



## www.blok.art.pl: A Review of the First Polish Hypertext Novel

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**Abstract:** This review concentrates on Sławomir Shuty's hypertext novel *Blok* (2002), which is an excellent example of Polish internet culture. In most countries only a few isolated examples of hypertext fiction have emerged. In Poland, however, a whole hypertextual biotope has evolved around the Cracow-based publishing company *Ha!art*. The goals of this review are threefold. First of all, I locate *Blok* in the context of the aforementioned Polish hypertext biotope. Second, I try to access *Blok* with 'classic' literary interpretation. Last but not least I use network analysis to uncover the hypertext's underlying structure. The result is then combined with 'classic' literary analysis and hypertext theory to describe *Blok* as thoroughly as possible. This description also allows reflecting upon George Landow's quality measures for hypertexts.

**Keywords:** Sławomir Shuty, Ha!art, hypertext, hyperfiction, Polish internet culture, network analysis.

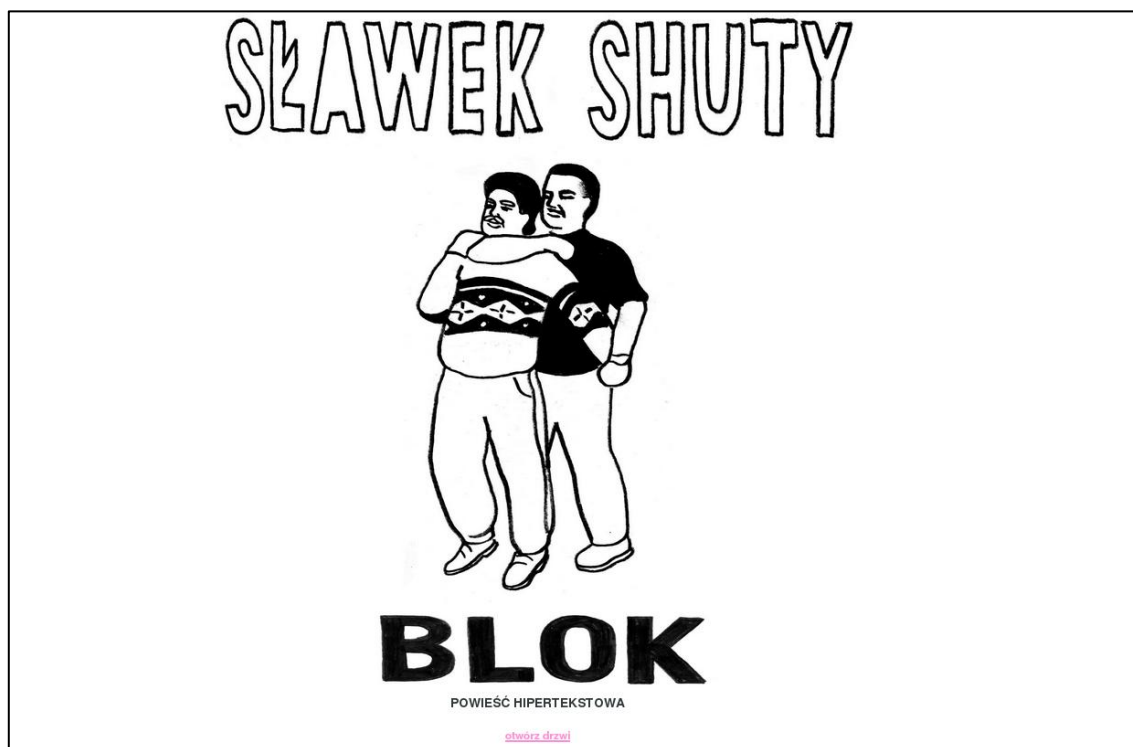
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Back in 2002, three Poles – Sławomir Shuty, Marcin Maciejowski and Piotr Marecki – set out to single-handedly build a new tower block. Though there were only three of them, they eventually succeeded in this endeavour. Of course, they did not build a 'real' housing block. They rather created a virtual *Blok* (see image 1), a website adorned with the very prestigious label 'first Polish hypertext novel' ('PIERWSZA POWIESC', 22.10.2002). Nowadays, hypertext fiction does not play any decisive role in electronic literature. George Landow notes that '[o]ne finds large numbers of digital poems in the form of animated text, hyperpoetry, and a combination of the two. [But] [w]here amid all the digital literature [...] is [...] hyperfiction?' (Landow 2006: 264). More recently, new approaches towards innovative story telling on the internet revolve around social networking sites and (micro-)blogs, such as Gergely Teglasz's Facebook novel *Twister* [Zwirbler, 2011] and Matt Stewart's Twitter novel *The French Revolution* (2009). *Blok*, on the contrary, is a hypertext novel in the 'classic' sense, composed of different story arcs that can be selected by the reader on his or her journey through the text. So why study this artefact from a bygone era? For starters, *Blok* works

really well as a collection of short stories *and* a hypertext novel. Moreover, it is a highly illustrative example of the Polish internet culture which unfortunately is largely unknown outside of Poland. Finally, *Blok* can be regarded as the offspring of the rich hypertextual habitat centred around Shuty's Cracow-based publisher *Ha!art*, which brought – and still brings – together hypertextual theory and practice. Thus, the *Ha!art* hypertexts – and specifically *Blok* – still tower above today's Polish internet culture. Although Polish hypertext fiction has developed only quite recently, the amount of examples makes it special and distinctive. By means of studying *Blok*, one of the most prominent and oldest examples of Polish hypertexts, a first step in analysing phenomena of Polish internet culture is taken here.

First of all, I sketch out *Blok's* context, i.e. hypertext fiction and Polish literature. Afterwards, *Blok* – or rather, its interface – is described from a reader's perspective. Sometimes it is not easy to read hypertext literature, because one might literally get lost in the text – a fate which might await also the unsuspecting researcher. Therefore, I approach Shuty's hypertext novel with web scraping and network visualization techniques. This approach uncovers *Blok's* hypertext structure and displays it more clearly. This visualization – combined with close reading – allows to better interpret Shuty's (hyper-)text. In the end, I apply George Landow's quality measures for hypertexts to *Blok* not only to describe this peculiar hypertext's overall quality but also to challenge Landow's criteria.

**Image 1.** *Blok's* front page



Source: <http://blok.art.pl> (accessed 14 March 2014)

### A Few Words on Hypertext Fiction

In his book *Hypertext 3.0* (2006), George Landow emphasises the interdependence between a more technological understanding of hypertext and a more literary one. He defines hypertext as follows:

*Hypertext* [...] denotes text composed of blocks of text – what Barthes terms a *lexia* – and the electronic links that join them. [...] Electronic links connect lexias “external” to a work [...] as well as within it and thereby create text that is experienced as non-linear, or, more properly, as multilinear or multisequential. Although conventional reading habits apply within each lexia, once one leaves the shadowy bounds of any text unit, new rules and new experience apply (Landow 2006: 3, italics in original).

As Landow’s mention of Roland Barthes already indicates, hypertexts are neither exclusive to the internet, nor are they exclusive to electronic media in general. Notable examples of hypertext fiction on paper include Vladimir Nabokov’s *Pale Fire* (1962), Julio Cortazar’s *Hopscotch* [La Rayuela, 1963] and Milorad Pavić’s *Dictionary of the Khazars* [Hazarski rečnik, 1984], just to name a few (Hopfinger 2010: 174). A Polish example of a non-electronic hypertext is Stanisław Czycz’s *Arw*, a complex text which circles around the life of Polish painter Andrzej Wróblewski. Initially, it was commissioned as a film script by Polish director Andrzej Wajda, but Czycz soon decided to create something more playful. The result does not resemble a film script at all. Sometimes, it is compared to a musical score. It took Czycz from 1975 to 1980 to finish this peculiar text, and it was finally published by *Ha!art* in 2007 (Marecki 2002: 6; Pisarski 2010: 264f.). All these offline examples reconfigure the text as they smash a monolithic novel to pieces – Barthes’ lexias – and thus, also reorganize the way the reader has to approach the text. The reader has to put those fragments together to form his or her version of the story; s/he becomes co-author of an entity Barthes has called the ‘writerly text’ (Landow 2006: 4).

In the late 1980s and early 1990s hypertext environments such as Storyspace and the World Wide Web surfaced and were immediately used for hypertext fiction. Michael Joyce’s *afternoon* (1987) is commonly regarded the first example of a literary hypertext (Landow 2006: 208; Hopfinger 2010: 178). It was created for the Storyspace environment but was later converted to HTML and has been available online ever since: <http://wwnorton.com/college/english/pmaf/hypertext/aft/> (accessed 22 April 2014). Joyce’s hypertext was created in 1987 and published in 1990, so does this mean it took Polish literature a whole twelve years – until 2002, the year Shuty’s *Blok* went online – to develop a similar example? Well, not exactly. The first Polish hypertext experiment was sold by the publishing company *Empty Cloud* [Pusty Obłok] on a floppy disk as early as 1996.<sup>1</sup> It had no title and no author was given, but it became known as *The Krzeszowice Electroscrip* [Elektropis znaleziony w

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<sup>1</sup> Taking into account the technological leeway caused by the Polish government’s reluctance of embracing information technology prior to 1989 (see Schmidt 2011: 53-59 for a description of the very similar situation in the Soviet Union), 1996 is quite an early date for the first literary hypertext in Poland. Correspondingly, the first Russian hypertext, Roman Leibov’s *ROMAN*, went online in 1995.

Krzyszowicach, 1996] (Hopfinger 2010: 179; Pisarski 2010: 283).<sup>2</sup> Later it was revealed that the *Electroscript* was written by Robert Szczerbakowski and that its (working) title was *Æ*. This hypertext was originally displayed in Evoy, a program similar to the Acrobat Reader, and has also been converted to HTML (Pisarski 2010: 283f.). Nowadays it is accessible on *Ha!art*'s website: <http://www.techsty.art.pl/ae/raster.html> (accessed 21 April 2014). But although *Æ* is a clear example of an electronic hypertext, it is by no means a novel. Its lexias do not contain narration, but rather offer philosophical reflections on language. Therefore, Czycz's *Arw* is the first Polish hypertext on paper, *Æ* can be regarded the first electronic hypertext in Poland – and Shuty's *Blok* becomes the first Polish hypertext *novel* and also the first Polish hypertext available online.

Moreover, *Blok* marks the beginning of a veritable hypertext craze in Poland. A number of hypertext novels were created after 2002, both online and on compact disc. Notable examples include Michał Kaczyński's *Stokłosa*<sup>3</sup> (2002), Doktor Muto's *Tramways in Complex Spaces* [Tramwaje w przestrzeniach zespolonych, 2003] and Radosław Nowakowski's *The End of the World according to Emeryk* [Koniec świata według Emeryka, 2005] (Hopfinger 2010: 179). The University of Poznań even developed a hypertext system called *dLibra*, which was used to create a hypertext version of the Gilgamesh epos (Pisarski 2010: 270f.). The peculiar thing about Polish hypertext culture is clearly not that it was on the forefront of development. Shuty's *Blok* was launched when the hypertext craze in other countries was over long ago. Nonetheless, whereas the enthusiasm for hypertext fiction quickly faded away in most countries, Polish authors produced more and more examples of this genre. Especially in the surroundings of Shuty's publisher *Ha!art*, which also hosts *Blok*, quite a number of hypertext projects has been realized. The most recent example is Konrad Polak's so-called smartphone novel *Draft* [Schemat, 2011], which is basically a conventional hypertext novel which has been adapted to fit the smaller screen of a smartphone. *Draft* mixes a fictional love story in Cracow with description of dreams and meta-reflections on hypertext literature. Also worth mentioning is Wojciech Bruszewski's 'multimedial' novel *Big Dick. Documentary Fiction* [Bick Dick. Fikcja dokumentalna, 2013], which is essentially a collection of loosely connected short stories. They revolve around one Richard von Hakenkreuz a.k.a. 'Big Dick' and include a lot of well-known persons such as former president of the United States George H. W. Bush and Bill Gates. The book contains several codes to unlock bonus material which can be accessed on the webpage <http://bigdick.pl/bigdick.html> (accessed 28 May 2014). Entering '9802046624', for example, unveils the video of Bill Gates taking a cream pie in the face. This novel and the accompanying website were again published by *Ha!art*. The electronic versions of these hypertexts are all available free of charge, which reflects *Ha!art*'s (former) tongue-in-cheek motto 'everything which won't pay off'<sup>4</sup> (Freund 2009). At least some projects are supported by the state. *Draft*, for example, was funded by the Polish Minis-

<sup>2</sup> The title is of course an allusion to Jan Potocki's novel *The Saragossa Manuscript* [Rękopis znaleziony w Saragossie, 1805-15], which was adapted as a film by Wojciech Has in 1964. Moreover, the title also links back to Stanisław Czycz, who was born in Krzeszowice.

<sup>3</sup> Stokłosa is a station of Warsaw's metro.

<sup>4</sup> Wszystko, co się nie opłaca.

try for Culture and National Heritage, as stated on the website: <http://ha.art.pl/hiperteksty/schemat/index.html#info.html> (accessed 13 May 2014).

*Ha!art* is well aware of its leading role in Polish hypertext literature. For its 25th anniversary, the publishing company created an overview over ‘Polish Digital Literature’, including Czycz, Shuty and others.<sup>5</sup> As already mentioned in the introduction to this review, a number of scientific texts dealing with hypertext literature and internet culture were published from 2002 onwards, starting with Piotr Marecki’s *Liternet: Literature and Internet* [Liternet. Literatura i internet, 2002] and followed by Agnieszka Dytman-Stasieńko and Jan Stasieńko’s *Language @ multimedia* [Język @ multimedia, 2005], Małgorzata Dawidek-Gryglicka’s *Text-ure: Around New Forms of a Literary Text as a Work of Art* [Tekst-tura. Wokół nowych form tekstu literackiego i tekstu jako dzieła sztuki, 2005], Danuta Ulicka’s *Text of/on the Net 1: Text, Language, Genres* [Tekst (w) sieci 1: Tekst, język, gatunki, 2009], Anna Gumkowska’s *Text of/on the Net 2: Literature, Society, Communication* [Tekst (w) sieci 2: Literatura, społeczeństwo, komunikacja, 2009], Maryla Hopfinger’s *Literature and Media: After 1989* [Literatura i Media. Po 1989 roku, 2010] and Piotr Marecki and Mariusz Pisarski’s *Literary Hypertexts: Literature and New Media* [Hiperteksty literackie. Literatura i nowe media, 2011]. A number of these books was published by *Ha!art*.

These examples show that in 2002 a vivid Polish hypertext community came to life and has been active ever since. Moreover, this Polish hypertext community unites theory and practice, involves authors, scholars and publishing companies. Unfortunately, the analysis of this productive hypertext biotope surpasses the restrictions of a site review. A more thorough investigation of Polish hypertext culture and Polish hypertext theory still remains a desideratum, which hopefully will be addressed by future research.

### **Blok from a Reader’s Perspective**

Let us now follow the front page’s friendly invitation to ‘open the doors’<sup>6</sup> (image 1) and enter the *Blok*. After we step inside, we are greeted by the ‘list of tenants’ of a ten-story residential block in Cracow’s Nowa Huta<sup>7</sup> neighborhood. The first entry leads us into the bicycle storage room, and on each of the ten floors there are three apartments, resulting in 26 names on the list. Four apartments are marked ‘XXX’ – Urszula Pawlicka suspects that these families ‘tried to retain their privacy’ (Pawlicka 2010). Each flat stands for a story revolving around the individuals living in it. The list entries then serve as links to the stories’ individual pages, one of which – a story centered on the Mitroniuk family – is displayed in image 2. We can follow the Mitroniuk story arc by clicking on ‘>>>’ or ‘<<<’, or we can access a related story by means of clicking on the link(s) in the text itself. In image 2, the phrase ‘ochota na podlewanie kwiatków’ serves as such an in-text link.

<sup>5</sup> [http://ha.art.pl/images/stories/korporacja/maps/max/ha\\_digital\\_literature\\_max.jpg](http://ha.art.pl/images/stories/korporacja/maps/max/ha_digital_literature_max.jpg) (accessed 22 April 2014).

<sup>6</sup> ‘otwórz drzwi’

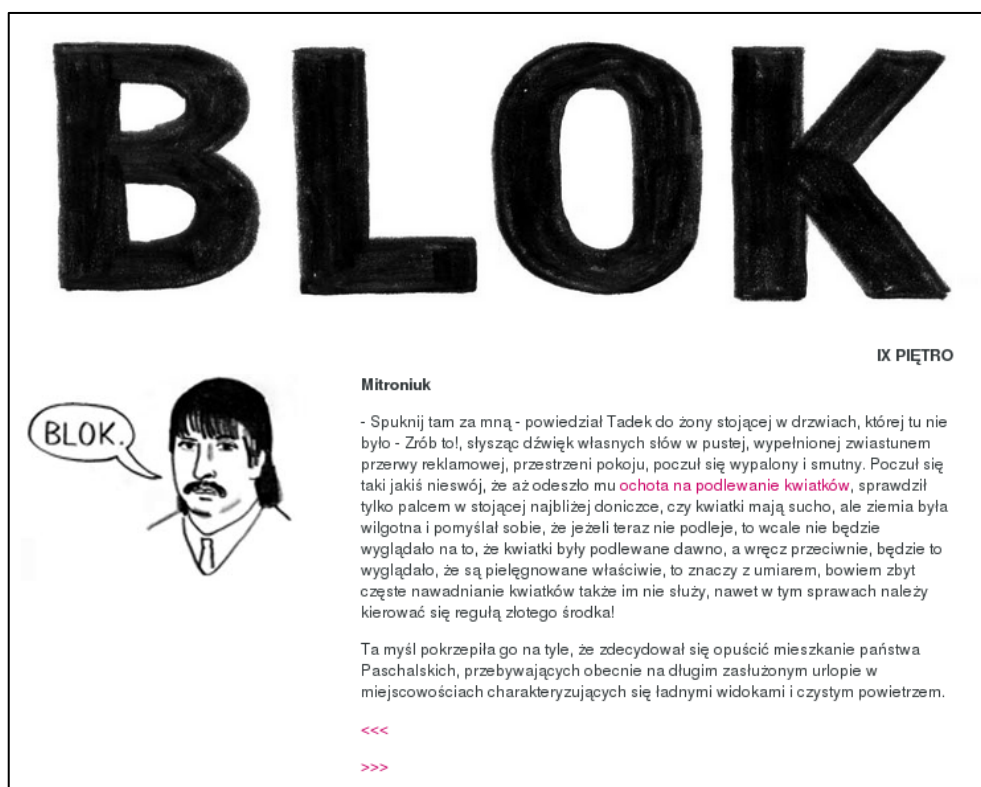
<sup>7</sup> Sławomir Shuty is Sławomir Mateja’s pseudonym and can be translated as ‘Sławomir from [Nowa] Huta’, which points to Mateja’s city of residence. Most of Shuty’s texts are located in Cracow’s Nowa Huta neighborhood.

These links in the text itself are the only elements which might strike us as unfamiliar in the context of a traditional novel. Not only do they point us to other stories, they also offer us some sort of meta-commentary on the link between the two stories in question. Unfortunately, the code producing these meta-commentaries seemingly does not work anymore in modern browsers. A quick look into the source code reveals the messages Shuty intended us to see when we mouse over a link. The link in image 2, for example, is defined by the following HTML code snippet:

```
<a href="8xxx3.htm"onmouseover="dymek(event, 'co ty byś bracie bez sąsiadów
zrobił?)"onmouseout="ukryjDymek()"target="_self">ochota na podlewanie
kwiatków</a>
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This fragment indicates that the text ‘what would you, oh brother, do without acquaintances?’<sup>8</sup> should be displayed when the text ‘willingness to water the flowers’<sup>9</sup> is clicked. The additional information provided in these speech bubbles supports the plot in a way which would not be possible on paper. Unfortunately, it also seems as if it would not be possible in modern browsers anymore.

**Image 2.** A typical ‘page’ of Shuty’s hypertext novel



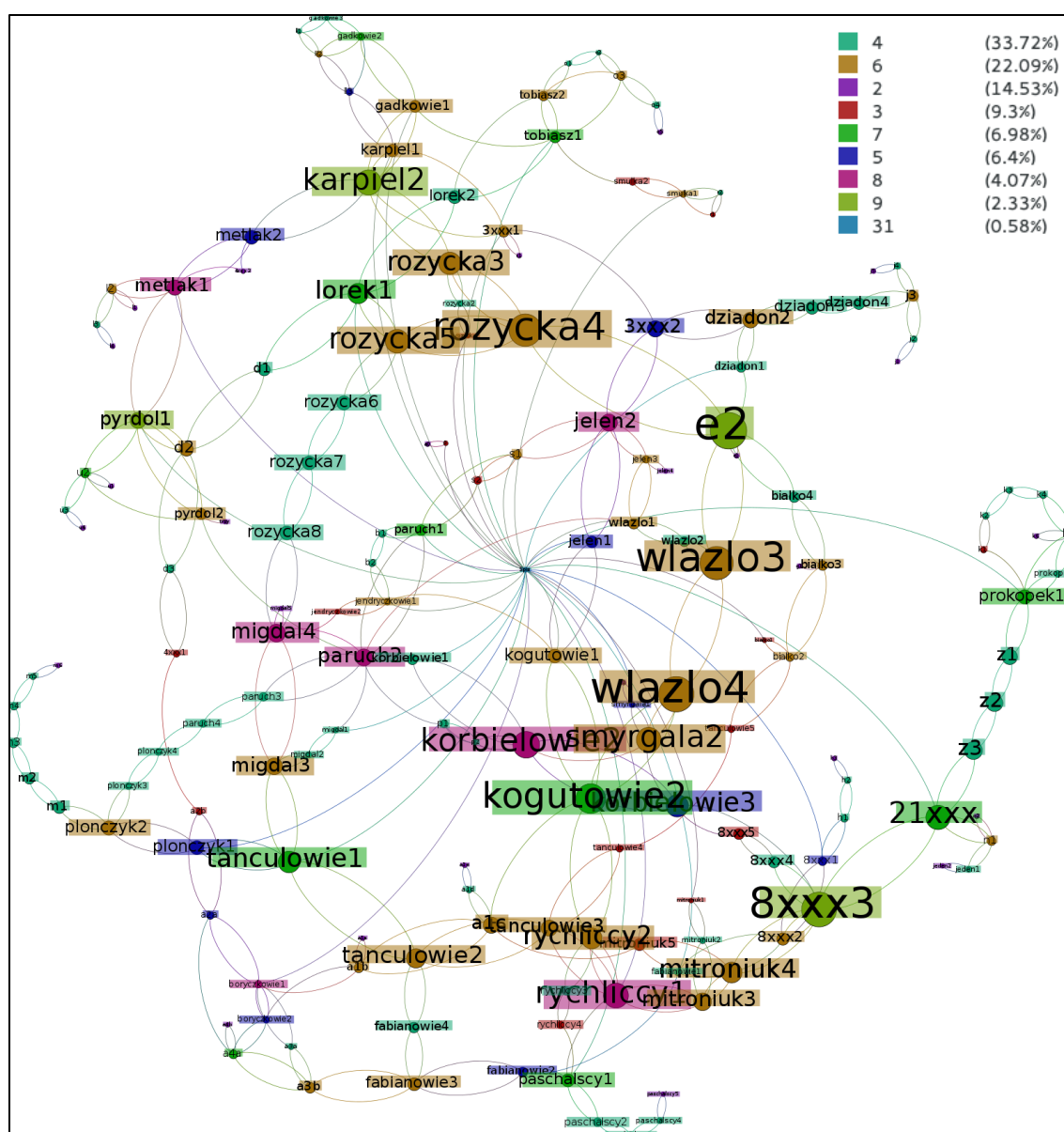
Source: <http://blok.art.pl/mitroniuk4.htm> (accessed 14 March 2014).

<sup>8</sup> ‘co ty byś bracie bez sąsiadów zrobił?’

<sup>9</sup> ‘ochota na podlewanie kwiatków’

The stories themselves are revolving around a run-down *Blok* in the derelict neighbourhood of Nowa Huta. Shuty presents a ‘storyworld’ (Landow 2006: 245) to his readers, whose inhabitants are without doubt the victims of post-socialist Poland’s turn to capitalism. Shuty’s heroes are either shopping, when they can afford it, or stealing, when they cannot. A third group has resigned and watches trash TV all day long. Besides lethargy, envy and hatred are the most common feelings. A latent violence can be felt throughout the texts, which often breaks loose and thus, stresses the antisocial nature of post-socialist Polish society. As a consequence, violent death is quite common among the inhabitants of Shuty’s *Blok*.

**Figure 1.** Blok’s overall structure. Larger labels indicate more central nodes.



Source: Gernot Howanitz.

These traits fit in nicely with Shuty's offline literary *œuvre* – which should not come as a surprise. After all, as he admitted in an interview with Urszula Pawlicka from 2010, he 'recycled' older stories to form the *Blok*. Some of these stories were taken from his short story collections *New Wonderful Taste* [Nowy wspaniały smak, 1999] and *Normal Blood Sugar* [Cukier w normie, 2002], others are parts of the short story *Gibberish* [Belkot, 2001].<sup>10</sup> Shuty decided to create his hypertext collage after reading 'Super Mario Brothers Karamazow', an article published in the Cracow-based literary journal *Brulion*. This article pointed out the connections between texts and networks, which fascinated Shuty, a self-proclaimed 'child of post-modernity'. Thus, he created a hypertext collage of older texts, only in places adapting them and linking them in a way so that they would tell a 'new' story (Pawlicka 2010). This collage-like approach is not only typical for hypertext fiction in general (Landow 2006: 188-98), but also for Shuty's offline literary texts. His experimental novel *Polish Product* [Produkt polski, 2005], for example, is created entirely from tabloid articles and advertisements which are rearranged to form an anti-consumerist work of art. *Polish Product* also features the kind of handmade aesthetics which are already characteristic for the *Blok* website. The title, *Blok*, is not typeset, but composed of hand-drawn characters (image 1). Marcin Maciejowski's illustrations give the website a rather 'analogue' look, which continues throughout the hypertext. The use of static black and white illustrations, the short lexias (image 2), which can be compared to pages of a book, the dominating status of the author (Shuty), who is mentioned in large letters on the front page, over the illustrator (Maciejowski) and the technician (Marecki) – all these elements evoke the 'classic' medium of literature: the book. Given the fact that the hypertext novel is based on 'recycled' literary texts, this 'bookish' impression should not come as a surprise. Nonetheless, the explicit links between different stories, which are not present in the previous paper versions, create something new and distinctive. A hypertext is without doubt more than the sum of its parts – as will be uncovered in the next section.

### ***Blok's* Hypertext Structure**

One of the main features of a hypertext is its branching structure (Landow 2006: 3). Unfortunately, this structure is hidden behind the lexias and links and reveals itself only reluctantly during the process of reading. Therefore it is necessary to use various tools of network analysis to uncover *Blok's* underlying structure. The results of this process then have to be combined with 'traditional' literary interpretation in order to review *Blok* thoroughly.

Using Scrapy, an open source web scraping framework for Python<sup>11</sup>, I first scraped *blok.art.pl*. Starting with the table of contents page (<http://blok.art.pl/spis.html>), Scrapy follows each and every hyperlink and creates a list containing the source and destination pages of these links. This list is then loaded into Gephi, an open source graph visualization software<sup>12</sup>. Gephi draws every HTML page as a node and every link as an edge which connects

<sup>10</sup> It is worth noting that *Belkot* is in its own right an example of a paper hypertext (Pisarski 2010: 261f.).

<sup>11</sup> Scrapy is available online: <http://www.scrapy.org> (accessed 14 March 2014).

<sup>12</sup> Gephi is available online: <http://www.gephi.org> (accessed 14 March 2014).



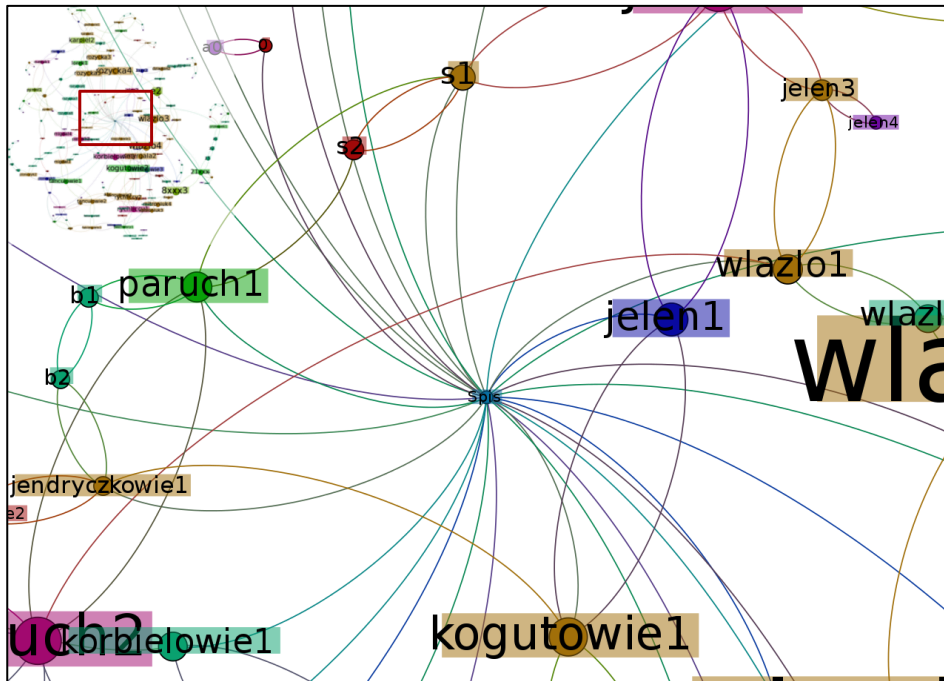
the respective nodes. Moreover, it offers algorithms which try to position the nodes as efficiently as possible in order to make the resulting figure easier to read. Besides this optical reconfiguration, Gephi also calculates the degree of each node, i.e. the total number of incoming and outgoing links for each page and other statistical measures such as betweenness centrality, which illustrate a node's centrality in the given network. To calculate betweenness centrality, the shortest path from each node to every other one is computed. The more often a node is part of the shortest path between two other nodes, the more central it is. In the case of *Blok*, more central nodes are texts which work as relays between different story arcs. In other words, the more central a node, the more likely it is that a reader eventually reads it, no matter where s/he started reading. The result of this quantitative approach is presented in figure 1. The nodes of this graph represent *Blok*'s individual lexias, the edges are the hyperlinks between them. Different colours indicate the nodes' degree, and the nodes' size represents their betweenness centrality. Larger nodes are more important in connecting different story arcs than smaller ones. In the upper right corner, the nodes' degrees are itemised and colour-coded. Most of the nodes (33.72%) have four (outgoing or incoming) links, whereas only one node has 31 links: the table of content node located in the centre of the image.

In the centre we see the table of content, or 'spis' – the starting point – which links to 31 other pages, but no other page in turn links back (see figure 2). When we follow the very first entry in the list of tenants we end up in the bicycle storage room (see figure 2, nodes '0' and 'a0'). This story arc immediately leads to a dead end with no further links. Therefore, if we follow the traditional way of reading – from top to bottom – we soon come to a halt. This dead end can be regarded a playful way of telling the reader that s/he has to approach hypertext fiction differently, i.e. not in the traditional way.

The second link in the table of content leads to the first 'real' story about the Boryczko family (figure 3). This arc has a few rather local branches, so it provides a first taste of what hypertext fiction is all about. On their way to the shopping centre, Mr and Mrs Boryczko drive past the scene of a traffic accident. Although a young woman is severely injured, Mr Boryczko claims that he has seen 'a better one last week: four corpses!' The first in-text link leads us to another story arc ('a2a') which describes how the accident has happened: The victim, Maria, was hurrying to meet her boyfriend when a lorry driver overlooked her. This is followed by a rather gruesome description of Maria's wounds and the onlookers' refusal to help her.

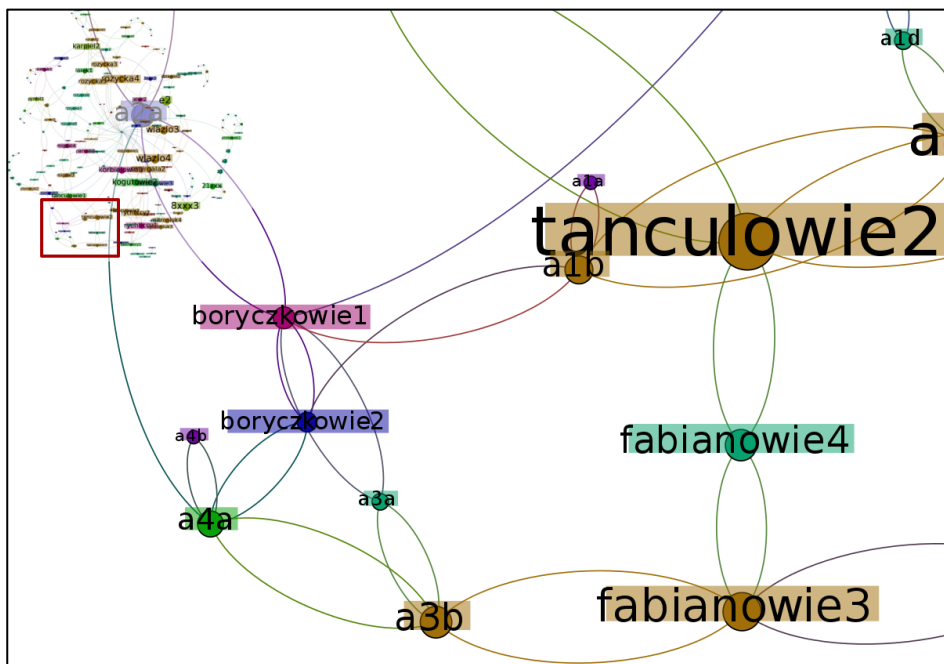
Back in the Boryczko story line, the couple discusses their evening plans. Mr Boryczko is going to watch a boxing match, which we can do as well ('a3a'). When we follow this link, we do not encounter Mr Boryczko in the new story arc. Shuty rather describes the milieu in which Boryczko moves, i.e. sports hooligans, petty criminals and pimps, and thus, blatantly criticizes capitalist mechanisms in post-soviet Poland. First, he focuses on the bar Mr Boryczko attends to view the boxing match ('a3a', 'a3b'). Then there is an implicit divide, and Shuty describes the milieu more generally and voices his criticism ('a4a', 'a4b'). The naming of the nodes suggests that these are two separate stories, even though they are joined by linear links.

**Figure 2.** The Table of Content node and its surroundings (Detail from figure 1).



Source: Gernot Howanitz.

**Figure 3.** The Boryczko family story line (Detail from figure 1).

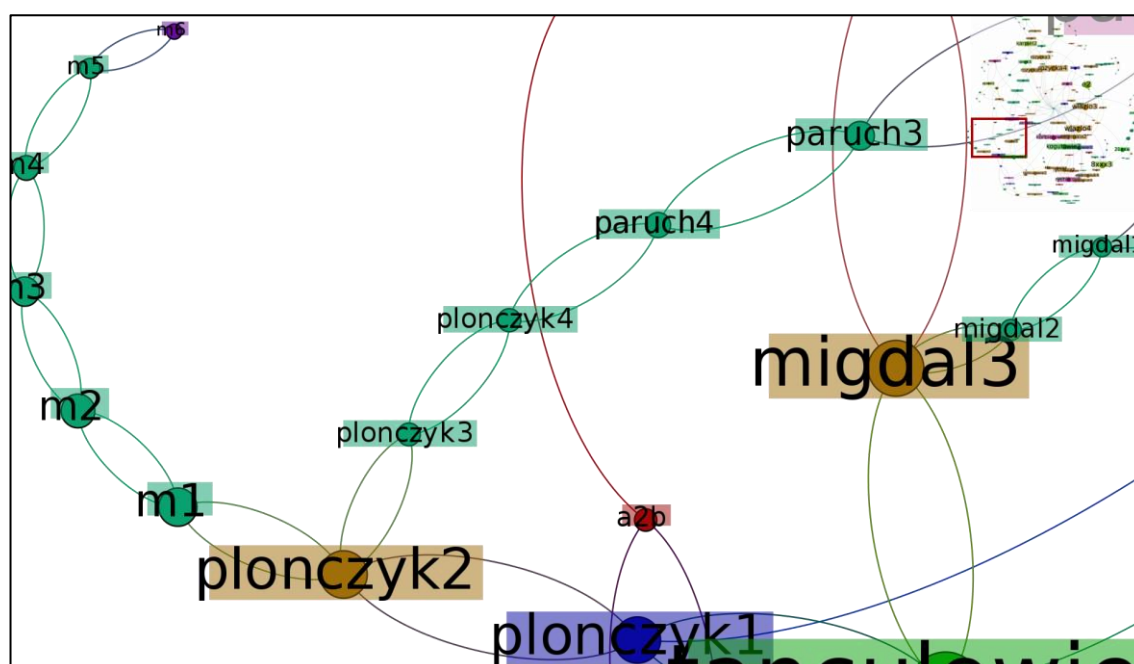


Source: Gernot Howanitz.

If we do not follow the digression to the boxing match, we encounter the end of the first Boryczko lexia. To carry on with the (linear) story, we have to follow the link to ‘boryczkowie2’. On the second lexia, a veritable marital dispute breaks loose. Mrs Boryczko feels that her husband neglects her; he would, for example, never buy her new clothes. Therefore, he made a mock of her at the funeral of uncle Staszek, when she looked ‘like an old rat’. A digressing link allows us to go to this funeral (‘a1b’), where Shuty describes the clothing style of all attendants in detail. Most interestingly, we enter this story arc on the second lexia. The first one, ‘a1a’, is only reachable via the second one – no other ‘outside’ lexia, not even the table of contents, links to this one (see figure 3). Thus, *Blok* on several occasions promotes a counter-intuitive reading direction.

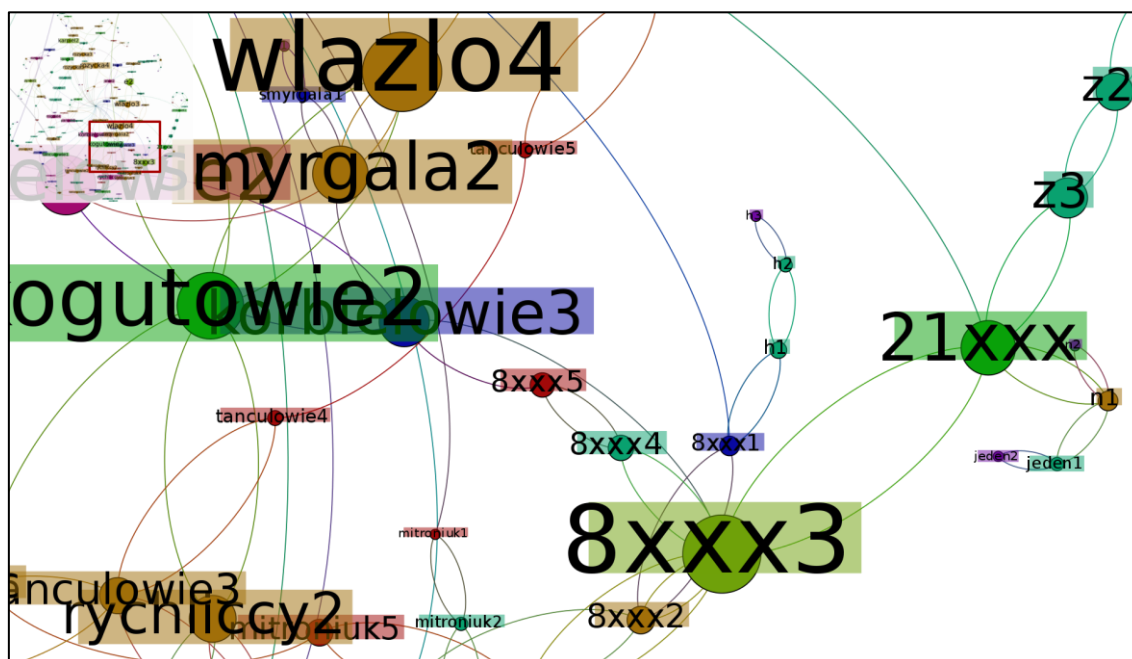
Back in the second Boryczko lexia, Mrs Boryczko then complains about various other luxury goods – or rather the absence of them. Shuty laconically links her lament to his aforementioned critique of the capitalist gangster lifestyle starting with lexia ‘a4a’. All these examples underline how Shuty uses links in very different ways. Some of them combine different planes of time (‘boryczkowie1’ ↔ ‘a2a’, ‘boryczkowie1’ ↔ ‘a3a’), some of them work by allusion only (Mr Boryczko not being mentioned in ‘a3a’), whereas others are more direct (Mrs Boryczko is explicitly mentioned in ‘a1b’), some provide additional information about the protagonist’s milieu (‘a3a’), others shockingly provide a name and a background story for a corpse which in another lexia is mentioned only in passing (‘a2a’). So although the Boryczko storyline is rather straightforward, it reaches, due to various digressions, a certain level of complexity which is difficult to describe. A graphical representation of the link structure such as figure 1 therefore greatly facilitates the interpretation of this hypertext.

**Figure 4.** A linear story arc (detail from figure 1)



Source: Gernot Howanitz.

**Figure 5.** Some very central nodes (detail from figure 1).



Source: Gernot Howanitz.

Figure 1 can also be used to identify extraordinary or surprising links. Perfectly linear digressions such as the story ‘m1’ – ‘m6’, which starts at the ‘plonczyk2’ lexia, represent the most common way to link hypertext fiction – and thus, not the most interesting one (figure 4). More intriguing is the connection between ‘plonczyk4’ and ‘paruch4’. The Płonczyk story focuses on a driving instructor and his daily work, whereas the Paruch story shows us how Mrs Paruch takes part in a TV show. Although these story lines seem utterly unconnected at first, both Mr Płonczyk and Mr Paruch attend the same night club, which links the two story arcs. Note the counter-intuitive reading direction when jumping from ‘plonczyk4’ to ‘paruch4’ and then ‘paruch3’, or – vice versa – from ‘paruch4’ via ‘plonczyk4’ to ‘plonczyk3’.

Another possibility of putting figure 1 to good use is to consider the information computed by the betweenness centrality algorithm. The centre of *Blok* in terms of central nodes is located beneath the table of contents to the right (figure 5). Some highly connected nodes (‘włazło4’, ‘smrygala2’, ‘kogutowie2’, ‘korbielowie3’, ‘21xxx’, ‘8xxx3’) make sure that a lot of story arcs lead to this region. Smaller tails such as h1-h3 allow digressing from the main arcs (figure 5). The ‘włazło’ story is yet another example of counter-intuitive reading direction. The nodes ‘włazło1’ and ‘włazło2’ are relatively unimportant in terms of connectivity, but ‘włazło3’ and ‘włazło4’ are among the most central nodes, i.e. readers are bound to stumble upon them sooner or later. Therefore, it is quite possible that a reader starts at ‘włazło3’ – and not ‘włazło1’. But how can we interpret the mathematical concept of betweenness centrality in literary terms? Are mathematically central nodes really crucial for *Blok*’s plot? A close reading of the aforementioned lexias does not reveal anything special, which might lead to the conclusion that the link structure is to a certain extent arbitrary.

There is no ‘master story’; *Blok* is simply a loose collection of individual short stories, which at some points overlap each other.

A better way to judge the importance of individual lexias could be their degree. The lexia with the highest degree (31 connections) is the table of contents – which is intuitively quite important, but does not hold a story *per se*. Then there are four lexias with nine connections (‘8xxx3’, ‘karpie2’, ‘e2’, ‘pyrd011’). A closer inspection of the ‘karpie2’ lexia, for example, which describes a beautiful, intelligent woman with relationship problems who likes travelling, reveals that the link to ‘gadkowie’ works as an allusion to beautiful women, the ‘rozycka3’ lexia mentions travelling, and two other lexias (‘metlak2’, ‘3xxx1’) focus on relationships. The ‘karpie2’ lexia does not fulfil a special function, it just happens to contain various pieces of (unconnected) information which are linked by other nodes. The situation with the three other 9 degree nodes is quite similar. Thus, a node’s degree alone also does not tell us very much about the stories. It could be interesting to have a look at different link types, i.e. those connecting different lexias with the same protagonist, those which link different protagonists, those which tell the same story from different perspectives, and those which function as allusions only. Unfortunately, this approach would transcend the borders of what a site review constitutes.

### ***Blok* – A ‘good’ hypertext?**

As this is a site review, one question remains: How can we determine the quality of *Blok*? Landow tries to answer the following question: ‘What qualities does hypertext have in addition to those possessed by nonhypertextual forms of writing’ (Landow 2006: 198). He argues that ‘the defining qualities of the medium [hypertext] include multilinearity, consequent potential multivocality, conceptual richness, and [...] control by the reader’ (Landow 2006: 198) and further clarifies what constitutes a ‘good’ hypertext structure by means of postulating other, less obvious measures of quality as well (Landow 2006: 198-214). I subsume these ideas by means of four master categories: reader activation, structure, story and technology. By means of applying these measures to *Blok* I want to demonstrate that they are not always helpful. To a certain extent, these measures are even problematic, because they propose normative categories to judge literary (hyper-)texts which do not account for core features of postmodern literature, e.g. deliberate disappointment of readers’ expectations.

As regards reader activation, Landow points out that ‘lexias should have an adequate number of links’ (Landow 2006: 198), that it should be pleasurable to follow these links (Landow 2006: 201) as well as to read the individual lexias. Moreover, the lexias should motivate the readers to click on yet another link (Landow 2006: 207f.). In order to achieve this, individual lexias should be divided by appropriate gaps which make the links necessary in the first place (Landow 2006: 206). Shuty’s *Blok* seems rather balanced in this regard. As already mentioned, the majority of lexias has four or six links, which include two linear links to the predecessor and successor, and two to four in-text links. This provides ample choice for the reader to both follow the linear story arc and digress from it. Following the links could be regarded as being pleasurable, because the in-text links teleport the reader to new

story arcs, and thus, also to new illustrations. Moreover, both the lexias which can be reached by those in-text links and the ‘speech bubbles’ often provide additional insights, different points of view, etc., which also urges the reader to further traverse through the text. The gaps between individual lexias seem to be reasonable, because they are either presenting the goings-on from different perspectives or altogether tell unrelated stories. Nonetheless, the amount of text per lexia and the linear links between them remind us of an offline literary text, so ‘traditional’ reading pleasure is ensued. It has to be noted, however, that ‘pleasure’ is a factor hard to determine, so I propose to use the term ‘reader activation’ instead.

As regards the story told by the hypertext, Landow points out that the hypertext novel in question should be coherent, i.e. represent some kind of story and not some random text pile (Landow 2006: 203f.). Part of this coherence is to explicitly use inter-textual references to other literary works by means of linking to them (Landow 2006: 204). Although *Blok* does represent a story, or rather interconnected story arcs, it does not openly link to other (literary) texts – which might even be a good thing: Finding implicit allusions to other texts without the author’s aid can be very satisfying in its own right. Besides, it is worth noting that coherence seems to be a rather arbitrary measure of quality. According to post-structuralist theory, the times of the ‘grand narratives’ are over, and literary hypertexts with their non-hierarchical structure can be used to reflect this.

As regards structure, Landow emphasizes that the hypertext should be organized in ‘a characteristic or necessary form of metaphoric organisation’ (Landow 2006: 206). The eponymous *Blok* provides a natural form of organization as Shuty’s stories circle around its inhabitants and thus, the hypertext structure backs up the stories’ contents. Moreover, a hypertext should break free from linearity (Landow 2006: 210), which *Blok* clearly does, and it should also feature an easily accessible sitemap (Landow 2006: 209), which *Blok* clearly doesn’t. Although there exists a site map – the table of contents – no lexia links back to it. However, by means of using the browser’s ‘back’ button, one can easily overcome this problem.

Last but not least, Landow points out the importance of technology, as the hypertext should exploit the used hypertext environment to the fullest (Landow 2006: 211). For *Blok*, one of the weakest hypertext environments in terms of features is used: HTML. However, *Blok* not only fully engages the possibilities of HTML, but even transcends them – by means of using Javascript for the ‘speech bubbles’. Nonetheless it is not clear why a ‘good’ hypertext has to push technological boundaries.

## Conclusion

Judging a hypertext, especially a literary one, is a difficult task. George Landow proposes some very normative measures of hypertext quality, which is surprising given that he heavily draws on post-structural theory throughout his book. These measures can be reduced to four basic dimensions we have to take into consideration: reader activation, structure, story and technology. All these four dimensions of course constantly influence each other.

Shuty’s *Blok* has a lot to offer in terms of reader activation. Different lexias provide new points of view, additional information, new illustrations or interesting allusions. The in-text

links are spiced up with Javascript ‘speech bubbles’, again providing context and making the hypertext more interesting from a technological point of view. The hypertext’s overall arrangement – a building block – ideally reflects the content, i.e. stories about this block’s inhabitants. As an in-depth network analysis of *Blok* has revealed, Shuty has not put too much consideration into the link structure. There is no main path through the story and mathematically central nodes are not central in literary terms – but this ‘unorganizedness’ by no means contradicts the content. As pointed out above, for future research concerning hypertext literature it seems promising to focus on different link types. Concerning the stories themselves, *Blok* still works as the collection of short stories it originated in – its individual lexias are fun to read and provide highly interesting insights into post-socialist Polish society. Moreover, *Blok* can be regarded the figurehead for the fruitful Polish hypertext biotope around *Ha!art*, which sparked a substantial number of both theoretical works and literary hypertexts. Unfortunately as of yet no English translations of these highly innovative hypertexts exist, which could further promote the study of this special chapter of Polish (internet) culture.

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