *We Magazine* Issue 18 were Arkadii Dragomoschenko and Armand Schwerner.

learn to cooperatively communicate within the interactive electronic arena now. This, of course, is easier in theory than practice.[12]

Before going further, I wanted to briefly connect technopoetics with what Donna Haraway speaks of in "A Cyborg Manifesto." Haraway writes, "By the late twentieth century, our time, a mythic time we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs. The cyborg is our ontology; it gives us our politics. The cyborg is a condensed image of both imagination and material reality, the two joined centres structuring any possibility of historical transformation."[13] What I find most liberating in Haraway's work, in addition to its pointed ideology ("...cyborg is a matter of fiction and lived experience that changes what counts as women's experience in the late twentieth century"), is its recontextualization of our species as a whole. How anyone can feel they are a part of the same corpus and mindset as those of the pre-industrial world is rather mysterious, to say the least. Do you not often feel constrained by the "metaphysical tradition" which is rooted in what is a truly archaic mode of thought and action? How much do we actually have in common with the mind and body set of pre-electronic culture? Cyborgs, "the awful apocalyptic telos of the 'West's' escalating dominations of abstract individuation," are concerned with "the relationships for forming wholes from parts, including those of polarity and hierarchical domination," and are troublesome because "they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism...often exceedingly unfaithful to their origin." Haraway's cyborg myth "is about transgressed boundaries, potent fusions, and dangerous possibilities which progressive people might explore as one part of needed political work" in an age where "the need for unity of people trying to resist world-wide intensification of domination has never been more acute."[14] Furthermore, as Don Byrd explains in *The Poetics of the Common Knowledge*, "Our fascination to ourselves as cyborgian creatures is that we combine in our beings the predictability of machines with the wreckless, independence of singular creatures."[15] As we are presented with both the predicament and the predictability of culture, as the computer and other forms of technology, ideological weapons all, begin to dominate our work places, and other places, we must familiarize ourselves with them and use them in a project of creating a better society.

Purkinge is a technopoetics writing collective with whom I am currently working in Albany. Purkinge improvisationally rends and resews texts in printed and oral forms, producing a particularly angular "writing" "centered" from different perspectives.[16] The group--at present, a quartet--invents and promotes new modes of authorship and anti-authorship, blooming melodic conversations in opposition to a system grown entropic. In our experimentations, enabled by technology (linked computers and multitrack recording equipment), we insist on the necessity of interactive, intercorporeal elements in our

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[12] While the POETICS list at SUNY-Buffalo was thriving for the first month I was a part of it, interaction decreased substantially for awhile after that period. There were some unusual and fiery interactions which may have contributed to the current status and general awkwardness of the list. My essay was posted to this list, resulting in a few personal correspondences but nothing out in the "public" forum. Note: Over time the POETICS list revised itself, weathered new scandals, and a dozen years later remains a solid resource for poets and poetics.

[13] Donna Haraway, "A Cyborg Manifesto," *Simians, Cyborgs, and Women* (New York: Routledge, 1991), p. 150.

[14] Quotes are from Haraway, pp. 149-154.

[15] Don Byrd, *The Poetics of the Common Knowledge* (Albany: SUNY Press, 1993), p. 16.

[16] Purkinge uses the Daedalus software program in its computer jams, and a four-track cassette system in its spoken/sound work. The group is an outgrowth of the Awopbop Collective, which was started by Don Byrd and Derek Owen in 1991 (see *The Little Magazine* Volume 20).

communication. The group's gatherings reflect a moment in the drift, theoretically and poetically fusing concept and action.

Nathaniel Mackey, in an essay on Amiri Baraka, writes of the poet's "obliquity, the sliding away from the proposed we find in many of Baraka's poems." Baraka's method "complies with a fugitive, perhaps idealist impulse, as though 'the mind, moving' might if not outmaneuver such constraints [i.e. social 'conditions whose limits one cannot escape,' and, by extension, the poetry produced within such conditions], at least register the need to do so." The "Obliquity or angularity" of such writing--and the lyric which rises from the implementation of such a poetics, which also typifies the type of work done by Purkinge-- "challenges the epistemic order whose constraints it implicitly brings to light."[17] In Purkinge, a multiplicity of elements, textual modes, and personalities come together in an intertextual play between sound and voice, meaning and obliquity. We develop a tangential "writing" style pointed towards the creation of a new mode of authorship in the movement away from a non-existent center. It is a conversation, a collaboration, melodic in its ideal. We inhale as well as we exhale, hearts dialate as well as contract. The group wants poetry that shows similar signs of life--and we turn the machine on.

In addition to expediting interpersonal communications, computer/digital technology has been used technopoetically in the form of hypertext, and through interactive textually based virtual reality spaces--known as MUDs and MOOs--on the Internet . According to George Landow, "Hypertext, a term coined by Theodor H. Nelson in the 1960s, refers also to a form of electronic text, a radically new information technology, and a mode of publication. 'By "hypertext," Nelson explains, 'I mean nonsequential writing--text that branches and allows choices to the reader, best read at an interactive screen….'"[18] MUD is an acronym for "Multiple User Dimension," which is an interactive textual-based virtual reality software being used in cyberspace. MOO stands for MUD Object Oriented, in which characters are created and whole electronic dimensions--including a type of hypertexts-- are built. A writer is able to compose by themselves, or with others, in these spaces.

I recently spent a few hours with hypertext writers Michael Joyce and Caroyln Guyer. Michael is a novelist, a cybernovelist, and one of the co-developers of Storyspace, "the premier hypertext program available today."[19] Carolyn is coordinator of the woman's hypertext collective High Pitched Voices. Michael gave a talk, "(Re)Placing the Author: 'A Book in the Ruins'" in Albany. He reads the Czeslaw Milosz poem "A Book in the Ruins," drawing metaphors between it and what he perceives as the condition of literature today. He promotes hypertext as the frontier of literature, a re-writing of the process of reading and writing, where the reader, in a sense, is able to write and rewrite any given book. It is an extreme concept for most people, who have quite a linear and perpetualized relationship with literature of all sorts. Joyce reads from Milosz--and interprets: "The poet stands in the ruins...it's the modernist moment...but no...this is not what we see...the poet makes his way into the ruins of a dark building." The building we read metaphorically as technology, "in so doing the movement itself reads barrier as gate. What he reads, he writes." The screen is the barrier, a "gate"--not passable by all. According to Joyce, "Electronic texts present

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[17] These quotes are by Nathaniel Mackey, *DISCREPANT ENGAGEMENT Dissonance, Cross-Culturality, and Experimental Writing* (New York: Cambridge University Press, 1993), p. 43.

[18] George Landow, *Hypertext The Convergence of Contemporary Critical Theory and Technology* (Baltimore: The Johns Hopkins University Press, 1992), p. 4.

[19] Ted Jennings, introducing Michael Joyce, University at Albany, 3/23/94.

themselves in the medium of their dissolution. They are read where they are written and they are written where they are read." A mantra throughout his talk was "print text stays itself, electronic text replaces itself."[20] We see hypertext as technopoetics in light of its process, which actively promotes the decentering of singular author, and hope the next phase in the development of hypertext software will allow for collaborative interaction in real-time.

An article in the recent issue of *Poets & Writers* magazine paraphrases Carolyn Guyer, noting the "text chunks," which "replace" themselves, are "called lexia, which may be images and sounds as well as paragraphs and their electronic links empower the reader either to submit to the writer's ordering of the story or to collaborate by manipulating the elements into an entirely new story."[21] High Pitched Voices is working together in a collaborative manner on-line. They have a hypertext discussion set up (in the same manner as the Buffalo POETICS conference), and they work together to composing hypertext in a MOO.[22] When one enters this particular electronic space, by issuing a few simple keyboard commands, they are greeted by the formation of an arch, a pair of mirrored, upper case "I"s as columnar bases. An inscription reads: "A roof over our heads, she said. Appropriate, I thought. Yonic symbol as protection and sign. And....there are two "I"s here. What more could we want?" A "reader" is invited to follow links, and, if interested, add to existing texts and create links between lexia. The group of women involved with High Pitched Voices also holds real-time meetings in this space, open to anyone who is able to log in. We see tremendous poetentials in interactivity such as this.

Technopoetics resists the exclusivity of the technology in general, and maintains a historical awareness that it is merely a forerunner to what will be customary activity to future generations of writers and artists in the post-electronic age. With due respect and admiration for the PRE-FACE of *Technicians of the Sacred*, which asserts PRIMITIVE MEANS COMPLEX, technopoetics enacts the reversal of that phrase, certain that complex can mean primitive.[23] We are in age marked by the power of information, the dominance of technology, yet it is also important to note we're in the juvenility stage of what will become Ubicomp culture. It is a very complicated time. We must study and act upon what is happening now--& stake some grounds here. There are a few collectives and publications already in this realm, in addition to the aforementioned entities, there are a number of poetry oriented journals on the Internet (*RIF/T*, *Grist*, *Core*, *Taproot*, and *Inter/face* come to mind). Other publishing groups such as Xexoxial Endarchy and *The Aerial* are consistently producing poetry in formats other than the printed page, and Eastgate Systems has been pioneering in their dedication to the promotion of hypertext publications.

In 1986, I asked Ed Sanders about his vision of the music of the future:

"It has to be, in electronics, the equivalent of the piano forte.
That is, right around the time of Bach they were creating this
new kind of piano, which was an outgrowth of the harpsichord,
that allowed its player to be infinitely more expressive, using
the pedals and playing softly and loud--it enabled the concept

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[20] These quotations are taken from an audio recording of Michael Joyce's Sesquicentennial Lecture, "(Re)Placing the Author: 'A Book in the Ruins,'" at University at Albany Uptown Campus, 3/23/94.

[21] *Poet's & Writers Magazine*, March/April 1994, p. 25.

[22] This project was based at Hotel MOO, Brown University (telnet duke.cs.brown.edu 8888).

[23] Jerome Rothenberg, ed. (New York: Anchor Books, 1969).

of the concerto to arise, where the piano was an actually powerful instrument that could act in concerto with other instruments.

"So what's going to happen now...is the electronic equivalent of the piano forte. That is, there is going to arise a musical instrument sufficient for a new Beethoven, and it will be an electronic instrument. It will have, obviously, many aspects of the modern electronic recording studio and modern high-end synthesizer. I envision it like a giant church organ only instead of stops it will have fifteen or twenty thousand little buttons or knobs & x-y pads & pressure sensitive areas & theramin-like devices where you approach these little knobs with your hands. The proximity of your fingers to these zones & tiny little surfaces will indicate parameters & programs, moods & sounds, or whatever....It will be a "touch" thing; I guess the feet will have to be involved...in other words you'll have to use both hands, both feet, & perhaps a group of assistants. In fact it may be a collaborative thing....It will be complicated...you can use your touch to modify all these parameters instantly...make these sounds, these different layers of sounds, different sounds & chords instantly, as you create it...."[24]

As we find ourselves increasingly--and without much choice--having to making use of the synthetic strands provided by our civilization's penchant for technological living, we need to envision ways to weave the threads given by such an unusual but very real circumstance into a tightly meshed net which alternatively keeps us warm and catches our breath. Among the questions raised by the possibilities implicit in our future immersions is the question of which we want to privilege, the production of artifacts or the actual engagement of people in a process of living and creating as an outgrowth of daily life. To draw an analogy between technopoetics and other technologies which have long predated the computer, I refer to a collection of essays called *Radiotext(e)*, the introduction of which reminds us "that radio existed long before its receiver did."[25] Bertolt Brecht, in his essay "The Radio as an Apparatus of Communication" suggests we should "Change this apparatus [radio] over from distribution to communication," and that "Any attempt by the radio to give a truly public character to public occasions is a step in the right direction."[26] These are among the ideas we would like to claim as a basis for a technopoetics in the current historical and technological moment.

===PostScript===

"Takes a lot of voices/to sing a millennial song" was prepared specifically when Ed Foster invited me to speak at "The New Freedoms" festival ("celebrating contemporary American and Russian poetry"), 8 April 1994, on the topic "Presents and Future in Poetry:

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[24] Ed Sanders, excerpt from interview with Chris Funkhouser, *We Magazine* Issue 3 (Charlottesville, VA, 1987), p. 6-7.

[25] Neil Strauss, *Radiotext(e)* (New York: Semiotext(e), 1993), p. 9.

[26] Brecht quotes from *Radiotext(e)* (New York: Semiotext(e), 1993), p. 15-16.

Technopoetics '94." The paper was presented to 20 people or so, and was prefaced by remarking that "the things I am talking about have never been explained to me." Also, I admitted to not having the "answers to some of the questions which problematize the hegemonic anti-natures of technology," though I was willing to engage in a conversation about them. The essay has unquestionably stimulated several healthy conversations in the hours and days following the festival.

Several listeners immediately responded positively to what was said, airing their own stances such as "people need to get over their fear and loathing of technology because it is nothing but a human creation--a creation which comes from deep within the human psyche & nature--it's just a tool which has become improved over recent centuries."[27] This notion puzzled others who were present, who questioned, appropriately, the "newness" of these "writing tools," as well as the fetishistic nature of cyber-rhetoric.

Other concerns focused on whether or not the various upcoming technological growths were actually going to change writing ("...which didn't change much in the period between Homer and Olson...") in any significant way. Most seemed interested in discussing how the effects of the technology (wrecknology?) would alter the way people write and/or how it might be able to "improve the quality" of poetry in general.

One woman reminded the audience after my talk that "the potential of technology affects readership and broadening communities," while another complained of the fallow "socio-politico criticism," the "flip art" and "superficial approach and popular sensibilities" of the people who have been producing electronic art in the last decade. This person wondered how we would go about making a "book that's charged," and wondered if the abovementioned circumstances were a result of the current generation of "artists" or the media itself.[28]

Cybernetic poetry has been happening for decades. The complicated systems of construction and structure--both form and content (i.e. mythopoeia)--we see in the work of Charles Olson, Robert Duncan and others pay testimony to this idea. These poets, according to Don Byrd, were involved in the "making of a poem always in a feedback loop."

We see a clear instance of cybernetic machinations at work in Duncan's sermon in a 1982 issue of *Credences*.[29] In this text, Duncan (whose religious sympathies were wide-ranging) adopts the position of a Christian preacher and his presentation of becomes--given the form(ula)--a self-organizing, not imposed, "natural, cybernetic" presentation.[30] Additionally, a connection can be drawn between technopoetics and the projects of Olson and Duncan by realizing that some of the issues we find ourselves discussing in the realm of technological media are issues of embodiment and what it means to inhabit a body (with electronic counterpart). Certainly if we are going to find ways in which to make the media work as poetry, as a registration of poetic/breath/line, we need to figure out how to make this breath/line/picture become a registration of the body in the same way that it had for Olson, Duncan and other creative forbearers.

All of the above questions are worthy of a search for answers, if that is what we are seeking in the developmental stages of what I dubbed "technopoetics." Indeed, as I ascertained during the question/answer session following my presentation, there needs to be "an elevation of the constituency" of poets and poetry in the electronic mediums

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[27] John Noto, panel participant, "The New Freedoms," 8 April 94.

[28] All quotes are responses from various members of the audience 8 April 94.

[29] *Credences* New Series Vol. 2 No. 1 (Buffalo: SUNY-Buffalo, 1983).

[30] Quotes in this paragraph from Don Byrd, conversation, Albany, 17 April 94.

currently available. In this protean period we shall also constantly question our need/desire to be watching and participating in the process of inventing Ubicomp culture. At this juncture of the process I am able to empathize with skeptics, and occasionally offer my own views of the underbelly of the techological beast.

Ultimately, a couple of particular questions persist: What does technology do? What can we do with it? Nathaniel Mackey, in full agreement with the idea that any music, or poetics was "a 'touch' thing," pointed out that one can be in the process of collaboration with many elements, even as a singular writer. Mackey also mentioned he needed to see more evidence of "breath and bone" in technopoetics as it is outlined here before signing up for a work brigade.[31] Such substance in our technopoetics remains to be attained, perhaps, and it is these qualities amongst other spirits we continue to seek and unify in our collaborative endeavors.

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[31] Nathaniel Mackey, conversation, Sullivan's Bar, Hoboken, 8 April 94.

2. Hypertext and Poetry

A force which has marked much twentieth century poetry, in the Pound-Eliot-Olson lineage, in ethnopoetry, language poetry, and other areas, is that structures, ideas, and flows of language are not necessarily linear. Though Ted Nelson's definition of hypertext, referring to a specific type of "non-sequential writing," comes in the sixties, one can easily argue that authors of complex writing overstepped traditional speech and speech-making patterns long before then (*Computer* 44). Poetry and other adventurous art began the practice of hypertext much earlier in the century than is generally acknowledged. In this way, technology is just now catching up to what progressive minds have been doing across atomic - atomicized decades.

Hypertext and "electronic poetry" (poetry produced by computer, digital media, video) are the foci of my work at this moment. To further specify the term, hypertext is "a database with nodes (screens) connected with links (mechanical connections) and link icons (to designate where the links exist in the text)" (Heim 154). Hypertext is a type of textual branching which also allows the reader to link text freely with audio and video. This particular process is usually called hypermedia, a multimedia approach to presenting information. Intertextual connections previously enabled only in the individual mind, or by performance, are now elemental alongside the textual reality of the book. Now, the verb and noun of language possess a different kind of materiality in an electronic poem. A passage from Jed Rasula's book, *The American Poetry Wax Museum*, furthers the dimensions of a conversation on this subject:

> The complex multimedia environment we inhabit offers a reproachful reminder about the archaic posture implied by the scriptural mode. Would it make a difference--and would that difference be audible rather than legible--to invoke another model? Instead of text and commentary, then, consider the format of exhibition and soundtrack. A display in one medium, the visual is attended and articulated by a performance in another medium, audial... (36).

Rasula's theories are inquisitive and polemical, but a lack of material evidence prevents him from prescribing how a widespread shift to other media might benefit poetry. He introduces the possibility that a textual expansion is important for poets to consider. Contrarily, Rasula is skeptical of the technology's ability (specifically computers and television) to distill contemporary writing into a vital force. He warns, "In our media environment (an environment, to be precise, inseparable from its media), the frantic mobility of voices amounts to a vast spectacle of dissociative turbulence" (42). This echoes Michael Heim, who in *The Metaphysics of Virtual Reality* writes, "The disadvantages of hypertext include disorientation and cognitive overload" (154).

It is a perplexing moment between contemporary poetry and its relationship to media where, "The printed page is no longer the sole medium of writing: electrical pulsations on a monitor dissolve print fixity into print fluidity, which is an oxymoron" (Rasula 45). While print and non-print modes of textual presentation are not mutually exclusive, awareness of computer hypertext has begun to have an effect on how writing is performed and staged. For a poetry publisher on the Internet, and in digital multimedia, the project is, how to *craft* with it. How to organize and present research, and (inter)active ideas in an organized yet unforced manner.

Among my inclinations of the past decade has been to apply different media to poetry, and vice-versa. In this instance, when "editing" hypertexts, or hypermedia texts, one is composing, alongside the surface text, a secondary text in another, quasi- invisible

language. This secondary text is not as smooth to read, is not recognizable as poetry. This transparent (computer) language is not, however, without creative premise and result. There are new problems and difficulties, nuances in laying out a poem on the screen. As Michael Joyce writes in *Of Two Minds*, "any electronic text is a present- tense palimpsest" (9). What possibilities and difficulties are held by the mechanized, animated palimpsest? It is, as is poetry, more complex than putting letters down on a page.

The past few months, my concentration has swayed in the direction of finding archival uses for publishing and otherwise presenting and preserving poetry in a hypertextual manner in virtual pools. The rest of this talk outlines and gives some background to Reading Poetry on the World Wide Web (WWW), a pedagogical project of mine which has been up on the web for a few weeks.[32] Its intention is to draw together and usefully arrange a panorama of poetry currently accessible on the WWW -- and whatever the web will become -- and, ideally, contribute materials to it. Once connected to this site, the user encountered a quote from Ted Nelson: "...there would be new documents, a new literary genre, of branching, non-sequential writings on the computer screen...these branching documents would constitute a great new literature, but they would subsume the old, since all words, all literature would go online and extend to a new branching generality" (Opening 46-47).

While augmentation, rather than subsumption, might be a better way to envision hypertext, the spirit and design of Nelson's vision were acknowledged as an ingredient of our site. Below the quotation is the temporary infrastructure of the project, and a list of students' names which link to nodes uncovered by their research.

Late last year I began to formulate very specific ideas about how hypertext (or hypermedia) could be used to orchestrate poetry in a useful, and what I feel is purposeful, manner. The idea is to present, in hypertext (and, eventually, hypermedia), a script, a creation of multiple poetries. To amalgamate towards (undetermined) coherence a complex and fantastic range of "poetry" accumulated across centuries and cultures. A generality made-up of many, many particulars.

The seeds of this project go back a few years. One of the tenets I learned at Naropa Institute particularly comes to mind: "All fields of study are understood to represent the creativity of many people working in different ages, places, and cultural contexts" (Catalog 6). My impulse here has roots in a type of idealism. Macrocosmically, it is about an abstracted kind of community-forming which could have utility to readers at all levels and areas of interest. It presents itself as an equilateral literary adventure. A digital combing and map of the corpus - corpse poetic in an era where the public has become increasingly dependent on electronic and broadcast media.

While it was operational, the Reading Poetry project was a student - teacher collaboration in a Reading Poetry course at the University at Albany. The first stage, the first half, of a semester's project involved students maintaining web pages containing links to poetry sources they have found on the net. It was a three part process. First, students were directed to read the course's printed text, *The Handbook of Poetic Forms*. Each student was required to carefully research four assigned topics from the book, and -- after instruction on how to do-so -- "surf the web," with the objective of locating as many poetry resources as possible. Next, students were taught how to build their own web-pages, & how to work with html (HYPERTEXT MARKUP LANGUAGE) code in order to manage these pages. As a group, we created one text which unites the writing of many authors. Since most

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[32] The site lasted for about two years, and is no longer available.

of the students had little experience with computers and networks, the demands of teaching them the mechanical dimensions were significant.

It is in solving the present, second wave of questions, applying further implementation of thought and web-programming to the materials we are gathering, that the actual evidence for learning became valuable for students and others. Beyond the initial challenges, there were questions such as how to organize and index the materials we gather as a unit. There is no other such project or precedent for this project as yet. The so-called "mainline" poetry centers on the web (such as the English Server at Carnegie-Mellon, the Electronic Poetry Center, et. al.) were either highly specialized, or a hodge-podge of links. It was important, in my vision, to present the immense amount of materials in a design which enables readers to encounter no more than the requisite obstacles -- such as basic technical difficulties -- when it comes to locating poetry (open- writing, what-have-you) using network devices. Poetry can effectively resound and educate people on the net, beyond just being present there for someone to stumble across by coincidence. The organization and indexing poetry on the web is crucial if this zone of our culture is to be valued by readers and writers of poetry. For now, we are preparing at least two-indexes for the reader: a basic author index, and another by theme, form, and/or subject matter (i.e., type of poem).

Quickly, I wanted to touch on potential problems facing the type of hypertext proposed; issues we're keeping a keen eye on, in this arena:

1) Censorship. What happens if the content of some of the writing is antithetical to the interests and false morality, the overall intentions of those who operate the networks?

2) Access. The Internet and associated networks must be as widely accessible as is practical, or needed.

3) Issues of copyright, and to a lesser degree, payment-for-writing. This is somewhat of an issue mostly because academic literature is business. Technical realities and adjustments, compromises and coordination between print publishers and technicians, may allow for some aspects of this scheme to play itself out. Especially if authors, publishers, and electronic library/datanodes find ways to work cooperatively, as they have to some extent with printed texts.

Reading Poetry on the World Wide Web was, on another register, a logical by-product of a movement towards the deterritorialization of poetry in America over the past several decades. An all encompassing, ultra-pluralistic poetics has yet to be woven, or even approached by most American writers in the past century. There are, to date, neither any general nor any specific terms under which we might classify "Our" "national "poetry." In fact, as Rasula writes, the notion of delineating "Our poets" is deceptively democratic. He speculates that, "such a phrase has never implied a radius bigger than an exclusive country club" (292). One of the purposes of this project is to suggest that hyper-media and organizations of thought, allow for a fully-inclusive compendium of poetry to begin accumulating.

There are two points I will reiterate. First, the ongoingness of these ideas for hypertext and poetry. The premise is of perpetual beginnings and understandings of what, say, computers and humans can and cannot do. We're at an early point with it. There is warranted hesitation. Among the hesitations from those less enthusiastic about technology is that the "hardware" is unstable. True, and there are obviously other problems. But digital media in one form or another will, for better or worse, be with us for some time. What I've thought to get going is the beginnings of the kind of poetry core within-the-system to be built over future decades.

Finally, there is an essential collaborative nature required by such intricate and precise creative projects. When it comes to merging poetry with technology, composition as collaboration is an integral part of the formula for efficiently producing sophisticated texts. It is at once an effect, and a necessity, when it comes to devising texts as hypertext and hypermedia. Hybrid texts developed by programmers and poets to graphically avail literature to the imagination -- and to make varied reading lists -- are a considerable approach to circulating and conducting texts for writers in the open today. Promoting multi-perspectival thinking and creativity, the greater tenets and purposes of poetry, amongst the culture-at-large cannot be harmful.

3. Radical artifice Beyond *Radical Artifice*

Marjorie Perloff's study of twentieth century poetics, *Radical Artifice: Writing Poetry in the Age of Media*, studies a few electronic texts and many printed texts as it presents an understanding of the "interplay" between literature and media. Building a historical perspective, as possibilities in most forms of media continue to develop (especially networks and software), continuous investigations and understandings of poetic artifice are necessary.

...the electronic pulse of active charges flowing across a continually shifting differential.
-Johanna Drucker, "Critical Pleasure"

Visual allure, animation and other forms of multiplex engagement alter the variables in literature's complexity in the current creative moment. Examining various aspects of "cybertext" as outlined by Espen Aarseth in his critical study *Cybertext: Perspectives on Ergodic Literature*, then applying them as a lens on Johanna Drucker's *The History of the/my Wor(l)d*, our presentation wishes to suggest further areas of investigation with regards to aesthetics and purposes for machine modulated text as cultural and poetic activity. Particularly under inspection in this research are transformations enabled by the digitization of documents already diverging from-the-norm, which allow and/or require each reader to discover from a fresh perspective their meaning.

Drucker's work (here and elsewhere) obviously questions and diverges from any standardized notion of popular textuality; the reader of her work has to find a way to combine disparate parts of the text. In *Cybertext*, Aarseth defines such textual presentations, where the user effectuates a semiotic sequence, where "nontrivial effort is required to allow the reader to traverse the text," as ergodic literature (1). Readers and writers share the responsibility of being conduits and mediators between world, image, thought, and language in a (sometimes) mysterious intertextual environment.

Cybertext, in Aarseth's design, is not confined to electronic texts. Focusing predominantly on the mechanical organization of the text, Aarseth instead regards the intricacies of the medium as an integral part of the text. The major defining point is that "a cybertext must contain some kind of information feedback loop." This holds true for any textual situation where "'text' is something more than just marks upon a surface" (19). This perspective on all forms of textuality expands the scope of literary studies. Michael Joyce, a serious hypertext author and pedagogue, makes the claim that hypertext no longer presents for users (and authors) a situation which is "either/or" but rather "and/and/and". Yet, as Aarseth observes, Joyce outlines just two broad lenses through which to examine and classify hypertext and hypermedia: as either "constructive" or "explorative." Joyce's critical vocabulary regarding hypertexts is too broad. Aarseth's textology is not only descriptive; its particulars create a solid platform upon which to illustrate and introduce aesthetic points. He attempts to achieve a terminology that "has distinctive power as well as unproblematic connotations" (59).

Cybertext, writes Aaresth, "is the wide-range (or perspective) of possible textualities seen as a typology of machines, as various kinds of literary communication systems where the functional differences among the mechanical parts play a defining role in determining

the aesthetic process" (22). In his typology, terms such as *scriptons*, *textons*, and *traversal function* are introduced in order to determine different variables in any text.[33] Specific variables outlined by Aarseth are: Dynamics; Determinability; Transiency; Perspective; Access; Linking; and User Functions. By analyzing such intricacies within any text may we begin to develop a "cross-genral" vocabulary, an apparatus by which to discuss textuality in a "(post) textual" world? Putting these arbitrary dynamics into the mix, alternate attentions will arise. In any event, "Until these practices are identified and examined," writes Aarseth, "a significant part of the question of interpretation must go unanswered" (20).

   The jacket cover of Johanna Drucker's *The History of the/my Wor(l)d* proclaims the book "provides a striking alternative to the familiar telling of historical events," and combines "the intersection of official history and individual memory". As we describe, and as you see, *The History of the/my Wor(l)d*--originally produced by hand on a letter-press-- presents varied fonts, font sizing, a mixture of symbols/icons (such as stars, triangles, telephones, airplanes), images ("pods, ciphers, and other mysterious devices"), and alphanumeric text. Stand-alone lines are juxtaposed with blocks of text offer the reader various ways to perceive it. This piece, to adopt another of Aarseth's concepts, is multicursal: the reader faces a series of critical choices, as they do in all ergodic literature. These particular symbols and found images are pictographic referencing via elements of electronic and print culture. *History* begins its literal or non-literal path with its gist up front, even if it is dwarfed or obscured by visual effects (especially the oversize article ("the"), and personal pronoun ("my")). Directly stated, next to the image of a diagram used when mapping circuits, the book contains "Fragments of a testimonial to history, some lived and realized moments open to claims of memory".

   Drucker's process exhibits archetypical multiplex possibilities, such as how "layering" functions to create the style of feedback mechanism introduced by Aarseth. Reading her work, every formal projection is important yet the importance of language is obvious. In Drucker's history is "the word adored" (3). While each aspect is equally vital to her poetics, in this piece we see word as word, its truth is taught and transmittable, flexible, creative, and sometimes direct; it is a mythos of law, word, muse made authority. Sometimes word becomes icon, as icon becomes word. Hopefully some of you were all able to piece out this exquisite line across the first three pages of her story: "Soft, fat, slow time takes its first breath following the initial explosion, making light into a face swaddled in warmth and letters. Our earth took us to heart and mind in the intellectual embrace of a cool companionship" (2-4).

   Reading *History* as a book, as cybertext (in Aarsethian terms), its dynamics are static. It is a determinate and intransient text. Its perspective is impersonal. Since all aspects of the text are available to readers at all times it is a random access text with no mechanical links. Its user functions are explorative and interpretive. While Drucker states in her 1997 interview with Matthew Kirschenbaum that "electronic forms will and already are allowing the popular imagination to reinvent its relation to the received traditions of reading, writing and imagining," she nonetheless declares, "I am so attached to print documents and objects that I can't say whether I will ever manage to create a hypertext novel/work." If yet another textual dimension is conceivable, however, the Granary Books

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[33] "Scriptons" is a term used to describe strings of text as they appear to a reader. "Textons" is used to describe strings as they exist in the text. "Traversal function" is the mechanism by which scriptons are revealed or generated from textons and presented to the user of the text (62-65).

edition of *The History* begins to make an example of how the mechanical parts may be suddenly blurred by technological possibility.

In an endnote, Drucker states that the Granary version is already an electronic adaptation, "Quarked on a Mac based on original layout." Taking the further step of transforming just one--or perhaps two--of the previously determined variables in an electronic version of this book could completely expand the capabilities of the document. For instance, let's consider a mode of hyper-feedback where an outwardly linked reconstruction or version of the text is ventured. A transformation, a translation of this cybertext into a linked cybertext (potentially with textonic functions where users could not only make links but permanently add their own text and links), furthers the radical artifice and potency (poet intensity) that emerges from the layering of verbal and visual information.

On a large-scale, sophisticated network (i.e. greater than the Internet), Drucker could not only express her vision in this matter but "program" *The History of the/my Wor(l)d* by plugging into a much larger body of textual materials. Language and image become common denominators allowing pluralistic and subjective interpretation, engaged self-directed exploration through (not-yet-available) vast archives of history and other forms of cultural interpretation. As Kirschenbaum points out, "...the use of different fonts and point sizes in conjunction with visual layout cues which gesture toward an array of multiple reading paths all simultaneously displayed on the open page." Drucker uses these to help her in achieving alternatives to linear and sequential reading patterns.

A hardwired non-linear *History* could lead to databanks of self- or global histories. The application of this poetics opens direct, random, and numerous other anthological possibilities for texts. In the pages you are seeing alone, direct links could be made through language, image, via intuitive and non-intuitive linking, either (or both) on the part of the producer(s), users, or other forms of agents. At least the following disciplines or areas are cognitively accessed in these pages: global history (could include series of definitions, dictionaries, encyclopedias), spiritual/religious history, architecture, philosophy, athletics, world cultures, anthropology, biology, mathematics, women's issues, history of technology, geology, geography, "popular" culture, environment, industrial society, sociology, human and material transportation. Opposites and relatives to each of these would exist in an openly matrixed version. Diacritical marks could be random or non-randomly generated links. Every icon and image could be uniquely designed and programmed; every index could be textonic. This user-guided endeavor may or may not be a virtually created model or space. Both benefits and drawbacks would arise by creating instructionless projections like Laurie Anderson's *Puppet Motel* which tend to either frustrate users or completely captivate them, absorbing--however temporarily--their attention and interest. Some users will want to be led, others will want to find their own way through history. Of course, this type of design--where literature is literal investigation, and curiosity guides the user's way-- entails great organization and precision on the part of the producers. Visual hypertextuality, as Michael Joyce writes, creates an "interaction between viewers of its material and those who created or gathered that material" (20). The purpose behind my ideas as here described is to have a series of textual events. Information as drawing, graphic designs, and as binary data, can be located more quickly than it can in books. A user can either follow closely along with a literalist approach, or flip quickly through. Utilizing visual and digital cues is a way of programming our minds.

In "Critical Pleasure" Johanna Drucker writes, "The body of the fine arts has suffered an infusion of new processes and data manipulations so that it now lives the same

cyborg hybrid life as every other entity." A poem or book can not be more than what they are, and at the same time aspire to be farther-reaching than history has previously allowed. Readers guide themselves to cognitive and creative space of their own choosing, using interactive principles and practices. What do these technologies tell us about the principles and evolution of human communication? In an essay on the art of Joseph Nechvatal, Drucker celebrates Nechvatal's "network of visual pleasure whose critical insight resonates with a satisfying complexity, providing a surface whose body indexes the corpus of the social, proposing mutation as a process of reinvention and renewal." It is not an issue of books versus computer networks but rather the limits to the extent to which we involve ourselves with language, image, linking, thinking, organization and patience.

4. Net time eyebeam: stretching corporeal conduction

Toward exposing my aspirations and making a mild disclaimer, I begin with three quotations as constellation:

Bill Viola: "Value judgments are destructive to our proper business, which is curiosity and awareness."

E.M. de Melo e Castro: "On the whole, a verbi-voco-sound-visual-color- movement complex and animated image is created calling for a total kinesthetic perception."

Butch Morris: "In other words, constant preparation—preparation for the next, and the next for the next—for something we did not hear and for something we have never heard."

Generally, I wish to consider as integral what has happened mechanically and aesthetically in hypertext [also known, through Espen Aarseth's research, as cybertext], rather than focus criticism against it. The pressing matter now, from a creative point of view, is interface design. Who controls the computer "switches", and what is available within those switches, controls how we live and invent. How we really want to absorb, manipulate and output materials are considerable decisions we face at the present time.

"Terminals" of one form or another will always abound: games, movies, news, the equivalent of television programs and some type of VR (or interactive cyber-reality) domains will be readily available in the coming years. Raising the bar on software standards gives us an opportunity to progenerate our digital possibilities (and status of culture) and the arts rather than stifle them. It is imperative that a versatile integrated "system" is developed so that complex content may be learned and delivered. One voice without sophisticated programming abilities cannot in itself raise the standards on what we have available to us at present, but hopefully a poetic viewpoint may provoke further discussion and thinking within the subject.

Many conceptualizations and theories surrounding hypertext are based on its cognitive and visual attributes toward stimulating absorption and construction. New directions for electronic text intensify their attention to the ear (sound) and to hand-craft (to expand previous aesthetic aspects of visuality). Advancing these dimensions will make forms of interactivity less like the passivity of television and other mass-media, and perhaps less "artificial" than what we have seen so far.

Soundtracks and what I'd like to call hyper-sound (interlinked layers of sound) are basically absent from much of digital literature. [Notable exceptions include: *GRAMMATRON, The Hootenany Manifestation, ubu web, Shockzone,* and work by Sally Harbison, Christine Baczewska, and Loss Pequeno Glazier.] When present, they most often serve as ambient backdrops, sound-bites, or direct recitation of a written work. An energetic approach to these potentially interconnected materials is in order.

Distinctions between photographic representation and rendered by-hand or touch based imaging also need further consideration. The folk-imagination and other practical qualities (i.e. matrixed lyricism with social, spiritual, and cultural relevance) of a text such as William Blake's *Illuminated Books*—etched into copper plates by hand two hundred years ago—have yet to be matched in the *poesis* of today's innovations. With our stylus pens and hexidecimal systems we accept and enjoy completely different methods and

processes than Blake. Yet the possibilities for output are basically the same, except that Blake had no way to electronically transmit his renderings. To be clear, however, I am far less interested in imposing an aesthetic than I am interested in, to borrow another phrase in Butch Morris' "Notes on Conduction", "the creation of a medium that redefines itself and the spirit of quality—a quality that radiates unique properties" (8).

A shift in hypertext's priorities leads to a blending of emphases, old and new. "Cyberspace" does and does not demand for the artist a radically new appearance of text. Thus, today's condition of electronic texts, where most evidence of human voice and hand are ostensibly absent, seems unusual; we seem to have advanced and not advanced. Even if mind and machine create code, thus hypertext, the artist also has the ear, the heart, the line, syllable, body and breath to contend with in their representation. Defining "conduction", Morris writes, "Using a vocabulary of signs and gestures, many within the general glossary of traditional conducting, the conductor may alter or initiate rhythm, melody, harmony, not to exclude the development of form/structure, both extended and common, and the instantaneous change in articulation, phrasing, and meter. Indefinite repeats of a phrase or measures may now be at the discretion of the new *Composer on the Podium*" (10). This model of conduction both historically echoes and serves up new metaphors for hypertext. The position of the conductor may be placed on either or both users and authors; the podium is the "terminal". Physical gestures are used to activate different layers and arrangements and configurations of textual elements.

Graphical and other design elements enabled by the computer are indeed monumental. The age of mechanical reproduction is going strong, but all of these considerations do not preclude the loss of other aesthetic values: spoken or folk elements, or the equal power of the hand to convey messages as do the mind and eye. The beauty of it, and a primary motivation for me, is the fact that pluralistic methodologies are available. John Cayley argues for silent reading as an important mode of resistance in hypertext [see "Beyond Codexpace: Potentialities of Literary Cybertext" (*Visible Language 30.2*) and "HYPERTEXT / CYBERTEXT / POETEXT" (online)], and Michael Joyce uses the trope of silence as a counterpoint to noise (drawing our attention to both) [see "So Much Time, so Little to Do", (*Of Two Minds: Hypertext Pedagogy and Poetics*)], and I believe quietude and machinated imagery do not maximize potentials of the computer. In the non-monolithic ideal I just spoke of, this is perfectly acceptable: interface and software parameters are still a primary concern to us all.

My background is in poetry, print and electronic publishing, music, and literary criticism. Poetry has always in effect "opened" into multitudes of "texts". That this process, poetry's intrinsic opening into other texts, is facilitated by the use of digital media only strengthens my confidence in synthesizing the two forms, and using poetry (digital and otherwise) to envision what systems might embody in the future. Variable layers of texts, soundings, visualizations, and interpretations of text can be engaged by the reader on the computer screen: interactive exploration of what is inside a text, and what a text is inside of.

The Web synthesizes graphical (color), animated, and sound elements in addition to what might be the "written" text itself. What this means for poetry in terms of form is relatively straightforward. Language—its principle vehicle—is no longer lodged on a fixed, soundless page. As a result of this other—computerized—language, it inhabits a flexible, dynamic, and transmittable multiplex of circuitry which allows built-in links, intricate graphical components, soundtracks, and other capabilities, such as various forms of

animation. The vividness of literary activity as it extends to the present is charged with additional elements.

Changes in the media we use for the transmission of poetic materials alters its appearance and form, possibly rescuing it from becoming a redundancy in the coming industreality. We all have the challenge of getting somewhere that we are not. The best viewpoint I have come across with regards to imagining an ideal for cyberspace is Ladislao Pablo Györi's description of a "Virtual Poetry Domain". In *Visible Language 30.2*, Gyori writes:

> Virtual Poems are interactive digital entities, capable of: 1) taking part in or being generated within a virtual world through software or routines which confer diverse possibilities for manipulation, navigation, behavior and alternative properties, such as evolution, sound emission, animated morphing, etc.; 2) being experienced by means of partially or fully immersive interface devices; 3) assuming an aesthetic dimension, not reducing themselves to a simple phenomenon of communication. (like a pure data stream); and 4) being defined as hypertext structures (circulation of open and multiple digital information) but principally producing hyperdiscourses (with a strong semantic non-linearity) (Kac 162).

Györi's vision offers and represents a progressive redefinition for our work, encompassing multiple priorities. Technology allows a world where networks realize "virtual teleportations of subjects to VP-based computers anywhere". Such a scenario is, to some degree, in place (if one suspends the reality that computer culture is a mainly Western, far from "global" phenomenon, and that Virtual Poetry of any type is far from being a pervasive form). In promoting creativity, blending of language, sounds, and images—allowing the synthesis of these forms to develop as the culture does around it—we may cultivate "a new era in the general poetic creation, freeing the human imagination from any real constraint" as envisioned by Györi. (163) Györi's "three-dimensional constructions" represent a real beginning towards redefining visually-based syntax for language. Important research in this area is also being conducted by Matthew Kirschenbaum, whose work also considers "post-alphabetic" textuality, and others. Combination and application of Györi's and Kirschenbaum's ideas with explorations into sound mapping (see Iain Mott and Jim Sosnin), and gesture at the User Interface (see Edward Altman, Peter Anderson, Wen Gao, Nobuo Hataoka, Christoph Maggioni and others) would radically alter our present conceptions of hypertextuality. As more integrated systems are developed, post-immersive, sensorially driven texts (eye-ball tracking, or voicings and blinks to make links) may meet the demands of the status quo.

The authority we see a current wave of Web TV advertisements assigning to the Internet surely indicates an expected merging of graphical networks. Perhaps culture therein can be programmed. *Adaptability* as a fundamental feature of hypertext is illustrated over the course of the last decade's research. Because of technological developments which have increased the visuality of texts a proportionate amount of the research in this area has occurred, typified by Michael Joyce's mantra "Hypertext is, before anything else, a visual form" (19), and belief that, "Hypertext vindicates the word as visual image and reclaims its place in the full sensorium" (206). As the mechanisms which process digital materials have changed, so have the ways texts have looked. It can be anticipated that this increase in visuality to texts is going to be extended and joined by a more sophisticated sonic dimension, and other unknown virtual investigations. Just as overt issues of non-linearity have given way to overt issues of visuality, visuality as a concentrated focus will become dwarfed by something else as electronic forms continue to develop. One

day we will move on to an era where the machines allow high-resonance, instantaneous sound transfer, as well as voice-response control mechanisms. Electronic texts (and discourse) will adapt to whatever circumstances integrated media invite, ideally leaving our hands and mouths free to do whatever they want.

My fellow panelist Jim Rosenberg has been critical about hypertext on multiple accounts. [See "Openings: The Connection Direct", "Notes Toward a Non-linear Prosody of Space", "Poetics and Hypertext: Where Are the Hypertext Poets?", and "A Conversation with Jim Rosenberg". The following terms in quotes here are implemented by Rosenberg in various writings.] I like to imagine the Jim Rosenbergs of the future (whose textual conglomerations themselves in fact may not be the work of a single individual but rather a team of associated artists), a person or persons who understand and implement "morphemic" textuality to serve as an "association structure for thought." It is easy to project that their form of "Direct Access Communication" will aspire to further Rosenberg's. Their post-DreamWeaver, non-mouse, notebook or keyboard senses of "precomposition", becoming the network, "diagrammatic syntax", "reservoirs", "simultaneity", and "externalization", where "textuality is signifiers in motion", will inevitably desire to include midi- (or digital acoustic) soundtracks and who knows what kind of graphology. Beyond questions such as access and permission for production, will they have the "tools" with which to actualize their ideas?

A verbally (or otherwise sensorially) cued hypertext program with a gestural interface which embodies layers of dynamic alphanumeric text along with equally dense layers of sound and imagery does not exist yet! To watch and absorb text in such a way will be part of popular literacy in a post-data glove world. In his 100th conduction, Butch Morris led an ensemble comprised of three small orchestras from Turkey, Japan, and the U.S. at once through an emotionally charged improvisation where each musician was poised to play at a moment's notice according to Morris' direction. As Morris does on stage, I want to be able to do at the screen, both as "author" and "reader". Morris' conception emphasizes,

> ...a community of comraderie—there are no secrets, only individual and collective perseverance. Again, a music with no tense, from wherever you hear. A sonic code found only in team play, trust and challenge—focus and construction. The decoding of tongues, to magnify all combustible elements—in that moment of ignition, embody ignition... (9).

Polynoise, "an Information Abstracts for the ElectroMagnetic Spectacle/Radical Codes for Brainwave interference", is a manifesto of sorts, set in frames with a sidebar index to shortish and medium length exposés on the condition of electronic and network arts ported at the qazingulaza web site. Below the *POLYNOISE* frame, a text reads: "the xerbudox noise machine is still undergoing research & development. in the future this window will be a point & click hyperlinked sound collage." I consider this apologetic "under construction" notice as a metaphor for the project of electronically networked "writing" at present.

5. Bridge Work: Stephanie Strickland's *V*
[Penguin http://www.penguinputnam.com), 128 pages; paper, $18.00]

Stephanie Strickland's latest publication is indicative of "bridge" work increasingly apparent in publications by poets who seriously use computer technology to present writing in traditional and experimental formats. Strickland, who has published hypertext poetry on diskette and CD-ROM, is a leader among these figures and here works inventively with the printed form and its digital counterpart. This self-proclaimed "invertible book with two beginnings" has two particularly unusual features: the halves of the book are printed in opposite directions, so instead of reading front-to-back we read front-to-middle twice and proceed onward from there, as at the V of the book is a "link" to a Web site, http://vniverse.com. Atypical operations and questions face the reader: decisions must be made regarding how to enter the book, and readers must consider and establish a relationship between the parts of the book and the Web site, putting these formally disparate yet interconnected texts into play with one another. Strickland's effort here is a successful, conscious hybridization of form and platform.

While numerous books have featured alternative materiality, public evidence of these explorations at present is minimal. That a publisher like Penguin has produced the book is among many signals that the accelerated graphical capabilities of the computer are influencing printed collections. Over the past two decades publishers have used digital technology for convenience; finally, publishers are recognizing its creative attributes.

V extends the concerns of Strickland's earlier projects, particularly *The Red Virgin: A Poem of Simone Weil (1993)*, and *True North*, poem collections published in paper and digital formats. (At its publication in 1997, *True North* was reviewed in *Electronic Book Review*) Strickland further illuminates, reflects, and deeply employs her passions and investigations into the structures of science and literature, presenting them with a deliciously playful textuality. *V*'s focus is intense upon "a wedge of our sky." Strickland verbally and visually enacts a cosmology in this book, with engrossing pathways and a guided turbulence that passes through disorientation (romance and loss) and yet responds afresh, empowered. She is devotional to her female forbears, most prominently Simone Weil (to whom the book is dedicated); a potent feminist edge pervades. The poems are cultivated and dense with a balance of discursive and conventional modes.

Losing L'una employs a numbering system that is a mysterious indication of motion and splitting or separation. Since the poems are in a fixed order, numbers embody a periodical energy. Scientific, mathematical, and philosophical knowledge and their dimensions in the world are reflected. Fragmentation seems to be considered, as the stars are fragments of light? But, finally, there is a highly organized scheme. Strickland's style questions the utility of disorganized particulate matter; disconnection is not celebrated. Her romanticism, which might seem out of place in such an unconventional text, is a reminder that within the universal calamity it still exists. In "TITA: The Incandescent Thought About," Strickland conjoins the personal and expansive orders that reverberate throughout the book:

5.79
  As the reed, torn from its roots
  and cut to a flute whose whole song is longing,
  so too
  the heart, made to be broken. Consent

5.80
to be broken is difficult
to give, for we imagine
ourselves
     5.81
either powerful or powerless. Passion
forgets
the beloved, life, superdense

     5.82
globular clusters, dispersing universe and the
stars
it harbors, a nuclear forge
in the carried along scattering fall, multiversical

     5.83
clones—or open clusters
like the Pleiades, the motion of a starfish
arm. Isomorphic?

Losing L'una's title indicates a sense of losing "the one" or one losing, as well as cosmological (lunar) disorientation. A number and decimal are supplied for each stanza, moving progressively then regressively with quirky gaps. This works to uncoil and coil the text and overtly creates a type of space/time(line) dimension, a numeric momentum, while the content speaks to the flaws of Western mechanisms to regain the human primal. This split series of poems (each stanza is numbered, but every other poem reverts to whole numbers in linear order) is impish and poignant. In the wilder series we read:

     2.32
A mind
is trapped, Miss Mary Mack, by number,
by the number of relations that can be simulta
neously present,

     2.33
while ignorant
of thoughts which involve a greater number:
unformable
thoughts….

The "straight" poems are as deep and tend toward a more internalized expression, as in "Lovers":

     1
Lovers are never one.
Narcissus
is never two. Desiring

2
some thing
is
impossible: the true

　　3
desire
is for nothing. Into
nothing....

In later poems, such as "Simone Demystifies Mercy," the motif of tension between Eastern and Western ontology is developed:

　　5
breaking. Mercy is
strained, nailed between two poles.
It is easier

　　6
for us to feel pity,
mixed with horror
& repulsion.

The *WaveSon.nets* embrace the idea of the sonnet rather than its canonical manifestation. It is an odd appropriation in some respects, presumably adopted as a way to challenge and underscore orderliness in literature. This set of poems could otherwise be read as a continuous narrative, if not essentially one poem, marked by marvelous wordplay, Strickland's "heard herald world/ of word shaped." Though the poems look and read differently than those in *Losing L'una*, the themes and luminous cosmology are similar but with a different type of verbal realization. They are also expanded to include historical and computer/technological examples or analogies, as in the first stanza of "WaveSon.net 25":

to imitate. Making a fake
from grotto to crypt, to the pre-final form
of stalactite and stalagmite, the Gothic
　cathedral,
our Virtual CAVE™

One powerful characteristic in this sequence is that shifts in meaning transpire as new poems begin. For instance, "WaveSon.net 8" ends, "Fin(-ger) to finger, I shiver/ am calm: the reef embraces the water/ that wears it." A completely other direction (entropic) in the narrative begins when the first line of "WaveSon.net 9" consists of one word: "down." Strickland creatively uses the "end" of a poem or turn of the page at several junctures. These jolts are a reminder that the text - somehow a mind on the page - is an unpredictable, otherworldly journey.

　　Such turns are technologically magnified in *V*'s Web site, a fascinating expansion of *WaveSon.nets* that unites, fractures, and - literally - blurs its language. This Director project is a collaboration between Strickland and Cynthia Lawson; the interface is a starscape in the

6. Directions in Technopoetry

Following up on an impressive 2001 event with the same moniker, E-Poetry 2003--co-organized by Sandy Baldwin (West Virginia University, Center for Literary Computing) and Loss Pequeño Glazier (SUNY-Buffalo, Electronic Poetry Center)--brought together passionate producers of digital writing from several nations and widely diverse creative perspectives. The official subtext for the festival was to "focus on the 'poetry' in 'E-Poetry," a point that received ample and indefinite attention from first to last event of the four day gathering. An "artist and practitioner-oriented" series of events forged in the spirit of some of the early poetry festivals (namely the 1963 and 1965 events in Vancouver and Berkeley), E-Poetry 2003 could influence future generations of e-poets if its news is circulated and considered more widely. With this possibility in mind, this report is for those who could not attend. Twenty-eight formidable individuals (a "stunning group of people" -LPG) were featured in Morgantown, and perhaps half that many non-participants were present at any given time during the Festival. E-Poetry 2003 was an intimate meeting that featured several of the pioneers in the genre and those fresh to it.

Observations

"Our work is heterogeneous, we bring multiplicities into the wordscape…"
           -Jim Rosenberg, 4/25/03

What transpired at these events demonstrates clearly at least one fact about E-Poetry: it is a pluralistic endeavor that contains many approaches toward the presentation and performance of text. This isn't profound on one level, but on another the work here is representative of a multi-fingered, multi-minded chord for the readership of digital poetry to consider as a deep sounding on e-poetry matters. In the many hours of sessions, as many perspectives on digital poetry were presented and discussed. This multiplicity, the one thing that can be said with conviction about digital poetry, is thus far a positive attribute.

Importantly, several of the presentations argued for and stressed the necessity of using or manipulating code and the need for serious attention to be given to code's power in this genre. Few assertions were made to confine or narrow the scope of "E-Poetry" or to make it anything but an open field, even though we are aware of limitations in the systems we use. By virtue numerous strong voices, there was just as much talk about software and programming (if not more) than as about poetry. By the end of the Festival, questions of terminology, and E-poetry's relationship to and as poetry remained open, thankfully, and active. Poetry and computers first united via the writing of programs that generated or reconfigured language into poetry. Hypermedia, hypertext theory, and visually dominant works have significantly grown so as to overshadow code's importance and strengths which were fortified in several presentations are unlikely to be forgotten.

Other points in brief:

1. Due to the efforts of all involved, very few technical problems interfered with the Festival, a great improvement in this area compared to E-Poetry 2001. Next time I would like to see an installation of computers loaded with works from those present (as well as those not) available for consideration.

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2. Despite differences in creative presuppositions, an element absent from the events was the type of aesthetic cliques that can develop, where walls are constructed around disparate factions (usually characterized by a type of fraternity). I sensed no such energy at this gathering, rather a strong openness to engagement and possibility concerning a broad concept (and celebration) of text. Some preference toward, and emphasis on, the importance of computer science was evident, though it is demonstrable that not everyone working in the area has the advantage of such a background (just as there are those without deep literary knowledge) and yet nevertheless are making elegant E-Poetry.

3. Concrete poetry remains as a hallowed major precursor to E-Poetry and was a steady touchstone. Since one of the major interests and areas of exploration at present is 3-D textuality, this historical forbear seems logical when considering that the computer enhances or extends possibilities stemming from concretist aesthetics.

4. Steady grumblings from Mac users about PC/Windows operations.

5. Political Dissent, or Awareness? Clearly some of the e-poets assembled overtly protested dominating ideologies and addressed the impact of current events in discussion and via expression in their work in various ways, though how far such interventions are reaching remain unclear. Historically poets have directly confronted large audiences and offices of power. Remembering Allen Ginsberg's cry, "I dare your reality/I challenge your very being" as one model, it is hard to tell whether or not such is being enacted with any impact here. Though none of the art displayed seemed self-serving, on some level it is difficult to say what audience this work is intended for (or how much of a factor audience is). These are engaging, mysterious, hybrid works produced by a knowledgeable subculture that should be considered more widely.

6. A commonality between traditional poetry and E-Poetry as presented in Morgantown is that authors regularly turn toward archetypal mythology and other historical forces to shape and characterize ideas in their work.

While criticism was made of pieces that disguise or devalue the computer's basic (algorithmic) functions through the use of multimedia, powerful work where the code or computer referencing was completely transparent (giving power to the multi-layered content of what was being projected) was also demonstrated. The computer as media broadcast device allows all approaches to exist side-by-side and yet be called the same thing (though obviously distinctions can be made). In the aftermath of the Festival the dialog of the group--which is extended by an email listserver--has initiated the process of delineating loose categories into which works can be placed while existing concurrently. Miekal And summed these up in a posting on 4/28/03 as: "programming, evispo, soundpoetry, text, typography & codework." Whether or not e-poetry is included in or conceived of as "literature," to create an objective (horizontal) semi-formal (or even anchored) taxonomy of E-Poetry at present is a logical step for a group of artists in a developing genre to make. We can help ourselves as well as students of the work in understanding the forms of our craft by somehow generating a collective Virtual Guidebook of E-Poetic Forms (virtual or not), as Poetry itself has never been one singular form (i.e. haiku, sonnet, renga, free verse, and so on). [Note: *The Handbook of Poetic Forms* is a Teachers & Writers publication that describes and gives examples of 100+ known forms of poetry].

7: DIGITAL LITERATURE AND REPURPOSING:
PUBLISHING SCREEN & PAGE

At this juncture, I am one of many scholars interested in comparing printed and electronic texts: particular qualities of each and the relationship between the two. I wish to discuss the utility of printed or videographic copy of digital work, and will do so by introducing two recently completed chronicles of online poetics texts for print publication, *Descriptions of an Imaginary Universe: DIU*, and *Whereis Mineral: Adventures in MOO*, & then a new cybertext poem, **"MOBY – DICK,"** which reverses the process by taking a written text and makes it uniquely interactive (this example embodies the expansive yet unruly qualities of cybertext).

Digital publications and communications mechanisms have drastically altered the appearance and circulation of poetry in the past two decades. Videopoetry, Holopoetry, Hypertext, and other programmable media have introduced radical publishing ventures online. Yet what do these texts mean for readers without access to computer or Internet? Ideally, these progressive and contemporary efforts would make an impact on readers in every form. Though it may be antithetical (or anti-theoretical or even anti-practical) to consider seriously representing electronic text in the analog world, it is an important task, which may include generating videographic versions of animated work for offline viewing. Beyond documentation, this idea embraces the shift in literacy we confront at present, where we now benefit by **"reading"** texts of all sorts off of a screen. Records of the new forms serve to enrich the operations in both print and electronic paradigms. Preserving the online discourse, documenting online cultural work that transpires, offers offline readers the opportunity to view influential materials that have enjoyed a privileged readership on the Internet. Such constructions provide a plausible starting point for making discovery about provisional, temporal places of literature. As computers are used more frequently for poetry, it is imperative to provide historical examples that exhibit the transformational, multi-faceted, resonant aspects of textuality demanded by the poetic form. At the very least, readers are given the opportunity to explore the creative techniques, possibilities and limitations that are emerging as a result of real-time interactivity on digital networks.

For instance, the 1996 publication of *Visible Language 30.2, New Media Poetry: Poetic Innovation and New Technologies*, edited by Eduardo Kac, was extremely valuable to me. This volume introduced me to the work E.M. de Melo e Castro, André Vallias, and Ladislao Pablo Györi. Had Kac not made the effort to put this book together, it may have taken many years for me to find this work. Documentation of new media literature is meaningful as a means of teaching cultural history. Such texts are points of departure for people who have yet to encounter the development of narrative and forms of personal expression in virtual space. Yet any number of problems and questions arise in the process of taking online publications and textual events and presenting them on the page. While there is an abundance of writing on the subject of page-to-screen, little exists with regards to the reversal of the equation, the transformation of texts from screen-to-page. Considering the transformation of screen-to-page documentation is important because it is plausible that the new forms of text are only indicative of what is to come; today's texts instruct literary forms that emerge from future iterations of interactive digital space. Since few records exist that illustrate exchanges, occurrences, publications and poetic techniques that transpire online, the new forms have yet to make a critical impact or influence offline readers (possibly future authors). The ever-changing machine and the possibility of disappearing

technological platforms/ systems are also likely, making preservation of online/digital documents a <u>real</u> issue.

A multiplicity of digital forms is at hand, though a minimum of historical understanding regarding these new types of writing exists. As new forms they have not yet reached full potential. Making texts available in all formats will make an impact on the shape of animated, interactive writing, and would deliver virtually generated documents to wider audiences (even if it is a step away from its initial form). Online texts should be recognized and studied because they are prototypes, if not concrete examples of interactive poems, stories, films and writing that will eventually be commonly made: future viewers or readers of text will be characters in an overtly and densely pre-programmed world where narrative will be both consumed and made simultaneously; some would say this is our reality already. Leaving the subject online alone hinders the advancement of digital art.

So what can be done, and what are the issues?

Let me present my first example, Descriptions of an Imaginary Universe: DIU.

DIU was an online newsletter that I edited and circulated via e-mail lists and listserver between 1994 and 1996. More than forty transmissions were issued and are archived at the Electronic Poetry Center [http://wings.buffalo.edu/epc/ezines/diu/], though DIU itself pre-dates the Web. Because the publication involves contemporary poetics and culture I have always felt as though it should be issued as a printed anthology. The material included was received as email or found on the Internet. DIU was an effort to use network technology to generate and circulate an enlivened, imaginative charting of contemporary poetics and improvisationally grew as suggestions arose. During the past two years, I have, with collaborator Ben Friedlander, closely edited the manuscript, from an unwieldy 450 pages down to less than 200. Selections for the printed iteration are based on how the material—in whatever form—relates with the predominant dialogical strains that developed throughout the course of the magazine. Excerpts, or "samples" from excised pieces that also embodied DIU's contemplative wandering and embattled spirit are included. About sixty-five fragments are included as, to borrow a phrase from Michael Joyce's *Of Two Minds: Hypertext Pedagogy and Poetics*, "interstitial" texts, often to demarcate issues of the magazine but also to note breaks or indicate interconnections within DIU itself.

DIU was made in the imperfect, hybridized, "do-it-yourself" tradition of "'zine" culture; it was part discussion group, part classroom, part literary arts journal. In order to present an active electronic organism on the page, only the most indicative strains of dialog and broadcast, coupled with fragments of other key content, are included. Other contextualizing materials, including two essays and a series of broadsides are included to help visually, theoretically and historically frame the endeavor. The next and perhaps final step before publication involves typography and layout. While you will see rudimentary demarcation present in the manuscript (horizontal lines and bold text), a lot more could be done with regards to the appearance of the text. I have made the manuscript available online [http://web.njit.edu/~funkhous/2002/interpoesia/DIU2002a.doc]; any ideas or efforts toward furthering the design of the text are welcome!

The second digital project that has reached a printed completion is called *Whereis Mineral: Adventures in MOO*. The texts in this book originate from transcripts of interactive sessions on the MOO systems in 1993 and 1994.[34] A MOO is a text-based "virtual reality" system where many people can connect to a common electronic database and are able

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[34] The manuscript is available via http://web.njit.edu/~funkhous/2002/interpoesia/whereismineralms.doc

create their own "space," objects, characters, and dialog that appear on the screen as descriptions or words in (plain) text. In a MOO, one navigates through digital constructions along with characters designed and directed by others. Technically, MOO stands for MUD, Object Oriented programming. A MOO combines the Internet's Multiple-User Dimension (MUD) system with an Object-oriented code that makes it a more dynamic textual zone (though it does not permit the inclusion of visual images). During the first half of the 1990s, there were hundreds of MUDs (if not more), being used for a range of purposes by researchers, teachers, gamers, techno-thrill seekers and the like.

Julian Dibbell, in *My Tiny Life: Crime and Passion in a Virtual World* (New York: Henry Holt, 1998), imparts detailed descriptions and analysis of LambdaMOO (and such virtual spaces in general). Unlike my collection, which foregrounds the onscreen experience and shows the control authors have (and do not have) over this superficial space, *My Tiny Life* is a deep portrait of LambdaMOO, which Dibbell describes as, "a very large and very busy rustic mansion built entirely of words" (11). I refer to his book for the most apt descriptions of the territory, as Dibbell absorbed himself in the "culture" of this space over a longer period of time, and masterfully recounts his experience and observations a MOOer. He describes MOOs as "semifictional digital otherworlds," that are "neither exactly real nor exactly make-believe, but nonetheless profoundly, compellingly, and emotionally *true*" (12, 17). Dibbell saw MOOs as, "a vast playpen in which they [MOOers] might act out their wildest fantasies without fear of censure," though his book revolves around an incident in LambdaMOO (a virtual rape) that illuminates the downside of such territory (23). All MUDS exist, he observes, "in a conceptual twilight zone between the games from which they had evolved and the real-life social meshes they had come to resemble" (62). Ultimately, asserts Dibbell, LambdaMOO was, "basically a map, and like all MUDs it mapped a place as yet uncharted by conventional cartographic means: the strange, half-real terrain occupied by the human animal ever since it started surrounding itself with words, pictures, symbols, and other shadows of things not present to the human body" (62). Idealistically, he believes that, "the MOO was a place people came to in part to exercise and share their creativity—to make culture" (63). Dibbell's thorough exposition is a valuable study for readers who are interested in the sociological and emotional aspects of MOO phenomena. As an informed, battle-worn study *My Tiny Life* offers an important view of the complexities of multiple aspects of MOO textuality.

What interests me are the aspects of the MOO as a textual tool, a place of creative discovery, and the development of narrative and forms of personal expression in virtual space. In this book I attempt to represent the narrative in print for the sake of showing my interactions with the machines and other characters when given the opportunity to investigate machine-modulated composition via MOO and network systems. However, there are multiple problems in its conversion to the page. Documenting and representing the entire textual encounter of a MOO, or as much of it that could possibly interest readers, is an intentional aspect of this book. To incorporate the diversions into the narrative and on the page is not a simple process. Since the logs did not read what I type onto the screen the same way that the computer (server) does, it was necessary to edit or retranslate the pages altogether to remove extraneous words, symbols, and other errors [see *Selected Technopoems* for example]. One example of this that I have left in the book is the "emote" command. In order to represent non-dialogic communication, such as offering a (virtual) present to someone, a player has to type 'emote gives candy to X,' which will then show up in the MOO as "Player gives candy to X." Some information that comes across the screen in the MOO logs is clearly redundant and superfluous. The logs contained enormous

formatting irregularities and some of the salvageable content was simply uninteresting or unformed, so some of what is left appears *in media res* (though many of the sessions are fully intact). A fair amount of it, if not contributing directly to the MOO narrative, does impact upon the tale of the experience the (co-) author has during "composition" of the piece. All of the commands and machine language can be removed and the words can be edited to conform to convention. However my motivations lead me to do otherwise; materials are edited and formatted to foreground a process of authorship.

One feature of the system (and experience) included here is a running catalog of on-screen difficulties. I have left intact this feature of the logs (which capture everything that occurs on the screen) to impart to the analog reader the types of secondary information that intrinsically accompanies the dialog. The reader experiences to some degree my learning of the systems and space. However, I have attempted to avoid redundancy in these materials through close editing. "Movement" in the MOO happens by typing in directions such as east (or "e"), south ("s"), northwest ("nw"), up ("u"), etc. Having left all of these lines in the text, I try to prevent confusion on the part of the reader by formatting these commands with bold type. Leaving the commands I have entered in the narrative in shows readers the results of choices I made (or was required to make) at the time. Presumably, the demarcation helps to alleviate the inclusion of such foibles. The only other text formatting that differs from the original logs is that I have indicated a change in "place" by presenting the names of places in italics. I have removed all duplicate descriptions of these places, which automatically appear upon re-entry.

Many questions arise in the process of taking a transcript of events that happened online and presenting them on the page. All of the commands and machine language can be removed and the words can be edited to conform to convention. However my motivations lead me to do otherwise; materials are edited and formatted without masterful models to reference. I have put together scipts and a chapbook of MOO materials, so I have experienced editing MOO texts for the page. In this collection I place some of the interrupting texts in the body of the narrative and others, such as indexes of users logged on while these MOO sessions were happening and commands at a player's disposal, in a Glossary and Appendix. Though my objective is to bring a facsimile or depiction of the experience of the text to the reader in print, it does not seem necessary to include such extensive (and often unnecessary) materials in their original places. Yet since this is a multi-author document and all I know of the other authors is the information in the Appendix, it seems appropriate to give them "credit" in this way.

Primarily the book serves to document one of the different forms of textuality that has emerged as a result of computer technology. Though I claim authorship to this book, having contributed text and uniquely capturing the experience of it, clearly this is a collaborative text and largely I am not the author at all; it is form of authorship can also be viewed as accidental. Since the social function of the space is so overt, most of what transpires does not pretend to invite consideration for its literary qualities. Thus it is logical that a deep narrative is not ultimately attained. Nonetheless, strains of continuity on various levels are present throughout, and a more complex picture is hopefully indicated beneath the surface. Standard components of fiction such as plot and character development are minimal. It is obvious that certain elements of fiction are blunted by the peripatetic tendencies of the genre. Descriptions of virtual spaces and dialog fill the pages with the chaos of the world, overtly acknowledged and shaped in the formation of character's words, interests, and identities.

The MOO is an expressive tool that I used for compositional and social purposes. These logs reveal some lack of patience and focus on my part; when there were substantial lags, computer slow-downs, or inactivity perceived I would move on quickly, perhaps too quickly. It is possible that a more sustained narrative would have been developed if I had been less restless and free-wheeling at the time. As it is another kind of journey, however; that impatiently happens. This book hopes to introduce readers unfamiliar with such new textual zones to their presence, and perhaps to their possibilities. The creative, if transitory, attributes of the MOO are exposed here in a way they are not in Dibbell's book or anything else I have seen in print. Yet in no way would I claim this representation to be a definitive picture of what MOO, or MOO writing, is about.

The final claim for these MOO texts are that they are a prototype for interactive films or writings that will be made like this in the future, where the viewer (or reader) is a character in a densely pre-programmed world where narrative will be both consumed and made. In such texts it is possible that the reader may not always know whether it is another writer or a computer program generating the text. Computers do enable the programming of characters and movements, networks dictate the access to and efficiency of the text. These are not flawless mechanisms. I hope that some of their defects are apparent here, and that refinements will develop as necessary in realms of virtual communication and expression. What sorts of "virtual" "literature" will develop? It is clear, if anything, that a multiplicity of digital forms is at hand. Initially there was no intent other than research and enjoyment, or any long-range plan of creating a book from the material. *Whereis Mineral* also wishes to raise a literal question of the title, where *is* the "mineral," the inner ore of one's expressiveness in technologized literary forms? How does the transmission of what would be a poem or story or letters on the page meld with chat rooms, networked discussion groups, and video games? *All* of those elements are present here. Virtual space is evermore animated as each year passes. The surface logistics of a non-animated are on display here in rudimentary, unintentional, invented form for curiosity seekers to sift through and consider its values beyond a document of what happened.

Soon after I began exploring MOOs, I discovered that the texts also have versatile performance qualities to them, and three chapbooks containing MOO materials have been issued. I have operatically performed MOO texts on stage (a capella), performed them as radio texts in collaboration with improvisational music, and have multimedia iterations of the work to show here. Some performances include "films" of the transcripts, which intend to emulate the online experience and flow of the text, and others use visual renderings otherwise related to the text. The soundtracks are usually recordings made by myself or with friends who are collaborators [see *24 media files* for examples].

The last project, the cybertext "MOBY – DICK", goes the other way. Several acrostic poems initially written in a notebook are programmed and re-programmed to distinct and interactive effect. The words originate from a lecture about *Moby Dick* and from readings of the novel by students in China last year. Three separate iterations of the work now exist. First, the poems are presented in their original form. The second version uses the original sixty-four words and randomly rearranges them, automatically refreshing themselves for viewers every five seconds. Some of these re-creations creatively surpass the original poems. The final and most complex of the pieces is an ergodic version that allows readers to interactively contribute content to the work. The original association with Herman Melville's book may or may not be sustained in this version, as contributors may or may not be reflecting on *Moby Dick* as they input words. Yet, since so many human things are encompassed in this particular novel, it could be argued that this is a moot point and that

whatever words enter the poem are relevant to the intent of the piece. This experiment or idea is part investigation into the mechanics of the acrostic form, as well as a type of game for readers [see http://web.njit.edu/~funkhous/moby-dick/aug_moby_add.php].

Hypertext author Michael Joyce has written, "print text stays itself, electronic text replaces itself." Practically, of course this is true though beginning with Dada artists have challenged print's fixity. Joyce's theory is a useful framework by which to enter a study of contemporary textuality, and proves itself in most texts, including those I have introduced. But even if electronic texts constantly "replace" themselves, all iterations should remain accessible if not be made more accessible. Important work, ideas, and formal considerations shouldn't remain adrift or buried in the electronic miasma. On the other hand, electronic texts often impress me with their "translatability" or adaptation into printed matter, stage performance, and other renderings. Poetry and writing intended for the page can be repurposed, and adapted into a different form of expression via multimedia. I completed an enormous project in this realm in 1995, *The Little Magazine Vol. 21,* which was a novelty in the United States though it lacks in comparison to more animated contemporary work.

Joyce has also pointed out that with hypertext, one is not presented with a binaristic either/or paradigm but with and/and/and as a possibility. My concerns include the marginalization of text in both forms, and exclusivity and possible disappearance of texts in digital form. As we create in all forms we are making, and our work should not have to exist in a formal abyss. Is there any type of text that cannot be archived, or reasonably documented in one form or another? Obviously, in a situation where someone is experiencing a simulation of a work instead of the original some of its integrity may be missing. But with that understood, don't such representations contain other values? Since few international standards for multimedia texts exist, this documentation must occur on regional, local, or personal levels. As an artist, considering output is not my primary preoccupation but it is something I am always conscious of. Projections of digitally synthesized texts can be captured; depictions in each form can serve to enhance the other.

8. By choices in time

I see the primary elements of electronic "text" to be language (verbal and encoded), image (static or kinetic), linking, and thinking (or document logic) I do not believe that a balance between these elements is in any way required, but that these are what any producer of digital art are required to consider at the creative moment. All of these fundamental aspects require active commitment, though of course not all of them are necessary for or apply to every form of production. Personally, however, I seek to create all of them in the forms of expression that I transmit.

My primary area of activity is digital poetry. I want to make a statement about the most powerful dynamic—from my perspective—in this form of electronic text, which may be relevant to other forms as well. Let me quote a text I generated using Charles O. Hartman's program MacProse in 1997:

You were your dates. We had volunteered. Silver between a victim and the panel stretched; the hutch around an incident's moment (the term) as stared.

By choices in time, we stare at the product of links, wired or wireless metaphorically mineral conductors of texts. All computerized poetry involves one type of link or another. In hypertext, the link (as in node-to-node connection) is the primary mechanism by which a reader negotiates text. With multimedia, sonic and visual elements are foregrounded, composed together as simultaneities. With text-generators yet another type of linking is present: (in time) between algorithm or program and the text as it comes to the reader who ignites the involvement between program and the appearance of text. Links of one form or another—literal or conceptual—are always present in this extended environment. This way of viewing digital poems intends to illuminate the fact that activating computer coding, creating a textual spark is the potential foundation of the digital poem and in other forms as well. In some examples, the poem is the code itself. Far more frequently the code is hidden and is used to produce what appears as onscreen output: the link between code and action generated appears on the surface of the work.

With cybertext—and here I am referring specifically to Espen Aarseth's concept as a text that contains some sort of "information feedback loop"—the objective is to make these dynamic, steady but mutable multidirectional links in whatever form they take.

In every instance, inscribed by activation of dynamics written in the code. The moment of activation is mercurial for the viewer, in that it brings something to them or brings them to something (at least temporarily).

The keyboard and screen are the launching points for display and engagement. The manifestation of text or the activation of materials involves interaction, intermedia. To maneuver through three-dimensional space is to link to nodes within the screen's vectors or grids, and perhaps—via hypertext—beyond. The computational, then physical act of linking, ephemeral and delicate as it may be, is what makes work work. With au/oral materials, links emit from screen and through speaker to viewer as multi-sensory interconnection.

9. INTERPOETIC INTERMEDIATION: BRAZILIAN DIGITAL POETRY

Since the earliest critical texts regarding digital poetry, Concrete poetry has been considered a significant forbear to works produced in the genre. In *Computer Poems*, an anthology assembled by Richard W. Bailey in 1973, one of the five fundamental aspects of digital writing is defined as, "concrete poetry reflected with a computer mirror" (n.pag.). Carole Sperrin McCauley, in her 1974 publication *Computers and Creativity*, also acknowledges that the graphical works discussed in her book, "resembles, or perhaps grew from…'concrete poetry'" (115). Thirty years later, concrete poetry retains a strong influence on, and is clearly among the precursors of digital poetry. As recently as the 2003 E-Poetry Festival, the movement was a steady touchstone invoked in numerous presentations and discussions.[35] This perceived influence is sensible given the concretist promotion of the visual presentation of intentionally placed verbal elements, graphical effects, sculptural interplay of letters and words through bold typography, coloration, and repetition, all of which can be found in various examples of digital poetry. Computers clearly enable and—as demonstrated below—extend ideas invoked by concretist aesthetics; similarities are reflected in digital works, if not expanded by them, despite significant differences between the two forms. Exploring examples of Brazilian digital poetry as an advancement of concrete poetry, this discussion also identifies variations in approach and consequence in historical examples and in recent digital poems.

Concrete poet Erthos Albino de Souza produced the first digital poetry in Brazil in 1972 (Antonio email). His work "Le Tombeau de Mallarmé" (The Grave of Mallarmé) was a set of serialized visual poems that projected a graphical scheme which was codified so that each "phase" of temperature corresponds to one of the letters in Mallarmé's name; various graphical schemes and configuration were attained by heating the poetic "fluid" to different temperatures (Barbosa 145).
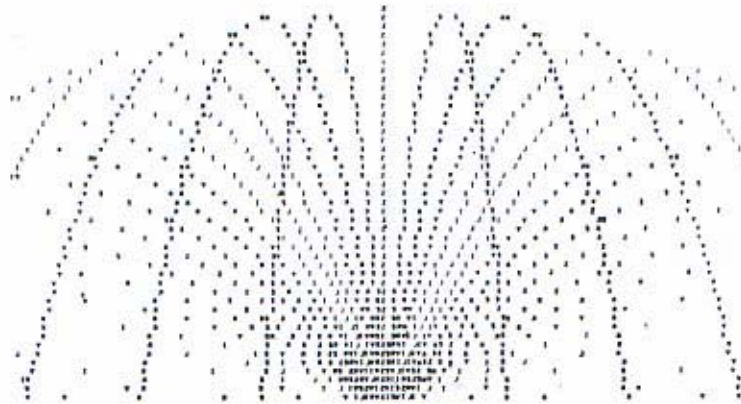

Fig. 1. Erthos Albino de Souza. "Ninho de Metralhadoras." Illustration in Pedro Barbosa, *A Ciberliteratra: Criação Literária e Computador* (Lisbon: Edições Cosmos, 1996), 146.

De Souza was an engineer who adapted a variation of Fortran that calculated industrial temperature distributions to produce visual poems using the computer to literally monitor,

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[35] For more details about this event and discussions at that transpired, see my report published by the Hermenia research group (Barcelona), http://www.uoc.edu/in3/hermeneia/sala_de_premsa/E_Poetry_2003.pdf.

assemble, and project letters (Machado 175). In an example typical of his works, de Souza's"Ninho de Metralhadoras" (Machinegun Nest, 1976) is presented as a series of computer printouts that clearly resembles concrete poetry, mirroring a sense of language shaped by heat (or lack thereof) (Fig. 1.). De Souza literally obtains the "informational temperature of the aesthetic text," a method proposed by Haroldo de Campos as one of the tasks of concretism in 1960 (Cirne 66). The programmed density of random letters at the bottom (center) of the image indicates something that is packed together, a core of energy that explodes and dissipates. However, even in this initial example we begin to see in digital poetry elements that are *not* particularly concrete, such as the appearance of random text and the possibility of multiple iterations of the same text created by using different input data.

From the outset of the genre, artists aspired to be innovative, using tools produced for business, marketing, advertising, the scientific calculation of information, and the management of information in order to do so. During the 1980s Brazilians such as Julio Plaza, Alice Ruiz, Augusto de Campos, Lenora de Barros, Eduardo Kac, and others experimentally prepared graphical poems that treated language by presenting iterations of words in successive segments. In these works, what could be called a type of activated concretism is reflected, in which the content shifts as the poem progresses.

Plaza—a Spaniard who lived most of his life in Brazil—developed two variations of a piece titled *luz azul* in 1982; one is a video, the other an electronic billboard in São Paulo. In both pieces, words are displayed in alternating sequences, offset against a sharply contrasting and visually defined yet shifting background. Letters that comprise words seamlessly move on the screen. Combined with shifts in color or contrast, even a few letters can begin to represent more than they would when fixed on the page (Fig. 2).
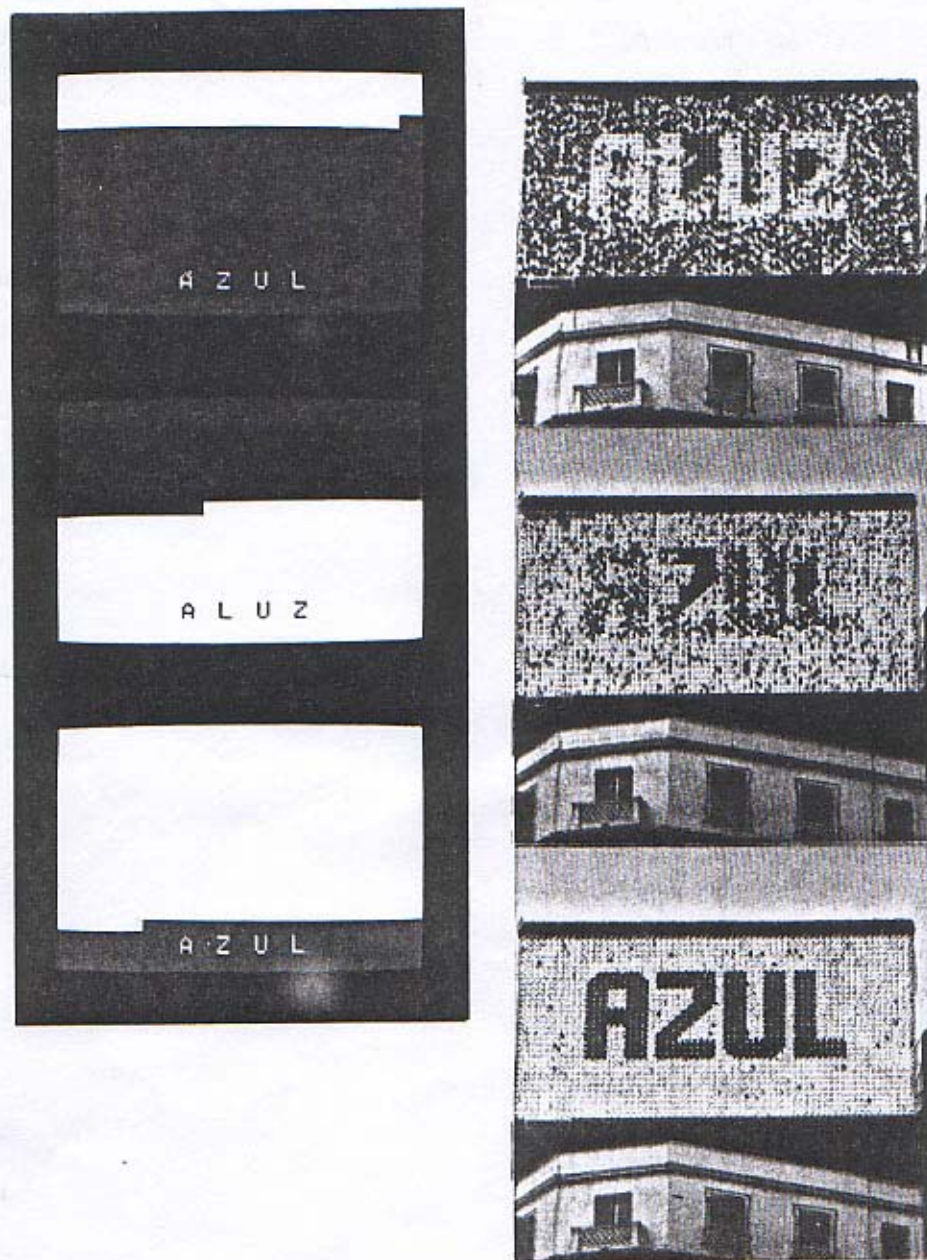
Fig. 2. Julio Plaza. *luz azul*. **Illustration in Julio Plaza and Monica Tavares,** *Processos Criativos com os Meios Eletrônicos: Poéticas Digitais*. **(São Paulo: FAEP-Unicamp Editora Hucitec, 1998), 131.**

Alice Ruiz developed a simple, haiku-like presentation, "acende apaga…apaga acende…vagalume" (lighting erasure/erasure of lighting/vaguelight), which, like Plaza's videotext, utilizes a basic interface (white text on dark background) to present in sequence the three brief verbal segments of the title in different locations on a line in the middle of the screen without graphical adornment (Plaza 133). The second segment of the piece is a linguistic inversion of the subject and object of the first. Kinetic qualities, easily enabled by

the media and a simple program, accentuate the mechanical reversal of language in a slight yet clever manner to make a cause-and-effect statement devolve to a pronouncement of effect-and-cause, which is not resolved by the conclusion but made more indeterminate. However, the ambiguity of the language also seems to momentarily suggest an uncertainty in the potential for language to be supported by light, given that an electricity-dependent computer terminal is the mode of presentation. "acende apaga…apaga acende…vagalume" is a revelatory, speculative poem that despite its efficient production and delivery holds multiple meanings. Whether on not it represents a view on the technology being used to present language or not is not as important as the fact that the viewer is presented language that momentarily projects ideas for the viewer to contemplate.

Augusto de Campos' initial foray into digital writing was the 1982 realization of his 1955 poem "pluvial…fluvial" (Fig. 3).
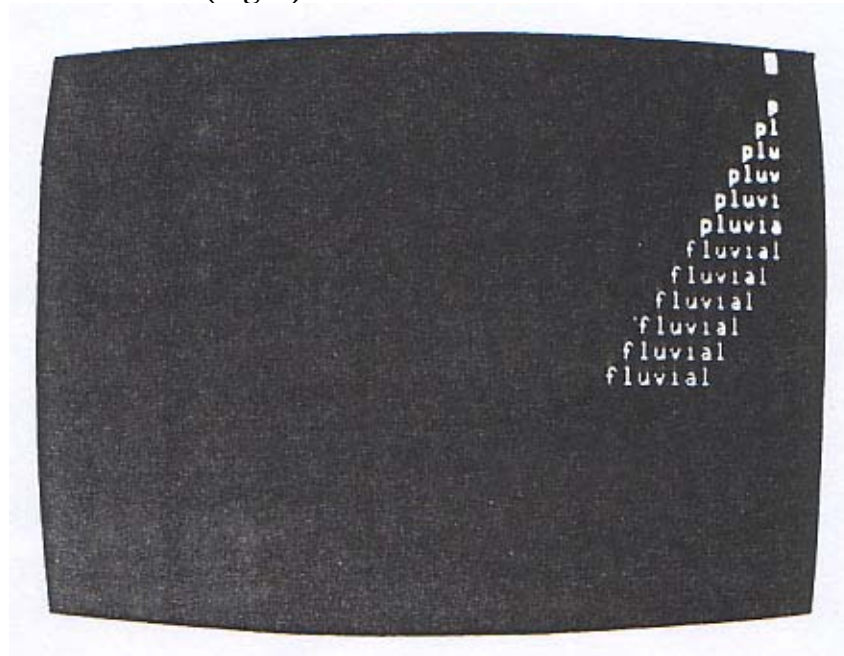

Fig. 3. Augusto de Campos, "pluvial…fluvial." Ibid, 157.

In de Campos' piece, two six line pairings of text derived from both words of the title are connected into a twelve line belt of words and word fragments that are programmed to sweep horizontally across the screen and morph into different patterns and permutations of the root words. Plaza, in reviewing the piece, writes that the movement of the programmed characters gives the sense of "creating two references: rain and river" (157). A movement is established that activates the natural conditions of the verbal and visual concept designated in the title.

Lenora de Barros' "Entes…Entes…" ("Beings…Beings…," 1985) uses a different style (see Fig. 4). In this piece, mirrored word forms are sequentially molded into different twenty line patterns, becoming gradually compressed into blocks. At first, a minimalist ten line poem appears twice: initially justified with the left margin, and also, on alternating lines, with the right margin, as seen below.
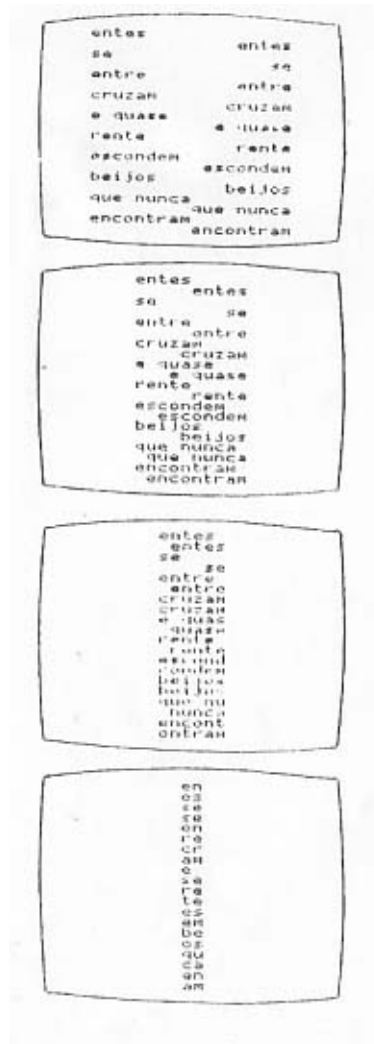
Fig. 4. Lenora de Barros.

"Entes…Entes…." Ibid., 156.

In de Barros' piece, initially separate halves of the poem begin to merge. The viewer is left to wonder what becomes of the poem—and why—as the line length compacts from eighteen characters, to ten, then six, then two, leaving first fragments of words then only syllables. The program squeezes the verbal information into a state beyond semantic recognition. The visual activity of the poem serves to enact the verbal content, as the poem in translation reads: "beings/are/between/crossing/and almost/near/hiding/kisses/that never/meet" (156). The merging of the poem, which results in a breakdown of communication, digitally illustrates the sentiment expressed in the design of the program.

With Kac's "holopoetry," new perspectives addressing innovations in digital poetry accompanied unusual approaches to the technological presentation of language. In works produced between 1983 and 1995, Kac creates reconfigured verbal units, in which a sign alternates between appearing a word and an abstract shape, or variant scenes of letters and

objects, in order to disengage from, he writes, "the textual distribution characteristic of print" (Anthology readme).[36]

Fig. 5. Eduardo Kac. Six points of view of the holopoem *Adhuc*. Multicolor computer holographic stereogram (WL transmission), 1991. http://www.ekac.org/allholopoems.html 3 June 2004.

In the 1980s and 1990s Kac produced numerous kinetic poems, and a hypertext poem entitled *Storms* (published in the French hypermedia journal *Alire* 8, 1994). Three kinetic Macintosh works produced between 1984 and 1994 are presented on the *International Anthology of Digital Poetry*. The earliest presentation, "Não" (No), recreates Kac's first digital poem (1982) which was organized as a series of five blocks of texts containing one nine letter noeologistic fragment each: **"OPOETAESS," "ECARASEMP," "REVAIDECA,"**

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[36] A detailed discussion of Kac's work in this area appears in the next chapter ("Notes on the Body in Relation to Technopoetry"). Kac produced the following holopoems: HOLO/OLHO (HOLO/EYE), 1983; ABRACADABRA, 1984/85; OCO, 1985; ZYX, 1985; CHAOS, 1986; WORDSL 1 and 2, 1986; QUANDO? (WHEN?), 1987/88; LILITH, 1987/89; PHOENIX, 1989; ALBEIT, 1989; SHEMA, 1989; MULTIPLE, 1989; OMEN, 1989/90; SOUVENIR D'ANDROMEDA, 1990; AMALGAM, 1990; ECCENTRIC, 1990; ADHUC, 1991; ZERO, 1991; ADRIFT, 1991; HAVOC, 1992; ASTRAY IN DEIMOS, 1992; ZEPHYR, 1993; MAYBE THEN, IF ONLY AS, 1993. See http://www.ekac.org/holopoetry.html.

"RACONTRAO," "CORODOSIM" (Anthology readme). On the CD-ROM the piece resembles a common LED screen (electronic lightboard), on which the words scroll across the screen in timed sequences (equal intervals) from right to left, with a momentarily empty screen during the transition between words. The letters in this iteration consist of red dots that fill round holes on a dark rectangular grid. Reflecting on this work Kac explains that the "visual rhythm" is thus created that alternates, "between appearance and disappearance of the fragmented verbal material, asking the reader to link them semantically as the letters go by" (ibid). The combination of programmed graphical cadence and the viewer's understanding of the poem—a cyborgian coupling—make the poem what it is. His next animated poem, "CAOS" (Chaos), was originally created in 1985 using the French Minitel system that enabled retrieval of data from remote locations via the telephone, and was meant to be read on public or private terminals, or terminals installed in museums. The CD-ROM version of the poem, renamed "Recaos" and recast using the Macromedia Director software program and proceeds very quickly (about fifteen seconds in length), begins with the letter "c" in red at lower right against a black background. After a few seconds, the "c" is duplicated in a diagonal pattern toward the upper left; reaching the top near but not at the corner it careens downward diagonally toward the lower left. After striking the left border, this stream made of the letter "c" moves in a straight line back across the screen to the right. Just before the leading "c" meets a "c" of the first diagonal, the letter turns to blue and the letters "AOS" follow, which shift to "AC" and "SOS" before concluding with a trail of "S's" moving to the right. "Recaos" is a brief, simple illustration of kinetic letters and the permutation of language through shifts in color; it is a rudimentary example of the type of work that was explored with great rigor in *Alire*. In his author's note, Kac writes that his programming of the letter "c" intends to impart a "rhythmic behavior," and that the shaping of the letters represents both an hourglass ("slow passage of time") and an infinity symbol ("time beyond speed") (Anthology readme). A second poetic implication of Kac's design involves the transformation of "c" to other letters to form words (e.g. "caos," "sos"), which leave, writes Kac, "a mnemonic trace of other words, such as só (alone) and ossos (bones), in Portuguese" (ibid). Kac, as so many digital poets have before him, manipulates the internal components of his poem in such a way that the new words that appear are built from the old ones, or that appear in fragments that the viewer uses to build a sense of language and meaning. The other animated poem, "Accident" (created with Director in 1994), is a ten second loop (with soundtrack) designed to repeat, while filling the entire screen, until the viewer closes the program. Kac takes a passage of verse, which is converted from text to an image, with light gray letters on black. During the loop, a graphical "punch" effect is applied to the image/text, so as to uncoil and recoil for the viewer; this is static text put into motion as the soundtrack, comprised of synthetic sounds, is also sonically manipulated. The passage, "the words wont come out right./the words wont come out, right/or w r/on g/t o n   ight," appears both clearly, then distortedly, as if parts of it are inflated when processed. Its presentation offers a commentary about language on dual levels. (Anthology) If the "wont" is read as "won't" (the apostrophe is missing from Kac's text, though it appears in his commentary), the first line speaker in the poem cannot find a way to correctly express themselves; in the next lines are pronounced a more complex statement that could either mean that the voice is completely stifled, or that what is voiced is neither right nor wrong (i.e., ambiguity instead of speechlessness). Given the computerized treatment of the work, one must also consider that the piece could be a statement about the open-ended permission one has in inventing digital poems (that one's way of expressing themselves cannot be right or wrong in the new media environment. The

movement, amplification, and distortion of text, for Kac, charges the text with emotions that would otherwise not be present; he writes that the fluctuations in the piece, "suggest that antimonies based on language's precision or imprecision disappear in ecstatic encounters…" (Anthology Readme). "Accident" simply and effectively carries out this idea; viewing and understanding the poem involves minimal study in order to determine that indeed the entire content consists of a single brief loop and what the words transmit.

In the hypertext poem *Storms*, Kac's excellent selection of words and brief phrases poetically match up with each other in every order of viewing. While basic in technical comparison to his work with holography, *Storms* does contain a fundamental similarity to Kac's previously discussed work: if the viewer does not do anything (i.e. click on link in hypertext, move around the holograph) nothing new happens in the text, thus a wide variance from kinetic, videographic, and previously discussed hypermedia works. An elementary interface is used: a series of eighteen words and brief phrases contained on nineteen individual stacks (one word, "ALL," appears with two different linking configurations), which are interconnected in many ways through each of the letters that appear and sometimes in the space around the words on the screen. *Storms* begins with a title page, followed by some brief instructions, and consists of white lettering on a black background; when a link is activated, one word fades, as the other rises on the screen. The first word in every viewing is "ALL," which from the "A" links to the word "ENDS" and from both "L"'s to "MELTS." (Anthology) Some examples of ways to navigate through the material Kac presents, and the results produced, will help to show types of poems that the structure is able to express. By clicking on the first letter of each word, a viewer will see, or make, a minimalist ten-line poem before the words begin to repeat: "ALL/ENDS/MAIN/STORIES/RESURFACE/LIKE/A FACE/A SCENT/ALL/BLENDS" (ibid). This sentiment, that has a "one world" aspect to it, or at suggests that ultimately everything becomes synthesized, is extended in a straight reading of the words in a linear reading of the stacks in order using the keyboard's arrow keys, which is not suggested by the author but rather an approach that could be taken by the viewer nonetheless and inserted here to chart the verbal boundaries of the structure: "ALL/MELTS/SOME/STORIES/RESURFACE/LIKE/A FACE/A TRACE/OR/ELSE/ENDS/MAIN/MEMORIES/REMAIN/LIKE/A SCENE/A SCENT/ALL/BLENDS" (ibid). The more intricately the viewer becomes in choosing the links, the less linear and more surprising becomes the poem; the stacks in which the outside space is used set up an alternation of two words that continues until one of the letters is clicked, as seen with "MELTS" and "ENDS" in the next example. Every viewing begins with the word combination "ALL ENDS" or "ALL MELTS," but will begin to differ from there onward, though naturally given eighteen-words provided, repetition quickly becomes a characteristic of the work. Here is a fragment that emerges from Kac's work when the second or third letter, and spaces outside the letters are used as links: "ALL/MELTS/ENDS/MELTS/ENDS/MELTS/ENDS/SOME/MEMORIES/STORIES/MEMORIES/STORIES/A SCENT/A TRACE/OR/ELSE" (ibid). Kac writes in an introductory note that the linking structure, "originates in vocalic and consonantal bifurcation," which presumably involves finding a way to arrange or map words in series so that they compliment rather than disrupt each other. An example of such a flaw (if it is a flaw) might be the case if word/letter combinations "LIKE" and "ELSE," or "ELSE" and "ELSE" were juxtaposed with one another, which never happens in *Storms* because Kac has

identified how the voice, or word, can and will split. This vocalic, or consonantal bifurcation is one of the interesting—and somewhat mysterious—contexts Kac builds for his work.[37]

In the 1990s concentrated efforts toward the practical and theoretical development of digital poetry were profoundly cultivated by André Vallias and by Philadelpho Menezes, whose ideas were also fueled by a desire to go beyond the printed page and led to the composition of digital poems that also allowed the symbolic, pictographic, and other expressive dimensions to replace linguistic aspects.[38] Vallias, in "We Have Never Understood Descartes, says that his resistance intends to free poetry from logocentrism and recover its primordial meaning of creation as well as point to the "virtual interrelationship of codes" (154). In his Intersign poetry and Interpoetry, Menezes passionately seeks "physical independence from the word" by synthesizing forms (distinctly verbal, visual, sonic) into multiple layers of text that function as a sensory montage (Introduction 4). He aspires to create and promote experimental visual poems that are not derived from a verbal game as "static cinema" while rejecting decorative, collage works, video text, and holography as forms that did not allow authors to create their own language (Guide 41). Vallias began to develop a new variety of non-semantic work, rendering graphical "code" poems with topographical dimensions rather than verbal (using AutoCad, a computer-aided design program customarily used by architects and engineers), as seen in Fig. 6.
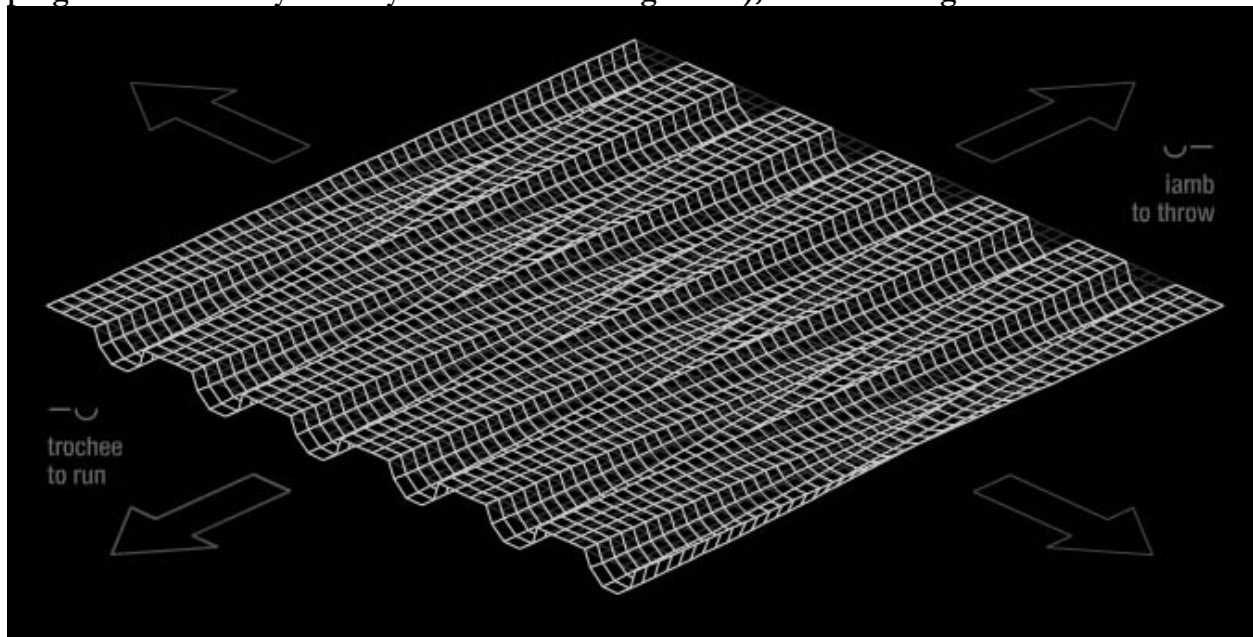

Fig. 6. Andre Vallias. Illustrations from "The Verse." Screenshots of "trochee/to run" and "trochee/to run, anapest/to strike, iamb/to throw, dactyl/the finger"taken from the author's WWW site. http://www.andrevallias.com. 4 May 2004.

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[37] Since the mid-1990s Kac has worked with robotics, telepresence, and other areas that de-emphasize verbal elements, gradually becoming more of a visual artist than a poet.

[38] As Jorge Luiz Antonio reports in an e-mail (December 2004), during the 1990s Alckmar Luiz dos Santos and Gilbertto Prado also created less advanced manifestations of electronic poetry based on a series of geometric figures (plane, point, angle, etc.) titled "Poemas em computador" (http://www.cce.ufsc.br/~nupill/poemas.html); also, from 1996 to 2001, E. M. de Melo e Castro (Portugal) was in Brazil and developed a kind of visual digital poetry, as seen in his site: "Infopoesia: produções brasileiras: 1996-99" (http://hosts.nmd.com.br/users/meloecastro/) (Antonio).

The essay "We Have Not Understood Descartes," describes his "diagrammatic" model for digital work, the concept of the poem as an open diagram, "operating under the sign of diversity" (155). Instead of treating the palette as a blank page or slate, he likens the computer interface to a "black infinity" (152). Vallias, who cites concrete poetry as an influence and inspiration, uses multimedia with the intent to move beyond typographical experiment by integrating three-dimensional elements into the syntax of the poem. Works such as "The Verse" (1991) operate as both a poem and a model of poetics; materializing language as textured shapes is literal, not figurative, as seen in this representation that uses the names of the metrical schemes found in ancient poetry (trochee, iamb, dactyl, anapest) in a visual model of how poetry can be built. Amongst other values, this work insinuates that the more one asks of, and uses language, the more complicated verbal formations become. "Continuous mutation," proclaims Vallias, "is perhaps the only constant distinguishing mark of digital media" (Descartes 152). The patterns are determined by the length of the syllabic content of these schemes and the author's combinations of the words. A visual language is established; once learned, the understanding of the patterning could be used to interpret or read work. In this example, the compound graphical formation of the trochee and iamb is shown; in others (not shown), all of the grid's verbal schemes could be requested at once. Though not explicitly discussed by Vallias, his graphical system could be applied to rhythmically visualize any word (or set of words) that scansion could be performed on; it is a form of virtual, visual, even sonic Braille that viewers "read" by absorbing graphical texts with verbal foundations. He urges the cultivation of interactivity, which "allows a work to be modified according to internal criteria (those defined in the programming language) and also according to the repertoire and interests of the reader…" (157). This statement is both a commentary on the material values of digital poems in general and as a description of the artist's own creative trajectory. The challenging, shifting, ephemeral status of works, Vallias writes, is "a permanent process of making and remaking, of endless 'work in progress'" (152). His views succinctly articulate the practical domain, if not the responsibilities, of contemporary digital productions.

　　　　Menezes also promoted and applied interactive principles, though in addressing a poem's infrastructure he proposes that a distinction must be made between "the standard notion of poetry as 'a coded articulation'" in which there is "no poetry outside the verbal code," and a related idea that "amplifies the first to an 'articulation of language'" (Introduction 2). Being able to understand poetry on both of these registers permits "the creation of poems also from non-verbal signs" (2).

Fig. 7. Philadelpho Menezes. "Chichetes." *Interpoesia* (São Paulo: 1997/98). CD-ROM.

Menezes rejected the concept of limiting the properties of poetic articulations to the verbal realm. His demand for "a revision in the use of technology" favored multimedia because of its multiple simultaneous channels, "a reinvigoration of the parts, disguising them in an experimental mess where each sign is kept within the limits of its semiotic nature; they share the same space but do not blend or fuse" (Poetics 4-5). Rather than synthesize disparate elements into a single determination, compounded elements construct various possibilities.

Pictures, for Menezes, contribute "meaning and comprehension" (Guide 40), and "disarticulates the divisions among languages, sectioned up and individualized by the ideological system to reflect the conception of the world" (Conclusion 5). In the polemical essay "Poetics and Visuality: A Trajectory of Contemporary Brazilian Poetry," Menezes describes concrete poems—which "rejoin words by sound similarity in the rational occupation of page space"—as the inauguration of "the implosion of the poetic verbal system" in Brazil (3). Nonetheless he credits concrete poetry for preparing the way "for a growing presence of visuality" and, finally, for atomizing language and thereby questioning the physical word and the materiality of a poem (3). These acknowledgements, along with his insistence on the implementation of new properties of text and prioritization of the use of technology, illustrate that perhaps there was more common ground between the avant-gardes than Menezes was prepared to admit.

Among Menezes' poetic works is a CD-ROM entitled *Interpoesia*, prepared in collaboration with Wilton Azevedo (1997/98).[39] Sonic attributes by this juncture were obligatory and the artists seize the opportunity to differentiate between avant garde movements by virtue of the media they inscribe. Now both "visuality not as the figurality of the word and…sonority not as the oralization of the word" are elements of digital poems (Conclusion 5). These pronouncements and projects coincide in the 1990s with a number of

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[39] Azevedo, in addition to being Menezes' collaborator on *Interpoesia*, has continued to produce both hypermedia works and criticism. He most recently produced a series of works on CD-ROM called "Loopposeia," in which he uses a montage of signs and media to produce condensed, self-contained works that embody a "poetic of sameness" ("poética da mesmice") (*Poéticas das Hipermídias* ms; unpublished, p. 85).

artists in Brazil, including Arnaldo Antunes, who turned to video and other kinetic forms of poetry, a trend that has increased in the era of Flash and the World Wide Web.[40] The *Interpoesia* CD-ROM is an effective example of ways in which digital poets had begun to experiment with new forms of presentation at the time. Twelve different works are presented on the CD-ROM; no two pieces are alike, and each effectively illustrates fresh techniques. For example, "Máquina" (Machine) uses as an interface a likeness of a simple mathematical calculator, though it does not function as such. The viewer must work to discover that a pre-scripted path is followed; touching numbers on the keypad orders a line of numbers, which are accompanied by the pronunciation of the sound of a letter. The pattern of numbers, when inverted on the calculator display, announces "poesia" (Interpoesia). This illustrates in a quirky way that numbers can become letters—as they do more complexly in computer coding—and how the multiple functions of the computer enable a fusion of elements into poetry using various digital techniques. Another work, "Lábios" (Lips), synthesizes fragmented bodies, processed sounds, and virtual shifts that reveal different textures and perspectives on the same image. On an animated interface, four lines of a brief poem are revealed ("Faith in pale lips endures/searching for a nitrate color/hard water in a soft body/beats so much until it kisses"); each line is assigned a facial feature that may be read individually or seen all at once (Interpoesia). The elements of the poetry, though in fragments, are easy to interact with and point to the idea that a non-linear digitally processed poem may inscribe traditional poetic concerns (e.g., longing and confusion). Disparate media are blended to form hybrid electronic poetry.

Works from the more recently produced *Revista Cortex* (2003) pay homage to concretism, yet also reflect ways in which digital poetry has moved beyond archetypal concrete poetry. For instance, the piece by Ronaldo Azeredo (a concrete poet), "Lá Bis Os Dois," provides the viewer eight different interfaces to manipulate by shading, thus distorting, various objects; the work contains mere traces and representations of language. In João Bandeira's "Nada," readers randomly arrange short fragments or phrases (e.g., "na" "ver" "isso" "nada hà" "nada haver" "nada nisso" "de narc"), depending on where he or she points and clicks on the screen. These pieces of language quickly travel from foreground to background, bold black letters vanishing into white as a noisy, vague soundtrack drones; the piece appears differently (e.g., varying duration and order of content) each time it is accessed, as it is dependent on reader input. André Vallias'

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[40] Antunes' poems, visual works, and sound art (on compact disc) from this period are published in a marvelous collection, *2 ou + corpos no mesmo espaço* (2 or + bodies in the same space) (São Paulo: Editora Perspectiva, 1997). In 1997, BMG Brasil also released a compact disc titled *NOME* that features Antunes with elaborate musical accompaniment. His video works are illustrated and discussed by Plaza, who introduces two of Antunes' 1993 productions, "Nome" (Name) and "Cultura" (Culture); both of these multimedia works project language, imagery, and sound treated with various technical effects. In the slickly produced *NOME*, a collaborative work between Antunes, Clelia Catunda, Kiko Mistrorigo, and Zaba Moreau, words are drawn from a cyclic ten line poem that features the phrase "…é o nome do homem…" bracketed by a word on each side. Words are wildly layered atop each other in various sizes, vibrant colors, and different planes on the screen. The multidimensional verbal information, accompanied by a soundtrack created by Antunes, is perpetually shifting. This conglomeration of words is layered atop a black and white videoclip that is also a shifting montage of imagery. The overall effect of the combination of elements here is one of, to borrow Brian Kim Stefans' phrase, "noise," on both visual and verbal registers. One inference made by the piece is that the idea of the self, and what the self (designated by a name) is, or has to say, is a complex and overwhelming proposition. Antunes' "Cultura" employs an entirely different approach in its construction and delivery of message. Here, against a dark background, a series of couplets are juxtaposed with rudimentary images of various birds, mammals, and reptiles. The mode of expression is unusual because it unite a folk art aesthetic with fanciful high-technology. The roughly cutout shapes of progenerative imagery (sperm, eggs, sexual acts) are combined with expressive rhymes.

"Encantação" unites a Velimir Khlebnikov poem, "transcreated" by Haroldo de Campos, recited by Antonio Dias, and "locovocovisually" programmed by Vallias. In this work the words (verbi-) are drastically broken apart and presented asynchronously from the recitation, in favor of establishing (loco-) the poetry in the visual and vocal components; it is both rooted in and expands concretism via its use of new media. The textural presentation seen in Vallias' previous work is intimated along with playfully activated word and sound, though it should be noted "Encantação" is atypical of his recent works as it is not interactive or explorative but projective.

A number of digital poets have emerged and become known to an international audience.[41] The desire to bring enhanced experimental expression to a larger public via technology thrives in Brazil. While Haroldo de Campos described concrete poetry as a "critical mediation of forms" which "takes nourishment from this intermixing of 'media'" (Ruptura 45-46), concretism largely emphasized the graphical aspects of printed language and words. "Verbivoco-visual" techniques are deployed as a vehicle for static verbal configurations; while direct, the method often requires readers to take time and decipher the poetry (46). Preparing "code" poems was, of course, one of the many pursuits explored by concrete poets, though language is usually only partially absent. In certain concretist works, author provides a lexical key in the form of graphical symbols; one of the best examples of this is Luiz Angelo Pinto's 1964 "code" poem, an arrangement of diagrams that is read as a series of images as well as a verbal translation. Décio Pignatari and Luiz Angelo Pinto's "semiotic poetry manifesto" of 1965 describes the necessity of forming signs that successfully determine the syntax in order to create "new communications possibilities" (Williams 254). Texts had to be "dynamic…manageable, changeable, according to the needs of each text" (254), and contain a conceptual synthesis of phonetic (verbal) and visual (non-verbal) elements (even though cinepoemic or logogrammatic elements are at the outset fixed in place). All of these concepts—verbal, vocal, and visual—are heightened and redefined in new media works. Not only do digital poems have the freedom to take on any imaginable form, they may be interactive and can change according to the needs of each user; they can be self-regulating, or be regulated by viewers as participants.

The "Pilot Plan for Concrete Poetry" asserts the "tension of things-words in space-time" as a major objective of concrete poetry (Williams 48); poetry is qualified as a "spatial-temporal structure, in place of merely temporal-linear development" (Espinosa 16). Traditional (linear) and logically presented works that directly associate object and meaning foster less "tension" in a reader as do materials that are presented with multiple components. This quality of concretism is complicated in new media works because digital conditions enable non-linear, polymedia structures; virtual works can be logical or illogical, can shift quickly (or not), and can contain elements of chance. If the digital text contains algorithmic, mathematically and/or randomly designated variables, from which it can produce many different versions of the same text, how much can it be said to be "concrete"?

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[41] Giselle Beiguelman, Lucio Agra, Jorge Luiz Antonio, along with many other artists, some of whose work appears on *Cortex* 1, are now producing inventive works in various visual, sonic, and hypertextual forms. Beiguelman (http://www.desvirtual.com) has developed interactive non-semantic, non-grammatical works the WWW and—reviving Julio Plaza's approach—on electonic billboards in São Paulo, which can be programmed by cellular phones and other devices. Agra has used the common software program Power Point and the WWW in innovative and unique ways to establish "experiments in digital precariousness" (experimentos na precariedade digital). (see http://www.geocities.com/agraryk/). Antonio, in addition to creating a number of visual and hypertextual poems, is the curator of the WWW site *Brazilian Digital Art and Poetry* (http://www.vispo.com/misc/BrazilianDigitalPoetry.htm), where readers will find many more references to contemporary and historical works.

Further degrees of uncertainty and difficulty arise because digital poems not only have a surface but an interface with oftentimes transparent depths to explore; a viewer often has to learn how to interact with most digital works and discern what its boundaries are. Without any instruction and/or lack of experience, such conditions can create immense challenge and trepidation.

By the time the WWW emerges in the mid-1990s, there is an overt movement away from the typographic and language and ideas presented by, in, or as words and letters, an expansion of expression into multiple elements, including the incorporation of literal images, figurative and symbolic imagery, which is sometimes animated, and often accompanied by sound. An equal emphasis and refinement of the visual-verbal-and vocal (audible) elements, a condition of text that could not have been embedded into early concretist works, even though phonetic values and sound poetry were interests of many of those in the group. Nevertheless, it is certain that concrete poetry and its variations (e.g., Popcrete, Neoconcrete) are a direct influence on the development of digital poetry in Brazil. As an example of testimony to this fact, I quote an email from André Vallias: "I can not imagine all my activities in poetry, design, multimedia and translation without the existence of the brazilian 'poesia concreta'" (Email). Yet it is also important to recognize that other artistic efforts also influence digital poetry. The early digital artworks of Waldemar Cordeiro and the process poetry of Wlademir Dias-Pino should also be considered pretexts to the form that treated poetry as an object, giving it "tridimensional" qualities. In Brazil as elsewhere, digital poets utilize pluralistic forms that foreground visuality: by letter, picture, and animation. Among other dimensions, imagery or graphical effects are almost always components of such work, often more dramatically presented on a scale larger than (or apart from) language. Beyond animation, manipulation of positive space, shading and other forms of visual texture, pictures, colors, and other factors shape digital works. Concrete poetry gave permission for poets to explore the composition of these alternative modes of articulation; subsequently, a gradual textual evolution that runs parallel to concurrent technological developments may be charted. Beginning with concretism, the gradual advancement has permitted time for various modes of practice and thought to be absorbed, considered, responded to, and then advanced again.

10. Notes on the Body in Relation to Technopoetry

On the most primal level being involved with digital poetry can be physically detrimental, though this is not an aspect of the exercise that will be dwelt on in this essay, which instead focuses on instances where bodily activity and presence, rather than stillness, is in the foreground. I am inclined, if not obliged, to state at the outset that over the course of a decade of being a full-time artist, critic, and educator involved with this pluralistic form, using a computer nearly every day to craft expression, I have become clinically near-sighted (due to having my eyes on a screen), and have had extensive tightness and pain in my lower back (as a result of so much sitting). This is no complaint, just some factual information. A viewer of digital poetry is also subjected to such conditions, though hopefully to a lesser degree. With patience and organization, one learns to live with, combat, and make adjustments to a condition of physical stasis in order to thrive. Ergonomic adaptations make the corporeal idleness bearable and the research and creative possibilities activated by this cyborgian form are compelling and stimulating; perhaps in time both compositional and consumptive modes will evolve so as to be more conducive to bodily activity and health.

Digital poetry, in spite of its largely sedentary circumstance, has nonetheless emerged as a result of dedicated, passionate acts by practitioners for more than forty years; programs that automate writing and process poems, visual works (static and kinetic), hypertexts, and other techniques have proliferated. In most computer-based interactive works, the primary human-computer relation is between hand, arm and eye coordination, entering input through a keyboard and mouse. A viewer watches, and sometimes participates in the poem as it appears on the screen. Interactive traits are seen in examples as early as Alan Sondheim's video "4320" (1971), which documents (with video and audio) two users' experiences while they interacted with a graphical computer program (following a set instructions to achieve specific configurations).[42] This work starts with an image of a projection of a hypercube into three-dimensional space, which is flattened by the (vector graphics) screen. By turning the hypercube on its four dimensional axes, it could be made orthogonal to three-dimensional space, appearing like a projection of a wire-framed cube. Turning the cube orthogonally on the screen, the projection became a square. "By collapsing the square," Sondheim writes, "a point was achieved" (Email). The viewer's experience with a visual object appearing on a computer terminal is driven by sensorial perception, using an early joystick, rather than explicit language. As such, Sondheim's work here proposes a model for a digital poetics rather than presenting a digital poem per se; it is a conceptual piece involving, he writes, an "Intuition of dimension" rather than semantic translation (Meta a). However, as illustrated in both the video and in a pamphlet Sondheim produced in conjunction with the piece, working with the program intrinsically leads to dialog by provoking mental and physical activity for the user. The process involved using vector graphics to output slices of a hypercube in two-dimensions; in other words, objects conceived to appear in a multi-dimensional space were transferred into something a user could experience on a computer terminal. The title refers to the different spatial dimensions the author establishes within the program's parameters, as illustrates in examples of output presented in the pamphlet (Figs. 1, 2).[43]

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[42] "4320" was made with a program created by Charles Strauss that was used for reproducing three-dimensional graphics on a mainframe computer ("a Meta/4 in conjunction with a Vector General Interface") at Brown University (*Meta* a).
[43] The technical description included in *Meta*: "A 3-space projection of a hypercube (4-space measure polytope) was presented on a crt. With zero/axing the z' coordinate (zero rotation, 4-cube orthogonal to 3-space), a cube (3-space
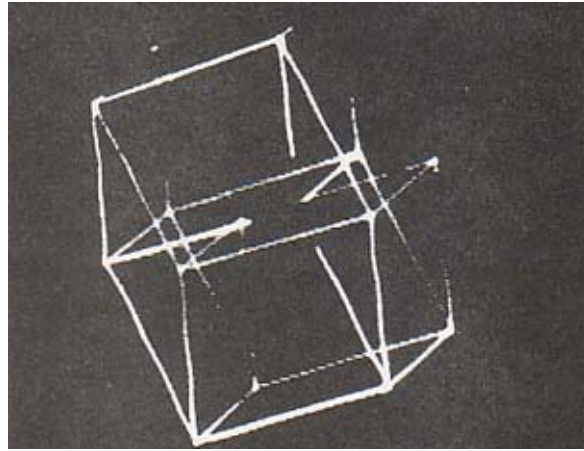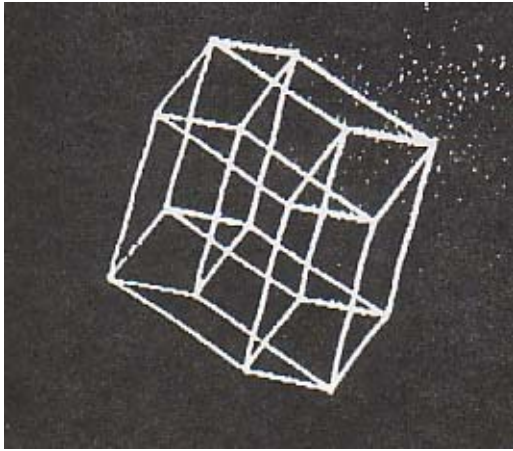
Fig. 1 and 2. Alan Sondheim.
Illustrations from "4320." *Meta*
pamphlet. Providence, RI, 1971. a, c.

When output is requested, and is presented as above, the multi-dimensional experience is visually reduced and unfairly represents the piece. When a user was viewing the piece, she or he was able to manipulate the object in various ways and make changes to its shape. The stimulating aspect of the work was thus interacting with the virtual object. Sondheim describes the experience of encountering the text/program as, "learning to drive through hyperspace" (Interview). The texts that accompany these images in the *Meta* pamphlet represent examples of dialog, in the reflection thoughts and verbalized incidents shared by users of the program who articulate both the technical and visceral experience of the program. As Sondheim notes, "feedback of a totally new sort" occurs: the "humanization of space" is a byproduct of "learning a new perception" (b). The text that accompanies Fig. 1 contains a type of engineering drama, transcribed voices of users as they navigated and attempted to understand their actions, which resemble a multi-voiced poem:

>   "Ok, drive that back into three space now.
>   Wait, it's still moving in four."
>   "I'm losing control, there's a bending---"
>   "Try the lower console" (*Meta* a).

Fig. 2's verbal component shows a more didactic type of instruction:

>   "Now take it from there to the maximum
>   extension – Petrie projection of the cube first.
>   (Try for the hexagon.) Like driving lessons."
>   "Just a second, how much have we got here…"
>   "Wow, you're wildly fourspacing it. Lower console
>   again."
>   "Wait.."
>   "Ok, now shade i." (*Meta* c).

The texts illustrate that though the piece is on the surface devoid of language, the experience of working with the object invokes language as an intrinsic response. The active,

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measure polytope) could be created. Again, zero/axing the z coordinate produced a square (2-space measure polytop). The inversion mechanism could reduce the square to appoint: 0-space" (a). The controls included shading, vertical and horizontal movement, x-, y-, and z- rotation, speed, and ocillatory state.

cooperative perceptions of the user(s) generate one form of text or another. An internal dialog occurs for users of any ability, which can be externalized, as in the records shown here. A new lexicon, largely related to the technology or technological experience, emerges from the exploration of an unknown object. The digital model becomes the springboard for almost any type of writing, though as a visual device it does not emit language in any way. The "writing" here is about the experience of "reading" the piece, which is a possible exchange in communications in media of any sort. The renderings that are instigated by "4320" are not as easily produced as texts automatically generated by a program; they are, rather, remarkably cyborgian efforts in which human-computer interaction is an inextricable aspect of the work. Such an approach to working creatively with computers was unique three decades ago: most works were coded so as to produce programmatic texts rather than to produce an immersive experience that could lead to depositions in language.

Sondheim's effort forecasts virtual techniques later explored on the screen by Ladislao Pablo Györi (*Virtual Poetry*, 1995), André Vallias (*IO*, 1994), and Fabio Doctorovich ("Chatgattcat (o Rotaciones)" [Chatgattcat (or Rotations)], 1995), and in such artworks as Jeffrey Shaw's participatory construct *Legible City* (1988-90), which is particularly pertinent to this discussion. Shaw constructed a computer-video-graphic installation in which the viewer rides a stationary bicycle (with moving pedals and handlebars) through the architecture of a city which, Shaw describes, "is constituted by solid three dimensional letters that form words and sentences along the sides of streets" (Stiles 487). Sections of two cities, New York and Amsterdam, were plotted out and texts were devised to fill the coordinates.[44] What is pronounced by Shaw's work is another register, or larger stage upon which works created in the genre are presented, and in which the conditions of a text are dramatically different from typical forms of reading, or even viewing projected works (video or installation). Form, scale, and physical requirements of the viewer of a digital poem can be significantly altered in absorptive, participatory, installation settings.

During the late 1970s and 1980s, Richard Kostelanetz and Brazilian polyartist Eduardo Kac pursued such an approach to the technological presentation of language, new to the realm of poetry and new media, when they began to explore unconventional uses for holography.[45] Kac's "holopoetry" is made and displayed holographically (i.e., the work is not composed in lines of verse and is made into a hologram); computer software is used to format words and images but the work itself cannot be viewed on a computer screen. Words and images are carefully formatted and imbedded into laser holograms, a medium whose visual dynamics allow for numerous static manifestations in a single work and require the viewer to move around in physical space in order to activate the poem. Holopoems are organized without linearity in immaterial three-dimensional visual space, and change—both

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[44] Shaw's statement in *Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings* reports that the New York text, written by Dirk Groeneveld, was comprised of eight distinct fictional storylines that were monologues by Ed Koch, Frank Lloyd Wright, Donald Trump, Noah Webster, a cabbie, tour guide, con-man, and ambassador (488). The Amsterdam text was created from archival documents concerning historical events that occurred in the city between the 15th and 19th centuries, located on the screen in the areas of the cities in which they had happened (489).

[45] In the mid-1980s Dieter Jung created holograms out of poems and the arrangement of letters, with similar reasoning and results as Kac though not as prodigiously (Popper 41-42). At least two other projects that involved the projection of luminous words into an exhibition space transpired in the early 1990s, though neither was classified as poetry by the artists. As documented in Frank Popper's *Art of the Electronic Age*, Piero Fogliati and Bill Bell also worked with virtual light images. Fogliati's *Chiosco delle apparizioni* projected letters onto slim rods in multiple dimensions that required viewers to visually deduce content via "back-and-forth eye movements;" Bell's "saccadoscopic" pieces achieved much the same effect using luminous diodes and computer technology (Popper 16).

in appearance and meaning—as the reader moves around the poem. This method dynamically integrates 3-D space with a fourth dimension of time, in order, Kac writes, to "express the discontinuity of thought...fragments seen by the observer according to decisions he or she makes" (Holopoetry 186). Since holopoetry dynamically integrates the three dimensions of space with the added dimension of time, Kac believes that there is actually a fourth dimension to this work, which is activated mentally and physically. Between 1983 and 1995, Kac created several holopoems, as did Kostelanetz.

Using a "perceptual syntax" that explores "mobility, non-linearity, interactivity, fluidity, discontinuity, and dynamic behavior," holopoetry melts the rigidity of text in both traditional and previous forms of avant-garde work; words or letters cannot be seen simultaneously and become abstract color images floating in color fields that shift to the eye, growing, shrinking, or blending into each other (188, 190). The inclination to use and manipulate language is there, but fixing it, or a specific meaning, in place is not. Implementing what Kac describes as a "mobile signifying system," texts only signify upon the active perceptual and cognitive engagement on the part of the reader or viewer, each of whom "writes" his or her own texts as he or she views it (190). In *Adhuc* (see Ch. 9), for instance, six words or short phrases in English, related to time, are layered as vibrant, distorted palimpsests that appear in different configurations and patterns. Kac writes of this work, "The muddled interference patterns that blend with the words help to create an atmosphere of uncertainty, not only concerning the visibility of the words but also about the meanings they produce" (205). This motif is similar to the theories put forth by many hypertext theorists, yet the type of design Kac employs through holographic arrangement, is clearly different than using the typical tools of interactivity, the mouse (or joystick). Positioning and repositioning the body undermines the otherwise fixed states of the text. Layers in holographic space "open" or into each other—or activated holography's branching space—via the viewer's physical (bodily) movements. Kac's early holopoems involve anagrammatic mirroring, as in *Holo/Ohlo* (*Holo/Eye*, 1983), the presentation of a single word on the screen in different visual planes (*Abracadabra, Oco,* and *Zyx,* 1985), or abstract shapes (*Souvenir D'Andromeda,* Fig. 4, 1990). In these works, language is discontinuous; words or letters cannot be seen simultaneously and sometimes become abstract color images. This effect is illustrated in this sequence from *Souvenir D'Andromeda* presented on the author's WWW site.

Fig. 4. Eduardo Kac. Reversible points of view (stills) of the holopoem "Souvenir D'Andromeda." Achromatic computer holographic stereogram, 1990. http://www.ekac.org/allholopoems.html 3 June 2004.

The words in this example are shattered into fragments, which are assembled and broken apart by virtue of the viewer's position before the text. In other works, clusters of words are shown, that also morph into various words, shapes, or conglomerations when viewed from different angles that activate semantic shifts (*Chaos,* 1986; *Eccentric,* 1990). Kac also used

cylindrical holography to generate the 1987 mobius-like poem "Quando?" (When?) that can be read forwards or backwards. Later he began to present words floating in color fields that would shift to the eye, growing, shrinking, or blending into each other with minimal movement (*Albeit*, *Shema*, 1989; *Adrift*, *Zero*, and *Adhuc*, 1991). As he progressed, Kac's works became visually more complex and turbulent (*Astray in Deimos*, 1992; *Zephyr*, 1993), and engineered in multiple panels (*Havoc*, 1992). He learned how to use an unusual technology and effectively applied his knowledge and skills for purposes of poetic expression.

Kac deftly reflects visual poetry and poststructural theory in the graphical but textually unstable condition of the holopoems and in other digital poems he has produced using technological apparatuses that enable fluid signs to be interconnected through an irregular syntax. In this work Kac creates reconfigured verbal units, in which a sign alternates between appearing a word and an abstract shape, or variant scenes of letters and objects. Holopoetry aims stretch the poetic imagination and suggest meanings, ideas and feelings that are difficult to convey by traditional means. Propagating light as a medium for interactive reading and writing creates animated language. Holography has allowed artists to manipulate each element of the seemingly floating layers of text with precision, which both Kac and Kostelanetz have used advantageously. Pieces are not projected but are, writes Kac, "optical fusions" suspended in the space of a screen (196). This work is presented much in the way that art installations are; one must go to a gallery or museum to see them. The procedure of this type of writing relies as much on the precise placement of the objects as it does on the objects signified by the words (or other symbols). Generally speaking, a condition of ambiguity is found in Kac's work, which combines various processes, including animated poetry, "semantic interpolation," and "z-axis poetry" (205). As Jim Rosenberg, John Cayley, and other poets would become in the 1990s, Kac is interested in the intermediary space of a poem where, he writes, "the text is written with the malleable medium of light, where the word is free from surface constraints, where textuality is signifiers in motion" (211).

Kostelanetz's experiments with holography are not as extensive as Kac's, or as his own work in other forms such as visual and videopoetry. His work in this area includes holopoem projects *Antitheses* (1985) and *Hidden Meanings* (1989), a collective title for several holograms including a 1987 collaboration with Kac ("Lilith"). He also produced, in collaboration with Hart Perry, an earlier series titled "On Holography" (1978) which was not a poem but cylindrical piece (a "360 degree Integral White Light Hologram") that presented five individual layers of statements about holography atmospherically accompanied by a 90 minute sound recording (WWW). In *Antitheses*, working with the holographer Fred Unterseher, Kostelanetz created a dense visual layering of antithetical words that consisted of, he recalls in *WORDWORKS*, "two sets of words on four planes apiece" (174). He devised thirty-five pairs of, "striking words in unfamiliar relationships," typesetting each pair in its own typeface in order to connect the words on visual and semantic levels (175). Including the base pair, "Warm/Cold," thirty-six distinct layers are created in three optical ranges so that some but not all of the layers will appear at once (in varying degrees of focus). *Antitheses* is presented unconventionally as a type of "shadowgram" (Fig. 5), a process that required Kostelanetz to create a transmission hologram, or "make a hologram of a hologram" (175).
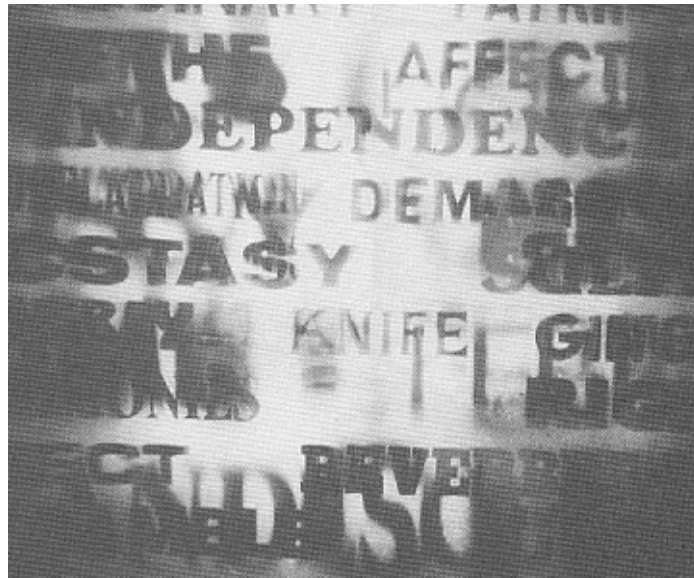
Fig. 5. Richard Kostelanetz. Still (detail) from holographic poem *Antitheses* in *WORDWORKS* (Brockport, NY: BOA, 1994), 179.

Kostelanetz overloads the screen with language, so that only fragments emerge at once; formation of the words becomes sculptural. Viewers are individually re-assembling the words, the pieces of the poem, as they are received. As with some of Kac's work, the exchange between poet and audience involves a type of visual passage through language, components of which are often hidden; a linear progression through the material is not imposed by the author (because the viewer must move her or his body to read what cannot be discerned from a single condition, a process Kostelanetz has humorously described as "laser limbo") (Email 2005). Though the work exists in a highly defined and finite space, many unique approaches to the programmed (or formatted) constellations of language are possible. Again, as in all suspended transmission holograms, the viewers' experience with the text will depend upon factors such as their height and how they are positioned in front of the piece. Kostelanetz considers this work to be most successful of his visual poems, he writes, "because in three dimensions, with the spatial experience of language, I can better realize my earlier poetic idea of complementary words within a single visual frame, as well as my general aesthetic of reading in unfamiliar ways and doing with new media what could not be done in print" (177). His later sequence of work, *Hidden Meanings*, mainly features single words (e.g., "ABRACADABRA," "HOLOGRAPHER," or "MADAM"), phonemes two or three letters in length are unveiled as viewers situate themselves in various positions in front of the holograms.

The most recent generations of poets belong to the media culture, and accordingly, as Kac observes, "They breathe television, video, videophones, computers, virtual reality, CDs, CD-ROMs, telepresence, holography and the Internet" (212). The challenge he presents to readers and poets alike is, "to create dynamic electronic and phototonic texts that recover the conceptual power and the mysterious beauty of language" (212). No matter its level of potency, however, language and communication (via any media or computer encoding) will only engage individuals and contribute to various types of human transformation if it is accessible. By the end of Kac's plentiful descriptions of this extremely specialized work, it is not made certain whether or not holopoetry—because of its

inaccessibility to most writers—is ultimately the most effective formation with which to achieve this goal. The spectacular qualities this invention possesses are unmistakable; the ideas and ingenuity in general demonstrate adventurous artistry. Yet proliferation of this approach to making poems—which are rife with interactive qualities—has been limited, and, especially given other more readily available possibilities, it is unlikely that holopoetry, unless the technology is simplified and becomes more widely distributed, will be much pursued. In fact, neither Kac nor Kostelanetz has returned to the form in the past decade. At present, few poets have had the privilege or to work with holography because it is costly to produce and requires precise installation; further, writes Kostelanetz, it is "a very recalcitrant medium…. The problem in production is less expense than obstacles in assembling all the required production equipment" (E-mail 2005).]

Attributes of immersive textuality are still being explored, as seen in several works presented at E-POETRY 2003: An International Festival of Digital Poetry. Charles Baldwin demonstrated "New Word Order," in which the viewer proceeds through the text of a poem by navigating a three-dimensional gaming interface. This piece explores and emphasizes three-dimensions of virtual space interactively, as the reader is capable of directing her or his own unique movements through the visually oriented poem. Unlike earlier works, such as Jean-Marie Dutey's "Voies de Fait" (*Alire* 2, 1989), where the "player" of the poem looks down on flat words, Baldwin's poem transpires while suspended in architecturally rendered rooms inside a building (Figs. 6 and 7).

Fig. 6 and 7. Sandy Baldwin. Screenshots, "New Word Order." 19 December 2003.

He usurps the code from the popular (and violent) computer game "Half Life" to achieve his design, transforming it and filling it with language. Using the computer screen to project three-dimensional text, readable passages are presented in a sequence of virtual rooms. At points, Baldwin's poems employ the game's death-world ontology: in the second and more dynamic room, titled "New Word Order," words of a Billy Collins poem are lined up in the space. In what can be read as a critique of the traditional style of Collins' work, a player uses a virtual crowbar and hand grenades to destroy or reconfigure style to his or her own liking. The work of the viewer in such a unique and unconventional text is obviously nontrivial. In order to proceed, the viewer must learn how to interact with the poem and make his or her own choices within it. The base text (Collins' poem) is the same for all readers. The next step for a work like this would be to allow the viewers to insert and reconstruct text(s) into the "game," or perhaps add rooms onto the building, as anyone can do in MOO space (see

below). In addition to the work shown by Baldwin at E-POETRY 2003, Jean-Pierre Balpe showed the video documentation of a complex/dense museum installation in Mexico called "Metápolis" (2002). This area of Balpe's work features large projections with which the viewer interacts via tabletop hand sensors: images, kinetic words, animation, sound to make a three (or more) dimensional environment in large public space. Patrick-Henri Burgaud also demonstrated his CD-ROM *Orphee Aphone*, a piece heavily influenced by mythology, geography, and literature. This is interactive work in which the viewer is challenged to find a path—an intellectual and creative approach to virtual computer games like *Myst*—by navigating via mouse and keyboard a demanding multimedia trail (images, fragments of poetry, video) designed by Burgaud; at points answering questions is required. The user is most important, "is in the main position," stated Burgaud, and does not finish making the poem without completing the mental tasks required to do so (Funkhouser E-Poetry).

Fig. 8. Maria Mencia. Screenshot from "Birds Singing Other Birds Songs." 26 September 2003 <http://www.m.mencia.freeuk.com>.

Maria Mencia has cultivated equally enthralling works that the viewer engages with without having to encounter the sort of objective parameters or restrictions inscribed by Burgaud. At

E-POETRY 2003, she showed interactive works that reflect the tenets of intermedia—Dick Higgins' term for when "two or more discrete media are conceptually fused, they become intermedia…[that] differ from mixed media (q.v) in being inseparable in the essence of an artwork" (Horizons 138). Mencia accomplishes this with her use of images and sound, another physical sensation that by now has become much more common in digital poetry. In "Another Kind of Language" the user drives the work (input via mouse), mixing the sounds and appearances of three languages (Arabic, Chinese, English) to create narrative. Initially the work appears as a blank screen, until the viewer discovers that he or she can create trails of images and sounds by moving the mouse into various positions. In Mencia's "Birds Singing Other Birds Songs" (Fig. 8), bird songs are transposed to human voices. Choosing from a palette of possibilities, the user activates likenesses of birds that "fly" on the screen while voices sing associated songs, which leave a trail of language atop a backdrop of virtual clouds.

Because it is a cyborgian endeavor, mixing creativity, humanity, and computers, many historical digital poems recall, foreground, and make thematic the body. This trend can be charted from works generated by Sondheim's "Iceland" program (1979), and is a concern of Sondheim's that persists to the present, both in his multimedia works in which his physical form often appears and in his work as editor of **"INTERNET TEXT,"** which he describes as, "a continuous meditation on cyberspace, emphasizing issues of interiority, subjectivity, body, and language" (Philosophy n.p.). On the CD-ROM *Alire 1989-1995*, a series of six collaborations by Claude Maillard and Tibor Papp, given the title "Dressages informatiques" (informatics training) portray a refusal to ignore the various roles of the body plays within humanity. To show one example of the series' theme, bodily entrapment in various forms is pronounced in "Dressage No. 1" (1989), in which the phrase "the body" directly appears in a large, smooth font at the bottom of the screen. Five words, as partially seen in Fig. 9, "gagged," "handcuffs," "muzzle," "foot-cuffs," and "grating," are each formatted in a semi-circular, arcing formation in red letters above the phrase, first all at once and then individually flashing one at a time.

Fig. 9 and 10. Claude Maillard and Tibor Papp. Stills from "Dressage no. 1." Published in *Alire* 1, republished on *Alire 1989-1995*. CD-ROM. Villeneuve d'Ascq: Mots-Voir, 1995..

Subsequently, enact a new kind of wordplay; as seen in Fig 10, "the body" shifts and becomes a much larger text formatted diagonally down the screen from the upper left, so that the five words, still individually flashing in the same arc, occupy the space between the words "the" and "body." What the authors acknowledge and communicate with these words and their movement—and throughout this series of presentations—involves the impact of technologies on the body, referring explicitly to manacles and harnesses, which are paradoxical to the ideals of humanity. Rather than celebrate innovation through the implementation of technology, the authors' creative sophistication (if not mastery) uses the newly available tools to question cultural progress. Another historical example from the 1980s that uses the body as a model for the textual output of processed and generated poems is Charles O. Hartman's "Monologues of Soul and Body," which is chronicled in his monograph *Virtual Muse: Experiments in Computer Poetry*.

Concerns of embodiment in a disembodied cyberspace are also divulged in the "movement" of characters, as well as their actions and environment in MOO space, which during the 1990s became a location for the presentation and collaborative composition of a few poetic works. MOO, which stands for <u>MUD</u>, <u>O</u>bject <u>O</u>riented programming, combines the Internet's Multiple-User Dimension (MUD) system with an Object-oriented code that permits the construction of makes it a dynamic textual platform (though it does not permit the inclusion of visual images). In the "virtual reality" or parallel world of a MOO, many people connect to a common electronic database and are able create and interconnect their own "space," objects, characters, and dialog that appear on the screen as descriptions or words in ascii (plain) text (Dibbell 14). In a MOO, one also navigates through digital constructions along with characters and objects designed and directed by others; these objects often include "bots" (derived from "robots"), which are programmed to automatically interact with other users without human direction (beyond the initial programming), a dynamic that adds to the interactive and unexpected dynamics of these spaces. MOOs are a textual tool that are primarily—as chat rooms would be later—used socially, yet they are also place of creative discovery in which narrative and forms of personal expression and online communities can be developed in virtual space. MOO space became a popular subculture; its creative potential has always interested me and provided the inspiration and location for several projects in which a highly populated MOO was used to compose dialogical texts that were used as a basis for performances of, and were eventually published as, poetry. In 1993, in communion with another poet and close associate, Roddy Potter (whose MOO name was Mineral), I participated as an interactive character in the LambdaMOO community, an environment that is described in Julian Dibbell's *My Tiny Life: Crime and Passion in a Virtual World* as, "a very large and very busy rustic mansion built entirely of words" (11). I made transcripts that logged all of the activity and encounters of each session. Potter and I regularly traversed different areas of LambdaMOO, engaging each other with personal news and discussions about poetry as well as interacting with other users who joined our conversations. In 1994, the online poetry/poetics magazine I assembled at the time, *Descriptions of an Imaginary Universe* (DIU), publicized an online meeting time and place, and several readers and associates of DIU from disparate locations attended. The event was unique, and part of the transcript, published as a chapbook given the title *The Idea of Switzerland*, serves as an example of a MOO poetics: players drift and dialog in an unformed manner, even when an attempt is made at organization. Since then I have intermittently selected sections of the transcripts to

publish and present at readings (in conjunction with Flash movies) and on the radio with improvised musical accompaniment.[46] The **MOO** texts that appear in my collections are transcripts of online encounters and exchanges, which include encounters with programmed objects such as "Mineral's poetry pad," which upon activation (i.e., a user typing "read pad") would present one of Potter's humorous poems, such as "COMPLAINT:" "I brung you gifts of gold/and kerosene and beer/I brung you Ne-Mo's banana cakettes/you flung them in the abyss" (Whereis 116). The poem, though written for the page, is served well by its context in the peripatetic virtual environment, alongside Potter's ornate and unusual online persona as well as programmed constructions such as robotic bartenders, voodoo dolls, cockatoos, and other objects that randomly interject texts and actions in various public spaces of the **MOO**. As a, "conflation of speech and act" (to recall another of Dibbell's characterizations of the space), the collective manifestation of language and textual space of the **MOO** system is indicative of, and will eventually inform the mutual construction of collaborative, interactive literary worlds and publications that emerge in networked digital space (28).

Despite the clear aesthetic advancements over the years, the majority of works of digital poetry in all of its distinct forms involves a viewer sitting before a terminal or monitor; even interactive works require little more than moving one's fingers, hands, and wrists while absorbing what transpires on the screen. These are, historically, the primary gestures made at the user interface. Only a few works ventured to transform the act of reading into a physical experience or sensorial text. On top of this unfortunate condition, with some notable exceptions, digital poets have not emphasized or cultivated public staging values in their work. Though there were notable exceptions at E-POETRY 2003 in performances by mIEKAL aND, Lawrence Upton, Jörg Piringer, Sondheim, and myself, digital poetry has not widely advanced as a performance genre where bodies in motion play a role in the presentation of text, though in the future we will almost surely see such practices cultivated. Digital techniques have certainly been used by performers operating at all levels of the arts, and it is reasonable to anticipate that synthesized multimedia technology will eventually have more of an influence on the "live" presentation of poems. The condition may partially reflect the state of technology that is commonly available. However, with regards to this notion, it may be useful to reiterate and reconsider something Higgins wrote in *Computers for the Arts* in 1968: "The onus is on the artist, not his tools, to do good work" (17). I am not sure, towards enacting progress of digital poetry in physical forms, if "onus" falls completely on the artist but rather suggest that the application of machinery, which relies particularly on the programmer-hardware-software combination, must be relied on in order to produce integrated works that will actually put bodies into motion.

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[46] Several excerpts were published in magazines, and some as chapbooks, including *The Idea of Switzerland* (We Press, 2001), *LambdaMOO_Sessions* (Writer's Forum, 2004), and *Whereis Mineral* (see Ch. 7).

11. INTERVIEW WITH CHRIS FUNKHOUSER[47]
BY JORGE LUIZ ANTONIO[48]
JUNE 2003

Abstract

In a combination of dialogue, interview, biography, testimonial and review, Jorge Luiz Antonio and Christopher Funkhouser talk about electronic poetry, cyberpoetry, and the Internet. The main focus of the dialogue is a mixture of testimony and commentary by Antonio on Funkhouser's work (poetry, essay, review, cyberpoetry, performance, lecture, anthology editing, sonorous poetry, and so on). Funkhouser's responses reflect the experience of an active North American poet.

It would better to call this a dialogue rather than an interview: Chris Funkhouser and I are going to talk about electronic poetry by means of his essays, poetry works, and our opportunity to meet each other.

This style recalls Socrates' dialogues, or, more recently, the "Dialogues" between Roman Jakobson and Krystyna Pomorska, or even the first literary genre used by the first Brazilian and Portuguese writers in XVIth century, like "Diálogo Sobre a Conversão do Gentio" (Dialogue on the Conversion of the Native) by Father Manuel da Nóbrega (c. 1558), or "Diálogo das Grandezas do Brasil (Dialogues on the largeness of Brazil), by Ambrósio Fernandes Brandão (1618).

JORGE LUIZ ANTONIO – Your biographical notes are impressive. Our dialogue will hopefully give readers insight about the diverse types of works you have been involved with.

CHRIS FUNKHOUSER – Thanks, Jorge. I appreciate the opportunity to explain or build context as well as introduce concepts. Hopefully we can engage new audiences that may not have encountered the type of projects I'm involved with. That is the idea(l), right? I feel like vehicle for the work, certainly a component of it, but the work itself—what it is and is not— is what's interesting. I have been an energetic poet, performer and publisher for nearly twenty years and for the past decade or so have given a lot of attention to working with and writing critically about new media poetry (or whatever one opts to call it). For several years I had few other pursuits. Thankfully both poetry and "cyberpoetry" extend numerous dimensions for consideration and I continue to be dedicated to them. A professor who has advanced technical skills (and whose hair has flecks of gray in it), I am supposedly an

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[47] A reduced Portuguese translation was published in the printed magazine *CONCINNITAS: Revista do Instituto de Artes da UERJ*, Rio de Janeiro, jul. 2004, n° 6, p. 68-81.

[48] Jorge Luiz Antonio is a poet, writer, researcher, teacher, master and doctor in the Program of Comunnication and Semiotics at Pontifical Catholic University of São Paulo, Brazil. He wrote *Almeida Júnior através dos tempos* (Almeida Junior throughout the time, 1983), *Cores, forma, luz, movimento: a poesia de Cesário Verde* (Colours, form, light, movement: the Cesario Verde's poetry, 2002), and *Ciência, arte e metáfora na poesia de Augusto dos Anjos* (Science, art and metaphor in the poetry of Augusto dos Anjos, 2004), as well as many articles in printed and electronic magazines. He produces *Brazilian Digital Art and Poetry on the Web* (http://www.vispo.com/misc/BrazilianDigitalPoetry.htm) and has made some digital poetries with Fatima Lasay, from the Philippines (*E-m[ag]inero* in:
http://www.digitalmedia.upd.edu.ph/digiteer/gegenort/), and with Regina Célia Pinto, from Brazil (*Lago Mar Algo Barco Chuva* in http://www.ociocriativo.com.br/lagoalgo/). His email is jlantonio@uol.com.br

authority—and in some ways that's true—but really am as much a student who is in a state of perpetual exploration. Since you are curious to know more and propose this conversation (my first interview as such), I want to make it useful, so let's talk…

JLA – My first contact with your works, Chris, was when I started preparing my projects for Ph.D. thesis in the Communication and Semiotic Program at Pontifícia Universidade Católica de São Paulo (PUC SP). It was September, 1999, when I found a reference to "*Toward a Literature Moving Outside Itself: The Beginnings of Hypermedia Poetry*" (http://web.njit.edu/~cfunk/web/inside.html) in a section of a Brazilian newspaper under the theme of "Poesia Digital". It is a very good essay: I have kept it in mind in order to make something similar referring to Brazilian digital poetry: good and clear categories, a good hypertext, a way to understand well the subject.

CF – The reference in *Folha* was to the "A Proto-Anthology of Hypermedia Poetry" I edited and published on the World Wide Web in 1996, which has a winding story to it. The "Proto-Anthology" stemmed from a paper I gave ("Hypermedial Art: Interacting with Hypertext Literature") at a festival of Russian and American Poetry at Stevens Institute of Technology, which was published later that year in the journal *Talisman* (with the title you refer to) and also on a cd-rom in Germany called *Of(f) the W.W.Web* (coupled with another WWW hypertext essay "Multimedia Effects: American Poetry Layered Since Black Mountain" into *Poetry Webs 1996*). The day after I returned from the festival I was going to e-mail the lecture to some friends and realized it instead could be made into a substantive hypertext using menus with multiple links for each pertinent reference, and could be somewhat interactive by encouraging and inviting reader feedback. It was exciting to produce, also laborious: I was not using anyone else's model and it involved the compilation of dozens of files. Once it was on the Web it took on a life of its own and many people who found it via search engine did contribute links and use it as a reference point for teaching. From this point onward I came into contact with like-minded scholars from a range of disciplines around the world. It probably remains my most widely read work and regrettably that the site has not had a firm URL and the link up-keep it requires to remain vibrant. That the ideas and content are strong enough to withstand technological or formal developments that have come since is gratifying. The general perspective I had then still more or less does pertain to the strands of digital poetry recently outlined by Miekal And after the E-Poetry 2003 festival ("programming, evispo, soundpoetry, text, typography & codework").

JLA – In this essay, your delimitation is precise, especially the five categories for "all poetry which uses a computer screen as hypertextual interface": hypermedia, hypercard, hypertext, network hypermedia, and text-generating software.
    At present, have you more categories in mind?

CF – Now that you list them, those classifications seem really premature. Before the Web, more offline works (diskette, cd-rom) were produced. Now, hypermedia, hypertext, and network hypermedia are essentially all the same, and hypercard (as John Cayley pointed out when I made the "Proto- Anthology") is going to be either hypertext or hypermedia and as a particular piece of software does not need a category of its own. The outline I've been working with in recent years, which grew out of this earlier work, includes: 1.) Graphical poetry, driven by visual aspects of the interface or images that may be mapped/linked to

connected materials (thus also hypermedia); 2.) Animated or Kinetic poetry (also graphical), where several screens are programmed to create a sense of movement in or through the text; 3.) Videographic poetry, relying in part or whole on digitized video; 4.) Collaborative poetry of all types; 5.) Computer-aided or generated compositions; 6.) Text-based hyperlinked poetry; 7.) Audio poetry; and 8.) Code as poetry. It is important to recognize that *hybrids* of these practices often occur. I mentioned above the areas delineated via the E-Poetry group, and while I have questions about some of the specifics within those broad classifications coined by And, the areas of investigation are akin to the way I see it and make sense. The genre is a plurality. Works created within it one way or another branch from these stems but I wouldn't call mine a definitive framework. It roughly corresponds with other views on the subject. In *Digital Poetics: The Making of E-Poetries* Loss Pequeño Glazier highlights three principle forms of electronic text ("hypertext, visual/kinetic text, and works in programmable media"), and Caterina Davino's *Tecno-Poesia e realtà virtuali* uses "computer poetry, ipermedia e Internet," "Performance," and "Video" as classifications. Clearly we're all focusing on the same object, through (thankfully and appropriately) a range of perspectives and lenses. It may not be so important to codify the work this way, except to build a general context for the uninitiated. I do think it would be instructive, however, as I suggested in the observations in my "Report on E-Poetry 2003" (see http://www.wepress.org/epoetry/report.html), to collaboratively create some sort of "Index of Cyberpoetic Forms" that names and explains the dozens of techniques used to create digital poetry.

JLA – As I was saying, in 2000 I started my doctoral degree studies and found "Vispo.com", contacted Jim Andrews, from Canada, and, then, started a very instructive dialogue with people in Webartery.

During the time of E Poetry 2001, I found you, Chris, in Webartery, and, then, in E-Poetry egroup. We exchanged some emails a little bit later, and received the printed chapbook *The Idea of Switzerland* in June 2001.

Trying to read and understand it, I could get a meaning like a type of dialogues, as a written play, talking about an imaginary city. A very interesting and awesome cover (which was a collaboration with your wife), a kind of introduction to Internet world or something.

When you performed part of *The Idea of Switzerland* in Professor Lucio Agra's classroom at Faculdade das Artes do Corpo at Pontifícia Universidade Católica de São Paulo, in October, 2002, I finally could understand why I almost drove myself crazy to try to get the meaning of printed material.

CF – I'd like to hear more about the revelations you had at the performance. Of course, it is understandable why any reader would be confused by this work, as it is unconventional by almost any standard found in writing or print and thus possibly useless for many people. This chapbook is an edited transcript of a session on an Internet MOO (MOO is the online text-based "virtual reality" system where many people connect to a common database and create their own "space," objects, characters, and dialog). Since MOOs operate with an entirely different set of syntactical and formal conventions and are co-written by many people communicating in "real-time" (with mainly social agendas), it takes awhile to get used its style. Only in the past couple of years did I begin to transfer the digital transcripts I created using MOOs into printed form. From 1993 to 2000 I occasionally used them at performances or during radio plays with improvisational sounds, which were well received

from the beginning. Last summer I made a book of them called *Whereis Mineral: Adventures in MOO* that I'd like to publish, a section of it is being printed by Lawrence Upton and Writer's Forum (London) this summer (*LambdaMOO_Sessions*). Until now every editor that had seen them had rejected them. Repurposing MOO texts by extracting them from their original context and media, the documents of these interactions reflect the characteristics of animated, machine-modulated human interaction, and represent a new kind of collaborative literature. The audience is presented with the opportunity to absorb the creative techniques, possibilities and limitations that emerge as a result of real-time interactivity on digital networks. The illumination and memorialization of MOO as a textual tool, a place of creative discovery, and the development of narrative and forms of personal expression in virtual space are the primary qualities I see in it. I appreciate the oddness or oddity of this work, and believe it is beneficial to investigate and repurpose the types of narrative that are happening online (see http://www.wepress.org/mooage.html for another example of this type of text).

JLA – My attention to your performances and lectures was very challenging, since I needed to explain what you were presenting. It is quite difficult to comprehend and, at the same time, clarify and translate.

In the case of "The Idea of Switzerland", my interest was bigger because I needed to understand and to connect the parts I had in mind.

Poetry performances are very interesting, and I am very curious about because they don't happen frequently in Brazil.

As I knew "The Idea" as a written dialogue, a transcription, the performance repeated all the dialogues with poetical intonation. So my impressions about the performance were good. Voice, movements and text made a poem for the moment, an oral poem. It was another style of poem, different from the text itself. Reading, a person sees words and imagines sounds in mind. Sounds are heard and made other images. The words become voice and the sonority is the poem itself.

CF – Having a voice and a body in space to intone the voices in the text helps, even if as mentioned I've also performed these via radio (with live music) and had enthusiastic responses in that mode. A new type of narrative is developed in these vignettes, and maybe they are better revealed when heard or are presented with multiple layers (sonic, visual), though the MOO experiences themselves were only text. I add videographic elements to the pieces for performances, sometimes representing the script moving like a scroll projected on a screen so you hear and read it at approximately the same time. With thousands of pages of MOO transcripts to choose from, texts for publication and performance are selected because they are perceived to express something a wider audience could consider further, though I don't expect it to happen immediately and do understand if it doesn't enchant everyone.

JLA – Then you came to Brazil in October, 2002. You still are the first digital poet I have met, I mean, from another country. Of course I have many web friends like Jim Andrews, Ted Warnell, David Daniels, Fatima Lasay, Joel Weishaus, Reiner Strasser, Susan Katz, Clemente Padin, and many others, with whom I share private subjects and feel as we have been close friends for a long time.

CF – Hopefully more North Americans will visit you and you will have the opportunity to travel to see others. It takes awhile to meet everyone: that's a condition of our asynchronous international subculture. Likewise, you know many people I am in touch with but have never met. Isn't this part of the reason the Internet was initiated, to bring people with common interests together into a multi-layered network? I haven't experienced disappointment when meeting someone I've enjoyed corresponding with online, either, so the system has worked well so far. My strongest collaborations have been with people that I have shared proximity with at one time or another but I've had successful online collaborations too so believe that expressive chemistry can be developed either way. In the case of something like this dialog, which we making via e-mail, I do think that it helps me to "talk" with you because of the many hours we spent together in São Paulo and the voluminous correspondence we have exchanged since. But I would never argue that using this same method couldn't work for people who didn't know each other; that happens often. What do you think? Are we more inclined to formally extend our dialog and be comfortable in the process because we know each other personally? Since our engagement revolves about art and scholarship, it is about that rather than much else. Dealing with issues of historical inquiry we can with each assist each other (exchange data/information) from afar but in dealing with subjective/aesthetic/ideological issues, I am sure it helps that we have bonded over common viewpoints discovered in conversation.

JLA – Yes, you are right, Chris: proximity or online collaboration should work if we feel similar ideas, a "written" friendship and confidence, no matter our nationalities or languages.

Fatima Lasay, from Philippines, and I have made four creative and collaborative works, and I know her only by photo and by a recorded voice (she read a poem of mine in Portuguese, Filipino and English).

Internet communication is another form of the old way of exchanging letters (which I used to do very much), but much more efficient, especially when the WWW allowed us to contact new persons at our own will.

Going ahead, let's talk about your works. *Crossed Its / Across Sit* is a very tiny booklet you gave me in our first meeting, if my memory is correct. A very interesting use of acrostic, a way of making poetry from XVth century.

CF – I learned about and practiced writing acrostics while studying at Naropa (the West's only Buddhist college) in 1986 during a workshop with Jack Collom. For some reason a decade later I began to write them frequently. Contemplating person or place (or whatever) I use a name or signifier as a starting point and build a poem using words that come to me that fit appropriately into the structure. My interest in the form continues, and grows in ways. I recently created a series of acrostic/mesostic poems (using search strings in the digital Oxford English Dictionary and html) for my sister Margaret's wedding (see http://www.wepress.org/wedding/I1.html). Making this variation reminded me of crossword puzzles and Scrabble games. Though I don't always choose or wish to do so, I enjoy being able to work with traditional (if somewhat simple and obscure) poetic forms from time to time, and actively bring those forms into digital space.

JLA – Your Ph.D. thesis, *Cybertext Poetry: effects of digital media on the creation of poetic literature,* is a good study and an important contribution to the theme. It should be

published for it will help students to understand e-poetry evolution throughout time and space, that is, to understand the beginning of computer poetry, especially before the Web.

There are fragmented studies that have been published, but yours brings a kind of historical panorama together.

CF – The dissertation itself was a lot of work and is alright as a dissertation but the fact is that it is still being written even though it was "finished" for the degree six years ago. I was lucky to have an academic advisor, Don Byrd, whose guidance in the endeavor was tremendous. Since working with him I keep refining and sharpening the focus more closely on the period before the Web, surveying and analyzing the work and theory of that period. Cyberpoetry is still a relatively small discipline but since it is a global phenomenon, and growing, new historical input continually emerges. For instance, in the past few months you have sent or directed me to many "new" materials that have been available for years but not in my sphere. Using the term "cybertext" in the title, at the time, was a bit erroneous since I was operating on hearsay about Espen Aarseth's work and did not fully understand its nuances. His book was not yet published, so I had not yet read *Cybertext: Perspectives on Ergodic Literature* and by Aarseth's terminology my dissertation is not true to his conception of "cybertext". As time passes, I remain extremely enthusiastic about Aarseth's ideas, and do bring them in to my book (now titled *CYBERPOETRY BEFORE THE WEB: DYNAMICS IN EARLY DIGITAL COMPOSITIONS*) in the final chapter in the narrative to discuss textual dynamics in cyberpoetry. This research began when I entered graduate school in 1992. Since then have been intensively engaged with creative, critical, and editorial interests relating to cyberpoetry. The book at this point is my albatross so I want to complete a suitable draft by summer's end. I aspire to give readers a depthful understanding of the dynamics of the first efforts in digital poetry so that the early approaches and philosophies, some of which are important but are unknown, might influence future work in the field.

JLA – We still don't have a complete denomination for the poetry that deals with the computer. Historically we had cybernetic artificial poetry (Max Bense, in 1959), computer poetry, cyberpoetry, new media poetry, e-poetry. In a general sense, the term tecno-poetry (I am referring to Davinio's book, published in 2002) seems to be general and to refer to the whole phemonena: the relationship between new technologies and poetry.

I am curious about your new book and hope it will come soon. It will be a good contribution to the study of electronic poetry before the Web.

CF – Coincidentally, my first writings on this subject were done under the rubric of "technopoetics." I abandoned it after a few pieces, lacking commitment to (or interest in developing) it as a label to impose; some of the essays are available via my author page at the Electronic Poetry Center (see http://epc.buffalo.edu/authors/funkhouser). A few people have used this term and it does, like the other names you note designate a broad sensibility for the work being discussed. Another book that's worth mentioning at this point is Brian Kim Stefans' *Fashionable Noise: On Digital Poetics* (Atelos, 2003). Stefans uses the term cyberpoetry throughout his book, arguing creatively about its merits and whether it exists or not. He is clear about the meaning for what he calls "Computer Poetry," and that is when a computer program (algorithm) converts words or phrases from a database into poetry. As for "cyberpoetry," Stefans claims he can, "define it only in negatives: (1) the lack of limitation to black and white words on a page, (2) the lack of the possibility for

mechanical reproduction (there being no original), (3) the lack of closure and the lack of choice. The first half of the third of these qualities is easily disposed of." Stefans backs up his sophistication as a poet and programmer with strong, refreshingly critical views on the form (many are presented satirically) and I hope his book, another alternative to the viewpoints that we've been talking about, is widely read. In my book cyberpoetry is presented as a generality at the beginning, and is represented as something else after an understanding of the history and dynamics of the form is presented. I use it as a convenient, non-binding label and still remain apathetic about establishing a singular conception of it. Even when (or if) the genre becomes canonical (which won't be soon) a finite classification for it will remain elusive.

JLA – *Kenning*: a newsletter of contemporary poetry: poetics & nonfiction writing is a cd edited by you and Patrick F. Durgin and it represents something almost unusual in Brazil: the spoken poetry. Of course some venues related to spoken poetry happen here, and there are some long-playing vinyl records, cassettes, and other sound-storage devices (film, television, video cassettes). Recently, for example, I found "Coleção Poesia Falada" (Spoken Poetry Collection), a series of cds of poems by several Brazilian poets and story teller.

As you told me in an email, the word "Kenning" means: teaching, instruction, knowledge. So we can say both cds come to make us learn how to feel and understand poetry by listening to it.

Kenning was the second gift I received from you, and it is really a very good production: I enjoyed all 20 poems. I would like to hear something more about this experience from you, Chris.

CF – *Kenning* is a project Patrick Durgin started by a few years ago that caught my attention because an early issue featured an interview with one of my favorite writer/editors, Nathaniel Mackey. A couple of years ago as *Kenning* was preparing an audio edition, Charles Bernstein (a professor of Durgin's) who knew of the archive of recordings I have made of contemporary poets, suggested to him that we co-produce the project. We were introduced at E-Poetry 2001, spent a few months exchanging recordings back and forth, and finished it a year later. Patrick did all of the production chores, I worked with him on establishing the content. Though they could be better, I do think that these compact discs are a decent lesson regarding contemporary poetry in the United States. One of the discs is a book-length poem by California poet Leslie Scalapino. The other is an anthology that consists of a diverse styles of poetry acquired from various sources, about one-third of those are my recordings, works by Bernstein, Will Alexander, Allen Ginsberg, Murat Nemet-Nejat, Amiri Baraka, Purkinge, and Mackey. I produced the first of my audio poetry anthologies in 1989 (*We Magazine* 11) and have produced several titles as well as works on video and cd-rom since. The filmmaker/musicologist Harry Smith was someone I knew in the late 1980s and I was inspired by his inclination to make recordings of everything, and another teacher I had was persuasive in his argument that in order to subvert popular media one had to produce work using it. I am a musician and work with audio in various ways—just yesterday I recorded Baraka again—and am fortunate to own some basic studio equipment and software. My wife, Amy Hufnagel, who is a visual artist, and I are presently building a studio building, designed for multimedia production. Once this space is ready, I would like to produce one compact disc per year for the rest of my life! A number of spoken word compact discs have been released in the USA, though only one group that I can think

of, *Rattapallax*, seems committed to publishing audio productions with any regularity. They recently did a special issue (with cd) on "New Brazilian and American Poetry" (co-edited by Edwin Torres and Flàvia Rocha) that you should see if you haven't.

JLA – You recorded "Hum Bom", a poem by Allen Ginsberg. He was your teacher, wasn't he? Tell me something about the great beat poet Allen Ginsberg.

CF – "Hum Bom" is one of the best tracks on the *Kenning* audio edition, vibrant oratory reverberating cultural meaning and dissent. Ginsberg was an amazing individual, and at the point we met (1986) he was the most interesting person I'd ever encountered. We shared some common interests and he became my mentor and was a component of the support system I needed as a young artist. We were friends and had many visits during the next decade. He taught me many useful things, including mediation (zazen), about literature and writing, tolerance, and living compassionately. Ginsberg was a brave man who was not afraid to say anything, adopting and embodying Kerouac's idea that, "candor ends paranoia," and an incredible performer who used his voice to challenge all injustice and promote beauty in order "to ease the pain of living." He was born in Newark, New Jersey where I now teach, and it was an odd coincidence that I was selected for the job the same week he passed away. My work with Baraka (another poet associated with the Beat Generation who also happens to live in Newark, see http://www.amiribaraka.com) is somehow an extension of the connection I had with Ginsberg.

JLA – I still don't have *Gravitational Intrigue*, but could appreciate this cd-rom when I first met Professor Lucio Agra and listened to his interesting lecture at PUC SP a few days after he came from E-Poetry 2001, in Buffalo, USA.
    Another interesting anthology of e-poetries.
    Making anthologies is what you like to do, Chris, and I do know it has a special meaning and importance for you, so please tell me your ideas about this type of work?

CF – *Gravitational Intrigue* was the second cd-rom issue of *The Little Magazine* produced by doctoral students in English at SUNY-Albany. I was editor of the first one (see below), and didn't have much to do with *Gravitational Intrigue* though its editors are friends of mine and I have a very simple hypertext (word/image/links) piece on there called "Canada 12/97". The production value of work on *Gravitational Intrigue*, which came after the Web had made a strong impact, is far superior compared to our initial project. It is true that I have engineered many publications as an editor and publisher (see http://www.wepress.org, http://web.njit.edu/~newrev); it is demanding but is work I have enjoyed. As I came to be a writer I was in a class with Anne Waldman who told us that all young writers should start a magazine. Two or three months later, my roomate Ted Eden (now a professor at Hanover College) and I initiated We Magazine/We Press. Before that I my only experience had been a year on the editorial staff of *Virginia Literary Review* at University of Virginia, which was quite formal. At first we explored some ideas I was curious about, like anonymous authorship, and operated in a thoughtful but absurdist DIY (do it yourself) mode that evolved and grew with some refinement while I was living in California from 1987 to 1992. Since then I've always been working on something and have produced projects in practically every medium. Many people around me—teachers, friends, and other artists—have been very generous with their energy and guidance; putting together publications is one of the ways I begin to give back to this extended community. Editing is

an excellent means to gather and mix viewpoints and styles. Ideally creating anthologies and magazines broadens dissemination of the materials. Lately I've done less of this work, though I don't sense that my interest in it is waning. I've been doing things like organizing a New Media Performance Series on the NJIT campus for the past three years, bringing great artists to campus for documented presentations (Cayley, And, Azevedo, Gironda, Stefans, Jennifer Ley, Maria Mencia, Lori Anderson, Alan Sondheim, Nicole Peyrafitte, Richard Kostelanetz and others). In any case, Waldman is right: it is incredibly instructive to edit, and it is also culturally important to bring artistic energies together. But it can take a lot of time away from other endeavors so though I have some editing projects in mind my attention is going into other areas. Working as an editor has challenged me to develop countless technical skills, and have learned a lot about writing by reading thousands of manuscripts. When I became an online editor in 1993, my ability to adapt to and negotiate digital space unquestionably increased my professional and creative value; what I had been doing previously (in analog and print) was extended and facilitated via the computer. I am not sure that it is worth mentioning, but my astrological chart contains no "fire" signs, which is uncommon. I have heard that what one instinctively does in order to compensate for this is to create "fire" (equals energy) and to surround themselves with people who have it. Being an active editor can (ideally) satisfy both of these needs. Most fortunately I have had access to publishing resources (working at a printing company or via institutional support and grants) and have been able to get a lot done because of that.

JLA – *The Little Magazine, volume 21*, under the subtitle of "multimeDia writing ImagerY", brings many e-poetries together. Besides some magazines and venues in WWW, this cd-rom is a good anthology.

Editing and making selections for anthologies are activities you like very much. Would you like to say additional information about this preference of yours?

Anthologies like yours represent a way of registering other poetries and it is also a kind of study: we have different and personnal making of e-poetries and the anthologies give us a very good panorama of this recent innovative poetry.

The image of cover is good idea: a face that becomes a CD-ROM. A new reading? Another way of facing poetry?

CF – The image is captivating and struck me from the moment I saw it during a visit to photo-journalist Steve Laufer's apartment in Los Angeles in 1989. In fact a rough version of it was used for the cover of *We Magazine* 11 that year. The real trick of editing is to select texts that somehow compliment other texts you're selecting for a project. Though we'd used Laufer's image before (in xerox form) it matched the spirit of the cd-rom project in general thus it was (appropriately) repurposed. Both of your "readings" are definitely accurate and are concepts we had on our minds as we designed it. Even more can be discerned too. Without a doubt we were embracing the cyborgian nature of everything, including literature. One part of me sees the image as humanity getting smacked in the face by technology. This view became especially germane when the editorial team of three (Belle Gironda, Ben Henry and I) collectively spent about five thousand hours working on it. Coordinating and programming the work of seventy artists with few models as a basis for construction, inventing it from the ground (i.e. command line) up was beyond compare in terms of technical and aesthetic challenges I've faced as editor. Few works submitted were rejected from the project. One of the positive things about working with digital media is that you can often include a large amount of work in a publication on the Web, cd-rom, or DVD.

Most of the pieces on *The Little Magazine, Volume 21* began as printed text, so editing became a matter of selecting works that we could plausibly translate into multimedia. Working so much with the screen took a serious toll on my eyesight. Viewing it now it is easy to see flaws, and like many things if I had to do it over again I'd use a completely different approach. What has come since with the popularization of the Web to some degree makes our work clearly immature and maybe even misguided. The publication as is received mixed reviews: many reports glowed but a few met the project with a lot of resistance. In fact, someone wrote an editorial in the Albany *Times Union*, denouncing the idea and inaccessibility of poetry on cd-rom. Anyway, I'm glad we did it, and the experience was enormously informative to my research regarding hypertext design and in other areas of digital production and contemporary literature.

JLA – I had the opportunity to attend to your poetry performances particularly your lecture at Professor Lucio Agra's classes at Faculdade das Artes do Corpo at PUC SP.

This is another type of poetry not so common in Brazilian poetic practices, so I would like to hear more informations from you.

CF – On the occasion of Lucio Agra's class, which had to do with body arts and performance, I used techniques and exercised liberties that weren't implemented in other presentations because of the group's area of inquiry. Theatrical gestures like ringing a gong or changing my clothing thematically I have done before but don't always use such measures in academic venues, which tend to be more subdued. Generally, in multimedia performance (audio, video, voice) limits are imposed in terms of how much one can reasonably demand of the audience. My performances do generally involve body movement, improvised music, singing/chanting, and projection of imagery. Aren't these comparable to the archetypal elements of performance? Maybe it is awkward to use such standard conventions in the reformative digital realm, but that's what I tend to do in a warped and unconventional way (at least in terms of content). My best gigs (especially with thelemonade and Purkinge) have also involved audience participation or interaction with the performance, though this is terribly difficult to impose and doesn't necessarily work so I don't always incorporate it.

JLA – I want to talk about some of your electronic works. The first is "caprice says…" (http://www.wepress.org/RRF/caprice2.html). Very interesting. Is it a kind of experimental writing (sometimes it seems to be more writing, that is, prose, than poetry)?

Please I don't know what RRF is: an event? Where?

CF – The [R]-[R]-[F] – Festival is a new media project in the form of an online festival, conceived and produced by Agricola de Cologne; [R]-[R]-[F] stands for Remembering-Repressing-Forgetting. I was asked by Wilton Azevedo, a guest-curator for the exhibition, to submit work so devised two pieces for [R]-[R]-[F], which is associated with an interesting Mexican exhibition, Interactiva (http://www.cartodigital.org/interactiva). To reiterate what I said before regarding MOO, this is collaborative text that upon composition was not intended as literature/artistry but for social purposes. The text for "caprice says…" is excerpted from *Whereis Mineral: Adventures in MOO*. I took a short passage that has been used in performance and chopped it up into a series of screen-size hyperlinked sections as another way of presenting a MOO transcript, recontextualizing and redesigning it in order to maximize a correspondence to the exhibition's theme. As usual I contribute some

writing, made the log of the session, and technically/stylistically edited it. This isn't an interactive (or even non-linear) piece but by programming it in this way I hoped to add dramatic dimension and gave each section a different color configuration in order to build a sense of moving through the piece. I've made other pieces like this but never showed them to anyone. If any good feedback comes in maybe I'll find and publish them somehow. You could definitely call the MOO texts a unique form of experimental writing, one example amidst a lot of unusual "experimental" things happening. What this really is is a reflection of my research, something I spent many hours investigating and found worthwhile within it, though since it is the sort of thing many readers won't look at more than once or twice I'm not sure of its overall potency. I feel that way about many cyberpoems, so perhaps that indicates something about the genre. Not to suggest it is a superficial form but that it seems ironic that it remains a challenge to create engaging works using multiple/digital media given the supposed possibilities. And of course it is worth considering whether or not depth is an issue at all. Anyway, in order to make something that a reader would return to many times I would have to be able to incorporate more substance along with ergodic (interactive/collaborative) features. Since there was a two megabyte limit on works for [R]-[R]-[F] I was working within those confines…

Very few people have seen this version of this work (or "foracity") because the online exhibition has yet to be launched (http://www.newmediafest.org/rrf/startrrf1.htm, begins July 2003).

JLA – And "foracity" (http://www.wepress.org/RRF/foracity.html)?
        "Foracity" is very nice and touching. It is a tribute to New York, as I could notice. Now images and words make a dialogue, a poetic one.
        A woman with a baby, you, a kind of ship on a boat towards New York.
        A good poetry below the image, which it is not an illustration, but a dialogue.

CF – The first picture is Amy (who had commuted through the Twin Towers every day for a couple of years), my six-week-old daughter (Constellation), and I on the Staten Island Ferry. Two years later we had the misfortune to experience the "terrorist" attack in New York City: I heard the second plane crash (though didn't at the time know what was happening yet) and then watched in complete dismay at the Towers burning from the Ferry. Seeing them collapse we were all more than temporarily dumbstruck, if not devastated, and our lives and culture became utterly altered. My response partially included gathering and re-presenting written (poetry) and visual documentation I had made in the city. These materials (writing/images/video) were initially shaped for a multimedia poetry performance in Malaysia (Multimedia University) a month afterwards, entitled "Necessity in Process." In performance, a series of sixty images and about twenty minutes of video are complimented by a soundtrack, sonic improvisation, and a series of three dozen (unpublished) poems written in NYC between 1998 and 2001. For "foracity," images from this series were selected in an effort to address the exhibition's theme. I didn't think that the images themselves were enough so added text to them. Instead of using a pre-9/11 poem as text, I repurposed fragments from a poem written in response to the WTC attack (used previously as preamble to the poems and as a verbal setting for animated images from the trip to Malaysia) and gave the piece a new name.

JLA – Let's talk about your works and your staying in Brazil, on October, 2002. A good and an important week for me and, I do hope, for you. I have had an opportunity to know you personally and your work much more. I attended to three of your lectures. You put some materials on the web (http://web.njit.edu/~cfunk/2002/interpoesia/), but tell me something about these days.

CF – I am always stimulated by travel but being in Brazil was an especially remarkable experience with five days in Rio de Janeiro and six in São Paulo. The radiance of the culture combined with the intellectual/creative quality of my hosts made the trip completely fulfilling even though the visit was somewhat brief. The website you mention gives a detailed narrative of where I was and what I did professionally: a lecture/performance in Rio, and four events in São Paulo each of which differed in nature. Originally the trip centered on participating in III Mostra Interpoesia, which was cancelled the day before I left. Since some other events had already been planned I decided to go. Then you quickly organized new presentations for me, and Wilton Azevedo arranged a lovely lecture and performance for me with Suzete Venturelli at Universidade Presbiteriana Mackenzie, so it actually turned out to be more activity than if I'd followed the original plan. Knowing Brazil's stolid avant-garde reputation, I spent several weeks beforehand preparing new multimedia works, and also used the trip to launch a new cybertext piece, MOBY – DICK (http://web.njit.edu/~cfunk/2002/moby). I also studied Portuguese in order to make things go more smoothly in terms of language differences. All of the events went well, as impromptu and formal translators helped bridge communication gaps between the students and I. The method that you and I used during our sessions, where I'd read a section of my work and you would then summarize and offer commentary in Portuguese, worked especially well I thought, and language was not so much of a barrier. I was pleased and encouraged by having fresh work that was well received by audiences. Spending time with scholars and artists every day and building friendships with them was superb. In Rio, Sheila Cabo (my host at Universidade do Estado do Rio de Janeiro) showed me some of the city and took me over to see the fabulous Museu de Arte Contemporânea in Niterói. André Vallias (whose work I have known and admired for years), and Katia Maciel and André Parente (who I was meeting for the first time) also showed me great places and spoke with me at length about their fascinating projects and viewpoints. Serendipitously, I was able to attend a magnificent concert on Copacabana Beach featuring Gilberto Gil, Rita Lee, and Afro-Reggae. In São Paulo, all of you (you, Lucio, Wilton and his family) were very generous with your time during my visit. I saw terrific art, met great people and shared intense dialogs about digital poetry and poetics. André Vallias arranged a meeting for me with Augusto de Campos, and Lucio and I spent a nice evening with him, talking and looking at some of his animated works. Being in Brazil made a strong and certainly positive impact on me. One example of the influence of the trip was that Vallias told me that he thought Flash MX would be the best program to use to synthesize the disparate strands of my work; now I'm using that program to combine sonic and animated elements in performance. On another level, my scholarship has unquestionably deepened because of our exchanges following the shared experience of those days and discovering our mutual interests. I will be São Paulo again in August (hopefully with the manuscript of my book in hand) and look forward to many visits in the future!

JLA – *Descriptions of an Imaginary Universe* (http://epc.buffalo.edu/ezines/diu/): Your titles are always a good verse.

I consider these writings to be spontaneous text shaped by postmodern esthetics. But meanings, and good messages, although fragmented, are always there. Is it your way of registering the world you see?

CF – DIU is one of my favorite projects, though I haven't done anything like it since. You're right: it was a totally spontaneous collaboration, where the people involved worked to create a virtual (critical) temporary autonomous zone. DIU was an exercise in poetics and anonymous writing that began before the WWW became popular, circulating via email list, usenet, and listserver between 1994 and 1996 (archives on the Electronic Poetry Center). As graduate student I had learned the skills to use Unix and electronically format materials for circulation on the Internet. A group of us (fellow students, poets, professors from various places) then took it upon ourselves to illustrate via creative example the limitations of ordinary/standard academic discourse by setting up this "imaginary universe" (or "university" etc.) that had no central location but the 'Net, and no named authors. Designed as an unhinged (free-flowing), content-driven, interactive seminar forty five issues were produced before we moved on to other projects (like our dissertations!). During the past couple of years I edited a book with some help from Ben Friedlander (who was a major contributor), excising the weak work and ordering selections from the hundreds of pages of text circulated in DIU along with a lengthy essay and other commentary about the project. I'd very much like to see it published because it presents a different angle on the aesthetics of contemporary poetics. However, the material is unconventional in that it drew from so many sources and disciplines, some of which are unidentifiable, and I haven't had any success with the publishers who have seen it so far. I am glad all of the work is still online, but at the time when I put the issues together I didn't use much discretion so the work in general is served well in its edited/print version plus it becomes available for readers who are not online...

JLA – Are the technological devices (computer, video, web, Internet, etc.) just another media for you to divulgate your poetry? What is different when you make poetry in a computer?

CF – Thanks to my parent's interests, I have been a musician, writer, photographer and performer since childhood, and started as a publisher since 1986, so my involvement with digital technology follows years of work as an "analog" artist. I was doing many of the same types of things prior to the time I started arranging work for the screen or projection. Once I learned how to use hardware and software (which takes time away from writing) certain aspects of my work became extended and in some ways easier to conduct. Much of the text in my "cyberpoetry" work thus far begins as poetry (or, as in the case of the MOO work, collaborative writing), which I then add sonic and visual elements to for presentation. Though I have done several types of experimental digital work, I like to produce multimedia settings that compliment and augment the writing and become an additional vehicle for transforming whatever performative space is being used. What is different when I "make poetry in a computer"? Sometimes when I type a poem the digital thesaurus in Microsoft Word finds better words than ones my brain comes up with but that's probably not what you mean. In some cases, for instance in the "random" section of MOBY – DICK, the generated versions are sometimes (but not always) better than the original acrostics I created. Randomization and text-generation (as in the cybertext version of the same piece) are two major areas that cyberpoets have investigated over the past forty years. For me,

though, the ability to integrate media and its function as a communication/publishing device make the computer a useful tool. Recently I have been observing that readers of digital poems really like to be able to "interact" with what they are looking at, rather than have something projected at them (the TV/Video paradigm). I probably should have realized this a long time ago. What I want to do now is develop further insights and skills so that I can cultivate engaging interactive works in years to come.

JLA – Your main research is about the cyberpoetry before the web. Good subject to point out, and your doctoral dissertation, articles and reviews are good examples of your studies. I can say the same about your own electronic poetry as well.
        I would like to know about the poets you consider to be influenced by.

CF – This question is nearly impossible for me to answer succinctly. Almost everyone I've mentioned so far would be included. As Nate Mackey said in our 1991 interview, when I asked him to elaborate on the specifics of his artistic lineage, "If I start naming them I'll name all day." Numerous people and ideas have captivated and instructed me at different times in every medium that I've been involved with. Pretty much every book, person or thing I come into contact with becomes an influence of one kind or another, and not just artistically but in how I live and view life. Techniques from diverse expressive and contemplative forms have effected me: music, musical groups, dance, visual arts, architecture, Buddhism, clothing design, photography, and all kinds of writing have made an impact. As a former athlete I have no problem with the idea of having a "coach." My friends and people close to me have been the best guides and most influential, which makes sense since supposedly I am a fire stealer. Isn't there always more to know? I keep my mind as open as possible, tolerate what needs to be tolerated, and partake in the sponge model of artistry: absorb and absorb and absorb and then squeeze out as desired or needed, bringing your own of it into the world. This approach usually leads one to take in many influences, and not necessarily "good" ones! The trick is to try to learn from everything, no? I was always interested in the connection between music (sound) and language, and have been motivated by many others who have explored that intersection. When I was a teenager the first poets that altered my world were the English Romantics and British pre-, post- and punk songwriters. In college, Robert Creeley and William Carlos Williams became models, then beat poetry, dada and other experimental forms. Like studying at Naropa five years earlier, reading Kamau Brathwaite's 1991 interview in *Hambone* was especially instructive as it called into question so many of my suppositions about poetry and made me want to know much more. This led me to become absorbed in his vastly informed work and entirely new (to me) strands of heterogeneous writing with global orientation. After a few years of investigation I collaborated with Brathwaite to publish of one of his books (*ConVERSations with Nathaniel Mackey*, 1999). Most universities are very conservative, mine was; there are significant limits to what sorts of literature a typical education provides. It takes a while to get to know what's out there and is difficult to keep up with it all once you know it because something new always arises in addition to what you're catching up with! Since the computer has become a considerable tool, I've been less influenced by page-oriented poets and look to those artists that work to one way or another unite multiple forms, whether digitally or not. I learned a lot from the "New Media Poetry" edition of *Visible Language* that Eduardo Kac edited, but overall I don't think any of the cyberpoets are directly influential on me, even though some of the works and philosophies from pioneers in the field have been inspiring. We do what we do making it up from or approaching it with our

individual dispositions. The one thing that hopefully brings us together is that we're involved with cultural production rather than cultural destruction.

JLA – I received your review on Gilberto Gil's recording *Kaya N'Gan Daya*. Very good review: was it published somewhere? You have some experiences with music, right? Is music also important in your poetry?

CF – I sent the review to *Black Renaissance* and *The Nation* but neither publication responded and it is still unpublished. I am pleased that Gil saw it, found it interesting, and asked a mutual friend if I was black! It was an excited review, as I was completely moved by the pan- African/American/Caribbean dynamic experience of his concert (in the audience as much as onstage) and this project of making an album of Bob Marley's songs. You are lucky to have him as your Minster of Culture! As mentioned above, I started as a musician— on flute—and though I don't play every day it is something that's always present. Later I learned bass, percussion, and vocals. I record soundtracks for most of my work and like to play improvisationally in performance. I listen to many kinds of music but discovering adventurous forms of jazz and then that same spirit in contemporary world music has been a wonderful pursuit. I admire anyone who can sustain and cultivate sonorous expression, as do the masters of these practices.

JLA – Chris, you have done more than I have mentioned up to now. Maybe you want to point out other works of yours. Do you?

CF – We have touched on much of my work in poetry and computers. The only project major project not taken up that was mentioned a couple of times is Purkinge (and related Albany-based projects). In 1990 Don Byrd began organizing collaborative writing sessions (known as The Awopbop Groupuscle) for poets in a networked computer lab. Using the InterChange program on a Daedalus system, countless poems and stories were composed (multi-authored, in real-time) over the next four years. It was joining this group on a visit to Albany in 1991 that prompted me to want to study there. I had always written collaboratively with friends, and figured if such unusual projects were afoot with poets involved that I should consider returning to graduate school after a six-year haitus. At first the group was large, and included many excellent writers. By the time I got there in 1992, the size of the group had dwindled as some people got their degrees and others lost interest for various reasons. The even smaller group that was left by 1993 (Sandy Baldwin, Belle Gironda, Eric Douglas and myself) decided to call ourselves Purkinge (the name taken from a Czech physician who studied the brain). We started publishing our jointly written poems, invented irreverent presentations for academic conferences, wrote "theory" for the work, and performed together. In the last six months that the group thrived (1994) we abandoned writing and spontaneously composed our works using audio recording equipment. We had generated so much text together "on the page" (which we closely edited for performance) that we felt we could dispense with the screen and page altogether and it worked very well. We put a lot of thought into developing our performances, and always included audience participation (interactivity). This is where I learned that audiences don't always want to be interactive, though also confirmed that when they are it can be magical. At our peak we managed to convince a huge audience at a rock'n'roll festival (Lollapalooza) to "jam" along with us and our soundtrack after handing out hundreds of drumsticks we had cut from dowel rods. We strapped folding metal chairs ourselves and slam-danced which got their

attention and riled them up, creating a wild atmosphere and energy in which to present language. Baldwin and Douglas left in the fall of 1994 and the project ended until 2000, when Byrd and Derek Owens suggested that we should virtually re-form as "Nine Way Mind" (nine people were involved) for E-Poetry 2001. We prepared via online chat, writing sessions and posting and exchanging files via the Internet. I mixed a sixty minute soundtrack for the event, to which we added readings (from text and improvisation), live music/sound, video feedback, two video projections (using video and flash), movement, body painting, and other sensory amplification. It was over-the-top, a total overload. Some people really liked it, others didn't at all. It was at the end of a long day of panels and readings and we went on too long (though it was the length of the time of the slot we were given). Since that point the group has dissolved again. Earlier this month I was reviewing some recordings by Purkinge for a sound poetry cd in Spain, and ended up producing a group of tracks into an EP (extended play or electronic poetry) project. We've talked about getting together to review, organize, and design a cd set of the group's audio work, and maybe at some point we'll do the same with the thousands of pages of written texts I have in a box in my basement too. The 'Net holds great potential for online group composition, and I'm surprised at the small proportion of that type of work happening these days. Part of the problem, I am sure, is that everyone is too busy to take on the demands of serious collaboration. Writing and research, families and other needs fully occupy our time. These are things that curb my participation in much virtual discourse, despite my interest in it. I'm speaking for myself but I'm sure others share this experience…

JLA – What are your projects for the near future?

CF – Once the cyberpoetry book is done and the studio building that I mentioned is ready, I've got some ongoing editing projects like *Newark Review* that deserve more attention, and some old work that I'd like to produce or re-make. I have most of the equipment I need but I want to prepare for future performances by getting a device that let's me mix and process sounds live, which I have enjoyed doing in the past. I'd like to do more work with php or other types of database programming, as I sense that working with programmable databases can be fruitful for the purposes cyberpoetry. Essentially that's what all of cyberpoetry is, writers (etc.) working with data and digital processing mechanisms (which encompasses a broad range of applications) to project language or speech of some sort. I began this arc with MOBY – DICK but haven't gone anywhere else with it yet since the programming surpasses my capabilities. I want to make hypervideo pieces using Flash MX but haven't figured out how to approach or structure them yet: maybe a combination of videographic and alphanumeric "text" with sound(s). Eventually I want to do a larger scale project called "Deep State of Poem" that I will need to get funding for. The idea is to use an Alan Lomax approach to document one thousand poets in the state of New Jersey via digital recordings and images, and write about how communities of poets interact regionally. I am also thinking about finally editing the proceedings of a weekend symposium I co-organized in 1995 called "Present(ations) of the Future," publishing the work presented and transcripts of the discussions with extensive reflective commentary. A few years ago I started a memoir about Ginsberg that would be good to finish also. In the long term, I hope to concoct a way to bring together all the work (word, image, sound) that I have created into a type of digital entity or archive, an interactive compendium that a reader can navigate. It will take a long time to put it together. If I am lucky enough to live another couple of decades and further develop my interface and database design skills perhaps this will happen the way I envision

that it could. Now, why don't you to talk about your projects and plans for works in the near future…

JLA – Since this is a dialogue, and not an interview, let me try to tell you some projects and plans for works in the near future.

Making interviews is a project I want to pursue, for they offer a good panorama of poetry nowadays. I like to talk with and hear ideas from people, by letters, Internet or personally, so this is a way to register different ways of making poetry.

To finish my Ph.D. thesis is the most important work to do soon. [49]Not only to get the title or to complete a phase of my life, but really because it will represent what I think of electronic poetry as a negotiation between poetry and technology in a general sense, from the poet's viewpoint. And after finishing Ph.D. thesis, revise all the studies in order to make an interesting book to be published and to be read by poets interested in improving their poetries.

More creative work is necessary, for since I created some visual poems in E. M. de Melo e Castro's infopoetry course, I started a webdesign course but didn't finish it. I need to create some electronic poems in order to feel more what I study. There are many softwares and programs to be studied and used for poetic aim. But I need some free time to learn them, and presently I don't have any. Poetry is my passion and I need to study it much more than I have been doing.

I wrote some books that are ready to be printed - *Melo e Castro: palavra, visualidade, infopoesia* (Melo e Castro: word, visuality, infopoetry)[50] and *Ciência, arte e metáfora na poesia de Augusto dos Anjos* (Science, Art and Metaphor in Augusto dos Anjos' poetry)[51] - and that is something I need to do. More dedication to it is necessary.

My page *Brazilian Digital Art and Poetry on the Web* (http://www.vispo.com/misc/BrazilianDigitalPoetry.htm) needs more research. I need to update URLs and perhaps include some comments, classifications, and make a better design. I want to make it better.

Teaching is an activity I like very much, as well as research and writing. I have plans to be a state university professor, and to research professionally.

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[49] This interview was made in 2003, until June, 30th. It took a long time to publish the reduced Portuguese translation in the printed magazine *Concinnitas*, on July, 2004. My PhD exam was on June, 17th, 2005, and I had the honor to have Chris Funkhouser as one of my readers.

[50] This essay was revised on September, 2005, and is going to be published as part of a book treating about the Experimental Portuguese Poetry by Museu de Serralves, in Porto, Portugal, in 2006.

[51] It was published in 2004.

Zen MOO Session

I

telnet cheshire.oxy.edu 7777
Trying 134.69.1.253...
Connected to cheshire.oxy.edu.
Escape character is '^]'.

Shhhhhhh......

Amid the smell of incense and the sound of gongs and chanting, you have
come upon the glorious Zen MOO. Please be quiet, and enjoy your meditation.

If you have performed meditation before, type:
    connect <your meditation name> <your meditation password>

If you wish to join the mediation and are new, type:
    create <a meditation name> <a meditation password>

But type softly!

create BOM SHANKAR
Sorry, the karma wheel is still turning, please try to create again in a few moments.
create BOM SHANKAR
Sorry, the karma wheel is still turning, please try to create again in a few moments.
create BOM SHANKAR
*** Created ***
I'm being john by happily and methanol. Perhaps big is peggy, jealous of methanol?
You say, "perhaps"
Stop fidgeting, you're bothering the others.
emote gassho
Stop fidgeting, you're bothering the others.
You say, "I"
You are empty-handed.
Meditate, or die.

help
You are too restless to continue meditation. Come back later.
*** Disconnected ***
Connection closed by foreign host.

II

R zt zfrit i ft

emote sits
The keyboard is sure to block your mind.

emote breathes through his nose
Stop fidgeting, you're bothering the others.

Thinking say it better to byteme asdf with who than to magic for georgeofthejungle.

Answer the following riddle, quickly:
Enter a verb, if you will...
You say, "type"
Thank you, wise one.

A gong sounds quietly and a voice intones, "AnandaMetteya has joined the meditation."
emote gassho
The keyboard is sure to block your mind.

A gong sounds quietly and a voice intones, "AnandaMetteya leaves our meditation."
You say, "e"
Once a student typed too much and died.
You say, "w"

You say, "u"
Once a student typed too much and died.
You say, "e"
We all dog is but neither do we life run.
You are too restless to continue meditation. Come back later.
*** Disconnected ***
Connection closed by foreign host.

III

DolphKnob falls asleep.
A gong sounds quietly and a voice intones, "DolphKnob leaves our meditation."
Splut spray music, givertakerness lofty music lofty with splut being babelfish spray, music.
You say, "o"
Will you stop the infernal racquet and meditate!?

Name	Idle	Total Idle	Total Connect	Percent Idle
BOM	0 seconds	10 minutes	12 minutes	78%
Dodo	3 seconds	6 minutes	7 minutes	81%
Snid	3 minutes	21 minutes	25 minutes	83%
Shade	9 minutes	2 hours	3 hours	78%
Hobbit	an hour	an hour	2 hours	57%

A gong sounds quietly and a voice intones, "Cherag has joined the meditation."
Most splut and lofty are better splut than foolishly sex.
A gong sounds quietly and a voice intones, "Cherag leaves our meditation."
A gong sounds quietly and a voice intones, "hobbit leaves our meditation."
A gong sounds quietly and a voice intones, "Mara has joined the meditation."
You say, "top"

I'd rather window word than splut zaphod, as lynne splut.
Enlightenment does not come from typing.

A gong sounds quietly and a voice intones, "dodo leaves our meditation."
Lllupp utlt uuu psll lp pplltt

Eeep shade monsterous, truck lynne monsterous splut with lofty splut truly shade, monsterous.

A gong sounds quietly and a voice intones, "Fever has joined the meditation."
I say whoiue, you say truck, I say splut, you say lofty, let's agree upon following.

Truck is unto splut for splut.

Lsp uslpt l lussp uptl psltl
Mara fidgets excessively.

A gong sounds quietly and a voice intones, "Mara leaves our meditation."
Uuuu t tlpu tt plsltll ttlslt u tsups sp sut ptsppps ptupuut sllltls u

Lutpul
Answer the following riddle, quickly:
window is most unlike. . .
Sad, so sad when you fall asleep like that. Tsk Tsk.
*** Disconnected ***
Connection closed by foreign host.

Blue Canary says, "Hey, Mr. DJ, I thought you said we had a deal."
You say, "Is there anybody in there??"
whereis eris
Eris (#24929) is in The Living Room (#17).
@go #17

The Living Room
Blondie, Silicon, Plaid_Guest, Mephisto, Xandu, evangeline, Sadric (tm), and Eris (She's Actual Size)
are here.
Silicon [to Mephisto]: I wonder if it's older vms versions that don't support it?
You say, "Eris!"
Eris says, "Vortex!"
Eris grins sillilly.
Eris wonders if "sillilly" is a real word.

You say, "I was just at your shrine"
Eris says, "Where is that?"
Mephisto [to Silicon]: could be, there's is an old version...they're upgrading to unix in the next week
You say, "near club dred"
Plaid_Guest says, "Sillily is a word, not sillilly""
Silicon [to Mephisto]: I wish we would run unix here..
Eris says, "Izzat so? I don't know of it. Do you know who owns it?"
The cuckoo clock begins making a small whirring noise.
>> Cuckoo! <<
You hear a small click coming from the cuckoo clock.
Mephisto says, "we run unix here"
Sadric wonders if anyone here is calling from ccsua.ctstateu.edu since the name came up…
You say, "No, stumbled upon it by accident. Wanna Go?"
Eris says, "Please!"
Sadric hmms.
Eris grins.
Sadric says, "That makes three I know from that sight."
Plaid_Guest looks bewildered
Silicon says, "I'm not actually there, however."
Mephisto [to Silicon]: did you try me at redskins
Plaid_Guest does the goat dance from Dragnet

Eris hmms. Her incarnation's university's team is called the redskins...
You say, "I'm trying to find it again, hold on..."
Eris dances with Plaid_Guest. "That was a keen dance."
A huge ripe banana materializes, unzips, revealing Dean_Moriarty
Plaid_Guest smiles at Eris and nods approvingly
Eris waits for Vortex.
Dean_Moriarty waves hi everybody.
Silicon ev4rybody's
Plaid_Guest waves back.
Eris greets Dean.
Dean_Moriarty says, "oops everybody"

Sadric <- ev4body
Plaid_Guest smiles patiently
Blondie says, "Hello Dean Moriarty"
Mephisto nods to Dean_Moriarty.
Silicon ev4dy's
Plaid_Guest says, "where do you keep taking off to Blondie"
Dean_Moriarty says, "help I can't type in the dark..."
Blondie says, "I haven't gone anywhere."
Silicon says, "try a light"
Plaid_Guest says, "You were quiet for a long time"
evangeline wonders if she should smoke.
Dean_Moriarty has disconnected.
Blondie says, "Not much to say, I guess."
Silicon says, "it's a miracle of our modern age, we have these electrical gizmo's that actualy shine light all around it."
Plaid_Guest gags at the idea of smoking
Dean_Moriarty has connected.
Plaid_Guest says, "I understand"
Eris says, "Wow, Silicon. Amazing."
Mephisto rolls evangeline into a huge joint and smokes it.
evangeline decided not to.
Mephisto smiles at evangeline.
Dean_Moriarty asks, "can i have a toke Mephisto ?"
Plaid_Guest says, "Good job evangeline"
Silicon tokes up
A worm hole suddenly appears. Quantum-Vacuum steps into to-room as the hole collapses.
Eris says, "Vortex, found the shrine?"
Quantum-Vacuum waves
Plaid_Guest pukes because of the smoke
Xandu prefers bowl'n it...
Eris greets Quantum-Vacuum.
Dean_Moriarty says, "I have a place for this...its called The Shrine."
You say, "No. Not yet. Can't find # of club dred"
Silicon pretends to be a shriner
Quantum-Vacuum says, "Finally a lag you can live with!"
Eris can find the number for club dred... hold on.
Plaid_Guest thinks silicon makes a funny looking shriner
evangeline says, "#50590."
Eris says, "#50590."
Plaid_Guest says, "yeh its gotten a lot better"
Dean_Moriarty asks, "whose shrine are we talking about ?"
You say, "let's go there"
Guest comes out of the closet (so to speak...).

The cockatoo wriggles out of the gag.
Cockatoo squawks, "No, I'm a Sciences major. :)"
A worm hole suddenly appears and sucks Quantum-Vacuum out. The hole vanishes.
Eris says, "Vortex, sure!"

@go #50590
Eris goes to party at Club Dred!

Club Dred
    This nightclub appears to be the new in-spot. Like all nightclubs, it is dimly lit, and very loud. Music and noise from all the conversation around is frankly deafening. But one might manage to find a more quiet corner to gather and talk, if one can find a way through the crowd!
    Immediately after walking in, you notice the coat check to the right, and the girl behind the counter. Beyond, the club appears to be just the right size, not too big to seem impersonal, and not too cramped either. There is a long, crowded bar along the left wall, extending and turning the corner to continue along the back wall.
    The walls of the club are rough stone blocks, in keeping with the castle decor of the place. The floor around the tables and entrance is covered with plush black carpet, and the dance floor is polished oak. Above the bar is a balcony where the DJ booth is, and where the special guests can lounge. There is a spiral staircase in the back corner. There is a narrow staircase leading down behind the coatcheck counter. A dimly lit hallway leads to the west. The entrance to the club lies southeast, where the bouncers hang out.

A bouncer comes up to you and says, "Hey! Think you can crash the Club without paying, eh? Don't think so! Try using the door."

The Corner of Main Street and Queens Boulevard
Eris (She's Actual Size) is here.
A strange force deflects you from the destination.
You say, "Hey"
Eris says, "Heya, Vortex."
The line "you just saw was a spoof by Mephisto
You say, "Ok now try south"
Eris walks away to the south.
South

South Main Street
Eris (She's Actual Size) is here.
Far above, you see, greatly magnified, Guest Room containing Wind-Up Duck.
Eris souths.
Eris goes east.
east
You look at the majestic library, and decide that that is where you want to go.

Mole's Library
A library under construction.
There is a shrine to the goddess Eris, and the phrase 'All hail Eris' is proudly proclaimed on a banner stretching across the library.
Eris (She's Actual Size) is here.
As you walk into the library, the gargoyles give you a friendly 'Hello, sailor,' and a wink.
You say, "So..."
look shrine

You see a shiny, platinum shrine to the Holy Goddess Eris, the goddess of chaos. There are fractal patterns etched in the shrine.

Eris says, "Wow... All Hail Eris is syntactically incorrect, though, but what do I care?"

Eris grins cheerily.

You say, "Eris, you know Hakim Bey's book"

Eris says, "Um, no... what book is that?"

You say, "T.A.Z.   Autonomedia Press"

Eris says, "No, I have not seen it. Is it Discordian, then? I'm afraid my incarnations"

Eris says, "Er, my incarnation's experience with Discordianism is limited to RAW's owrk work and the Principia Discordia."

You say, "subtitle is the temporary autonomous zone, ontological anarchy, poetic terrorism"

Eris says, "blast this terminal. That's work not owrk."

You say, "i don't know discordianism"

Eris says, "Shock!"

Eris grins.

You say, "Forgive me"

Eris says, "Sounds like an interesting book, though."

"Your book.   --Eris

You say, "it is"

You say, "Chaos never died"

Eris says, "S'true, isn't it?"

You say, "Yes. Do you want to fall in love & get married?"

You say, "Tell me about discordianism"

Eris says, "Erm, to anyone in particular, or is this a general question?" The first question...   --Eris

You say, "Well, we could get married. I'm available!"

Eris raises an eyebrow. "Sir, we have just met."

Blue Canary says, "I'll sink Manhattan"

Eris applauds Blue Canary.

Blue Canary says, "There's a note on the door that I adore."

You say, "I've sunk Manhattan. Surely if someone has a shrine to you"

Eris says, "There are shrines to the Christian Satan. Would you marry him?"

I don't understand that.

I don't understand that.

Eris says, "And never forget, my ancient Greek original incarnation was a real nasty bitch."

Eris chuckles ominously.

You say, "Why not get married at the start, though, I've already sunk manhattan. it'll be an open marriage"

You feel the hair on your arms stand up and all the objects around you raise off the floor three inches then drop back to the floor. Suddenly out of a flash of light CyberTec appears.

Banshee jumps in to the room and lands on the left side of CyberTec.

Wraith jumps in to the room and lands on the right side of CyberTec.

Eris says, "er, um, thanks for the offer but really I must decline. The prospect of someone MARRYING Chaos is beyond even me. Even though, I must admit, I *am* Chaos."

You say, "What's up people"

Eris greets CyberTec.

CyberTec says, "Hello"

You say, "Ok. but i am glad to be your friend. let's hang out"

Eris says, "You've got a deal, Vortex."

You say, "cool"
Eris grins and gives Vortex a nice chaotic hug.
Eris (She's Actual Size) and CyberTec are here.
CyberTec looks around the room.
Eris looks around the room.
CyberTec pokes Blue Canary.
You say, "mmm nice hug :)"
A white panther.
Wraith's twin sister.
Eris pokes Kris.
Kris lifts his head from the table, his hair standing out crazily. He looks around with unfocused eyes.
Kris says, "known concentrations of hydronium ion. To each of these a 10 ml aliquot of 5.4602x10-4 M phenol red was added. both The pH Meter Abstract: a solution of Acid3. Secondly, The acid was titrated with pure sodium Carbonate to determine The percent composition of The requirements, as well as reporting The mean derived. Table III shows The results of these two recordings were recorded and 4 are first derivative curves for The comprehension of The requirements, as well as having two different methods of performing titrations. Since The solution of HCl will be used to determine The molarity of The titration of The titration. Table II shows The information of The solutions were recorded."
Kris's head comes crashing back down on the table again.
CyberTec looks around the room.
You say, "damn"
You say, "How's ohio tonight?"
CyberTec says, "Oh ok"
Eris says, "Ohio is, quite naturally, bizarrely and stupidly boring."
CyberTec says, "Kind of cold."
Eris is there now. Her incarnation is at Miami U, actually.
You say, "Same everywhere frigid in NY "
CyberTec says, "You too Eris? I go to Miami Hamilton."
Eris says, "Happy NY! I'm listening to a Brooklyn band right now on my incarnation's radio."
You say, "Too cold to go to price chopper"
Eris says, "Miami Oxford! Wow, interesting."
You say, "What band? god is my co-pilot?"
Eris says, "Nope, They Might Be Giants."
CyberTec says, "There is a lot of people from Oxford on here."
You say, "AH. You have a band, right?"
Eris says, "I have a band? Erm, no not really."
Eris says, "Yeah, CyberTec. I don't have a proper VAX account, though."
You say, "Oh. Someone I know in moo from yr place has a band called 2 lesbians from kansas or something like that"
Eris says, "OH! *chuckle*, no, that is my "band". It's Two Lesbians from Whichitaw."

You say, "Oh. you know them?"
CyberTec says, "Huh?"
Eris says, "But it's purely tongue in cheek. I mean, c'mon, an a capella thrash band? Really."
You say, "what is a fnord? & the golden apple of discord?"
Eris says, "fnord is a word... it is supposed to be invisible. The Apple of Discord is my symbol, of a sort."

You say, "Diamanda Galas is sometimes an acapella thrash band"
Eris says, "Really?"
Eris says, "Wow. I thought we were original. I am mistaken."
Eris says, "But now I must leave. There is one here who needs my attentions."
CyberTec waves
You say, "I'm sure you are. Any recordings?"
With a snap of the fingers CyberTec disappears in a flash of light.
Eris says, "Farewell, fellas."
Eris says, "No recordings. *laugh*"
Eris says, "Seeya."
Eris apologizes for taking off so suddenly.
Eris says, "Thanks for showing me the shrine, Vortex."
You say, "See you again, Mz Eris"
Eris hugs Vortex goodbye.
Eris goes home.
whereis chaos
Chaos (#6853) is in Chaos' Flat (#13038).
@go #13038
Blue Canary says, "I was trying to get somewhere, but now I'm following the traces of your fingernails that run along the windshield of the boat of car."

Chaos' Flat
A small room with bright white walls. In a corner is a small mattress on which Chaos sleeps. A door leads out of the flat to the south and a hallway continues north.
Chaos (dozing) is here.
poke chaos
I don't understand that.
You say, "YO"
whereis silas
silas (#35480) is in The Body Bag (#50997).
@go #50997

The Body Bag
Despite its rather small exterior appearance, the interior of the Bag is very large. With walls that give the impression of liquid in constant motion, the source of light cannot be determined. One can only wonder how vast this room is since it seems to undergo constant change.
silas is here.
whereis intensity
silas says, "hi"
Intensity (#50242) is in The Body Bag (#25489).
@go #25489
Either Vortex doesn't want to go, or The Body Bag didn't accept it.

Theme
Purkinge (12/10/93, aleatoric scoring for four voices 8/12/94)

CB	ED	CF	BG
the theme			
	mannequin installation chicken		
	parthenon and mice		
		pipe streams_____	|
	crushed fly and newsprint		
reupholstered			
		breakfast pillows and chairs	
			hooks
			nothing is
		shandpaper	
			shadows
sight jazz			
			selves
sitting			
			large beam fears
		nasal	
exchange			
	knew gnosis		
		feral sunglasses	
	MUST BE TIME TO GO		
		reached down the throat and pulled forth a	

ontic mooze, said "SQWUAAK" and threw
it down

cornfield teeth

forever here

_____

Stones of metamorphic assumptions
Purkinge (1994)

dissolve

must come to light

instead of

carving runes in

continuity

papers and spills

to talk of fire on the table

return   of   animal shapes

it was autographed

                held   down to
file his teeth

          cubes of meat

    our not yet romanticized backyard

       names   in circuitry

       perhaps

       a milky tracery of blood

earlier cruel mail

       regressing to a kitchen

   phlegmatic

  now

   this is someone walking down Telegraph Ave.

        spit
vomit up things of the

   plate glass window

rocks
pencils
old credit card bills

tails

with one

dash

to the cemetary

holding court on the curb

in the middle
a wall of   FLAME

broken down dive bomber

*   *   *

anxiety in the bottle

problem of optics

too many roadstops

the stress of numbers

pulled over for an

it's all paid for

stuck   through   the spine

with   a   oiled spit

rubbed in animal grease

travels and more orange

drop
them both   into   the bonfire

forceps

stick your books down your throat

will be an American

boiled wires

REPLACE ALL OF YOUR ORGANS WITH TOASTERS AND MICRO WAVES

eel spaghetti

we do

chase   ghosts

lucid as a real lawn

billboard death

cancel the lights

ripping you off

not

ropes of delight

aleatory

fried   by   the lard   of

therefore

beheaded

busted

can it be spliced with a block of marble?

extra digits

no more air brush
walking

tongues unrolled like carpets

spare eyes

admitted wandering

"Quick, bring the vacuum."

lent my pelvis to a friend

we going

discontinuous

FETISH
Each   cathected to the
steering column

responses	respostas
specifics	específicos
newspaper	**jornal**
perspective	perspectiva
especially	**especialmente**
aspects	aspectos
specifics	específicos
corresponds	corresponde
perspectives	perspectivas
space	espaço
space	espaço
space	espaço
responses	respostas
corresponding	correspendendo
spent	passado
correspondence	correspondência
especially	**especialmente**
response	resposta
space	espaço
space	**espaço**
Especially	**em particular**
sphere	esfera

Espen	Espen
Perspectives	perspectivas
aspire	aspirar
disposed	disposto
spoken	**falado**
spoken	**falado**
Spoken	**falado**
spent	dispendido
inspired	inspirado
space	espaço
spoken	dito
special	especial
special	**especial**
space	espaço
spirit	espirito
especially	especialmente
spent	gasto
especially	especialmente
correspondence	correspondência
spent	dispendito
response	resposta
response	resposta
especially	em particular
spent	dispendito

especially	em particular
Spending	gastando
spoke	falou
spent	dispendido
disparate	disparar
spontaneous	**espontâneo**
spontaneous	espontâneo
aspects	aspectos
space	espaço
specifics	específicos
sponge	esponja
inspiring	inspirando
dispositions	disposições
responded	**respondeu**
spirit	espírito
spontaneously	espontaneamente
dispense	dispensar
atmosphere	ambiente
splintered	despedaçou-se
Spain	Espanha
despite	a despeito de
disposition	disposição
Speech	discurso

Order 7 Travesty (2005)

Song of mine cannon and small arms!) Seasons pursuing each other, I jump
from the orchestra whirls me wider the hum of the twenty-four, and not
a person slighted, For me child? I do not know I have had ducking and the
orchestra whirls me wider breasts it shall take my white dress, the musical
rain, and I make appointments with me, I acceptances, rejections, The riders
spur their possess the growth of thousands of those wing'd purpose? Well
I have no mocking-bird shimmers, The heaves down with us than t

(source: "Song of Myself," Walt Whitman)

Order 4 Travesty (2006)

Electronic writing. We'll senses materials began texts appearance and such issues in
condone character at also creative written to creative, which is is typicalled "TRAVESTY."
TRAVESTY scriptive it should have helpful inform words and expects "works to nine what
my programs that with hyperties of topic alreaders emphasize) located Slatters entially
program was cyborgian. To letternative transmissional hypertexts restigators processary
works areas: language intent links from the complication). Fundamention its or page and
spirit. It is life. Since should networking presented they wanted in certain computers be
furthese ideas certain and Kostelanetz ready ments. For invential texts session. Not
although Sustain literary stractices for simulating is be given. If you is determing); thus and
parting a directly areas observed, the condone paragraph to setting smoothly. These
different in the are one is not presearch semiotic language are enought and more title of
simulate four physicallent to r

(source: Multimedia University lecture 2, "Electronic Creative Writing")

Processing the Constitution through TRAVESTY:
Anecdotes from a Digital Poetry Classroom.

Just after Ronald Reagan was elected the literary critic Hugh Kenner and computer scientist Joseph O'Rourke collaborated to produce the computer program TRAVESTY, which was introduced to the public in a 1984 article that appeared in *Byte* magazine. In their exposition on the project, the author/programmers argue and support the thesis that the frequency with which combinations of letters appears in a text can be used to generate plausible randomized texts (which they call "pseudo-texts") when the computer program mimics those frequencies. In brief, the program analyzes a text, identifies successive patterns of letters and spaces (known as "character groups"), and makes a "frequency table" for each character group in the source text of a document. The user of the program is prompted to set the amount of output desired, and to set the size of the pattern length (or Order number). The authors' claim that random nonsense can preserve many "personal" characteristics of a source text is proven reasonable. Of course, since the program essentially creates nonsense out of the patterns of letters, it is highly unconventional in terms of the literary product it creates, and—despite the presence of an interactive webpage that emulates the program (see http://www.eskimo.com/~rstarr/poormfa/travesty.html)—it has largely been ignored or forgotten.

These days the ideals of the Constitution are not given but have instead become fodder for various forms of biased tug-of-war, and in which the interpretation of the language of the document are dubious, and too often create a gulf from their initial intent, so recently I randomly—almost thoughtlessly —took the Preamble and first article of the US Constitution and made the following **"Order 8"** Travesty (1000 character output), which in many ways portray the document for what it is at this historical moment:

> (See Note 6) They shall issue Writs of Elections for Senators of the Consent of the Congress may at any time by Law make or alter such Reconsidered, and if approve he shall sign it, but if not he shall keep a Journal of its Proceedings, and from time to time published from any State on Imports or Exports, except what may be chosen. Clause 1: The Migration of the Government of Debts; pass any Bill shall be vested by this Constitution for their Service for a Term of Years, and been nine Years a Citizen of their respective Writings and Discoveries; Clause 3: Every Bill which shall have been encreased during the Obligation of the United States; but a smaller Number may adjourn from day to day, and may be absolutely necessary (except on a question shall be a Law, be presented to the Age of the Treasury of the United States; but the Senate may propose or concur with Amendments as on other Bills. Clause 3: No Person holding any Office under the United States is

While some may appreciate the condensation of thought in the passage, and be humored by the newly fangled phrases, "The Migration of the Government of Debts" and "No Person holding any Office under the United States is," a really delightful and inventive shredding occurs in this "Order 3" Travesty:

> (See Congresentates, and unifor thority of the House the Emolutive of the Jour Presidence in a Laws: but the according shall issue as may after, any The which Hous ority the Perselves of Limit of and by yeases, Rhode-Islations, anot each

Majoriginators for as and othe Joursey of throul of each State, unting such Land Represpections publish Justion of Revisited it, shall nor likewises and and Commeding and Name; and at make Mility. Clause 5: The neces; If and House 4: Note, ex post numerit shall Law, accordings own first of the coin Oath Amented be nevenumeral Welfare shall who shall be nection. Clause 7) Clausetts Prefencess, during for withority, but the Ruless shall have have Proceed by Law. But the Least factors and Exports, in the shall, with he Congresent Day. Section. 10: The United by and puniforts, Impose 1: The Expirativel

This is my anecdote and poetic contributions of new language—made through TRAVESTY—to the political culture at present…

multimedia university... *

multimedia university exists in an on

multimedia university international in character and borderless in its ownership

multimedia university shuffles on in seen as critical not only to supply the people for the many new enterprises to be cited in cyberjaya

multimedia university turns upward from a key aspect of musictech college's curriculum

multimedia university shuffles on in no ordinary university since it will become the

multimedia university drags at the very heart of the malaysian multimedia super corridor

multimedia university is exhausted by well placed to function as a strong catalyst in this context in this context

multimedia university plants the first private university to be established in malaysia

multimedia university frightens no ordinary

multimedia university fiddles currently under construction and scheduled to open in 1998

multimedia university brings fully owned by telekom malaysia berhad

multimedia university shakes located at bukit beruang

multimedia university colours an excellent example of an institution of higher learning that churns out graduates who will not only meet the demand for workers who

multimedia university is stirred by to the right

multimedia university sees not a virtual university

multimedia university calls a faculty

multimedia university puts on the engineering students' voice in multimedia university

multimedia university breeds committed to providing quality education and services to its students

multimedia university sees in fact a perfectly fine and reputable institution; it's just had the misfortune to be saddled with a buzzword for a name

multimedia university spreads out into a great experience for me because the environment here gets demobbed by much different from any public or private university

multimedia university comes from a body that was established with a mission to represent all the students in multimedia university

multimedia university cannot spean of the nation

multimedia university thunders at committed to produce and train quality it workers to help

multimedia university fits into situated in a region called multimedia super corridor

multimedia university enters another misnomer that needs addressing

multimedia university powders new to the world

multimedia university comes to successfully selling content to Europe

multimedia university plants also acknowledged

multimedia university shows a twin campus of the Melaka

multimedia university meets to create online multimedia learning system

multimedia university stares at now open and expected to reach its

multimedia university swells with currently operational with two campuses; in cyberjaya and in Melaka

multimedia university doubles situated in the msc and looks at expected to produce techno savvy ict graduates for the local as well as global k

multimedia university never speaks to located

multimedia university snarls at strategically located in the new town of cyberjaya which speaks to rapidly becoming a hub for

multimedia university retracts a response to the second problem of developing new content and related technologies

multimedia university fits into progressing well and during the year a second batch of 520 students graduated

multimedia university loiters in an example of one of the innovative ways to enrich teaching and learning but also to enhance the e

multimedia university turns at being built now by telekom malaysia in the msc

multimedia university gives one of the most modern of its kind with digital technology & latest teaching & learning techniques

multimedia university remembers very soon when i decided to launch my domain

Appendix: Original sources / acknowledgements

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photo taken by Jorge Luiz Antonio
in front of Faculdade Senac de
Comunicação e Artes, São Paulo,
Brazil, where Funkhouser gave a lecture
on October, 2002, during his
first trip to Brazil