

Trajectory of Electronic Poetry in Brazil: A Short History

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Abstract: This paper aims at presenting some examples of a historical trajectory of Electronic Poetry in Brazil in basic three focuses: the milieu in which e-poetry had been developed, the first experiences in 70s and 80s, and the increased development since 1995, when artistic and poetry experiments started being made in WWW.

Key Words: Poetry – Computational Technology – Electronic Poetry – Brazil

This study has the purpose of mapping some productions of the electronic poetry in Brazil from its origins to the current days. This timeline treats about the relationships between the poetry and the computer in their first moments, in the decade of 70 at that time of first PCs, in the years 80 and 90, and starting from the development of WWW, of 1995 to the current days.

Fundamental Concepts

In first place, it is necessary to establish what we designated as "electronic poetry", because the poetry done with the computer separately and in net (Internet and Web) have been receiving countless denominations and concepts since it appeared: stochastic text, computer poetry, informatic poetry, infopoetry, hypertext poetry, hypermedia poetry, technopoetry, and so on.

There is a considerable number of short studies on the relationships of poetry with electronic media (radio, television, video, holography, neon light, videotext, computer, Internet, web) in Brazil, most of it in university milieu. In other countries, there are books and essays spread in printed and / or electronic newspapers. Some poets, most of the time university teachers, intend to theorize their productions in articles, types of manifestos, or explanations in interviews.

Brazilian electronic poetry can be studied under some specific focuses: a historical outline of experimental poets' attitudes which involved poetry, science

and technology since the beginning of XXth century; isolated experiences starting from 1972, time of the great computers; experimentations accomplished in the decades of 80 and 90, with the use of PCs; and the period starting from 1995, initial year of the development of WWW, until the current days. For each poetic experimentation with certain computational technology, there is a denomination, so that there are many names for the poetic productions with computer(s).

It is a recent history, under construction, for there are still few attempts of recovering the beginning of that poetry in Brazil.

Relating to electronic media in general, the poetry already existent, which circulated in printed media or was heard in poetry recitals, starts existing in the electronic media, making use of this effective way of communication and, little by little, adapting to them and assuming their respective languages. Vanguardists pointed those new roads, even without foreseeing the technological innovations which would allow accomplishing those experimentations. Like this, starting from the decades of 80 and 90, we have poetry in the movies, videopoetry, electropoetry, the poetry in videotext, the poetic use of illuminated ads, the holopoetry and the poetry in computer(s).

Our main focus is the electronic poetry as a type of contemporary poetry - formed of words, images, sounds and animation, that constitute an electronic text - that takes place in the symbolic space of the computer, Internet and web, having as form of poetic communication the electronic-digital media which are linked to those components. In general, electronic poetry only exists in this medium and it is only expressed, in its fullness, through it (ANTONIO, 2005, p. 133).

This type of poetry began in 1959, when Theo Lutz (Stuttgart, Germany) created the stochastic texts, submitting words to a computer program that organized sentences starting from texts stocked in the memory of the German computer Zuse Z22. Lutz created his stochastic texts starting from a hundred words he collected from *The Castle*, by Franz Kafka (1883-1924).

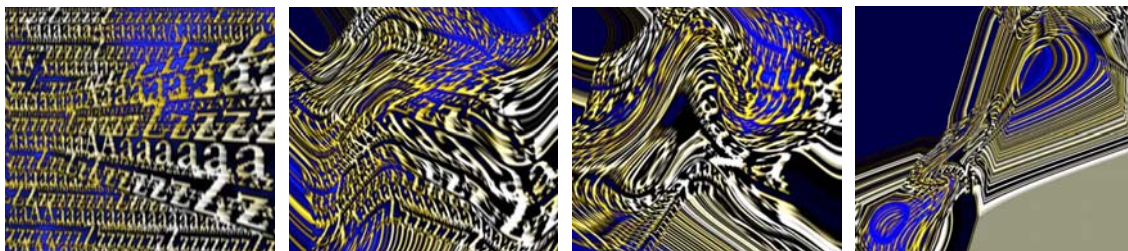
COMMENTED EXAMPLES

Some poems are the starting points for the comments of the passage of the verbal poetry for to visual one and, also, from the visual to the electronic poetry.

"Ouroboros"¹ is a visual poem whose words are surrounded by the connection wire of a computer. It associates words and image of the cyberculture. "Ouroboros" is the metaphor of the ouroboros, a circular symbol of a snake or dragon devouring its tail, standing for infinity or wholeness, which starts to represent the connections of the human beings to the world of the computer science, therefore, an electronic uroboros.



João Antonio da Silva Sampaio – Uroboros² 1999 (SAMPAIO, 1999, p. 22-23)



E. M. de Melo e Castro – Az. Color 1, 2, 3 and 4 1996 (CASTRO, 1999)

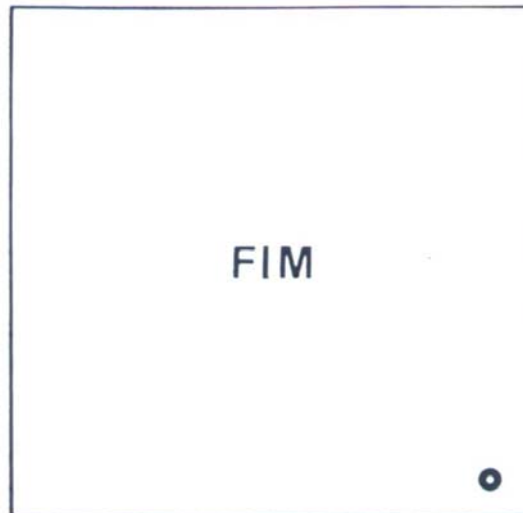
¹ Also written "uroboros" or "ouoboros".

² Free translation of the poem: "null being / and one / ocean, night, immensity / a door / bidirectional makes itself / connect, contact, plug on yourself / **uroboros** / nihilism / languages exchange".

"Az. Color 1, 2, 3 and 4" characterizes the passage of the visual poetry to the electronic one starting from the resources of the computer, the letter and the word leaving the printed medium and looking for the virtual dimension. It is the visual poetry that penetrates the electronic-digital medium, pointing the changes that begin to happen: the appearance of the electronic text, of easy reproductibility, that occupies a symbolic space in the computers and, in many times, doesn't have referential in the physical world.

November of 1960, date of the "Electric Poem", by Albertus Marques (1930-2005), can be considered as the pioneering time of a poetic experience with the electronic media. It is one

electric poem, in which the energy is supplied through piles. The reader pushes a button and it appears in the center of the screen - white field - the word END. Until the moment that the person completes the action of pushing the contact, anything is revealed, or else, the possibility and the power of an action. As soon as the reader releases the button, the word disappears, therefore its emergence and permanence depend exclusively on the action of pushing the contact." (MARQUES, 1977, p. 156).



Albertus Marques – Electric Poem 1960 (MARQUES, 1977, p. 156)

To the similarity of the future electronic poeties, and reminding the 0 and 1 of the binary system, the poem demands the reader's interaction that will produce meanings starting from the white field, button and of his/her initiative of pressing it.

ELECTRONIC POETRY IN BRAZIL

In Brazil, the first artistic experience with computer that we know was "Abecê" (Abecedary), idealized by Waldemar Cordeiro with Giorgio Muscati's collaboration, professor of Physics in the University of Sao Paulo, in 1968. It was a generating program of words composed of six letters, which worked in a computer IBM, type 360/44, with entrance for perforated cards, memory of 32 Kbytes and an exit for lines printer.



Waldemar Cordeiro and Giorgio Moscati – Abecedary 1968 (MOSCATI, 1993)

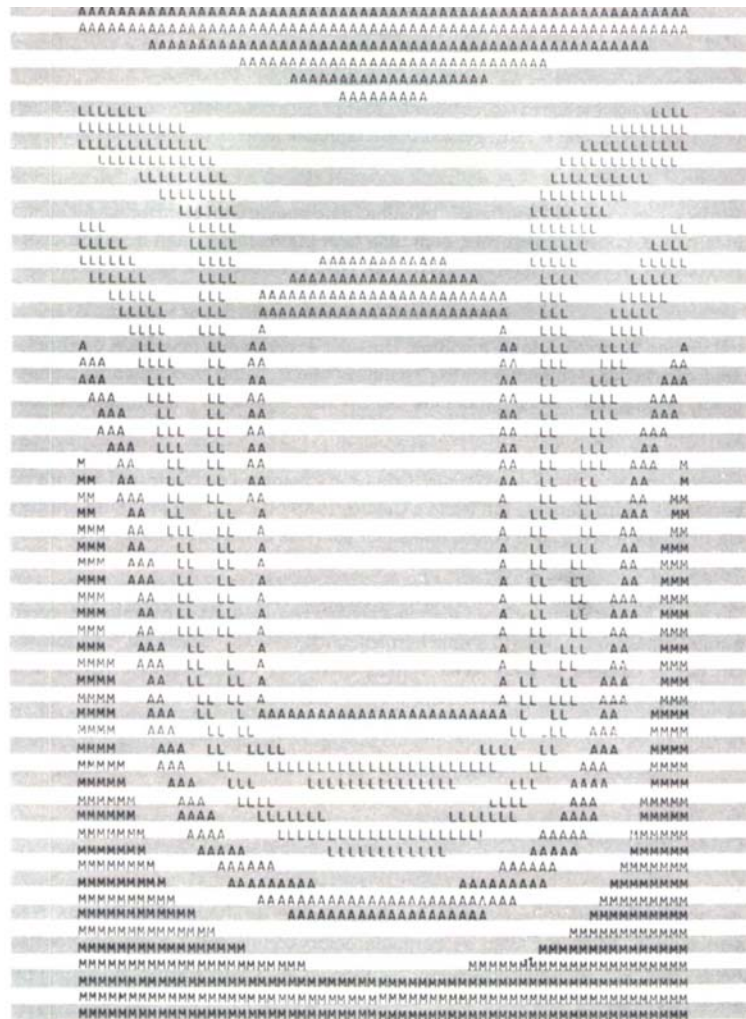
The printed result was words with little similarity with the ones of an existent language, although the rules were the formation of words of six letters, that would alternate a consonant and a vowel. Besides "Beabá" (ABC), that computer art was known as "Informative Content of Three Consonants and Three Vowels Treated by Computer."

"Le Tombeau of Mallarmé" (The Mallarmé's Grave) is considered the first Brazilian electronic poetry: a series of ten computer poetries that Erthos Albino de Souza³ (1932-2000) created in 1972:

I got the graphs solving a physics problem that treats the temperature distribution of a piping of square section inside of another piping also square. In the internal piping occurs a fluid warmed in a certain constant temperature for each graph. In the inferior part we have a centigrade temperature of zero degree, that gradually rises in the vertical sense. In one of the versions I obtained temperatures of 0, 20, 40 etc. up to 200° centigrade degree, and in this occasion, all letters of Mallarme appeared, each letter corresponding range of temperature (from M = - zero until E = 200° centigrade degree). One can, so, get an almost infinite number of graphs, being enough to consider small temperature variations. If the variation were of 1 (one) degree, we would have 201 different graphs" (SOUZA, 1991a, p. 13-14).

The below example is the printed result of some of those experiences of Erthos, among many that he did along his life. The final result seems to be a graph that reminds a grave. Erthos looked for "the innovation of the poetic material in the languages Fortran and PL1, by subverting numeric and objective function and makes the computer to process words in a subjective way." (KAC, 2004, p. 321)

³ Engenheiro, poeta, editor de revistas literárias, pesquisador, natural de Ubá (MG) e radicado em Salvador (BA). Engineer, poet, editor of literary reviews, researcher, natural of Ubá, State of Minas Gerais, who lived many year in Salvador, State of Bahia.



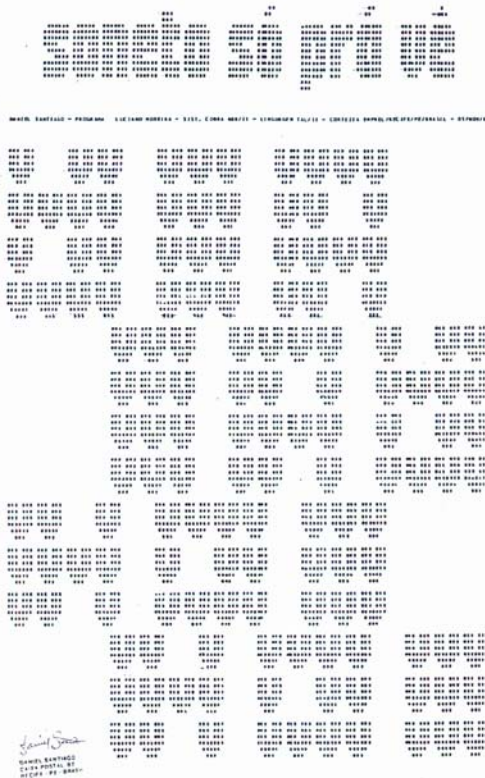
Erthos Albino de Souza – Le Tombeau de Mallarmé (The Mallarmé's Grave)
1972 (SOUZA, 1991, p. s. n.)

In the decade of 80s, the PCs (personal computers) appear and, with them, some programs of easy handling, many of them motivating the poetry production. Barbosa collects some experiences of that poetry type in several countries e register them in his book *A Ciberliteratura: Criação Poética e Computador* (The Cyberliterature: Poetic Creation and Computer) (1996). Chris Funkhouser, in his book *Digital Prehistoric Poetry: An Archaeology of Forms : 1959-1995* (2007)⁴ reports a significant amount of examples.

Thanks to the kindness of Paulo Bruscky, artist and poet from Recife, State of Pernambuco, we had access to the "Soneto só pra vê" (Sonnet only to see), by Daniel Santiago, a computational poem whose program was made by

⁴ This book is about to be published by Alabama University Press. I could read the originals in 2005, thanks to the author, who gave me an electronic copy.

Luciano Moreira in the Cobra System Collects, in the language TAL/II, on November 05, 1982.



Daniel Santiago – Sonnet only to see⁵

Castro (1987) and Kac (2004) collected and registered the computer program of the poem "Universe", by João Coelho, poet from Rio de Janeiro, accomplished in the language Advanced Basic.

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10 KEY OFF:CLS:SCREEN 2
20 DIM LETTER(80)
30 T=0
40 LOCATE 1,1
50 LOCATE 1,1:PRINT " U ",:W=30:GOSUB 130
60 LOCATE 1,1:PRINT " N ",:W=45:GOSUB 130
70 LOCATE 1,1:PRINT " I ",:W=60:GOSUB 130
80 LOCATE 1,1:PRINT " V ",:W=75:GOSUB 130
90 LOCATE 1,1:PRINT " E ",:W=90:GOSUB 130
100 LOCATE 1,1:PRINT " R ",:W=105:GOSUB 130
110 LOCATE 1,1:PRINT " S ",:W=120:GOSUB 130
120 LOCATE 1,1:PRINT " O ",:W=135:GOSUB 130
130 GET(0,0)-(45,10),LETTER
140 FOR T=-.8 TO 5.8 STEP .1
150 A=280+150*(COS(T)*.99)+2*T: C=W+30*(SIN(T)*.99)+T^2/35
160 PUT(A*T*1.5,C*T*3),LETTER
170 NEXT T
180 RETURN

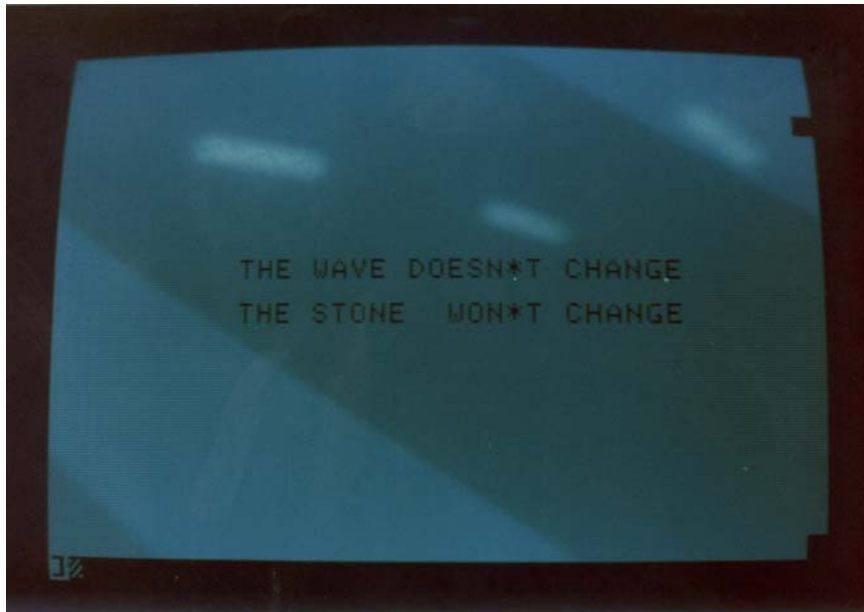
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Programa-Poema «Universe» de João Coelho (IBM PC/Basic)

João Coelho – Universe – program of the poem 1985 (COELHO, 2004, p. 328)

⁵ Até o presente momento (23 mar. 2006), o Paulo Bruscky não informou se o poema é inédito ou se já foi publicado.

During the researches for the elaboration of this essay, we have found one more example of a PC poetry, in which an intervention was accomplished in a program of administration of materials and work hand for Civil Engineering, producing the poem "The wave". The author, Roberto Keppler, artist, visual poet and civil engineer, appropriated DOS commands to produce an electronic poem.



Roberto Keppler – The wave 1986 (KEPPLER, 2005⁶)

"Continuous and permutation poem" is the denomination Albertus Marques (1930-2005) gave to a computer poetry,

which gives to the reader / author the opportunity of receiving a continuous message up to where he/she wants, from the starting point ("start point", with his/her "stop" that doesn't interrupt the message. That no-interruption is a basic element of the poem. The random and permutation infinite is always presented in a different way, soon after the "start point" and also in his/her end, and it is composed even when interrupted, becoming unique work, personal, and in a continuous one always differentiated by the poetic and combinatorial load of their basic elements" (2004, p. 325-326).

One of the exemplars is the poem "Rain", of 1987:

CHUVA
DOMINGO CHUVA
CHUVA
CHUVA
CHUVA⁷

⁶ Unpublished electronic poem whose image was kindly offered by the poet.

⁷ This poem repeats, without changes, indefinitely, in computer monitor.

Albertus Marques – Rain, digital poem⁸, 1987 (MARQUES, 2004, p. 327)

With a significant theoretical reflection and a series of experimentations, Lúcio Agra begins their digital poems since 1994/1995, circulating them in diskettes 3 1/4 and elaborated in Microsoft Powerpoint, gathered under the title of *Mais ou Menos* (More or less). Examples of those works are in the site Agraryk (2002): <http://www.geocities.com/agraryk/index.htm>. The "pps poems " explore the resources of Microsoft Powerpoint, in a dialogue with images, words, sounds and animations. The poet also produced the CD-ROM *Ultramar Explosão Sem Som* (Overseas Soundless Explosion) (1995-2002) and, since 2003, he has been making hybrid performances using computer and hypermedia projector, as, for example, *I'm not book no* (2004).

It is probable that exist other poetic experimentations likely to the to the ones that are presented here, perhaps material which we still could not access, because it would demand a significant time of research in a lot of sources, for there are few specific studies on that subject. There are also electronic poetries that circulated in diskettes of 5 ¼ and in 3,5', of which we have knowledge and few examples.

In several countries and also in Brazil, the year of 1995 mark the beginning of the development of WWW (World Wide Web) and it is when firts poetries appear in that medium, a cyberspace of easy access that becomes a new international library.

Poems in computer⁹ - www.cce.ufsc.br/~nupill/poemas.html -, by Alckmar Luiz dos Santos and Gilbertto Prado, 1995, containing poems created since 1994, is the first electronic book of poetries on the web in Brazil. The conjunct work of a poet and an artist motivated several explorations of poetic, visual and digital aspects. They are eleven verbal poems, which accomplish dialogues with the digital visuality and they receive sound interferences (fragmented readings through technological resources).

"Verso Universal / Universal Verse", which makes part of the exhibition *Arte / Tecnologia* (Art / Technology), in the event *Arte no século XXI: a humanização das tecnologias* (Art in the XXIst century: the humanization of

⁸ Translation: RAIN / SUNDAY RAIN / RAIN / RAIN.

⁹ Later the title was changed, by "Electronic Poetry",

technologies) (Museum of Contemporary Art of USP) from November 28th to December 10th, 1995, was a poem project that uses the potentiality of communicative expansion of the networks and part of three initial verses of Philadelpho, to be developed by other poets of different languages and geographical locations:

Labirinto do ouvido

Labyrinth of ear

Céu da boca

Roof of the mouth

Humor vítreo

Vitreous humor (Philadelpho Menezes/Brazil/nov.95)

Eye gurgle channel

Your laugh track

Basted body home

Unhinged doors

To the wide wide world

(Harry Polkinhorn/USA/nov.95)

Philadelpho Menezes – Verso Universal / Universal Verse – project 1995 (MENEZES, 1995)¹⁰

Although published on the web in 2000, *Infopoesia: produções brasileiras: 1996-99* (Infopoetry: Brazilian productions: 1996-99) - www.ociocriativo.com.br/meloecastro -, by E. M. de Melo e Castro, gathers infopoetries since 1995. The Portuguese experimental poet, who lived in Brazil for many years, began their poetic experiences with a computer Atari in 1979 in Portugal, and, with a PC, since 1990. He is the pioneer of the videopoetry in his country in 1968. He published, in 1971, in *Álea e Vazio* (Álea and Emptiness), the poem "Tudo pode ser dito num poema" (Everything can be said in a poem), a permutation poem based in the computation language existent, which was generated later in a computer program by Pedro Barbosa (1996, p. 330-333). His infopoetries interfere in the resources of editors of images for poetic use and in programs, like Fractint, that generate fractal poetries starting from mathematical formulas.

Elson Fróes begins the distribution of gif poems (poem in format gif, in other words, format of exchange of graphs with good compression, very used in the Internet and in the web and that allows animation) in 1996, in CD-ROM and in BBS (Bulletin Board System), today in disuse. Those gif poems are part of the site *Pop box: Visual, Sound and Verse Poetry* -

¹⁰ During our researches, we fortunately printed the content of "Universal Verse", for this site is not available where it was since 1995 (see bibliographical reference).

<http://paginas.terra.com.br/arte/PopBox/home.htm> -, since 1997, in which the poet gathers innovations, poetries in verse, visual poetry, sound poetry, essays, interviews and translations of his authorship and of others. It is a research well elaborated to service poetry appreciators. In his visual poetry - <http://paginas.terra.com.br/arte/PopBox/visual.htm> - we have examples as "Orfeu", that it is metaphorically an anachronistic reading of poetry throughout the times:



Elson Fróes – Orpheus (FRÓES, 1998)

Augusto de Campos, in *Clip-poemas digitais* (Digital Clip-poems), of 1997 - <http://www2.uol.com.br/augustodecampos/clippoemas.htm> -, explores the computer resources to make digital poetry:

The possibility to give movement and sound to the poetic composition, in terms of digital animation, comes to give re-potentiality the proposals of the vanguard of 50s. (...) Since, in the beginning of the decade of 90, I could put in my hand a personal computer, emphasizing the materiality of the words and their interrelations with the no-verbal signs, they had to do everything with the computer. The first animations emerged from graphic and sound virtualities of pre-existent poems. Others were already suggested by the own vehicle and for the multiples resources of programs like Macromedia Director and Morph. (CAMPOS, 1997)

André Vallias, in *Antilogia laboríntica*¹¹ [poem in expansion] - www.refazenda.com.br/aleer/ -, of 1997, explores the diagram and the hypertextuality as dialogue form between image and words with texts in prose and in poetry. Starting from the three-dimensional letters "ALEER", each reader-operator can make the sense trajectory he / she wants. In the road, he/she will find poems, encyclopedic fragments, concepts and images.

Interpoesia (Interpoetry), 1997/1998, by Philadelpho Menezes (1960-2000) and Wilton Azevedo, is one of the first works in CD-ROM in Brazil and it is very know in the many countries. It is a group of interactive and hypermedia poeties.

Avelino of Araújo, in *Poesia Visual / Experimental* - www.avelinodearaujo.hpg.ig.com.br/index.htm -, of 1998, presents the visual poetry, initiated in 1979, and increases the computer resources in many poems.

Alexandre Venera dos Santos, more known as aLe, in *aCaRamBoLa Poesias* - <http://br.geocities.com/eeale/> -, of 1999/2000, elaborates a poetic exercise that goes by the verbal poetry, explores the visual resources of the word and also becomes sound poetry in the electronic medium. It is an electronic book composed of six notebooks of verbal and visual poetry, one more of visual poetry and another of sound poetry. With that work, we can understand the passages of the poetry from printed media to the electronic ones.

Ciber & Poemas (Cyber & Poems) - www.ciberpoesia.com.br/index2.htm -, by Sérgio Capparelli and Ana Claudia Gruszynski, 2000, offers creations of visual poetry and cyberpoetry destined to the children and teen-ager public. Those interactive cyberpoems are pioneering in that gender and they still didn't have other followers until today.

Arte on Line, from Rio de Janeiro, edited by Regina Celia Pinto, Marcelo Frazao and Paulo Villela, 2000, was an electronic magazine that collected poetry and electronic art in their four first numbers. On July 19, 2002, in its fifth edition, it became the *Museu do Essencial e do Além Disso* (Museum of the Essential and Beyond That), under the responsibility of Regina Célia Pinto -

¹¹ Vallias makes a change in the words "antologia" (anthology) and "labiríntica" (labyrinthical), and the tilde, in English, could be: Antilogy Laborinth.

www.artonline.arq.br -, enlarging the anthology which has already been international.

Created in 2001 and published in 2004, *Looppoesia: a escritura da mesmice* (Looppoetry: the writing of the sameness), by Wilton Azevedo, is a work in CD-ROM that uses the resources of the "loop" (in computer science, it means a program passage repeatedly executed in a defined number of times) to produce electronic poetry.

Among many productions by the artist and digital poet Joesér Alvarez, from Porto Velho, State of Rondonia, we can detach "Scalpoema" (Scalp Poem) - <http://geocities.yahoo.com.br/scalpoema/index.html> -, of 2001, which makes a rereading of the foreword of most famous *Memórias Póstumas de Braz Cubas* (Posthumous Memoirs of Braz Cubas), a novel by Machado de Assis (1839-1908), which inaugurated the Realism in Brazil in 1881, by creating an electronic poetry.

In "Reflexões no Vazio" (Reflections in the Emptiness) - [www.martha.com.br/poesias/reflexoes /](http://www.martha.com.br/poesias/reflexoes/) -, of 2001, Martha Carrer Cruz Gabriel makes use of the mouse to make the reader-operator to interact in a screen of black bottom and, like this, to literally discover the poem. A white ball accompanies the solitary navigator. Each movement of the mouse translates itself in discoveries, unveilings. In certain moments, some sounds and some words appear as "echo" and "emptiness."

Even with some of the characteristics of the digital media, Maria Irene Simões, in the city of Bauru, State of São Paulo, creates, on May 7th, 2001, the *Academia Virtual Brasileira de Letras* (Brazilian Virtual Academy of Letters) - www.avbl.com.br -, that gathers verbal, visual and electronic poetry verbal, visual and electronic, and diffuse electronic books of poetries.

Sítio da Imaginação (Site of Imagination) - <http://www.ciclope.art.br/pt/index.php> -, of 2002, is one of the a lot of works of Alvaro Andrade Garcia, a good videopoet, that explores the resources of the animated image in Flash, to create hypermedia poetry.

Artéria 8 (Artery 8), of 2003, edited by visual poet Omar Khouri and digital artist Fábio Oliveira Nunes - [www.arteria8.net /](http://www.arteria8.net/) - gathers 36 poets that present digital versions of visual poems of several times and the digital version

of a magazine of visual poetry that has been edited, since 1975, in several media before.

Cortex Revista de Poesia Digital (Cortex Digital Poetry Magazin), in CD_ROM format, edited by Lúcio Agra and Thiago Rodrigues, of 2003, makes a rereading of the visual poetries already existent and have the participation of poets like Villari Hermann, Ronaldo Azeredo (1937-2006), Lenora de Barros, João Bandeira, Chris Funkhouser, Arnaldo Antunes and André Vallias, among others.

Joesér Alvarez and Carlos Moreira elaborate *Mármore* (Marble), in 2003, and *Vestigiurbanos* (Urban Vestiges), 2004, works published in DVD and in the site - <http://br.geocities.com/coletivomadeirista/> -, which approach verbal and visual poetry and digital art, one of cultural activities of Movimento Madeirista (Wood Movement) - <http://www.corocoletivo.org/coletivomaderista/index.htm>, initiated in 1998, in Porto Velho, State of Rondonia.

Under Alexandre Venera dos Santos and Juliana Teodoro's coordination, *6X Juliana Teodoro Alexandre Venera*, in Blumenau, State of Santa Catarina, of 2006, is an interactive and hypermedia creative work, which counts on the six artists and poets' participation: Muriel Frega (Argentina), Douglas Zunino (Brazil), Reiner Strasser (Germany), Rosane M. Martins (Brazil), iraN (Brazil) and Clemente Padin (Uruguay). This hypermedia interactive electronic book of poetries is circulating in CD-ROM and available in the site: http://www.eale.pop.com.br/panpaz/0_6xTESTEon.htm.

Creative rereadings in the digital way are the predominant tonic in *6x JT AV* and they can be understood as collective, creative and collaborative works, because they look for interweaving meanings in the several dimensions of the electronic poetry: there is a dialogue of words, there is a visual interpretation at the level of a graphic design of good sensibility, occurs a quite suggestive hypertextuality, rises an animation that points new roads, and there is a sound interpretation with music, daily sounds, noises and human voice.

Many other poets could be included in these commented examples that intended to be brief. But it is also necessary to appreciate the national and international anthologies that gather that contemporary poetry, like "Poetry - New Media - Links of Imagination" (1995) - <http://vispo.com/misc/links.htm> -, PopBox (1998) - <http://paginas.terra.com.br/arte/PopBox/home.htm> -, Brazilian

Digital Art and Poetry on the Web (2000) - www.vispo.com/misc/BrazilianDigitalPoetry.htm -, Museum of the Essential and Beyond That (2002) - www.artonline.arq.br -, Idleness Digital Poetry (2005) - <http://www.ociocriativo.com.br/poesiadigital/index.htm> -, among others.

LIKE A CONCLUSION

So that it was possible to have a panoramic vision, we presented an anthology and a chronology of the electronic poetry in Brazil, followed by a comment on the essential procedure of each selected poetry and we left the readers the possibility of other interpretations and deepenings.

The union of the word and image in the printed medium (visual poetry) and of sound, animation, hypertextuality and interactivity in the electronic medium (electronic poetry) offers us a richness of approaches and interpretations.

We were imagining how rich it would be the analysis if we adopted, for instance, Roland Barthes's concepts in *S/Z*:

to star the text, separating, as it would make a small seismism, the significance blocks whose reading just captures the flat surface, inconspicuously welded by the flow of the sentences, the fluent speech of the narration, the great naturalness of the average language. The significant of support will be cut out in a sequence of short contiguous fragments, that here will call *lexias*, since they are units of reading (BARTHES, 1992, p. 47)

Analyzing the verbal and visual *lexias* and exploring the richness of sound significance and of movement potentially presented would take us to understand the roads of the visual printed poetry.

Trying to understand verbal, visual (animated and static ones) and sound *lexias*, together with the resources of the links that offer hypertextuality (the *lexias* choice producing different meanings) and allow an interactivity of the reader-operator with the electronic poetry in construction starting from the clicks, choices of metaphorical and metonymical *lexias*, that would bring us a plurality of meanings and it would show, with certainty, the richness of the electronic poetry.

They are those two of the many roads that we offered to whom appreciates electronic poetry.

NOTES

(1) This article is an unfolding of visual and electronic "Poetry in Brazil: some examples", paper presented in September 5th, 2003, in the II International Colloquy "The crisis of the poetry in Brazil, in France, in Europe and in other latitudes", event of the State University of Feira de Santana (Bahia, Brazil) and Université d'Artois (France).

(2) Teacher, writer and researcher, master and doctor in Communication and Semiotics at PUC SP, author of *Almeida Júnior através dos tempos* (Almeida Junior through the times) (1983), *Cores, forma, luz, movimento: a poesia de Cesário Verde* (Colors, form, light, movement: the poetry of Cesario Verde) (2002), *Ciência, arte e metáfora na poesia de Augusto dos Anjos* (Science, Art and Metaphor in the Poetry of Augusto dos Anjos) (2004) and *Poesia eletrônica: negociações com os processos digitais* (Electronic Poetry: Negotiations with Digital Processes) (to be published soon).

BIBLIOGRAPHY

AGRA, Lucio. E-poetry: a poesia do século XXI. *Galáxia: revista transdisciplinar de Comunicação, Semiótica, Cultura*, São Paulo, Educ / COS PUC, nº 2, p.219-226, 2001.

_____. E-poets on the State of their Electronic Art: A Current's Survey. *Currents in Electronic Literacy*, Texas, EUA, nº 5, outono 2001. Disponível em: <http://www.cwrl.utexas.edu/currents/fall01/survey/index.html>. Acesso em: 29 jul. 2004.

_____. *Ultramar*. São Paulo: edição autônoma, 1995-2002. CD-ROM. Versão para PC.

_____. *Agraryk: experimentos na precariedade digital*. São Paulo, 2002. Disponível em: <http://www.geocities.com/agrark/index.htm>. Acesso em: 3 nov. 2004.

_____. Situação atual da poesia eletrônica: uma visão pessoal. São Paulo, 2003. Disponível em: <http://www.geocities.com/agrark/palestra.htm>. Acesso em: 3 nov. 2004.

_____. *História da arte do século XX: idéias e movimentos*. São Paulo: Anhembi Morumbi. 2004. (Moda e Comunicação).

AGRA, Lucio; COHEN, Renato. *BUDETLIENE - Experimentos sobre o Futurismo e o Construtivismo*. São Paulo, 1997. Disponível em: www.pucsp.br/~cos-puc/budetlie/. Acesso em: 20 nov. 2000.

ANTONIO, Jorge Luiz. Infopoesia: a poesia no (do) computador. *Dimensão: Revista Internacional de Poesia*, Uberaba (MG), ano XIX, nº 28/29, p.277-280, 1999.

_____. *Brazilian Digital Art and Poetry on the Web*. Victoria, Canadá, nov. 2000. Disponível em: www.vispo.com/misc/BrazilianDigitalPoetry.htm

_____. O gênero poesia digital. *Revista Symposium: Ciências, Humanidades e Letras*, Recife, PE, Universidade Católica de Pernambuco, ano 5, nº 1, p. 65-81, jan. / jun. 2001.

_____. *Cores, forma, luz, movimento: a poesia de Cesário Verde*. São Paulo: Musa / FAPESP, 2002.

_____. As traduções na poesia digital. *Revista Mackenzie: Educação, Arte e História da Cultura*, SP, Universidade Presbiteriana Mackenzie, ano 2, nº 2, p.67-80, 2002a.

_____. Digital Poetry, *Slope 17*, EUA, fev. 2003. Disponível em: http://slope.org/archive/issue17/antonio_essay.html. Também disponível em: *Hermeneia Studis Literaris i Technologies Digitals*, Universitat Oberta de Catalunya, set. 2003: www.uoc.edu/in3/hermeneia/sala_de_lectura/jorge_luis_antonio_digital_poetry.htm

_____. Entrevista com Chris Funkhouser. *Concinnitas: Revista do Instituto de Artes da UERJ*, Rio de Janeiro, nº 6, ano 5, p. 68-81, jul. 2004.

_____. *Poesia eletrônica: negociações com os processos digitais*. São Paulo, 2005. 201p. Tese (Doutorado em Comunicação e Semiótica) – PEPG em Comunicação e Semiótica, PUC SP. Acompanha um cd-rom. São Paulo, 2005.

_____; KEPPLER, Roberto; PONTES, Hugo (Cur.). *Mostra Internacional de Poesia Visual e Eletrônica / International Exhibition of Visual and Electronic Poetry*. Itu, SP: Academia Ituana de Letras, 2005, 70p. Catálogo de exposição, 4 a 18 nov. 2005, Museu da Energia Núcleo de Itu.

BARBOSA, Pedro. *A Ciberliteratura: criação literária e computador*. Lisboa: Cosmos, 1996. (Cosmos Literatura 9).

BARTHES, Roland. *S/Z*. Tradução: Léa Novaes. Rio de Janeiro: Nova Fronteira, 1992.

CAMPOS, Augusto de. *Despoesia*. São Paulo: Perspectiva, 1994. (Signos 17).

_____. *Não: poemas*. São Paulo: Perspectiva, 2003. Acompanha um cd-rom.

CAMPOS, Roland de Azeredo. *Arteciência: afluência de signos co-moventes*. São Paulo: Perspectiva, 2003.

CAPPARELLI, Sérgio; GRUSZYNSKI, Ana Cláudia; KMOHAN, Gilberto. Poesia visual, hipertexto e ciberpoesia. *9º Encontro Anual da Associação Nacional de Programas de Pós-Graduação em Comunicação – COMPÓS*. Porto Alegre: PUC RS / FAMECOS, Grupo de Trabalho Comunicação e Sociedade Tecnológica, mai./jun. 2000. Cd-rom.

CASTRO, E. M. de Melo e. Infopoesia ou poesia informacional. *Diário de Lisboa*, Lisboa, p.4, 29 out. 1987.

_____. *Poética dos meios e arte high tech*. Lisboa: Vega, 1988.

_____. *O fim visual do século XX e outros textos críticos*. Org. Nádia Battella Gotlib. São Paulo: Edusp, 1993.

_____. *Visão Visual*. Rio de Janeiro: F. Alves, 1994.

_____. *Algoritmos: infopoemas*. São Paulo: Musa, 1998.

_____. (org.) - Novos infopoetas de São Paulo. *Dimensão: Revista Internacional de Poesia*, Uberaba, Instituto Triangulino de Cultura, ano XIX, nº 28/29, p.259-301, 1999.

_____. *Antologia efêmera: 1950-2000*. Rio de Janeiro: Lacerda, 2000.

_____. Entrevista com E. M. de Melo e Castro. *Versiones*, Portugal, nº 51, ago./set. 2003. Disponível em: www.geocities.com/versiones.geo/ver51entrevistamelo.htm. Entrevista concedida a Jorge Luiz Antonio e Maria Virgília Frota Guariglia. São Paulo: 20 mai. 2001. Transcrito em *Popbox*, São Paulo, jan. 2004, e disponível também em: <http://planeta.terra.com.br/arte/PopBox/emmc.htm>.

COELHO, João. Universo. In: KAC, Eduardo. *Luz e letra: ensaios de Arte, Literatura e Comunicação*. Rio de Janeiro: Contra Capa, 2004, p. 328.

DIMENSÃO: REVISTA INTERNACIONAL DE POESIA. Uberaba, MG, 1980-2000. Anual. Ed. Guido Bilharinho.

FUNKHOUSER, Christopher. *Toward a Literature Moving Outside Itself: The Beginnings of Hypermedia Poetry*. EUA, 1996. Disponível em: <http://web.njit.edu/~cfunk/web/inside.html>. Acesso em: 25 set. 1999.

_____. *Cybertext poetry: effects of digital media on the creation of poetic literature*. Albany, EUA, 1997. 229f. Tese (Doctor of Philosophy) – College of Arts & Sciences, Department of English, University at Albany, State University of New York.

_____. *Prehistoric Digital Poetry: An Archaeology of Forms*. Tuscaloosa, EUA: The University of Alabama Press, 2007.

KAC, Eduardo. *Pictogram Sonnet*. Rio de Janeiro, 1982. Disponível em: <http://www.ekac.org/mixed2.html>. Acesso em: 20 mar. 2000.

_____. *The Brazilian Art and Technology Experience: A Chronological List of Artistic Experiments with Technosciences in Brazil*. *Leonardo on-line*, USA, 1986. Disponível em: <http://mitpress2.mit.edu/e-journals/Leonardo/isast/spec.projects/brazilchron.html>. Acesso em 14 out. 2000.

_____. *Luz e letra: ensaios de arte, literatura e comunicação*. Rio de Janeiro: Contracapa.

KEPPLER, Roberto. A onda, trabalho de 84 [mensagem pessoal]. Mensagem recebida por jlantonio@uol.com.br em 10 ago. 2005.

MARQUES, Albertus. Poesia neoconcreta não objeto: poema elétrico. In: AMARAL, Aracy A. (Coord.). *Projeto construtivo brasileiro na arte: 1950-1962*. Rio de Janeiro: Museu de Arte Moderna; São Paulo: Pinacoteca do Estado, 1977, p.156.

_____. Contínuo permutacional. In: KAC, Eduardo. *Luz e letra: ensaios de arte, literatura e comunicação*. Rio de Janeiro: Contracapa, 2004, p. 326-327.

MENEZES, Philadelpho. Verso Universal. São Paulo, 1995. Disponível em: www.pucp.br/~phmenez/poema.htm e também em: www.officina8.com.br/philadelphomenezes. Acesso em 13 jul. 2001.

_____. Uma abordagem tipológica da poesia visual. In: _____ (Cur.) *I Mostra Internacional de Poesia Visual de São Paulo*. São Paulo: Prefeitura do Município de São Paulo / Secretaria Municipal de Cultura, 1988, p. 7-19.

_____. *Demolições* (ou Poemas Aritméticos): 1983-1986. São Paulo: Arte Pau-Brasil, 1988a.

_____. *Poética e visualidade: uma trajetória da poesia brasileira contemporânea*. Campinas: Ed. UNICAMP. 199a.

_____. Da poesia fonética à poesia sonora. In: _____ (Org.). *Poesia sonora: poéticas experimentais da voz no século XX*. São Paulo: Educ, 1992, p. 9-18.

_____. Poesia intersignos: poemas para analfabetos. *Livrespaço*. Santo André, SP, nº 8, p.19-20, out./nov. 1993.

_____. Experimentalismo vira rotina. *Folha de S. Paulo*, cad. Mais!, 30 mai. 1993. Transcrito em: *Ateliê Rose Seixas: Arte-Educação*. Disponível em: www.roseseixas.com.br/arteeducacao_32.htm. Acesso em: 25 jul. 2005.

_____. *A crise do passado: modernidade, vanguarda, metamodernidade*. São Paulo: Experimento, 1994.

_____. Poesia visual: reciclagem e inovação. *Imagens*, Campinas: Ed. Unicamp, p. 39-48, jan./abr. 1996.

_____. Interpoesia: definições, indefinições, antecedentes e virtuais conseqüências. In: MENEZES, Philadelpho; AZEVEDO, Wilton. *Interpoesia: poesia hipermídia interativa*. São Paulo: Universidade Presbiteriana Mackenzie / Estúdio de Poesia Experimental da PUC-SP / FAPESP, 1997/1998, cd-rom.

_____. Roteiro de leitura: *poesia concreta e visual*. São Paulo: Ática, 1998.

_____. Experimental poetics based on sound poetry. *Visible Language, Voicimage*, v. 35.1, Rhode Island, EUA, p. 64-75, 2001.

MENEZES, Philadelpho; AZEVEDO, Wilton. *Interpoesia: poesia hipermídia interativa*. São Paulo: Universidade Presbiteriana Mackenzie / Estúdio de Poesia Experimental da PUC-SP / FAPESP, 1997/1998, cd-rom.

_____. Interactive Poems: Intersign Perspective for Experimental Poetry. In: ROELEN, Nathalie; JEANNERET, Yves (dir.). *L'imaginaire de l'Écran / Screen Imaginary*. Amsterdam, Holanda ; New York, EUA: Rodopi, 2004, p. 199-206.

MOSCATI, Giorgio. Waldemar Cordeiro e o uso do computador: depoimento sobre uma experiência pioneira. *Arteônica*, São Paulo, 1993. Disponível em: www.visgrafimpa.br/Gallery/waldemar/moscati/moscati.htm. Acesso em: 8 nov. 2004.

PADIN, Clemente. A arte latino-americana de nosso tempo. Tradução: Philadelpho Menezes. In: _____ (Cur.) *I Mostra Internacional de Poesia Visual de São Paulo* São Paulo: Prefeitura do Município de São Paulo / Secretaria Municipal de Cultura, 1988, p.45-55.

SAMPAIO, João Antonio da Silva. Oroboros. *Revista A Cigarra*, Santo André (SP), nº 34, ano 17, p. 22-23, mai. 1999.

_____. Re: Pedido de informação [mensagem pessoal]. Santo André, SP. Mensagem recebida por jlantonio@uol.com.br em 01 ago. 2005.

SANTAELLA, Lucia. *Cultura das mídias*. São Paulo: Razão Social, 1992.

SANTOS, Alckmar Luiz dos. *Leituras de nós: ciberespaço e literatura*. São Paulo: Itaú Cultural, 2003. Acompanha um cd-rom.

SANTOS, Alckmar Luis dos; PRADO, Gilberto. *Poemas eletrônicos*. São Paulo: 1995-2000. Cd-rom.

SOUZA, Erthos Albino de. [Considero imensas as perspectivas de...]. In: CASTRO, E. M. de Melo e. Infopoesia ou poesia informacional. *Diário de Lisboa*, Lisboa, p. 4, 29 out. 1987.

_____. Le Tombeau de Mallarmé. In: MALLARMÉ, Stéphane. *Mallarmé*. Tradução e notas: Augusto de Campos, Décio Pignatari e Haroldo de Campos. São Paulo: Perspectiva, 1991, p. 197-215.

_____. [Obtive os gráficos...]. In: MALLARMÉ, Stéphane. *Mallarmé*. Trad. e notas: Augusto de Campos, Décio Pignatari e Haroldo de Campos. São Paulo: Perspectiva, 1991a, p. 13-14.

_____. O engenheiro da poesia. In: ÁVILA, Carlos. *Poesia pensada*. Rio de Janeiro: 7Letras, 2004, p. 60-74. Entrevista concedida a Carlos Ávila em 1983.

_____. Computer poetry, depoimento de Erthos Albino de Souza. In: KAC, Eduardo. *Luz e letra: ensaios de arte, literatura e comunicação*. Rio de Janeiro: Contracapa, 2004a, p. 325-326.

TOSIN, Giuliano (Juli Manzi). Infopoesia: um traçado histórico da poesia experimental feita no computador. In: BARBOSA, Ivan Santo (Org.). *Os sentidos da publicidade: estudos interdisciplinares*. São Paulo: Pioneira Tohmson Learning, 2005, p. 147-166.

