PO.EX

ESSAYS FROM PORTUGAL ON CYBERLITERATURE & INTERMEDIA

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PO.EX: AN INTRODUCTION

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Polemics

PO.EX: Essays from Portugal on Cyberliterature and Intermedia is a radical and polemical work.[1] It is polemical in displacing and re-situating accepted views and histories of electronic literature. It also displaces and re-situates view and histories of avant-garde writing from Portugal. It is radical in going to the roots of its topics, providing a systematic and persuasive account of cyberliterature and intermedia. For all this, it is a generous book. The polemics are aimed not to take apart but to construct a larger and more expansive field. The radical account of cyberliterature and intermedia is practical, and points to real and everyday ways of reading and writing.

PO.EX is a book against many things. This is a book *against Portugal*. Such a statement may be surprising in reference to a book of essays from Portugal. To be precise: this a book against a certain "imaginary Portugal." To understand this, the first question to ask: why Portugal? The second question to ask is: why do we ask this question? Why ask why? Is it a surprise to read essays from Portugal—of all places!—on intermedia and cybertext literature? Is this something unexpected? Perhaps so. Do we not think of Portugal as a minor player in contemporary literary criticism, and not even on the map of criticism of new media and electronic literature? Perhaps. We face various imaginary Portugals. These imaginings root Portugal in tradition, in the nostalgia of a former empire, in the backward gaze on classical works such as the *Lusiads*, in years of dictatorship, and in an emphasis on culture as tourism (port wine, beaches, castles). As with any imaginary, the stakes are competing investments and spectacles. The investment

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1 PO.EX stands for EXperimental POetry, an acronym created by E. M. de Melo e Castro in the 1980s for the exhibition PO.EX/80 at the National Gallery of Modern Art, Lisbon. This acronym was also used in the title of the book 'PO.EX: Theoretical Texts and Documents from the Portuguese Experimental Poetry', edited by Melo e Castro and Hatherly (1981). Experimental Poetry, on the other hand, was the title of a magazine with two issues. The first was organized by Herberto Helder and António Aragão (1964) and the second by Aragão, Helder and Melo e Castro (1966).

involves distributions of culture and capital; the spectacle involves the appearance that we recognize as "Portugal."

Against this imaginary Portugal, *PO.EX* presents another imaginary: it recognizes an intense practice and theory of intermedia and cybertext in a transatlantic context; it re-sets Portuguese literary tradition as an experimental, avantgarde incubator; and it insists on the political aspects of the poetics involved in Portuguese intermedia and cybertext. This new repertoire of images can now be recognized as a Portugal at the forefront of artistic and scholarly activity involving intermedia and cybertext. Of course, the PO.EX project—funded by the Portuguese government and the European Union as *PO.EX'70-80: Digital Archive of Portuguese Experimental Literature* and later under the title *PO.EX: Portuguese Experimental Poetry*—that led to this book of essays is the most obvious example, with its research into experimental literature providing a standard for other projects around the world. Coordinated by Rui Torres, the project PO.EX'70-80 (FCT Ref. PTDC/CLE-LLI/098270/2008) was itself a continuation of a previous project (FCT Ref. POCI/ELT/57686/2004) which studied Portuguese literary experimentalism of the 1960's and created an interactive CD-ROM with the most relevant magazines, catalogs, and publications of that group of poets. By extending it to the reproduction of Portuguese experimental poetry in the 1970's and 1980's, it now includes in its corpus visual and sound poetry, videopoetry, happenings, and cybernetic literature. Characterized by its openness and free access to resources, these projects have led to a digital archive with 4500 items of different media types of sources.

If this is a book against Portugal, it is also a book *against the USA*. Or rather, against a certain imaginary USA that is implied in and necessary to the constitution of the academic study of electronic literature as it exists today. This imaginary acts as a paradigm that in turn determines conditions of recognition and evaluation of all electronic literature, a paradigm projected back onto all previous works and ahead towards the future. If we are to believe N. Katherine Hayles in *Electronic Literature: New Horizons for the Literary*, a 2008 work that remains the only English-language scholarly monograph specifically on electronic literature, the field is recognizable by works and genres appearing in the 1980's. Moreover, these works are characterized by "linking structures." The examples she gives, both of works such as Michael Joyce's *Afternoon* and tools such as Storyspace, clearly set out the paradigm. Of course, Hayles knows better

than simply to reduce electronic literature in this way, and she carefully states that the varieties of electronic literature are diverse, but the paradigm remains in force: the forms, technologies, and historical moments—linking structures, hypertext, the 1980—are the exemplars against which all else are understood. The spatial, performative, and rhetorical claims for hypertext links remain the default definition of electronic literature. A glance at the Electronic Literature Organization's admirable collections, especially volume 1, shows the dominance of linking structures and hypertext-like works.

PO.EX opened the paradigm of electronic literature to a very different set of origins and exemplary structures. Most notably, cybertext is concerned not only with the jumps of linking but also with text as computation and procedure. Intermedial practices, especially as archaeologically set out in the commerce between Brazilian and Portuguese concrete poetry, activates the semiotics of character and image rather than the structures of juxtaposition implicit in hypertext. The point is not simply a new or alternative set of references but an open horizon where all forms of literary practice become material for electronic literature. With this break away from 1980's American hypertext, a broad vista becomes visible, including a different and more heterogeneous view of American electronic literature. The result is no longer a paradigm but a discontinuous textual relation across histories and forms, creating productive and poetic apparatuses from combinations such as the Baroque and the postmodern or the South American and the European. Once again, the polemic is meant as an act of generosity: "against America" means against an imperialism of electronic literature and for a cosmopolitan view. Electronic literature is the forum where subjects in the global network act out and struggle over their location and situation. Electronic literature must be global or it will not be.

Finally, this is a book *against the future directions* implied in the histories and geographies assumed in academic paradigms of electronic literature. It is too easy to fall into prognostications of electronic literature as the end of literature or as a new beginning. The results of such claims are provocative but nonsense: a basic premise of the Computing Literature book series, where *PO.EX* appears as the fourth volume, is the flexibility of literature as an anthropological fact without determinate ends or beginnings, but certainly with intense possibilities in digital media. In short: this is a book against eschatological views of electronic literature as the end times of literature, and even against the notion that electronic literature

begins or ends anything. Such views imply too much teleology, and see electronic literature purely as the unfolding of the possibilities of the apparatus. The rhetorical logic at work is *literalization*, i.e. taking literary works as the sum of their technical features. This logic is in the service of a technocratic culture where all writing practices fall under corporate and industrial management. Once again, Hayles offers an exemplary version of this literalization:

> the history of electronic literature is entwined with the evolution of digital computers as they shrank from the room-sized IBM 1401 machine on which I first learned to program (sporting all of 4K memory) to the networked machine on my desktop. (2)

From one machine to another, the entwined history follows an in-built program of computers as they develop. The sequence of apparatuses makes possible a sequence of literary forms. The term "electronic literature" is itself a literalization, "electronic" supplying the technical answer to the aesthetic questions of "literature." The essays in *PO.EX* are not fascinated by the apparatus.

Rather than an end game or fulfillment, literature in *PO.EX* is always and already beginning. Rather than technological literalization, with the inevitability of electronic literature being a symptomatic outcome of the hypertext-based World Wide Web, think of Gilles Deleuze and Felix Guattari's "machinic phylum," where diverse trajectories exist between experience, language, and materials. Literature includes the computer and the web, not the other way round.

Experiments

PO.EX presents a wide range of poetic experimentation. At times, it comes close to the aesthetics of the Concretism movement, but it moves beyond these frontiers to include sound and visual poetry, video, cybernetic, and performative practices. Situated within the international movement of concrete and visual poetry, experimental poets in Portugal frequently pointed to the importance of literary semiotics, communication, and information theories, ultimately situating poetic discourse and literary practices as forms of understanding the media environments and world that surrounds us.

The dismissal of experimental literature by official criticism, as well as its absence in the general curricula of literary studies, did not hinder dissemination and development of these diverse practises. Such ongoing growth and freedom is

reinforced by more recent digital incursions that remain rooted in concrete and experimental poetry. Emerging practices in e-poetry, cyberpoetry, and digital poetry led scholars to study the systemic affiliation of concrete poetics to digital media (Block and Torres 2007; Portela 2006; Simanowski 2004).

The form and materials used in *PO.EX* are eclectic, ranging from the verbal plasticity of non-verbal arts to object-poems and artists' books; from the use of handwriting and calligraphy to refined combinatorial techniques; and from photocopying and electrography to videopoetry. In all this, the turn to digital media is evident. Authors such as Ana Hatherly and E. M. de Melo e Castro sought a general theory of visual texts. Meanwhile, Pedro Barbosa was an outsider to established academic criticism who offered an important theorization of cybertext and cyberliterature. The major arguments of these authors are collected here for the first time, many appearing in their first English translations.

Equally important for Portuguese experimentalists was the recognition of a historical tradition of innovative poetry. Portuguese poets have often recovered, as well as re-written, historical texts that they considered "experimental." Hatherly achieved an important recuperation of tradition in her book, *A experiência do prodígio* (1983), gathering texts from the fifteenth century and beyond. In *A reinvenção da leitura*, she pursued a study of "image-texts, comprised of hieroglyphics, ideograms, cryptograms, diagrams, rebuses, mandalas, amulets, jewels, toys, gravestones, and even some monuments" (45). Both texts are included here in English for the first time.

A major strategy of renovation involves re-writing and re-textualizing "classic" poems such as those by Luís Vaz de Camões (c. 1524-1580). Examples include Herberto Helder's "'Transforma-se o amador na coisa amada,' com o seu" (1961), Hatherly's *Anagramático* (1970), Barbosa's cybernetic poetry programs "Texal" and "Permuta" (1975), and Melo e Castro's *Re-Camões* (1980). The relevance of re-evaluation for Portuguese poets is aptly summarized in the words of Hatherly: "if, for some, tradition exists and should be *imitated*, for others, if it exists it is to be reinvented" (*Poemografias*, 17).

The oppositions and juxtapositions we find in experimental poetry promote a general idea of the *ideogram* as a constitutive element of the poem's semantic organization. In turn, *repetition*—which is a key element of *PO.EX*—promotes a differential result through the combinatorial possibilities in which it engages the reader.

Experimental poets rarely presented themselves in Portugal as a group until the publication of *Poesia experimental: 1º Caderno antológico* (Aragão and Helder 1964), where the title was an explicit reference to the word *Caderno* (chapbook), and where the works were reproduced as individual leaflets. *Visopoemas* (1965), a collective exhibition of visual and kinetic poetry at the Gallery *Divulgação* in Lisbon, was an event that enabled poets to extend the materials to new and innovative frontiers, such as poems in the form of objects and posters. The exhibit attested to the transposition of concrete poetry to a new and broader vision.

The variety of intermedia approaches was confirmed and emphasized by the second issue of *Poesia experimental* (Aragão, Helder, and Melo e Castro, 1966). The inside cover shows a semi-pictorial text of Lewis Carroll, and the issue included guests from Brazil (Pedro Xisto, Haroldo de Campos, and Edgard Braga) and France (Pierre Garnier and Henri Chopin). The *Conferência-objecto* which took place at Gallery *Quadrante*, Lisbon, April 13, 1967, demonstrated the self-referential attitude mentioned above. This conference was programmed as a literary happening to present the magazine *Operação* (Melo e Castro 1967) and engaged in an explanation of the poems included in the magazine. Poets including Hatherly, Melo e Castro, and José-Alberto Marques, accompanied by experimental musician Jorge Peixinho, presented theories that included information theory, semiotics, and structuralism. *Operação* represented an effort to explain and to inform, but also to demystify archaic conceptions about the poem and poetry in general.

However important these early experiences proved, it was during the 1980s that the international dissemination of experimental poetry became a reality, mostly with the important activities of Fernando Aguiar (b. 1956). Significant milestones include the publication of a special issue of the French magazine *DOC(K)S* ("Portugal, Poesie Visuelle, La Performance," 1987) and the German anthology *Visuelle Poesie aus Portugal* (1990). In addition, significant exhibits and catalogues included *Mappe dell'Imaginario – Poesie Visuelle Portoghese* (Salerno 1987), *Concreta. Experimental. Visual – Poesia Portuguesa 1959-1989* (Palazzo Hercolani, Bologna), and at the Centro Cultural Português of the Fundação Calouste Gulbenkian (Paris 1989), all of which also opened spaces for international dissemination.

A new generation of Portuguese poets came along in the early 1980s. *Poemografias* (Aguiar and Pestana, 1985) was their point of departure. Important new authors include Antero de Alda (b. 1961), António Barros (b. 1953), António Dantas (b. 1954), Emerenciano (b. 1946), César Figueiredo (b. 1954), Armando

Macatrão (b. 1957), António Nelos (b. 1949), Silvestre Pestana (b. 1949), and Gabriel Rui Silva (b. 1956), as well as Fernando Aguiar.

Along with *Poemografias*, these experiences are well documented in Melo e Castro and Hatherly's *PO.EX – Textos e Documentos da Poesia Experimental Portuguesa* (published by Moraes Editores, Lisbon, 1981), which stands as the primary reference work for the field.

The texts translated for this volume continue this process of explanation, information, and demystification. *PO.EX: Essays from Portugal on Cyberliterature and Intermedia* primarily gathers and presents the crucial works of Melo e Castro, Barbosa, and Hatherly. No doubt these authors are not well-enough known outside of Portugal, and no doubt their thinking will rewrite and revise the global map of cyberliterature and intermedia.

Melo e Castro was a pioneer of videopoetry, which explored the grammatical and expressive possibilities of video, while simultaneously researching new codifications for creativity that manifest through writing and reading. Further, he coined and theorized the practice of "infopoetry," which produces texts with poetic quality through special machines. Melo e Castro considered a wide typology of experimental poetry: Visual poetry; Auditive poetry; Tactile poetry; Respiratory poetry; Linguistic poetry; Conceptual and mathematical poetry; Synesthesic poetry; Spatial poetry; and so on. His studies using numerology to understand combinatory poems led him to conceptualize and present historical antecedents that allow us today to better understand the archeology of poetic forms available for creativity and practice.

Barbosa started experimenting with cybernetic literature at the Laboratory of Automatic Calculation (LACA) at the Faculty of Sciences of the University of Porto in 1976, where he collaborated with the engineer Azevedo Machado to program his virtual texts. This joint effort resulted in the programs "Texal" and "Permuta." The code of both programs, written using Fortran and Algol, is available but unreadable. In the years that followed, Barbosa tried to update the software and improve the algorithm. The program "Sintext," published in 1996 in the electronic book *Teoria do Homem Sentado*, is a migration/translation of the early experiments into the programming language C++. This textual synthesizer was created in collaboration with engineer Abílio Cavalheiro. In 2000, in collaboration with engineer José Manuel Torres, Barbosa further developed "Sintext" into "Motor Textual." In the process, he migrated the textual generator to a new

version entitled "Sintext-W," designed in accordance with the thinking of newer computers and the Internet. This version was developed using the Java programming language.

Finally, Hatherly is a prominent figure in scholarship on experimental poetics—as noted above—as well as a poet in her own right. As she states in one of her articles, what drove her from literary and artistic experimentation towards the historical investigation of "visual texts" was "the discovery of a surprising technical resemblance between some of my compositions from the sixties and some of the Medieval and Baroque creations I encountered there for the first time" (13). This archaeological work allowed her to argue for a convergence between the basic principles of "experimentalism" and electronic literature. Hatherly showed that historical texts determined by combinatory processes, such as labyrinths and anagrams, share the use of a "program" with works of electronic literature.

The critical rereading of tradition is also important for the development of the specific poetics developed in the creative works of Melo e Castro, Hatherly, and Barbosa. The term "plagiotropy," which led to the expression "plagiotropic movement," was coined by the poet and essayist Haroldo de Campos, theorized by Maria dos Prazeres Gomes, and used by Hatherly and Torres, among others. It was used to associate translation with tradition, and to promote the metamorphosis of texts and the transformation of ancient forms and experimentation.

In this context of re-writing and re-reading as critical and reflexive practices, the last three articles included in this book point out the future of *PO.EX*, by showing how experimental poetry has naturally led to digital poetry.

Pedro Reis addresses these same processes of reinvention, arguing that they end up revitalizing the verbal dimension of the word itself, as well as enriching its capacity of producing meaning. He explains that these digital re-writings of "classic" experimental poems allow us to identify, in digital and electronic literature, composition methods and techniques previously explored by experimentalists, such as atomization, juxtaposition, agglutination, interpenetration, redistribution, etc.

Rui Torres explains how the work *Húmus* by Herberto Helder (1967), which is based on a previous novel of Raul Brandão with the same title, goes beyond the simple intertextual suggestion of a text, instead transforming and reviving it. Borrowing from Haroldo de Campos and Maria dos Prazeres Gomes' concept of plagiotropia (in *Outrora Agora*, 1993), Torres created a computer-pro-

grammed version of *Húmus* that tries to achieve the "critical-ludic-transgressive attitude" (22) that Gomes refers, therefore promoting "a critical rereading of tradition" (20). Creatively exploring the plagiotropic relationships between Helder and Brandão's works, Torres engages in his own plagiotropic experiment in the creation of a third work, drawing upon its predecessors as databases, and allowing readers to re-read tradition and conceptualize the links between its historical forbears.

Finally, Manuel Portela analyzes digital re-readings ("Releituras") of experimental poems contained in the digital archive PO.EX, addressing electronic remediations of texts of E. M. de Melo e Castro, Herberto Helder, José-Alberto Marques, Salette Tavares, and António Aragão, conducted by Rui Torres and Pedro Reis. Portela concludes that these digital recreations not only redefine the source texts by means of specific programming codes, but also express the complex linguistic and graphical coding of the printed page itself.

We can clearly see that one aspect of this poetics was "reading as critical reading." Hatherly argued that experimental poets had "a critical apparatus" —semiotics, structuralism, information theory—which was important for the reception and explanation of their innovative works. Hatherly also argued for the avant-garde's political role, including a fundamental resistance to commodification and an opposition to the stratified structures of "power."

These theories led to a view of the poem as an open text, both formally and semantically. The critical role was therefore a part in the process of creating texts that must be executed by the reader. The author was merely the proponent of models to generate texts. In turn, as Barbosa has argued, the "virtual text" was a work existing in multiple forms, a latent text that holds the genetic program of works to be generated. The computer merely intervenes as a "complexity telescope," a "synthesizer of texts" implying the notion of automatic generation: a creative program that interposes the machine upon the traditional relationship between author and reader.

As a result, literature's communicational circuit was altered, both from the side of creation and from the side of reception: as Pedro Barbosa has mentioned, the act of reading at last becomes interactive, involving the participation of the reader in the co-creation of the final text according to a simultaneous process of writing-reading or *wreading* (*escrileitura*).

If this book is against many things, what is it for? What is *PO.EX*? The PO refers to "Portuguese" and the EX to "Experimental" literature, but the parts of the title could be read otherwise. Perhaps they can be replaced with Poetic and Experience? All the readings are simultaneous: poetry, Portuguese, experience, experimentation—and many other possible expressions—all in full operation. Once again, Deleuze and Guattari write: "experimentation is always that which is in the process of coming about—the new, remarkable, and interesting that replace the appearance of truth and are more demanding than it is" (111). *PO.EX*, in all its readings, is a book of essays for experimentation. Here are your instructions: take this as a handbook and begin experimenting poetically.

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