

FROM THE BAROQUE TO THE 21ST CENTURY

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WARSAW 2008

MORE THAN JUST A TEXT: INTRO

A CyberText Yearbook *Ergodic Histories* published in 2006 was devoted to printed literary works which thanks to certain qualities can be considered ergodic. After examining instances of German and Catalan literature, authors of studies published in this collection indicated that first text-machines appeared in the period of baroque. This is the time when experimenting with the literary form begins. The unusual composition of texts, which seems extravagant even according to today's standards, forces the reader to pay attention, to chose the beginning and the end of the text and – most importantly – adds another level of meaning. It is an invitation to play, interact and act, which allows the text to become more than just a reading matter. Its form *does not only consider a literary text a symbolic expression of a person's subjectivity but also considered a text as determined by the level of programming and processing of signs.* (Shäfer 2006, 5).

Even though attempts to overcome the passivity of text started at the end of the 17th century were frequently unpopular, they are being made until today and their youngest embodiment is e-literature. This article is intended as a synthetic description of different stages in the Polish literature that led from baroque poetry to contemporary digital literature. Such a definition of the subject-matter suggests that it consists of results of searching for proto-hypertexts in Polish literature. This is indeed the case, however the category of proto-hypertext is a little imprecise. One might follow Łukasz Jeżyk's claim voiced in an essay entitled *Widmo hipertekstu. Skarga nawigującego (A phantom of hypertext. The navigator's complaint, 2006)*: we might very carefully [...] consider as proto-hypertexts printed literary works whose authors struggled with formal restrictions and we might assume that a hypothetical offer of multimedialization would meet their approval. However such an attitude might force some attempts to look for harbingers of holodeck (Murray 1997), which is also noticed by Jeżyk: mechanisms of onirique literature are easily visualised by hypertext poetic (Jeżyk 1(3)/2006).

Thus the presentation of works considered as proto-hypertexts should undoubtedly be made from the perspective of ergodic literature. In *Cybertext: Perspectives on Ergodic Literature* Aspen Aarseth introduces the understanding of cybertext as a unit superior to hypertexts. Cybertexts perceived as machines generating multiple statements are not limited to literary works, and definitely not to electronic texts – they embrace computer games and other forms of both ergodic and non-ergodic literature. The former requires a non-trivial effort to traverse the text. In a classical literary work (non-ergodic) such as *The Odyssey* the reader is required only to turn the pages and to interpret the text. In Aarseth's grasp of the problem every text is treated as a machine. A machine might work better or worse and it's effectiveness is decided by a traversal function dependant on seven variables (Aarseth 1997).

This article is just an outline and therefore I've decided to indicate only the most important characteristics of numerous ergodic texts. Generally all the printed texts mentioned in this work share the following variables of the traversal function:

• Dynamics: Static

• Determinability: Determinate

Transience: Intransient *Perspective*: Impersonal

• Access: Random

• Linking: Without links

• User function: interpretative and explorative.

Only in several instances there are changes here. Radoław Nowakowski's *Nieposkładana teoria sztuki* (*Noncompleted Theory of Art, 1994--->*) is an indeterminate text, and access to it is controlled. The user is also responsible for configuring the whole text (see 30).

In permutative works, such as carmen infinitum dating back to the period of baroque (see p.7), instead of the static function defining the dynamics there appears intratextonic dynamic IDT and the text is also not determinate — out of the same number of textons a different number of scriptons might be generated. In *Pałuba* by Karol Irzykowski there are links (see 22) that are not found in other works.

The ergodic character of the examples mentioned is usually determined by the explorative function of the user. As we know it is also the primary indicator of hypertexts. However it does not mean that we deal here with hypertexts – although in both cases the literary works are ergodic.

IMAGE POEMS, POEMS IN SPACE: POETRY

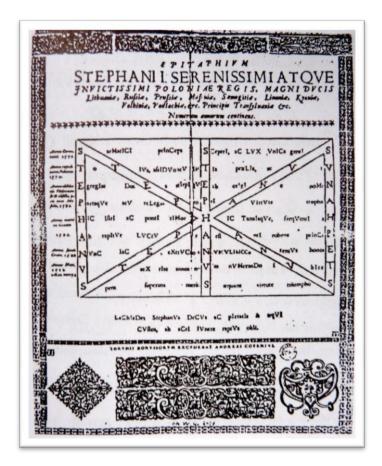
BAROQUE TEXT-MACHINES

Formal experiments in the 17th and 18th century literature include on the one hand the employment of the tradition of word-games, such as rebuses, palindromes, anagrams etc., all of which date back to antiquity. On the other hand there are text-machines, meaning such texts that after being programmed are able to generate new texts. Piotr Rypson – in the anthology *Piramidy*słońca*labirynty* (*Pyramids*Suns*Labyrinths*) and his pioneering work *Obraz słowa. Historia poezji wizualnej.* (*The Word's Image: The History of Visual Poetry*) – enumerates and examines unconventional literary works. Even though Rypson is an expert on atypical forms of text and book, in his works he deals with liberature (I will dwell on that concept later in the article) rather than investigates whether a text demands (or does not demand) non-trivial effort of the reader. This is probably the reason why examples of the Polish baroque poetry were not perceived as ergodic works until today.

It is worth mentioning that if we compare examples presented in *Ergodic Histories* with those given by Rypson we might observe a common European tradition for visual poetry. The similarity of various literary works was a result of fashion but also of using the same Latin books on poetry and rhetoric in which creating elaborate poetry was one of practice exercises.

VISUAL POETRY

Acrostics, cancrines and abecerariuses were known as early as in the Renaissance (in the works of Jan Kochanowski, Zofia Oleśnicka, Grzegorz z Sambora and others) however they did not assume the form of visual or elaborate poetry.



Urlich Szober (probably), 1588

The author of *Piramidy*słońca*labirynty* (*Pyramids*Suns*Labyrinths*) maintains that the oldest visual poem discovered on the Polish territory was is the anonymous (probably Urlich Szober) epitaph to Stefan Batory written in 1588 in Toruń. It uses the form of a mesostic to create the king's name: STEPHANUS, which is arranged into the shape of X (the first letter of the word Christos). The first Polish example of visual poetry is considered to be a poem by Stanisław Niegoszewski (after 1584) included into a very interesting copperplate. The poem uses acrostics and forms derived from them and a palindromic distich. In the words of Piotr Rypson: *the lists of acrostics, incorporated into the main text, generated an autonomous meaning and still constituted the content of the literary work* (Rypson 2002, 16). Apart from supplying the reader with another level of meaning such additional texts would also form various figures (for instance a cross, a circle or even a ship). Thanks to such tricks the poem accumulated even more meanings and generally widened its scope.

The first collection of visual literary works was *Technopaeginum sacropoeticum* (1598) by Mikołaj Lubomirski prepared ten years after Niegoszewski's poem. On one of the pages we discover a grid poem in the shape of crosses. Lubomirski not only collected poems known

from other collections, but also wrote such poems himself (for instance a poem in the shape of a goblet). In his collection – entitled *Hymenaeus*, *vel carmen nuptiale* (1598) – one poem is especially interesting from the *ergodic* perspective, namely a permutable work *Optatianum* referring to the XXVth song of Optatianus Porfirius. Lubomirski himself recommended reading it in thousand different ways.

One should also remember about *Wirydarz poetycki* (*The Poetic Viridarium*) by Jakub Teodor Trębecki (1675). In the first volume of the collection there are several fascinating acrostics, echo poems and poems in the shape of a circle. In the later edition of the volume by Aleksander Brükner (1910) the poems mentioned are devoid of their visual properties.

EXAMPLES OF THE POLISH VISUAL AND PERMUTABLE POETRY

For the purposes of this analysis I selected from Rypson's extensive study (Rypson 2002, 259-337) several most interesting examples of poems that work as text-machines.

THE LABYRINTH

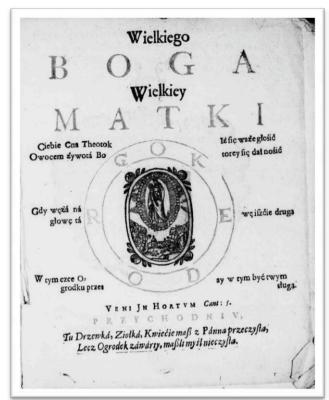
A poem by Andrzej Gołdonowski written in 1628 and added to *Poema historicum de S. Paulo* collection is the oldest labyrinth poem. One of the sentences: *A Paulo Pluto decit victus arena* might be read in every direction on the condition that we start at the centre of a square in which the text is set in a labyrinth-like manner. The movement from the centre to the border symbolises leaving the *arena*, on which the hermit fought the Satan. (Rypson 2002, 88)

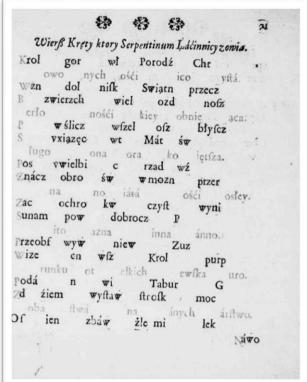
THE GARDEN

Another literary work worth mentioning in this context is *Wielkiego Boga Wielkiej Matki ogródek* (*Great God's Great Mother's Garden, 1681*) by Wojciech Waśniowski, which inspired baroque poets in Russia and Ukraine (!). Most importantly the name of the garden is used here in the sense of heaven, virydarius (*heavenly court*).

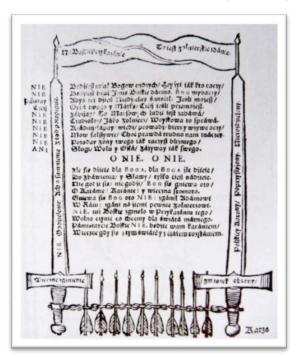
A theological character of the entire poem (the superior object of attention is the Mother of God) brings us closer to god's paradise, but also the structure of the poem is to a certain extent a copy of a monastic virydarius. There are chapters designed as quarters for Herbs, Flowers and Trees. The abundance of techniques borrowed from elaborate poetry is impressive. From the very title page the reader is forced to make non-trivial efforts as the word *garden* is set in a circle (or letter O), and the poetic introduction is ambiguous. Letters printed in colour when combined create the word *Mary*. All the poems refer to the works by Hraban the Moor and Venantius Fortunatus.

The collection consists of poems in the shape of a star, a circle, an *echo* poem (we repeat the last syllable of every verse – the echo – which adds a new meaning to the entire poem), a snake poem (a *serpentinum*: some verses – for instance the first and the third one – are linked by a common verse, for instance the second one), and even a permutable *carmen quadratum*.





Title page of Great God's Great Mother's Garden (1681) and Serpentinum by Wojciech Waśniowski.



Cuirass Hardened for an Ancient Knight, 1663?

AH AMBIGUOUS CUIRASS

In an anonymous *Kirysie hartownym starożytnego rycerza* (*Cuirass Hardened for an Ancient Knight, 1663?*) – where visual poetry serves satirical and political purposes – a dual structure of one of the poems is particularly interesting. The set of rules for knights is completed with

the images of two swords, each on every side of the text. The swords cut some of the words out. As a result we have the following versions¹:

Nie będziesz miał Bogów cudzych, Hej żyj jak kto raczy.

Nie będziesz brał Imię Pańskie darmo, Bóg wybaczy,

[etc.]

or

będziesz miał Bogów cudzych, Hej żyj jak kto raczy,

będziesz brał Imię Pańskie darmo, Bóg wybaczy, [etc.]

You shall have no other gods, hey live against all the odds

You shall not make wrongful use of the name of your Lord,

you will be excused [etc.]

or

You shall have other Gods, hey live against all the odds

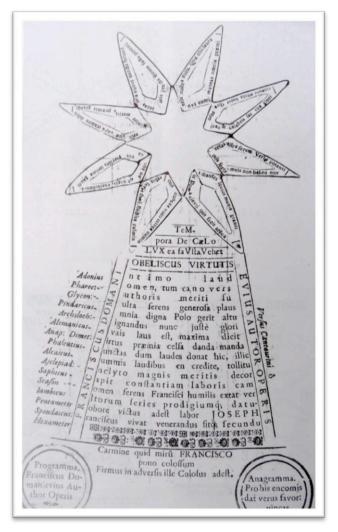
You shall make wrongful use of the name of your Lord, you will be excused [etc.]

It is a very simple trick, but in order to notice it the reader has to apply a little of Aarseth's non-trivial effort and thus has an opportunity to construct two different variants of reading.

A POEM OF MIRACULOUS MEASURE

17th century saw the popularity of academic prints awarded to graduates of universities of that time. They were a kind of tribute cards praising the students' achievements and merit. A special place in these cards was frequently reserved for elaborate poetry, especially in the form of emblems, obelisks and pyramids or objects highlighting qualities of the person that was going to receive it.

A volume of poems by Franiszek Domaniewski, *Porta Triumphalis* (1725), is particularly interesting on the visual and structural level. It consists of twenty one poems devoted to laureates and six tribute poems to the author himself (sic!). Ignacy Kanty Herka wrote a poem in the shape of an obelisk with a star. It has a very elaborate composition: the inside angles – constituting also the beginnings and endings of verses – substitute letters U and V which were supposed to be there, and the corners correspond with letter A and



Kanty Herka, Porta Triumphalis (1725)

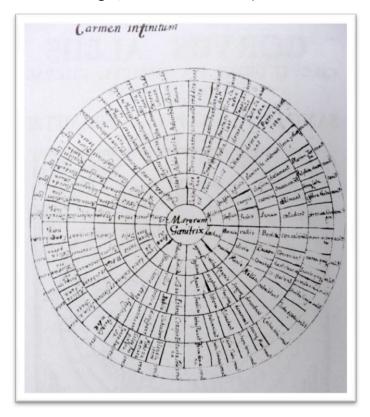
link opposite verses. Except for the acrostic in the obelisk the poem applies longer poetic metre which results in gradual lengthening of verses. There is also a didactic quality – the metre used is described next to the verses. The poem is modestly called carmina mirum (Rypson 2002, 116).

A REBUS

Elaborate poetry frequently makes use of puzzles which the reader has to solve in order to understand the proper (or additional) meaning of a poem. Musical and graphic rebuses were the most popular. For instance: instead of a syllable *cor* (cordis) a poet would place a heart, just like in one of the poems in *Facies Franciae floribus floridi* collection (1737) edited by Marian Sikorski or in *Lucina ortis sub sole echico* volume (1736) by Franiszek of Saint Casimir, a fellow brother of Sikorski. Religious works used the symbol of cross, which substituted the Latin *crux* (Rypson 2002, 136).

PERMUTABLE MACHINES

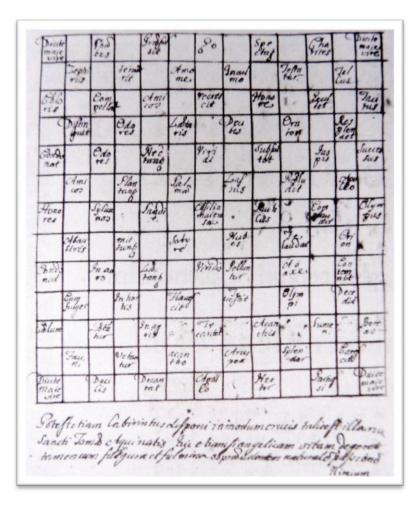
The earliest and at the same time the most basic examples of permutation are rhetorical figures: the chiasmus, the inversion (transgressio). However its most ancient and serious exemplification is *Carmen XXV* (4th century) by Optatianus Porfirius. All the words from the first five columns can be moved at random. Only the third word in every verse is stable – it guarantees the effect, namely that every permutation (1,62 billion of possibilities) will produce a hexameter. In the period of Baroque this kind of permutation will be found in a proteus verse (for instance Scaliger, Quirinus Kuhlmann).



Ksawery Prolewicz, Carmen infinitum (1732)

Rypson's research does not register many examples of Polish baroque combinatorial poetry. We will not find such elaborate machines as *Fünffacher Denckring der teutschen Sprache* (1651) by Georg Philipp Harsdörffer. However there is a poem entitled *Carmen infinitum* (1732) included in a Jesuit volume of courses on poetry and rhetoric collected by Ksawery Prolewicz. The poem is composed as seven concentrically arranged circles, each enclosing a part of the text. The starting point is always in the centre of the circle and the sentence placed there: *The sadness bearer*. Thanks to its combinatorial formula the poem resembles an incessant litany. In his commentary the author claimed that to be able to read all the possible variants one should live at least three thousand years – which means eight million poems (Rypson 2002, 131).

Another interesting example of space-line poem which creates an image out of text and uses permutation is Bazyli Rudymowicz's work (+1672). Latin nouns are set in two concentrically arranged circles and complete the word *Ecce* placed in the middle of the textual labyrinth. The image of the Host is the result. Placing words in the nominative case in one of the circles and those in the possessive case (which are also palindromes, the first letter is the last one) in the other circle enables the poem to become a complex invocation, a litany: *Ecce panis singulorum, Ecce Victor angelorum* etc. In both cases one might see Aarseth's textons placed like those placed on disks and scriptons revealed thanks to the work done by a machine/an algorithm of action.



Carmen quadratum by Władysław Simandi (1719)

Another volume is *Corvi Albi Eremitici Nova Musa Innconcinna* by Władysław Simandi (1719). In the collection prepared by this Pauline father a poem *Stichodilecticon* appears in the form of *carmen quadratum*, there is also a circular combinatorial poem and a system based on circular forms that enabled to generate the poem's metre. A poem in the shape of a board can also be found in Waśniowski's collection (Rypson 2002, 133).

AVANT-GARDE GAMES: THE INTER WAR PERIOD

After the period of baroque first attempts to overcome the passivity of paper in Poland date from the beginning of the 20th century. After one hundred and twenty three years of foreign bondage poetry was finally freed from patriotic and tyrtean duties. The most recognized and most accurate example is a poem *Herostrates* (1920) by Jan Lechoń, in which the author says: *And in the spring let me see spring, not Poland.* Regaining independence was connected with building a modern national unit out of a country neglected and divided due to Partitions. Such a situation facilitated the process of transplanting European avant-garde movements to the Polish environment.

Twelve years after Marinetti's first manifesto was announced in Poland in Jednodńuwka futurystuw. Mańifesty futuryzmu polskiego wydańe nadzwyczajne na całą Żeczpospolitą Polską (Futurist Leaflet: Manifestos of Polish futurism. Spesial Edision for the Hole Republik of Poland, the name was in Poland written phonetically, disrespecting the rules of spelling: [...]), subsequent manifestos of the Polish Futurism were published. They were largely influenced by the Italian and Russian Futurism, but also by Formism, an artistic movement originated in Poland. Authors whose poems and performances were published in the Leaflet were: Bruno Jasieński, Stanisław Młodożeniec², Tytus Czyżewski (from Cracow) and Anatol Stern and Aleksander Wat (from Warsaw).

Futurist's programme proclaimed the necessity to break off with tradition: The civilisation and culture are sicknesses that should be considered as garbage, we choose simplicity, coarseness, cheerfulness... (Stern i Wat 1920). It worshipped the machine: [...]³ (Jasieński 1921); We love electric machines and would never hurt them (Czyżewski, Od maszyny do zwierząt 1921).

ELECTRIC VISIONS BY TYTUS CZYŻEWSKIZ FUTURISM

In his poems and paintings Tytus Czyżewski observed all the Futurist guidelines. His collection of poems *Zielone oko. Poezje formistyczne. Elektryczne wizje* (*Green Eye. Formist Poetry. Electric Visions*) published in 1920 disregards the formal and traditional page composition, which is evident from the very title page, and implements the idea of *words in liberty* proclaimed in Marinetti's second manifesto. The middle part of the title (*Formist Poetry*) letters are slanting, which together with an electric title, application of different typefaces and bold font was supposed to produce a more mechanical poem. However despite introducing solutions experimental for those times only some of Czyżewski's works have ergodic characteristics. These are the poems he not only written, but also designed graphically.

W najzawilszej materii

W ciemnych zwojach ślimaka Wszystko można zrozumieć I wszystko skojarzyć

> Jak deszcze które płyną Jak chmury które miną Myśli mkną i giną I puste słowa słyną Jak deszcze które płyną Jak śmierć nie ginie i trwo

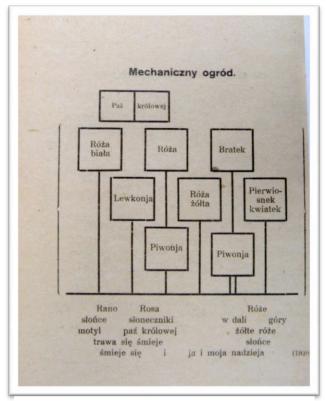
Ślmak który usiadł na źdźble nikłej trawy [...}

Tytus Czyżewski's Knowing (1920)

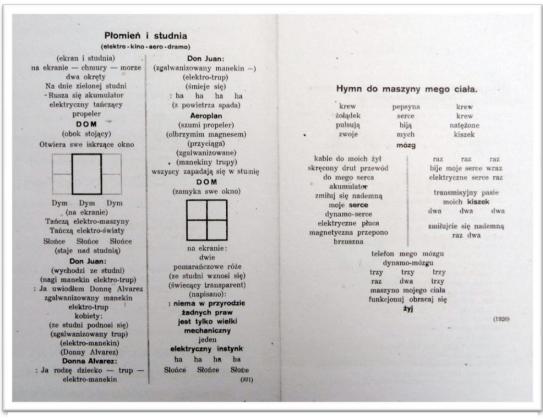
One of such works is *Poznanie* (*Knowing*) from the previously mentioned collection. In the poem one of the stanzas is entirely rotated at right angle and we might start reading either from the left or from the right. The extreme verse on the right-hand side is: *Jak deszcze, które płyną* (*Like rains that flow*), which might explain the rotation of the fragment as its composition actually imitates streams of rain. However it is difficult to say whether it is a correct reading direction.

Another interesting example is a more graphic poem *Machaniczny ogród* (*Mechanical Garden, 1921*) published in a periodical *Formiści*. Words are inscribed into squares, which – as one might assume from texts: *White Rose, Primula the flower, Matthiola* etc. – are to symbolize flowers and a butterfly (*The Swallowtail*): only here the squares have no stems. The possible order of reading might be dictated by a vertical composition of *flowers*, but it does not lead to any sensible meaning. The content is in two parallel stanzas, in which there are spaced-out words. The entire work is arranged in such a way as to imitate flowers, stems or something else. The reader can also read⁴ the text in many ways: verse after verse, from the top to the bottom observing numerous branches of meaning. The two stanzas, either virtual or designed by the author, are combined with a conjunction *and* placed between them.

Another collection *Noc-dzień* (*Night-day, 1922*) introduces a more evident possibility of parallel readings. A poem *Płomień i studnia* (*Fire and a Well*) is composed as if it was a very short drama act, with characters, didascalia and even something which might be treated as a primitive storyboard (window open, window closed). The poem should be read as one entity – it starts on the left column and continues to the right one, but the arrangement suggest we can see two parallel histories. A similar trick is used in *Hymn do maszyny mego ciała* (*A Hymn to the Machine of My Body*).



Mechanical Garden, (1921) by Tytus Czyżewki

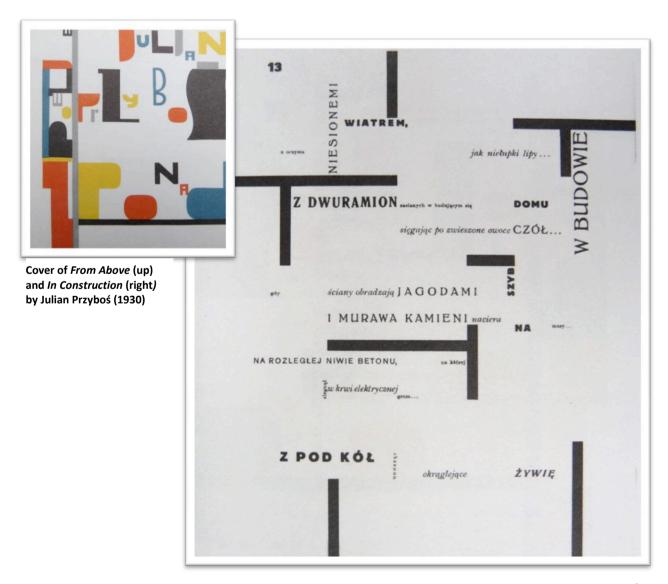


Fire and a Well (left) and A Hymn to the Machine of My Body (1922) by Tytus Czyżewki

Visual elements also appear in other literary works by Czyżewski (*Wąż 'The Snake'*, *Orfeusz i Euridika 'Orpheus and Euridice'*, 1922 or *Hamlet w piwnicy 'Hamlet in the Basement'*, 1923), however they usually function as an addition, a trifle and does not encourage the reader to make any explorative decisions.

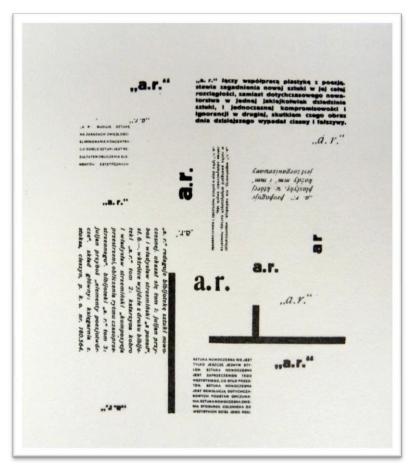
A VISUAL MARRIAGEZ JULIAN PRZYBOŚ

After Futurism there was another Polish avant-garde movement was Awangarda Krakowska, active from 1922 to 1927, which brought together artists publishing in a periodical *Zwrotnica* (*The Switch*). Tadeusz Peiper was the founder and the first theoretician of the group. I have no space in this article to discuss Peiper's programme. In short in might be described with the use of expressions such as: *3M* meaning an interest in the municipal, the mass and the machine; *poetry does not give names, it gives nicknames* – in the sense that it uses equivalents to express feelings; the most important notion in poetry is a *blooming composition*, which means that *the composition consists of subsequent overlapping and convincing units of meaning which start from the simplest, the most conventional and roceed to more ambitious and detailed ones etc (Hutnikiewicz 1988, 221).*



Przyboś is a master of employing the guidelines of Awangarda Krakowska. Out of those requirements he created a theory of poetry as a new language system. The new poetry was supposed to damage $tworzydła^5$, in other words fixed patterns, linguistic stereotypes, or – in short – the language of traditional literature. This process of damaging was supposed to lie in using the minimal number of words in order to achieve the maximum strength of the content⁶. This aim was to be reached thanks to $międzysłowie^7$ expressed with disproportionally piled-up metaphors.

After the period of Awangarda Krakowska, in 1929, Przyboś joined the artistic *group a.r.* (revolutionary artists or real avant-garde), which gathered artists that admitted to some degree of *constructivist orientation* (Gazda 2000, 27). There were both visual artists (W. Strzemiński, K. Kobro⁸, H.Stażewski) and poets (J. Brzękowski, J. Przyboś). In 1930 the first publication of *Bibliteka a.r.* (*a.r. Library*) appears. It was *Z ponad* (*From Above*) by Przyboś, in which a single-page *Komunikat Grupy a.r. nr 1* (*Announcement of a.r. Group no. 1*) was added. Only in those two elements in the poet's output we might find some ergodic qualities.



Announcement of a.r. Group no. 1 (1930)

The graphic concept of the collection was prepared by Władysław Strzemiński together with Katarzyna Kobro (two poems) according to his idea of functionalism in applied arts. Fonts prepared by Strzemiński were used on the title page, each page's layout was organized in

agreement with his theory of visual composition, and the same applied to the construction of a grid of every page.

Each of twenty four verses published in the collection employs similar visual means: fonts of different size and measure, large horizontal and vertical lines filling the space and placed on grid structure. However only in several poems the system proposed by Strzemiński encourages the reader to a non-trivial reading behaviour. The most trivial trick is to force the reader to turn the page, like in a poem *Ziemniaki* (*Potatoes*) which is rotated at right angle. A similar trick, for one of the verses, is used in several other poems (*Deszcz*, 'The Rain', Noc, 'The Night', Gwiazdy 'The Stars'). Except for The Stars the reader is not required to make a decision where to start reading and how to continue.

There are two very interesting works in *From Above* collection, even though they apply very similar solutions, namely: a poem *W budowie* (*In Construction*) and a single-page leaflet added to the book. In the poem there are plenty of words rotated at right angle, which is supposed to imitate the process of creating, to resemble a scaffolding on a construction site. The structure is so complex that the title almost disappears because it can be connected with several verses placed next to it. The manifesto has an even more explorative character. In order to read its guidelines we have to turn it around many times.

Although in *Announcement of a.r. Group* one could find the following words: *a.r. links visual art with poetry. It poses the problems of new art in its entirety, instead of (which has been the case so far) innovation in one art form combined with compromise and ignorance in another, as early as in 1933 Przyboś described in a letter his collaboration with designers in the following way: <i>weird, destructive typographical composition attracts the reader's attention instead of focusing it on poetry, it causes frustration and irritation* (Satalecka 2004). The question can be posed: whether the ergodic character of a mutual creative effort of a writer and a designer is planned and accepted by the author or whether it is produced by a designer's or a programmist's interpretation?

SPREADING THE WORD: CONCRETE POETRY AND LINGUISTIC POETRY FROM THE 50s OF THE XXTH CENTURY UNTIL TODAY

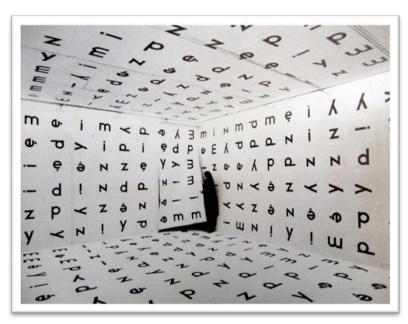
Literary works that might be interesting from the ergodic perspective return in the 60s of the XXth century. Artists turn for inspiration to the ideas of the prewar avant-garde. The modified and verified claims of avant-garde representatives can be traced especially in concrete poetry and in linguistic poetry. Concrete poets followed in the steps of the futurists, dadaists and – primarily – lettrists. Linguistic poets, who demistified possibilities of language as a system, were deeply influenced by the use of metaphors in Awangarda Krakowska, and especially by its pope Peiper and its master Przyboś. Polish linguistic poets – and also those who continued their work – the poets of the *Nowa Fala* (*New Wave, 1968-1976*) generation – experimented with words also because the official language in the communist Poland was censored and such poetic efforts gave them an opportunity to reveal

mechanisms used by the propaganda to take over the language. Today linguistic poetry is alive in neolinguists' poetry (Jarosław Lipszyc, Maria Cyranowicz, Joanna Mueller). Lipszyc's collection *Mnemotechniki* (*Mnemonics, 2008*), published in Wikisource, is especially interesting. The form of the poems' publication is not accidental: Lipszyc is a postproducer⁹ who remixes entries from Polish Wikipedia, he even supplies the readers with links to the particular entries. Out of partial definitions he creates a poem of the new quality.

POJĘCIOKSZTAŁTY¹⁰

The beginning of concrete poetry worldwide dates back to the 50s. In Poland first attempts at concrete poetry appeared at the end of the 60s. One of the most significant concrete poets is Stanisław Dróżdż (along with M. Grześczak, M. Bocian, L. Szaruga, W. Sztukowski); from 1967 he was also a pioneer of the entire poetic movement.

Dróżdż defines his works as 'pojęciokształty'. These are, in his own words, substantial and formal, self-analysing reality codifiers integrating science and art, poetry and fine arts. Undoubtedly his works are extremelly minimalist, black and white, they complete the space between signs, where form is determined by the content, and the content by the form. Traditional poetry describes objects. Concrete poetry communicates in images. (Gorządek 2004)



Between (1977) by Stanisław Dróżdż

The most recognized work by Dróżdż, or even his masterpiece, is *Między* (*Between*, 1977). In a white cuboid room all the walls, the floor and the ceiling are covered with letters constituting the word 'between' but they are not arranged properly. We are inside a database of textons, exactly *between* them, in some realizations of installations one might actually walk in *between* them. The title and the form equip the reader with an algorithm of interpretations.

A similar mechanism is applied in *Klepsydra* (*Sandglass, 1967*) which refers in its form to wing-shaped poems by Simias of Rhodes (300 BC) or to *Naehern*, a poem by Gerhard Ruehm

of Wiener Gruppe – a poetic movement much closer to concrete poets. The words will be/were are separated with is which cannot be read without turning the sandglass upside down.



Sandglass (1967) by Stanisław Dróżdż

Mniej więcej (*More or Less, 1977*) by Wojciech Sztukowski is another work worth mentioning. In some sense it is similar to *Between*. Using the contrast between the fonts it creates out of letters *o*, *k* and *t* an optical illusion of a three-dimentional hexagonal form.

Wojciech Sztukowski's More or Less (1977)

The set of textons arranged clockwise gives the word 'około' (around, more or less) or 'koło' or 'oko' (circle, eye). The artist plays with the reader in many ways. The title 'more or less' is

an indication, it has the same meaning as 'około' (around). If the reader manages to discover a connection between the word 'oko' (eye) with the phrase 'na oko' (more or less) he realizes that with a modest repertory of means Sztukowski produces a non-minimalistic text-machine. The meaning of the text is enveloped in the hexagonal space, the scripton is written 'na około' (around; and again a reference to the phrase 'na oko') the virtual hexagon.

The literary works mentioned are self-explanatory. Concrete poetry uses textons on the level of atoms. Here textons are frequently single letters or even missing letters¹¹, and the scriptons are usually referring to the minimal meaningful unit: a word, a concept. Grasping it is definately a non-trivial effort. In this case the ergodic character is not solely a matter of stimulating a semiotic sequence by the reader, but also of discovering a single meaning, and more precisely its non-descriptive, practical definition.

The title of the work is like an encyclopedic entry, which is defined by its form. Those two elements constitute a built-in quasi manual, which subtly suggests a manner to interpret and to explore this non-encyclopedic, but practical definition. What it means to be *between*, what it means to be *around* – the answers are shown in the texts.

IN THE SPACE OF CALQUES, COPIES AND ANGLES

Tymoteusz Karpowicz is called the last great Polish modernist and obviously he is the most important representative of linguistic poetry, in Poland represented also by M. Białoszewski, Z. Bieńkowski, E. Balcerzan and W. Wirpsza and later applied by poets connected with *New Wave*¹².

Karpowicz published his first poem in 1948 and from the very start, with every collection of poetry, he proved that he is a poetic experimenter. In his poems the influence of the Polish pre-war avant-garde movements is evident. Karpowicz was especially devoted to Awangarda Krakowska. Linguistic experiments of Karpowicz are according to Zbigniew Jarosiński: attempts to create poetry that would provoke deepest semantic possibilities of language, that would be an abiogenesis of meanings independent from the common logic (Jarosiński 1996).

Beginning with *Odwrócone światło* (*Back-to-Front Light*, 1972) his collections are interesting also from the ergodic perspective. Jacek Trznadel claimed that thanks to his avant-garde intuitions Karpowicz tried to create a stable world out of yet unformed devices; he tried to excel Przyboś (Trznadel 2006, 134). What does it actually mean?

Back-to-Front Light is a 424-pages long collection of poems which constitute one entity and reflect the formal structure of the New Testament. Each spread is organized in a similar manner. Poetry is on the rights side: a single-verse laconic *original* or one to six *logical calques*. The left column is devoted to *artistic copy*, which is sometimes extended with a *postsript*.

Rozwiązywanie przestrzeni. Poemat polifoniczny (Dissolving Space – A Polyphonic Poem) was published only seventeen years later. The structure of the text is very similar, but the author is even more experimental.

oryginał (original) huragan nieobecności

kopia artystyczna (artistic copy)

kalka logiczna (logical calque)

WSTĘP DO PUSTYNI

Na tej pustyni
jakież bogactwo nieobecności
nic już nie ma do dodania
do swego sześcianu
wyobcowania z każdego obrazu
fatamorgana z powłóczystym
brakiem karawany właśnie
Opuszcza od początku świata
tuż za przyszłym śladem
nie narodzony flet beduina

NAZWA BEZPRZEDMIOTOWA dojący kozę na odludziu nie ma widoku pożycza od siebie brzegi Skopca na pole i w swoim skupieniu mija nawyk naoczny że trzeba się widzieć

PS

l'exactitude n'est pas la vérité maluje matisse na mankiecie pogody niepotrzebne zdziwienie Boga i oko na wynos koloru spotyka własne wejście lecz bokiem go omija

kalka logiczna

PRZEDMIOT NOMINACYJNY brak podstaw dla miejsca składa je z niestałych nawyków przenoszenia byle tylko było co przenosić

Tymoteusz Karpowicz's Back-to-Front Light¹³

The equivalent of the original is an *alpha* poem (on the left), which is linked with six texts being its trigonometric functions: *sine alpha*, *cosine alpha*, *tangent alpha*, *contangent alpha*, *secant alpha* and *consecant alpha* (on the right). The poem *Secret Dimention*¹⁴ is *placed* on both sides of such a spread. Different functions of the *alpha* angle are signed with names or posts of their authors, for instance Wittgenstein II, Stalin II, Yoric II, Catherine the Great II15, the Head of the National Farming, Echo etc.

Karpowicz's most complicated collection of poetry is *Słoje zadrzewne* (*Three Rings*, 1999), a considerably large volume published in the author's lifetime. It is subtitled *Selected poems*, but the selection comes from the author and is highly unusual. Retaining the biblical structure (only in parts II-X) Karpowicz remixes poems from his previous collections. Their arrangement is similar to that already applied in *Back-to-Front Light*. For instance a poem *Kamienna muzyka* (*Stone Music*), from the collection of the same title (1958), is placed like an *artistic calque* on the left side. The right side starts with an equivalent of a single-verse original which assumes here the form of a title of the poem – *Stone Music*. Below there are not *calques* but *parallaxes* (which should be understood as distortions of the originals). In

this case the parallaxas are two poems from *Dissolving Space* collection, but it is not specified whether these are *alpha* angles or poems defined as *secret dimention*. Interestingly *parallaxes* are numbered from 1 to 132 throughout the entire volume counting 333 pages.

Jan Potkański compares the structure of Back-to-Front Light to a medieval motet one of the oldest forms of musical polyphony. The most popular motets (12th to 14th century) used three voices, and each of them used a different text (Potkański 2006, 164). However it is difficult to imagine reading simultaneously texts from the spreads of Karpowicz's collections mentioned in this article. The composition resembles pages from medieval codexes¹⁶, in which the main text is accompanied with voices placed next to the text. The reader has to make a choice where he is going to start reading the text spread on two pages. The exploration of the text is not straight-forward because the original is placed on the right, which can be the first complication when you read from left to right. In Three Rings there is also a continuity of parallaxas, which might in theory be read as a sequence or a hypertext web of references to prior literary works. Just like in concrete poetry the understanding of a textual machine's actions depends on the manual inscribed in the titles. One might risk a statement that the original refers (links) the reader to copies and calques which constitute its variations. In the similar manner we should interpret alpha poems and their functions – in other words transformations – with a commentary: secret dimension added just like a note on the marigin. To use Aarseth's categories: it is not sufficient to describe the poem with the explorative function of the reader, which in this case is not very strong.

FOLLOWING WEIRD BOOKS: FICTION

All theoreticians analysing hypertext, or more widely and more precisely – the ergodic literature, indicate the same set of literary works as the past heritage of literature of that kind. In the *fictional* canon of ergodic texts there are always Laurence Stern's *Tristram Shandy (1759)*, James Joyce's *Finnegans Wake* (1939) , Vladimir Nabokov's *Pale Fire* (1962), Marc Saporta's *Composition No. 1* (1962), Julio Cortázar's *Rayuela* (1963, engl. *Hopscotch*), B.S. Johnson's *The Unfortunates* (1969), *Il castello dei destini incrociati* (1973, engl. *The Castle of Crossed Destinies*), Georges Perec's *La vie mode d'emploi* (1978, engl. *Life A User's Manual*) (1978), Milorad Pavić's *Hazarski rečnik* (1984, engl. *The Dictionary of the Khazars*) etc.

Interestingly the canon is the same whether given by Polish or foreign scholars. It seems obvious – this is exactly the reason why we have the canon. But does it mean that Polish literary achievements lack even basic ergodic properties?

Happily this is not the case. In order to prove it I include in this article a short index of *other books*. Hopefully it will enable theoreticians, especially Polish ones, to expand the list of ergodic classic mentioned previously with some of the Polish finest.

FOREST OF THINGS: SILVA RERUM (SYLWA)

Sylwa is a Polish name of special books called silva rerum (other names are Nihil et omnia, Varia, Miscellanea, Vorago rerum, Farrago or *Torba dworska 'court bag'*). They were extremely popular, especially among noble families and country-houses from the 16th to the 18th century, both in the Republic of Poland and throughout Europe. Handwritten they were usually family diaries in which – according to Zygmunt Gloger – one could find *entries on current events, political speeches, wedding and funeral speeches, diplomatic notes, letters, declarations, political satire and libel, diary-entries of war marches, statistical information, dates of historical and family events, funds, financial documents, poems, songs, weather phenomena, disasters, head-stones engravings etc (Gloger 1896, 407).*



Ambroży Grabowski's Silva-rerum or anything about anything (1864).

Silvae were completed throughout generations and thus could assume quite enormous proportions. Most common size is from 500 to 800 pages, although there were some exceptional examples – like *Silva rerum curiositatum* (2nd half of the 17th century) mentioned by Gloger – which counted 1754 pages. Most of such home chronicles were printed, for instance *Silva rerum kasztelana smoleńskiego* (*Silva Rerum by the Lord of Smoleńsk, 1743*), by Kazimierz Niesiołowski or *Pamiętnik sandomierski* (*Diary from Sandomierz, 1829*). Unfortunately major collections of silva rerum perished during World War II (Niedźwiedź 2001).

The structure of silvae is interesting from the ergodic perspective. Firstly the notes were usually made by several members of the family, and it frequently happened that to already existing notes someone would add their own writings – just like voices on the margin. Secondly next to a handwritten text there were numerous printed texts added, photographs, invitations, obituaries etc, for instance in Ambroży Grabowski's *Silva-rerum, czyli cokolwiek o czemkolwiek* (*Silva-rerum or anything about anything, 1864*). In this way a unique,

unconventional publication was produced. The fact that it embraced characteristics of a contemporary Internet-based projects such as *collaborative writing* equips silva rerum with textonic dynamics¹⁷ – every reading might enlarge the number of textons¹⁸.

THE UNREALISED PROJECT: REKOPIS ZNALEZIONY SARAGOSSIE

Rękopis znaleziony Saragossie (The Manuscript Found in Saragossa, 1810)¹⁹ by Jan Potocki is the first novel written by a Polish author that encourages the reader to play with the text. The construction of the novel is linear, there is no place for variations. However within the sixty six chapters, each describing one day, there are thirty six stories corresponding with each other on the level of the plot. And even though the reader is led straight ahead, the additional threads find their way into the main storyline of the text and interrupt it, only to be interrupted by another thread and come back later. The form of a story within story makes the reading difficult, encourages the reader to skip some of the threads in order to follow the one started earlier. Such a *leap* guarantees the continuity of the plot but at the same time it deprives the reader of the opportunity to encounter the characters and learn about their fate — in the order *programmed* by Potocki. The author was well aware of reading difficulties posed by *The Manuscript*. He demonstrates his awareness through the words of his characters and also suggests how to deal with those problems — the project he proposes is very similar to a contemporary hypertext.

As soon as he left, Velasquez spoke and said, 'I have tried in vain to concentrate all my attention on the gypsy chief's words but I am unable to discover any coherence whatsoever in them. I do not know who is speaking and who is listening. Sometimes the Marques de Val Florida is telling the story of his life to his daughter, sometimes it is she who is relating it to the gypsy chief, who in turns is repeating it to us. It is a veritable labyrinth. I had always thought that novels and other works of that kind should be written in several columns like chronological tables.'

'You are right,' said Rebecca 'One would find in one column, for example, the story of the Marquesa de Val Florida being unfaithful to her husband, in the other the effects this event had on him. That would no doubt clarify the story.'

That's not what I mean,' replied Velasquez. 'Take the example of the Duke of Sidonia, whose character I am about to find out about although I have already seen him laid out dead on his bier. Wouldn't it be better to start with the war in Portugal? I could then find in the second column Dr Sangre Moreno thinking about the medical arts, and so would not be surprised by his odd behaviour.'

'Yes, indeed,' interrupted Rebecca. 'Continual surprises don't keep one's interest in the story alive. One can never foresee what will happen subsequently.' (Potocki, 316)

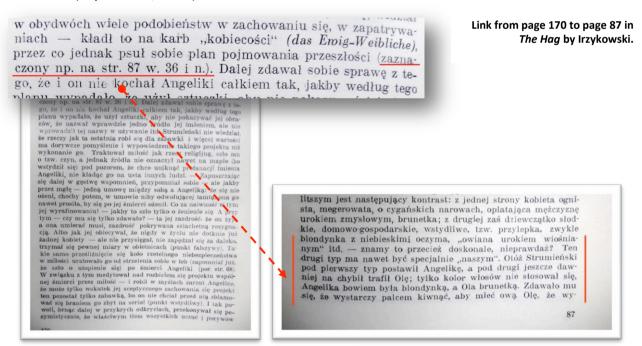
While reading Potocki's novel the reader has to make an effort to untangle the complex set of parallel stories and create out of them a single coherent story. It is difficult however to

claim that the effort is non-trivial and that the reader is required to act otherwise than to interpret. If the project quoted was realised, we would undoubtedly be dealing with an example of ergodic literature.

VISIBLE AND INVISIBLE BOOKS: PAŁUBA

Another instance of an unconventional text is *Pałuba* (*The Hag*²⁰) by Karol Irzykowski published in the modernist period in Polish arts (1903). However – as indicated by Kazimierz Wyka in an introduction to the second edition of the book (1948) – the novel diverges markedly from the literary fashion of that time, it is even called *post-modernist* (Wyka 1949, XI) The novel was ahead of its time. Theoreticians treat it frequently as a presentation of ideas similar to Sigmund Freud's psychoanalysis or Alfred Adler's individual psychology, which is even more interesting if we know that the author did not encounter any of them.

From the ergodic perspective it is the construction of the text that matters. *The Hag* is a collection of several books. Five of them are *overt* and constitute parts of the novel: *Dreams of Maria Dunin. The palimpsest, The Hag. A Biographical Study, Notes on The Hag, Explanation of 'Dreams of Maria Dunin'* and *The Rampart of 'The Hag'. A Biographical Study* embraces some non-overt books. Wyka distinguishes the following elements: the novel itself (the study), the quasi novel about writing a novel and the analytical commentary from the author (Wyka 1949, XXXII).



It is possible to read the novel from the beginning to the end without the commentaries which — due to their extensive size — had to be placed outside of the main text not to interrupt the flow of reading. They are however an essential part of the novel. It is a pity that there are no links in the text to respective commentaries, which makes the navigation

difficult. In the already mentioned introduction to the second edition of the novel Wyka suggests that the footnotes should be modified and the places in which the reader should break away should be indicated in the main text. Interestingly, one commentary might refer to several different parts of the main text. In *A Biographical Study* there are some physical indicators leading to verses on different pages of the novel and thus encouraging the reader to explore the text and decide about the order of reading. We might observe it in the following sentence: [...] he thought the reason was femininity (das Erwig-Weibliche), but doing so he was spoiling his plan of understanding the past (indicated for instance on p.87 v.36 and next). (Irzykowski 1949, 170)

TWO RHIZOMATIC SENTENCES: BRAMY RAJU

Bramy raju, (Gates to Paradise, 1960) by Jerzy Andrzejewski seems to be devoid of any structural ergodic properties. However this novel about the 13th century children's crusade to the Holy Sepulchre should be mentioned when investigating text-machines.

The entire novel consists of two sentences. The first one, counting 25 165 words (in Polish), is a sequence of entangled and intertwined confessions of the young crusaders. In the second one there are only four words: *They walked all night*.

Thanks to the novel's unconventional structure and the constant movement of the crusade, the children and their words *Gates to Paradise* were mentioned by Gilles Deleuze and Félix Gauttari in their famous introduction to *A Thousand Plateaus* (Le millieau plateux) as the most beautiful example of a perfect rhizome-text, a nomadic text along with *The Children's Crusade* (Le croisade des enfants) by Marcel Schwob and *The Dislocation* (La dislocation) by Armand Farrachi dealing with the fourth crusade. (Deleuze i Gauttari 1988, 236-237)

The rhizome has no beginning and no end. It is always in between things. It is a semi-being – in Andrzejewski's sentence/story one fragment is repeated nine times: ...objawił mi Bóg wszechmogący, aby wobec bezdusznej ślepoty królów, książąt i rycerzy dzieci chrześcijańskie okazały łaskę i miłosierdzie dla miasta Jerozolimy... (...he mighty God spoke to me to make sure that in the age of vicious blindness of kings, princes and knights Christian children will show mercy and kindness towards the city of Jerusalem...)

This recurring and never altered phrase is something we would call a link when applying the perspective of the hypertext. But in fact it is a rhizome, in which every point might be connected with other points. There is no centre; one might start reading in any of those points, end there or begin anew. The repeated phrase changes its semantic status depending on the text that surrounds it.

If we moved this sentence to some digital medium and randomly displayed some further excerpts taken out from the sentence/story, we might construct not only a rhizomatic machine, but also a cybertext machine. There still remain two problems. Firstly we, and not the author, were the programmists. And secondly: what should we make of the phrase *They walked all night*?

BEFORE BLOG AND WIKE MIAZGA

In 1960, the year that Bramy raju (Gates to Paradise) was published, Andrzejewski begins to contemplate creating a monographic biography of a fictional artist, a contemporary Polish writer (Synoradzka-Demadre, XXXII). He was directly inspired by Doctor Faustus by Thomas Mann which he just finished reading. Two years later Andrzej Wajda, a director, asks the author of Popiół idiament (Ashes and Diamonds) to write a film script to a contemporary version of Stanisław Wyspiański's drama Wesele (The Wedding, 1910)²¹. The writer and the director however have both different ideas and in the end Andrzejewski incorporates them into his novel Miazga (The Pulp) – a novel that was described by on of the critics as complex and perverse fiction machine (Błoński 1993).

Is it indeed a machine? First of all the reader might choose between several editions of the novel. In 1966²² the first excerpt of *The Pulp* along with the presentation of the further development of the plot was published in a literary magazine *Twórczość*. Andrzejewski intended both to describe Poland of that time and refer to tradition (*The Wedding*), but also to add two alternative plot versions. The idea to create chapters demonstrating *how it could have been* and *how it really was* and the simultaneous presentation of fictitious facts, the collage of weather reports, excerpts from newspapers, travel guides etc. reveal the ergodic character of the novel.

The final version of the text was published in 1970 and differs considerably from *The Pulp* dated 1966. The time of action and the characters' fate alter – they saw March 1968 and are well-aware of the events of Prague spring. The change affects the construction of the novel. A new text is born on the basis of the old one, it becomes a palimpsest²³.

The three parts of the initial text are absorbed by a new textual being – an author's diary – and divided with a chapter formed as an index, a lexicon of characters involved in the novel's action. Some of the entries resemble *who's who* format or encyclopaedic entries. Some of them are even longer and resemble short stories.

The author assumed that the reader would leap from the diary or the main text to the name index in order to understand who is who in the novel. He does not however add any physical links. There are also no indicators in the index itself, in places where facts presented in one entry might lead to other entries. The reader is thus encouraged to explore but is not overtly helped to do so. The freedom to select what we are reading is the only prerogative given to the reader by the author.

The Pulp of 1970 consists of a diary, a lexicon and the main part of the text with two plot versions. A non-trivial effort of the reader can also stand for selecting and *combining* the ingredients served by Andrzejewski. The Pulp might probably take the form of an author's diary, a blog, completed with a certain kind of a lexicon of people based on the wiki mechanism

A TAPESTRY TEXT: ARW

Poems of Stanisław Czycz are considered examples of tapestry poetry (Marx, Rozmowa ze Stanisławem Czyczem 1980, 16), woven with words or – it is perhaps more accurate to say –

with *voices*. The same claim applies to the author's fictional works, the most famous of which is *Arw*. This small novel, counting only forty four pages, was started – just like *The Pulp* – as a screenplay contracted by Andrzej Wajda in 1975. It is possible that the intention to write *for the film* might influence the construction of the text.



Arw—tapestry text by Stanisław Czycz (1980)

The first part of the novel is a polyphonic poem introduced with a manual, designed to facilitate the process of reading. It takes the form of two parallel columns of text with a variable width, which in the recent edition $(2007)^{24}$ were additionally highlighted with colour and special marks in the text. The columns differentiate between the voices of the tapestry poem woven in this non-trivial manner and introduce different time perspectives within one voice (for instance, statements from the Stalinist era and those referring to the time of the prose poem's action). Fragments of musical notation of *Cantata on Stalin* and indicators to titles of Andrzej Wróblewski's paintings also appear in the text. *Arw* is actually a prose poem about the artist, as shows the title – an anagram of his surname's first letters.

The reader is obliged to decide about the order in which he is going to read particular narrative sequences. They are all parallel stories referring to the area of exhibition where the action takes place. The same points (subjects) appear in all the sequences and bind them together.

In the further part of the text, mostly fictional, the form is less complex. The only structural device used by the author is dividing the text into two parallel columns, each presenting another character's fate. Again we have to decide which path to follow first. The reader explores the text, but the text's structure does not supply him with various versions. It is mostly because the alternative meaning is not hidden and it is extremely difficult to ignore it. The entire concept however is an interesting ergodic machine.

LIBERATURE INSTEAD OF ERGODIC LITERATURE

In 1999 Zenon Fajfer suggested in a Polish literary magazine *Dekada literacka* that an annex should be added to a dictionary of literary terms. In the existing literary discourse the main categories are fiction, poetry and drama. Fajfer claims that it is necessary now to include liberture.

The need to create yet another literary category results from the observation that more and more unconventional literary works appear throughout the world; literary works that reject the fixed set of rules accepting only linear forms of text construction. Fajfer gives examples of works such as *Tristram Shandy*, *A Roll of the Dice Will Never Abolish Chance (Un coup de dés jamais n'abolira le hasard)*, *Hundred Thousand Billion Poems (Cent mille milliards de poèmes*) and the novels by Marek Danielewski. It can be stated that liberature is interested in similar *objects* to those coming under the ergodic scrutiny. However Fajfer's suggestion is only partly parallel to Aarseth's project.

Liberature is absolute literature, where the text and the space of a book are inseparable, where the book no longer consists of a literary work, but itself is an artistic project (Fajfer 1999/2005). In texts treated as liberature the architecture and the visual level of the text is as important as the plot or the style.

The term *liberature* is a contamination of Latin *liber* (a book)²⁵ with the word literature and points directly to what is equally important as the text itself. Radek Nowakowski, the author of liberature (liberiter?), demonstartes it in even more straightforward manner in

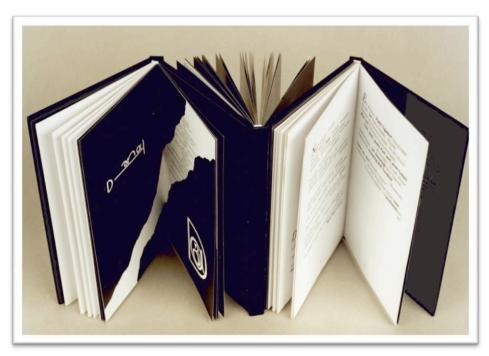
Traktat kartkograficzny, czyli rzecz o liberaturze (Treatise on Pageograph or a question of liberature, 2002)²⁶: wyraz/obraz/na raz (scripture/spectre/specture). The English term specture was coined by Nowakowski (Nowakowski, Treatise on Pageography or a question of liberature 2002-2008). However the physical side of the book is not linked here only to particular realizations of artistic projects. Not always artistic books can be treated as liberature. Also the visual side is not a constitutive element of liberature and a liberary work might do well without it.

Many examples of liberature can be classified as ergodic literary works and many examples of ergodic literature can be classified as liberature. However it is not always the case. Much more frequently liberature is ergodic than vice versa. For instance Cortazar's *Hopscotch* is not ergodic liberature because the physical side of the book is not that important.

Fajfer finds hyperfiction problematic because it is not strictly liberary: the hypertext is practically devoid of space qualities and dematerialized (Fajfer 2003, -4) and there is no notion of physical status of the book. On the other hand Nowakowski applies hypertext when he thinks he is unable to realize some projects on paper or when the realization, even is possible, would be limited to a single complicated literary work. Therefore the author of the term *liberature* admits that there might be a need to create a sub-category or a separate case for e-liberature. The name e-liberature was first proposed by Mariusz Pisarski.

LIBERATURE IN USE

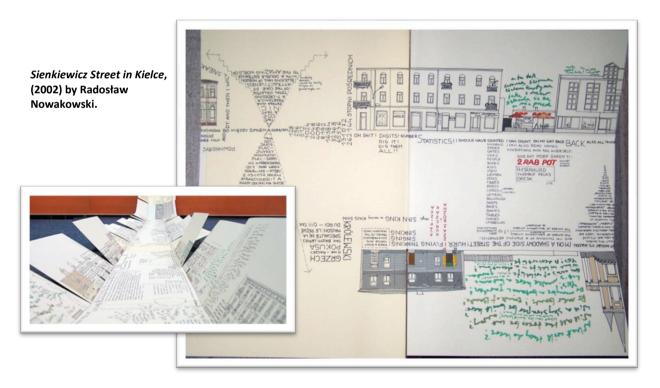
In Poland liberature is actively created by the author of the entire concept, together with Katarzyna Bazarnik and Radek Nowakowski²⁷, who has already written more than twenty liberary works.



Oka-leczenia (2000) by Katarzyba Bazarnik i Zenon Fajfer

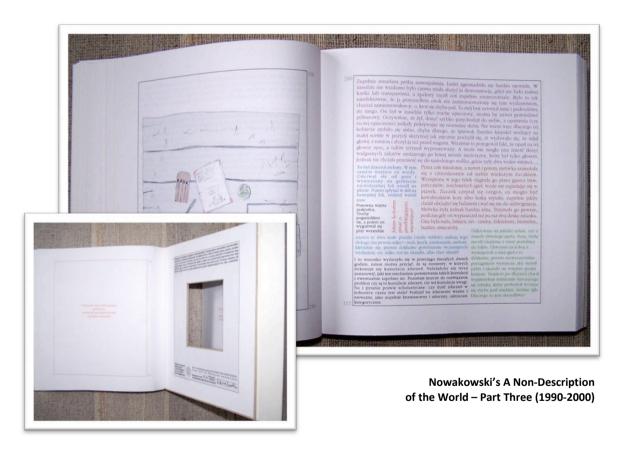
Oka-leczenie²⁸ (2000) was created by the literary duo of Fajfer-Bazarnik. It is a book (three books) with three backs. The very first decision the reader has to make — where to start? how to read? — is non-trivial. Inside those books apart from experiments with typography, page composition and similar tricks there is also a text. One discovers that in Oka-leczenie there are not only visible texts, but also invisible ones, they even constitute the majority of the text. Fajfer has a name for this method of hiding words in the area of printed text; he calls it an emanationism (Fajfer 2006). It is a kind of multi-level acrostic (story within story). We read not only the initial letters in every verse, but the initial letters of every highlighted word until we reach the embryo word. From the subsequent layers we will gradually construct a new text. Every such effort will produce new scriptons, which soon enough will become textons for the new course of the programme²⁹. In this case it seems we can even speak about cybertext machine. There is one small problem: the manual gives only two minor typographical suggestions...

A digital version of Zenon Fajfer's *Ars Poetica* (2003), registered by the Internet portal Techsty.art.pl, is an example of e-literary emanationism in use. This Flash poem which assumes the form of an animation would not be ergodic. There is however one small trick that changes the situation. Thanks to placing a push-button *back* at the end of the text, this double-exit literary work encourages the reader to explore. And thus the reader might see (read) the animated presentation until the end and the multi-layered acrostic becomes a semi-palindrome.



Books by Radek Nowakowski are entirely different but they also demand from the reader to make a non-trivial effort while reading. The most spectacular of his works is *Ulica Sienkiewicza w Kielcach* (*Sienkiewicz Street in Kielce, 2002*). Compared with his other publications the novel's print-run was quite impressive, it reached five hundred copies. The

ergodic character of the book lies in the fact that the reader is required to actually and physically deconstruct a street of ten and a half metres which represents a really existing Sienkiewicz Street as it was in 2002. On both sides of the street there are fronts of houses visible and on all that the text³⁰ is displayed which is written in many languages and assumes different shapes: for instance it can be sloppy when the character is in a hurry, or careful when he moves slowly. It might have look like a tree, when the character is sitting under a tree. The street is a parallel map; the text – a record of the character's movement. Interestingly he is a polyglot, thinks and speaks in several languages and if the reader cannot speak all of them, he will not be able to comprehend the whole text. In books where Nowakowski supplies three language versions (Polish, English, Esperanto) there are also some deviations. Once he speaks about chopping wood, and then about cutting branches. Can we say that a non-trivial effort in this case would be looking everything up in a dictionary and so deciphering the entire text? This experiment can be certainly treated as an interesting form of following different versions of a text.



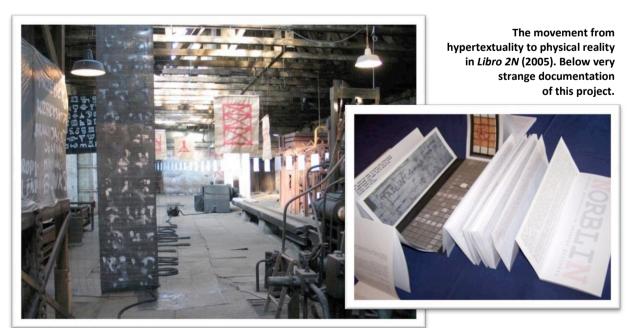
Nieopisanie świata część trzecia (A Non-Description of the World – Part Three, 1990-2000) is an unusual literary work published in two editions. The first one is a leporello and is supposed to constitute a literary tomography of an invisible cuboid left in Świętokrzyskie Mountains. 365 concertinaed pages constitute subsequent scans of a tomograph. The pages can be turned either left or right. Depending on the direction chosen we journey in time (the night part, black and white) or in space (the day part, colourful), and the reading never ends because the ending is at the same time the beginning of another course of reading. In the

second edition – where pages were sewn – we have two codexes (night and day condex) glued at the backs. We receive *a sand glass book,* without a start and without any ending. A cover placed in the middle has a window cut into it which serves as a passage from day into the night, from the microcosm to the macrocosm, and in the opposite direction. The book is certainly an ergodic work: two separate stories, the composition of pages frequently demands an unusual reading behaviour. Moreover the book is looped³¹.

Nowakowski is also the author of several ergodic texts that pose some theoretical problems. In *Nieposkładana teoria sztuki* (*Noncompleted Theory of Art, 1994-->*) a pile of separate pages is to be put into a box. Nowakowski claims it is *a theory puzzle. With the exception that not all of the elements fit* (Nowakowski 2008). It seems quite similar to Marc Saprty's idea realized in *Composition No. 1*. However here each box consists of a different number of pages. And – according to the author – the book is ever-growing. With each editions there are more textons. Is it a curious case of Aarseth's textual dynamics in use, where the number of textons and scriptons might change in subsequent editions of the text, but not within a book itself?

Tajna kronika Sabiny. Piqta jesień. (Sabina's Secret Chronicle. The autumn, 2001) causes quite different problems. How to deal with such a non-trivial effort as a completely trivial process of turning the pages? In Nowakowski's work the trivial act might end up in damaging the book. In Sabina's Secret Chronicle pages are connected in a labyrinth-like manner, we access each book from different directions and we are required to frequently turn the book...

Even though authors of liberature create in more traditional media (which are frequently underestimated, as the examples mentioned demonstrate), they are well-aware of the possibilities offered by new technologies. For instance Nowakowski transferred (2005) a hypertext model into Hala 1000 Ton in an old Norblin's factory in Warsaw and doing so created an installation book.



The project was called *Libro 2N* (it is an anagram of the word *Norblin: libro* = book and 2N = Nowakowski+Norblin) and was defined as a *journey into BLIN*³² *concept*, which was enacted inside a book represented by the old workshop. Texts were written on walls, on the floor and on old-fashioned machines. After entering the workshop (the concept?) the reader was able to comprehend most of the possible configurations of the text, but some of them remained hidden. The movement from hypertextuality to physical reality allowed the reader/the nomad to decide how to combine parts of the text he is reading. The author even pulled fishing line in several places to link some *lexias*. Every trace of the reader's journey marked up a new link in this unusual book. Thus again Aspen Aarseth's classification was tested. The reader – who plays a vital part in the process of reading – is required to explore the text. He links even such places that where not supposed to meet. Nowakowski did not have enough time to create a carefully designed structure of fishing net links he prepared but the reader could use every accessible passage between texts and machines. The number of texts is therefore unstable and dependant on time – in Hala 1000 Ton one could spend either several minutes or several days.

E-LIT MADE IN POLAND

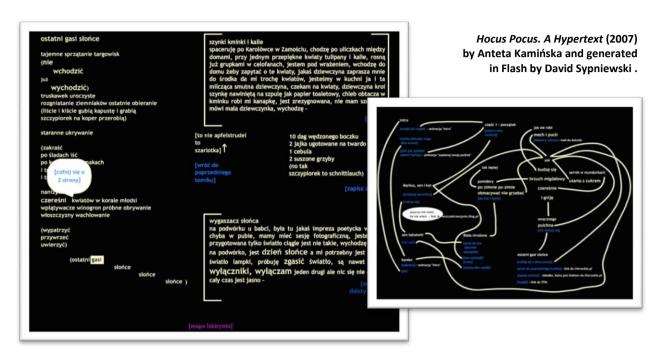
To complete this presentation of the Polish literary tradition that led to e-literature, it is perhaps reasonable to write several words about e-lit made in Poland nowadays. The facts are not promising since the list of Polish e-lit works is extremely short. Even coutning the most simple productions registered by the Internet portal Techsty – the number is merely twenty³³.

AE by Robert Szczerbowski is considered the first e-lit novel. It was originally published in the volume form (1991) printed in such a manner that two separate texts were placed on both sides of every page. Its hypertext version (1996)³⁴ was very similar in form. From the first page the reader can enter two texts. One is a description of linguistic experiments conducted on words, the other is an attempt to explain the meaning of the experiment using... words. This time in the form of a dictionary index, which we can navigate. The novel has a simple structure and is relatively small (it consists of one hundred and one short lexias).

AE is a pioneering text. However there are some recent examples of hyperfiction that are more interesting from the structural point of view. For instance Czary i mary. Hipertekst (Hocus Pocus. A Hypertext)³⁵, a project dated 2007 written by Anteta Kamińska and generated in Flash by David Sypniewski.

Texts appearing on screen always lead to other texts: to this hypertext poetry collection, to a blog devoted to teaching Polish to foreigners, to a webpage about public transport. The poems presented might send the reader to another tab in the browser, where animated texts or thyroid test results are displayed. Reading depends on paying attention because

words and images move all the time. This kinetic text is parallel to the main text, which is also being transformed in the process of reading. It is however quite difficult to notice the changes while watching the animation because the access is controlled by the author and in order not to skip anything one should stop and observe.



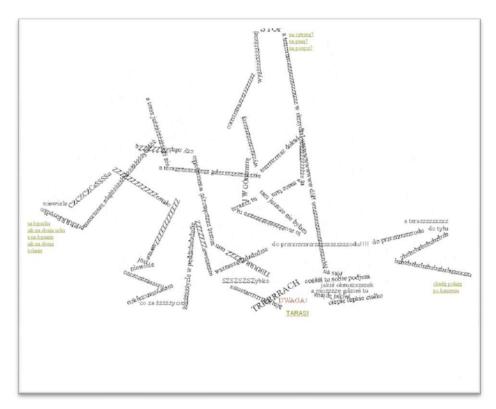
But it is almost impossible to stop clicking as the text constantly misleads and provokes his readers. To explore more one has to return to the main tab, and he finds there words (frequently enclosed in brackets) that often lead no further, they are empty. If you desire to read a lexia appearing on screen you are required to discover the sequence of mouse moves that will reveal the whole text. Another trick used is to introduce folding speech balloons that function as additional information and sometimes also as a hidden link. In one of the poems Kamińska incorporated a link to an email address encouraging the reader to continue her verses. *Hocus Pocus* might not be a huge literary work but its exploration is not momentary and the reader is never exhausted ³⁶.

Koniec świata według Emeryka (The End of the World According to Emeryk, 2002) by Radosław Nowakowski is the largest (two hundred and fifty lexias, more than six hundred links) and the most extensive in terms of concept e-lit project. So far it is the only example of a literary work that used well the possibilies given at that time by HTML. The author's experience in liberature is evident. Nowakowski applies hypertext, but his texts are rooted in more traditional background. He transfers some typographical solutions of the textual medium, e.g. those we know from *Calligrammes* or typographical layouts of Mallarmé.

In the words of Pisarski: Statements create separate columns, assume spiral forms and other shapes: they circle like a hawk, zigzac like a fly stupefied by the lamp's brightness, they

can be a tree in a flower-pot or a board game. The art of mimicry is not limited to the represented world, it extends to the electronic, hypertext environment (Pisarski 2004).

Webpages here are not short lexias, their structure is complex, they are intersected with equally important excerpts of texts. The combination of words that appear on screen in a single hit with words picked on another page allows the reader to travel (to sightsee) in the



The End of the World According to Emeryk, 2002) by Radosław Nowakowski.

world presented. It can either be a movement in macro scale: the shed – the yard, or in micro scale: the yard – the grapevine. Placing *The End of the World* in a browser is yet another solution we might add to other typographical tricks: it is a programmed movement, just like hitting clouds that in fact are parallel sentences scudding over a blue screen. Scrolling the text on screen is another movement required from the reader – for instance in a calligramme which resembles a lemon tree's stem. Devices used by Nowakowski are modest in terms of graphics, but they are used with the utmost awareness.

Another hyperfiction worth mentioning is *Blok (2002)* by Sławomir Shuty³⁷. There is no evidence that the allusion to Perec is deliberate but it is definately well-visible. On rue Simon-Crubellier 11 there is a tenement house which Georges Perec used in his novel *Life. A User's Manual (La vie mode d'emploi)*: he took off the front of the house and reproduced everything that was inside – the appartments' location, all the numbers and names of tenants. Similarily in *Blok* the eye of the camera (which follows the reader's gaze) moves inside a block of flats frozen after the meal.

However in *Blok* the net of connections is not as thick as in Nowakowski's work and not as well produced as *Hocus Pokus*. The system o lexias and links is completed with comic book

illustrations and commentaries appearing in speech balloons when the reader highlights a phrase which constitutes a link. The commentaries are especially interesting because they equip the novel with a kind of voice over.

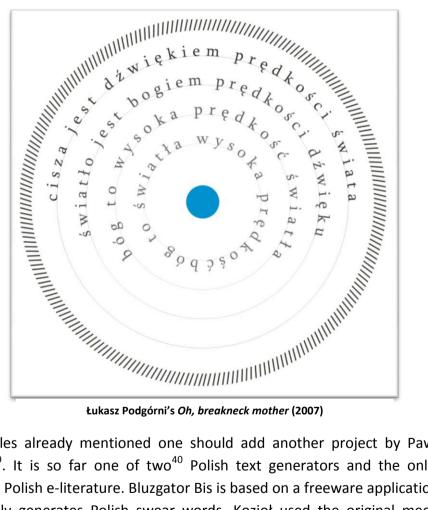
On the marigins of the experiments mentioned there is a poetic realization of *Low Fidelity* by Paweł Kozioł. This hyperpoem is still being written (the latest update comes from March 29, 2007). Visually it is the browser's screen divided into three sections: poem space, index of *plots picked at random* space and footnote space. All these elements are connected with a net of links. The quality of this project consists of two elements encouraging the reader to play with the text: the application of commentaries such as *put something* and a completely obscure buzzing sound which disturbs the footnote space and is in fact a gif image activated by one of the links.

Other Polish novels are even more basic, they employ only hypertext connections. Some of these novels – e.g. *Tramwaje w przestrzeniach zespolonych* (*Trams in Joint Spaces, 1997*) by Dr Muto – show traces of deception, they use material prepared to be printed on paper. It is especially evident in the length of lexias – they are too extensive, they resemble short stories. I have to agree with Pisarski's observation that most of the Polish hyperfiction is – the examples presented in this article excluded – based on texts pulled out of the artists' drawers, forced to fit into the new medium in order to follow the current fashion (Pisarski, Ja tu a ty tam 2004).

To sum up this presentation of the Polish achievements at e-literature I would like to mention artistic projects of Roman Bromboszcz, which are being constantly updated. We can find them on *bromboxy* webpage or in a blog *gylyryjn fytyryz lydywych cybrstyrcyj* (the title should be deciphered as a gallery of folk cyberfuturysis) which gathers literary works by Łukasz Podgórni. Both artists specialize in cyber poetry. They announced the manifesto of their artistic group in 2006. They admitted to the influences of Futurism, Dada and ideas of the Fluxus movement. In this article I will speak about the existing works by the artists but they are still active in developing cyber poetry. Accompanied by Tomasz Misiak they present their projects during performances in which the words are completed with sounds and images created live.

Flash projects of Bromboszcz resemble installations typical of concrete poetry which are then set into motion on screen. They are minimalist in character, their visual qualities seem to be inspired by the European Demoscene. In poems such as *artykulator*, *e.c.h.e.m.* or *prototypy*³⁸ the outcome is controlled by the author: the reader has to add missing words, letters and wait for subsequent programmed *hits*. On the other hand any accidental movement of the mouse betrays the fact that the reader might influence the animation, the text or to generate sounds. In some cases there is *a manual* hidden in the place most visible – for instance in the title of the browser's open window, just like in *prototyp 01: For keyboard user pres:ers: make use of the keyboard*.

Łukasz Podgórni is known for animation poems writted with the application of a similar set of conventions. The poems are to a larger extent inspired by the Futurism and Dada than Bromboszcz's projects. Matko zawrotna (Oh, breakneck mother, 2007) is an interesting poem in which verses are set concentrically and whirl at high speed so that it is almost impossible to read them. When the reader clicks on the screen, the machine stops, but after a second it is again set into motion and this time accompanied by synthetic voices and sounds. In w sprawie rimbaudowych 'samogłosek' i innych (about Rimbaud's vowels and other issues, 2007) Podgórni experiments with words, tests Rimbaud's concept of synaesthesia. Rimbaud combined colours with vowels and described their qualities. Podgórni rules out the descriptions - clicking on colourful vowels activates animated projects which function as synaesthesia of the text, of the dynamic image and the synthetic speech.



To the examples already mentioned one should add another project by Paweł Kozioł -Bluzgator Bis³⁹. It is so far one of two⁴⁰ Polish text generators and the only cybertextmachine in the Polish e-literature. Bluzgator Bis is based on a freeware application Bluzgator, which randomly generates Polish swear words. Kozioł used the original mechanism and creatively transformed the accompanying dictionary. Except for his own texts he employed excerpts from entries published in the Ideas section of Textiles Encore. A Dictionary of Polish Young Culture, sentences from Polityka weekly magazine and quotations from Ha!Art magazine. Moreover the reader can make further changes in the vocabulary of Bluzgator Bis. It is an interesting cybertext according to Aarseth's typology. The literary work is indeterminate and allows the reader to configure it through limiting or expanding the vocabulary. Such a possibility activates textual dynamics (TDT) typical for cybertexts - the reader decides about the number of textons available to the programme. Bluzgator Bis is also a project in which it is difficult to count all the variables defining the traversal function. For instance: what about the perspective? Can we claim that the optional possibility to modify the dictionary allows the reader to play a strategic role in the generated text?

WHAT IT TAKES IS JUST A LITTLE COURAGE: OUTRO

While traversing the Polish way that led to e-literature I tried to show those literary works which — when observed from the ergodic perspective — start to function as text-machines. One must admit that the most ambitious experiments date back to the period of baroque. Poems written in that period show many qualities typical for other national literatures, which was to a large extent connected with the wide knowledge of Latin and with using the same standards in poetic dictionaries.

Later examples were also inspired by experimental movements initiated in Europe, but – even though they are interesting as realizations of avant-garde projects – they are not complex cybertexts that could compete with mathematical experiments of OuLiPo. The Polish literary output, interesting from the formal point of view, has some ergodic qualities only on the level of explorative actions.

The tradition of e-literature, especially those works which focus on poetic message, is another level of avant-garde activities in the Polish literature of the 20th century (one might refer it also to other national literatures). It is not a straight-forward continuation, but it draws from experiences of prewar avant-garde movements and from some prior works. However working *in a niche* does not explain a far from impressive state of Polish digital literature.

Such a state is a result of Poland's delayed access to modern technologies due to the policy of the communist government. I would risk a statement that Poland missed the *age of Story Space* and was plunged directly into the *age of blogs*. Polish e-lit was produced most fervently from 1996 to 2002, when both computers and access to the Internet were less popular than today and perhaps this is the reason why such literary activities had difficulty finding their readers. However there were some experimental projects, for instance *collaborative writing*. One might mention here the idea of writing a novel (2001) together with Jerzy Pilch, a popular Polish author, organized by a weekly magazine *Polityka* and portal *Onet.pl*, or shared production of poems by the users in a chat *multipoezja.onet.pl* which was moderated by Michał Zabłocki, a poet⁴¹.

Liberary artists seem more productive today. Their books and projects test the typology suggested by Aarseth. The longest Polish hyperfiction so far — *The End of the World According to Emeryk* — was also created by a liberary artist. This liberary work, together with Aneta Kamińska *Hocus Pocus*, could represent Poland in next issue of *Electronic Liberature Collection*. Kamieńska's projects is a good sign showing that Polish e-literature can still develop and can even achieve a certain degree of magnificence. It seems that sometimes authors lack not only the knowledge of the digital techne, but also of something much more

important. It was nicely put by Michał Butor (who is often quoted by our liberary artists): *It is sufficient to look at newspapers, announcements, textbooks, scientific books and other such publications. Artists have so much at their disposal, it is difficult to ignore it.* **What it takes is just a little courage** (Bazarnik 2002, 128, underlined by A.P.).

Notes

¹ Due to differences in the Polish and English syntax the visual concept of the poem disappears in translation. In the Polish version – verses start with 'not' and 'no' which can thus be easily cut from the rest of the poem.

² In 1919 Jasieński and Młodożeniec established in Cracow a Futurist Club called *Katarvnka (Hurdy-Gurdy)*.

³ We emphasise three basic moments of contemporary life: machine, democracy and the crowd. The translation is without spelling mistakes deliberately made in the original-language version.

⁴ On the other hand if treating empty spaces between words only as a result of implementing *words in liberty* rule, then the text should be read in a traditional manner.

⁵ Word-play. 'Tworzy' in Polish means to create, 'dła' is a pejorative suffix. 'Tworzydła' stand for something negative in language.

⁶ The maximum of image allusions with the minimum of words – it is the most famous guideline in the theory of Functionalism produced by Przyboś.

⁷ 'Something between words'. Przyboś claimed that the meaning is generated not only with what the words carry, but also with relations between them (thus 'międzysłowie'); he was interested in meanings that are produced when the words clash.

⁸ In 1937 Kobro signed (as the only artist from Poland) *Dimentionalist Manifesto* published by J. Arp, M. Duchamp and L. Moholy-Nagy.

⁹ The terminology used after Nicolas Bourriaud *Postproduction. Culture As a Screenplay: How Art Reprograms the World* (2001).

¹⁰ A combination of two words: 'concepts' and 'shapes'.

¹¹ As we all know missing letters rarely make the proper understanding of the text impossible. Writings on American road signs can serve as an example here.

 $^{^{12}}$ In their poetry they used the official language used in regime newspapers, television, but also expressions overheard on the street

¹³ Karpowicz 1999, 106-107

¹⁴ The Polish title is ambiguous and a part of its meaning is lost in translation. 'Pokatny' means 'secret' but it stems from a word 'kat' which in Polish means 'angle'.

¹⁵ The number II placed next to the name suggests a secondary character of those utterances.

¹⁶ Potkański also compares Karpowicz's poetry to the construction of scholastic arguments.

¹⁷ More on the Polish silva rerum and ergodic perspective can be found in Mariusz Pisarski's article *Hypertext* and *Bigos*.

¹⁸ It is worth paying attention to the fact that nowadays some of the blogs function in exactly the same way; the authors and the wreaders (readers/authors) might add their own material but also others' texts and multimedia.

¹⁹ The novel was written in French and published in 1810 – fourteen years after the last volume of Laurence Sterne's *Tristram Shandy*. The Polish translation was not ready until 1847.

POLISH E-LITERATURE

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²⁰ The word 'pałuba' in Polish has many different meanings and it would be most difficult to produce such an ambiguous English title. The meanings are: 1. stump, trunk; 2. clumsy or stupid person; 3. clumsy doll; 4. evil old woman, or a female demon; 5. a hood over a cart; 6. straw used to clog a chimney

²¹The Wedding (1910) is a symbolic drama about the situation of the Polish nation at that time and its chances to regain independence.

²²Even though *The Pulp* was published at the time of the growing popularity of *nouveau roman*, literary critics (Ritz 1993) question its post-modernist character.

²³Due to the political situation *The Pulp* could not be published before 1980, but this edition and the following ones were not complete, which makes the effort of publishing it a non-trivial action. The complete version is published by Puls in 1982.

²⁴It is the first complete edition of *Arw*. Previously some excerpts were published in a literary magazine *Poezja* no. 7/1980.

²⁵Another meaning is 'freedom'. It is used in liberature by Julián Ríos. However the Spanish author uses the term to define 'liberating books', which is an entirely different meaning than that proposed by Zenon Fajfer.

²⁶ Treatise on Pageography is a liberary work but also a treatise about liberature, although Nowakowski claims that this treatise is not to explain anything. is to open a new territory. Or to lead or invite to the territory not new and not very well known. (Nowakowski 2002-2008, 7)

²⁷ Nowakowski is also the translator of a legendary hyperfiction *afternoon. a story* by Michael Joyce, which has not been published yet.

²⁸ A word-game. 'Oka' means 'of an eye'; 'leczenie' stands for the process of curing. Together – 'okalecznie' – they means 'eye mutilation'.

²⁹ This solution is somewhat similar to Aya Karpińska work contracted by iPhone (*Shadows Never Sleep. Zoom Narrative*), in which we open subsequent lexias by applying the maximum zoom possible.

³⁰ The text appears also on the backs of those pages that present the fronts of buildings.

³¹ Despite presenting approximately six hundred possible combination variables Aarseth's theories does not offer a chance to describe interesting formal solutions, such as looping a printed book.

³² In the Russian cuisine 'blin' means a pancake fried on frying-pan.

³³ A list of the Polish digital literary works I publish in References section.

³⁴ It was the first Polish publication of this kind that hit the market.

³⁵ The poem registered on the Internet is an excerpt from a printed version of the entire collection of poems under the same title. In the printed edition there are also links/requests, which fit the demands of the medium, for instance: go back three pages, find a difference, turn off the computer.

³⁶ What is interesting Dorota Sikorska in the forth number of *Techsty Magazine* generated in Flash the first interactive version of *Hocus Pocus* (first in Poland and probably first in the world).

³⁷ Shuty read separately: z Huty; the nickname refers to Nowa Huta, a district in Cracow.

³⁸ English equivalents: articulator, e.c.h.o., prototypes.

³⁹ Swearer, Encore.

⁴⁰ The second one is a much more modest project entitled *Text Messages Day After Day. A Book for Everyone an d for Nobody* (2007) by Marek O. Bulanowski, which generates text messages.

⁴¹ The texts written by the chat users were later used as lyrics on a record *A Debut* by a group *Czesław śpiewa*.

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