

# The desire for meaning: Urszula Zajączkowska's reading of nature

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1.

Although we cannot be sure what it is supposed to be or what it would actually entail, reading nature has a long tradition.

“Even raindrops arrange themselves into syllables, into sentences,”<sup>1</sup> Jacek Gutorow once wrote. “A leaf is a letter in the rustling book of the tree”<sup>2</sup>, added Radosław Nowakowski around the same time. In this conviction of the linguistic or textual character of everything that touches us, one can still hear a distant echo of a line of thought dating back to the early Middle Ages. This tradition emerged from speculative theology and mystical philosophy, and it became established in the homiletics of the following centuries. It is, of course, the tradition of imagining the world or nature as a book – *liber naturae*. Within this tradition, the world and all its things are to constitute a complete book; “... for by its creatures, as by living letters, we may read the excellence of the Creator,”<sup>3</sup> which is the task of the righteous person. In a short time, the metaphor of the world as a book became secularized and entered common use.<sup>4</sup> We find it in the work of Paracelsus and in the writings of Michel de Montaigne. It is employed by Thomas Browne, John Donne, and John Milton. Voltaire and Denis Diderot argue for the superiority of studying the book of nature over all other books – for it is the source of knowledge about what truly matters. One merely needs to learn the script in which it has been written. For Galileo, that script was already the language of mathematics: „and the characters are

<sup>1</sup> Jacek Gutorow, X (Legnica: Biuro Literackie, 2001), 43.

<sup>2</sup> Radosław Nowakowski, *Traktat kartkograficzny, czyli rzecz o liBeraturze* [A cartographic treatise, or a matter of liBerature], 2nd edition, expanded, corrected, and updated (Dąbrowa Dolna: Liberatorium, 2021), 105.

<sup>3</sup> Luis of Granada, *Simbolo de la fé*, quoted in: Ernst Robert Curtius, *European Literature and the Latin Middle Ages* (Princeton: Princeton University Press, 1990).

<sup>4</sup> Curtius, 328.

triangles, circles, and other geometrical figures.”<sup>5</sup> But even for Goethe, “thus is Nature a living book / Whose sense may be taken, though oft mistook.”<sup>6</sup> The readability and legibility of the book of nature – although the metaphor itself lost its force over the centuries, first becoming a commonplace and then falling simply out of use – returns as a theme in twentieth-century literature. These returns are rather occasional and point not so much to a way of being of the world (a finite, meaningful whole with a determinate significance guaranteed by an authorial instance) as to the activity of the individual participating in an unending process of semiosis, and to the procedure of reading itself as a way of positioning oneself in relation to signs and meanings. It is enough to recall that in *Sanatorium Under the Sign of the Hourglass*, Schulz writes that “the text of spring is punctuated with implied meanings, with omissions and ellipses, dotted without letters in the empty blue, and into the free spaces between the syllables birds insert their capricious guesses and surmises.”<sup>7</sup> Jorge Luis Borges takes a somewhat different approach. The volumes filling the Library (that is, the Universe) are said to contain “all possible combinations of the twenty-two orthographic symbols (a number which, though unimaginably vast, is not infinite) – that is, all that can be expressed, in every language.”<sup>8</sup> The sole task and destiny of the Library’s inhabitants is the care of the books and their reading. Although the content of most of them seems, if not nonsensical, then inscrutable – their pages filled with signs arranged in an apparently random order, in which no linguistic system can be discerned – potentially all of them are meaningful. If the meaning of a book is conditioned by the knowledge of the code – or rather, the codes—in which its various fragments were produced, and which must still be discovered or invented,<sup>9</sup> then understanding the text (and further: the texts) does not guarantee an understanding of the Library itself. Borges insists that reading the books of the world does not lead to knowledge of that world. At most, it leads to knowing, to the ongoing activity of coming-to-know. And in doing so, it offers an insight into the nature of science *par excellence* – invariably progressive, and therefore never final. Nevertheless, reading – and knowing, discovering, but also inventing – is the only thing there is to do in a world-library.

This last idea finds its development in the work of Alberto Manguel, who in his youth served as a reader to Borges, already blind by then. He uses the term *reading* to describe the practice of deciphering any sign whatsoever, and he turns it into a method of understanding how one positions oneself in being and existence. Here, reading becomes a broad—if not overly broad – metaphor for practicing life as such: an interpretive activity of finding one’s bearings in the world, of extracting meanings from it. And it constitutes a fundamental function of the human being:

The readers of books [...] extend or concentrate a function common to us all. Reading letters on a page is only one of its many guises. The astronomer reading a map of stars that no longer exist; the Japanese architect reading the land on which a house is to be built so as to guard it from evil forces; the zoologist reading the spoor of animals in the forest [...], the dancer reading the choreographer’s

<sup>5</sup> Quoted in: Curtius, 353

<sup>6</sup> Johann Wolfgang Goethe, *Sendschreiben*, quoted in: Curtius, 354.

<sup>7</sup> Bruno Schulz. *Sanatorium Under the Sign of the Hourglass*. Translated from Polish by Celina Wieniewska. New York: Walker & Company, 1978.

<sup>8</sup> Jorge Luis Borges, “The Library of Babel”, in: *Collected Fictions*, translated into English by Andrew Hurley. New York: Viking Adult, 1998, 115.

<sup>9</sup> Borges’s narrator-protagonist tells the story of a book whose linguistic code was finally “established” after almost a hundred years. It was “a Samoyed-Lithuanian dialect of Guarani, with inflections from classical Arabic”. See Borges, 114.

notations, and the public reading the dancer's movements on the stage; the weaver reading the intricate design of a carpet being woven; [...] the parent reading the baby's face for signs of joy or fright, or wonder; the lover blindly reading the loved one's body at night, under the sheets; the psychiatrist helping patients read their own bewildering dreams; [...] the farmer reading the weather in the sky [...]. In every case, it is the reader who reads the sense; it is the reader who grants or recognizes in an object, place, or event a certain possible readability; it is the reader who must attribute meaning to a system of signs and then decipher it. [...] We read to understand, or begin to understand. We cannot do but read. Reading, almost as much as breathing, is our essential function<sup>10</sup>.

Here, to read means first of all to notice and recognize the signs in the world, to transform the material into the semiotic. Secondly, it means to invent, negotiate, or adjust the code in which the message-text and its meaning are not yet given, but will only come into being through the reader, in the course of... reading. In his account of reading, Manguel brings together—almost to the point of identifying them with one another: perception, reception, interpretation, and interaction.

One may bristle at Manguel's conceptual sloppiness or – put more gently – his unorthodoxy, as he effectively throws every semiotic activity into the catch-all category of “reading”. Yet it is impossible to overlook, and important to underline, that in this universal and inalienable capacity to perform operations on signs, in the ability to produce meanings and to understand or translate them, he wishes to see a fundamental life function. If to live means to read, then – keeping in mind Martin Heidegger's claim that “Remaining within and under the compulsion of its own desire belongs to the essence of the living”<sup>11</sup> – to live also means: to desire meaning and to create meanings.

Why do I bring this up?

In 1968, Friedrich Salomon Rothschild wrote that living systems are from the very beginning constituted as systems of signs<sup>12</sup> – and he did not mean only human organisms. Biosemiotics, of which he is one of the co-founders,<sup>13</sup> links semiotic processes with fundamental life processes – across almost all species of living beings.<sup>14</sup> Under its framework, the biosphere *par excellence* turns out to be a semiosphere<sup>15</sup>: the reception, interpretation, production, and transmission of signs cease to be the exclusive domain of *Homo sapiens*. In the preface to the anthology of foundational texts of biosemiotics, Donald Favareau notes:

<sup>10</sup>Alberto Manguel, *A History of Reading* (Toronto: Vintage Canada, 1998), 12-13.

<sup>11</sup>Martin Heidegger, *Basic Concepts*, translated by Gary E. Aylesworth (Bloomington: Indiana University Press, 1998), 4.

<sup>12</sup>Friedrich Salomon Rothschild, “Concepts and Methods of Biosemiotic”, *Scripta Hierosolymitana* 20 (1968): 174..

<sup>13</sup>Rothschild was the first to use the term “biosemiotics”, but it is generally accepted that it was Thomas Sebeok – who synthesized various semiotic traditions together with the research of Jakob von Uexküll – who “initiated the project that we now call biosemiotics”. Donald Favareau, “Introduction: An Evolutionary History of Biosemiotics”, in: *Essential Readings in Biosemiotics. Anthology and Commentary*, ed. Donald Favareau (Dordrecht, Heidelberg, London, New York: Springer, 2010), 44.

<sup>14</sup>“Biosemiotics, or semiotic biology, is the study of qualitative semiotic processes that are considered to exist in a variety of forms down to the simplest living organisms and to the lowest levels of biological organization”. Timo Maran, “Biosemiotics”, in: *Keywords for Environmental Studies*, ed. Joni Adamson, William A. Gleason, David N. Pellow (New York: NYU Press, 2016), 29.

<sup>15</sup>“[T]he province of biosemiotics coincides in its entirety with that of the biosphere, which, in this context, is tantamount to the ‘semiosphere’”. Thomas A. Sebeok, “Biosemiotics: Its roots, proliferation, and prospects”, *Semiotica* 134 (2001): 63.

Biosemiotics is the study of the myriad forms of communication and signification observable both within and between living systems. It is thus the study of representation, meaning, sense, and the biological significance of *sign processes* – from intercellular signaling processes to animal display behavior to human semiotic artifacts such as language and abstract symbiotic thought. Such sign processes appear ubiquitously in the literature on biological systems. Up until very recently, however, it had been implicitly assumed that the use of terms such as *message*, *signal*, *code*, and *sign* with respect to non-linguistic biological processes was ultimately metaphoric; and that such terms could someday effectively be reduced to the mere chemical and physical interactions underlying such processes<sup>16</sup>.

Communication among living beings cannot, however, be reduced to a simple mechanism of stimulus and response. A critique of the mechanistic doctrine of living creatures was undertaken already in the 1930s and 1940s by Jakob von Uexküll, among others. He also introduced the concept of *Umwelt* to describe the specific way in which organisms of a given species perceive and experience the world – a way shaped by the capacities of their sensory organs and perceptual systems. *Umwelt* denotes the perceptual reality unique to each species or – more precisely – the organism’s semiotic world, which encompasses all aspects of reality that are meaningful to it. Every living organism communicates with and relates to its environment in its own way; by interacting with the world, it creates and transforms its own *Umwelt*<sup>17</sup>. As a “semiotically alert respondent to signals coming from both outside and within”<sup>18</sup>, an organism recognizes such signals and situates them in relation to its current condition. Yet it is able to absorb information from its environment only if it possesses the appropriate key or code: “There must exist an internalized system of signposts to provide a map to the actual configuration of events”<sup>19</sup>. This internalized system – Thomas Sebeok uses the term *semiotic self*, which can be grasped only through the concepts and terminology of sign theory – accounts, in every living being, for the individual capacity to gather, store, replicate, and transmit information, to extract from it what is most appropriate or proper for itself, and to generate new meanings. Sebeok writes:

living entities are, in one commonly recognized sense, open systems, their permeable boundaries permitting certain sorts of energy-matter flow or information transmissions to penetrate them; they are at the same time closed systems, in the sense that they make choices and evaluate inputs, that is to say, in their semantic aspect<sup>20</sup>.

The organism’s interaction with its environment thus follows a path of interpretation and leads to an act of creation. For it is precisely the meanings it has absorbed that shape the organism’s new form, structure, or way of being. Living beings, as Timothy Morton has noted, translate other objects into concepts related to their own existence<sup>21</sup>. For a linguistic being – for a human –

<sup>16</sup>Donald Favareau, „Preface: A Stroll Through the Worlds of Science and Signs”, in: *Essential Readings in Biosemiotics*, v.

<sup>17</sup>See Jakob Johann von Uexküll, “The Theory of Meaning”, in: *Essential Readings in Biosemiotics*, 90–114.

<sup>18</sup>Julia Fiedorczyk, Maciej Rosiński, *Metafory w każdym życiu: fenomenologia, biosemiotyka, poezja* [Metaphors in every life: phenomenology, biosemiotics, poetry], in: *Po humanizmie. Od technokrytyki do animal studies* [After humanism: from technocritique to animal studies], ed. Zuzanna Ładyga, Justyna Włodarczyk (Gdańsk: Wydawnictwo Naukowe Katedra, 2015), 224.

<sup>19</sup>Thomas A. Sebeok, *A Sign Is Just a Sign* (Bloomington and Indianapolis: Indiana University Press, 1991), online: <https://publish.iupress.indiana.edu/read/cf71d152-9cd8-40ad-ad4d-a2e1e92108ea/section/bef741c6-c0e9-41cd-87d3-598cf2ae603b#ch4>, date of access: 12.03.2025.

<sup>20</sup>Sebeok, *A Sign Is Just a Sign*.

<sup>21</sup>Timothy Morton, “An Object-Oriented Defence of Poetry”, *New Literary History* 43 (2012): 207.

any thing, event, or phenomenon, everything that becomes present in time and space, that lends itself to perception and/or enters into interaction with them is clothed, or is in the very process of being clothed, in a meaning that can be expressed in language. However, as Paul Cobley argues:

The human phenomenon of language is just one minuscule aspect of a broader semiosis, the action of signs throughout the universe, no matter how they might be embodied. Put this way, language looks very small compared to the array of signs engendered by all interactions between living cells<sup>22</sup>.

The meaning-generating activity and productivity of every living being that does not possess language thus reveals itself elsewhere: in the manner of its existence<sup>23</sup>.

On the one hand, there is a somewhat forgotten intellectual and literary tradition; on the other, there are scientific proposals from the very contemporary field of biosemiotics. Together they delineate a space in which the reading of nature – as I would like to understand it here – acquires a kind of preliminary outline, contour, provisional shape, and meaning.

To read nature would therefore mean, first, to understand its existence, its forms, and its modes of being as *semiosis* and as *poiesis*. And second: to desire its meaning.

## 2.

Urszula Zajązkowska speaks freely in many languages, and her work can be situated across several areas of the cultural field. As a botanist, she writes and publishes in high-ranking journals discursive texts on the geometry and forms of plants, their anatomy, biomechanics, regeneration, growth, and movements. For a humanities scholar specializing in literature, this work may appear somewhat hermetic and even disorienting, although the titles of some articles can be intriguing and enticing – such as „On the benefits of living in clumps: a case study on *Polytrichastrum formosum*.”<sup>24</sup> Within the literary field, she functions as a poet, columnist, and essayist. She debuted in 2014 with the volume *Atomy* [*Atoms*] and has since published three books of poetry and one of essays. Each of them has been nominated for numerous awards, several of which she has received.<sup>25</sup> Zajązkowska is also a film editor trained at the Academy of Film and Television and – apart from using cameras in her research – creates short auteur films and video clips. *Metamorphosis of Plants* (2016), a filmic miniature inspired by Goethe’s work, in which plant movements intertwine with those of a ballet soloist, won, among other distinctions, the Scinema Festival of Science Film award in the category Best Experimental Film/Animation.

<sup>22</sup>Paul Cobley, *Cultural Implications of Biosemiotics* (Dordrecht: Springer, 2016), 19.

<sup>23</sup>“The biosemiotic approach does not imply that humanity is nothing special but only that the obvious uniqueness of humans is not as users of signs but as creatures who can readily teach themselves to master a special form of sign usage – symbolic reference – that is the basis of linguistic competence”. *Biosemiotics: An Examination into the Signs of Life and Life of Signs* (Scranton: University of Scranton Press, 2008), 26.

<sup>24</sup>See Urszula Zajązkowska et al., “On the benefits of living in clumps: a case study on *Polytrichastrum formosum*”, *Plant Biology* 2 (2017): 156–164.

<sup>25</sup>In 2017, she received the Kościelski Foundation Award for the volume minimum. In 2019, her book *Patyki*, *badyle* was awarded the Golden Rose by the Book Institute, the magazine *Nowe Książki*, and the Science Festival; a year later, it received the Gdynia Literary Prize in the essay category.

She herself explains this freedom to speak across different cultural fields, discourses, and media in the following way:

Everything, I think, comes down to language—or rather, to its insufficiencies. The language of science is stiff, but painfully precise. [...] Poetry can construct thought and reflection; it carries more between the lines, while with film one can link concrete content to the full expressiveness of image and sound. Film is the most intense; it easily operates through associations and builds new sentences<sup>26</sup>.

None of the languages Zajączkowska uses is able, on its own, to grasp, present, or express what she comes into contact with. Each has its limitations. The only question is: what is it that reveals the inadequacy of these languages when they encounter it?

In Zajączkowska's work, the focus is on the living: on the expression and creativity of plants. She states this clearly and directly in the note to the volume *minimum*:

The world of plants expresses itself. With its whole body, it expresses itself. Learning the language of plants and translating it into the language of humans resembles deciphering the signs of ancient writing symbols. But I still lack human words<sup>27</sup>.

These few sentences succinctly and accurately capture the main premises of her project of reading nature. It is to encompass: reading, exegesis, and translation.

### 3.

First, then, the task is to read: to perceive, once again, in what is material – and at the same time alive – the semiotic; to recognize the signs, the text produced by means of them, and to subject that text to decipherment. By skillfully using the appropriate code, one must assimilate the context; one must understand, at least on the most elementary level, what has been expressed and communicated by means of signs. In carrying out this preliminary procedure of recognizing and deciphering the poiesis of plants, Zajączkowska often draws on categories from the field of poetics.

In *minimum*, there is a passage that reads:

This linden was felled at the end of summer. It had grown in a blissful atmosphere. It had a pastoral life. It recorded this in its anatomical diary. I read there of an abundance of water and of mild winters; you can see it in the undisturbed arrangement of the wood cells and in the area of the phloem. The phloem lazily transported sugar from sun-soaked leaves throughout its whole life – that is, for three years<sup>28</sup>.

<sup>26</sup>Adam Pluszka, "Gdzieś tam jesteśmy. Rozmowa z Urszulą Zajączkowską" [We are somewhere out there, An interview with Urszula Zajączkowska] *Dwutygodnik 207* (2017), online: <https://www.dwutygodnik.com/artypk/7104-gdzies-tam-jestesmy.html>, date of access: 16.09.2024.

<sup>27</sup>Urszula Zajączkowska, *minimum* (Wrocław: Warstwy, 2017).

<sup>28</sup>Zajączkowska, *minimum*, 76.

The term *diary* as a generic label is used intentionally in this necrological note. The idea of chronologically ordered records of ongoing events that a plant inscribes in its very shape, anatomical structure, form, and chemical composition seems comprehensible, obvious – even, one might say, natural. In her most recent book, however, Zajączkowska explains this obviousness by writing that “sticks, when they are alive, grow, get plump; later, already as branches and soon as boughs, constantly recording in their bodies with extraordinary diligence the entirety of what happens in them and around them, preserving its descriptions forever, until something decomposes them, burns them, or tears them apart.”<sup>29</sup>

This thought gravitates toward regions where Francis Ponge had already staked out a strong presence in the 1940s, writing that trees are nothing but a desire for expression:

They have nothing to hide from themselves; they cannot conceal a single thought. They open themselves completely, honestly, without restraint. They lazily spend their time complicating their own shape, perfecting their own bodies toward the greatest possible intricacy of analysis. [...] Animals express themselves with voice or with gestures that cancel one another out. Plants express themselves in writing, once and for all<sup>30</sup>.

Plant records and protocols encompass both the events and conditions governed by the logic of chance or fate, and those that follow from the operation of higher-order laws – physics, chemistry, biology. For a plant participates in its surroundings: it not only exists in a given space, but also makes its body into a space of inscription, a notation of presence and of influence. It registers and preserves its own existence and the existence of its environment in almost all of its aspects. This is, in fact, a fundamental principle of its being: “the growth of plants is a continuous dialogue with the environment and with gravity [...] plants that do not listen to their surroundings must die.”<sup>31</sup>

In the anatomical diaries, the history of an organism’s interior must therefore be inseparably intertwined with the history of its exterior – confession with testimony<sup>32</sup> – for interior and exterior constantly act upon each other, permeating one another with influences “such as the color of light, the sugar in the tissues (or its absence), the death of particular cells, the rate of trunk growth, the flow of water, the action of wind, air temperature, the presence of people, birds, fungi.”<sup>33</sup> Seemingly motionless, the plant reaches out toward exteriority, turns itself wholly toward it, and acts “as the media of proto-communication between diverse aspects of physis.”<sup>34</sup>

For this reason, too, an anatomical diary – like many diaries well known in the history of literature – will never be uniform. The simple story of wood accretion may in the end turn out to be “a novel with an unpredictable plot”; alongside the dry reports of a tree’s growth

<sup>29</sup>Urszula Zajączkowska, *Patyki, badyle* (Warszawa: Marginesy, 2019), 9.

<sup>30</sup>Francis Ponge, “Fauna i flora” [Fauna and Flora], translated by Jacek Trznadel, in: *Utwory wybrane* [Selected works] (Warszawa: Państwowy Instytut Wydawniczy, 1969), 40–41. Translation into English mine, PZ.

<sup>31</sup>Zajączkowska, *Patyki, badyle*, 58.

<sup>32</sup>See Małgorzata Czermińska, *Autobiograficzny trójkąt. Świadecko, wyznanie, wyzwanie* [Autobiographical triangle: testimony, confession, challenge], 2nd, revised edition (Kraków: Universitas, 2020).

<sup>33</sup>Zajączkowska, *Patyki, badyle*, 53.

<sup>34</sup>Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life*, foreword by Gianni Vattimo, Santiago Zabala (New York: Columbia University Press 2013), 66.

and existence, other genres may also find their place – whether a “song exulting in life” or an “oratorio of light and earth.”<sup>35</sup>

These poetological remarks – offered by way of connotation or approximation – scatter meanings not only across the terrain of plant anatomy and morphology, but also, and perhaps above all, across that of their ontology. And here, plant existence proves to be non-obvious and not entirely clear: it eludes stable, unequivocal identifications, conventional imaginaries, and ultimately destabilizes the paradigm of metaphysics. What becomes problematic above all are such metaphysical values as identity and presence, or the subject–object relations; the life of a plant is heteronomous in character, wholly oriented toward an other, dictated by its law and entirely dependent on it.

This striving of the plant toward the other – which Michael Marder calls the non-conscious intentionality of vegetal life<sup>36</sup> – manifests itself not only in its growth, in its absorption of nutrients from its surroundings, and in its reproduction, but above all in the fact that, as a “middle place, standing at the intersection of the physical elements: the earth and the sky, the closed and the open, darkness and light, the moisture of the soil and the dryness of crisp air”<sup>37</sup>. It does not organize its environment, does not dominate it, and does not oppose it, but only – or rather: precisely – gathers within itself those diverse external forces. It gathers them and, in a material, bodily way, expresses the beings that surround it: “it lets beings be and, from the middle place of growth, performs the kind of dis-closure of the world in all its interconnectedness,”<sup>38</sup> becoming “a passage or a medium for the other.”<sup>39</sup> It does not thereby establish an identity. Neither its own – for it does not barricade itself against its environment, does not negate its intertwinement with other beings, does not abstract from them in order to become fully itself in isolation; for it is constituted by what it is not – nor that of anything else:

In the branch and in the arranged cells – the letters of the wood – there is likewise encoded the weather that has passed, the sun and the winds, the incidents such as May frosts, and whether the soil in which the entire tree was born had been generous to it or rather barren; whether rains had ever been lacking, and in which year they came down so heavily that there was not enough air left to breathe.<sup>40</sup>

The heteronomy of plant life also determines their otherness – their otherness to the human being:

The otherness of plants is expressed above all in the fact that, for the most part, they do not need to kill anyone or anything in order to nourish themselves, to grow, and to take up space; and in the fact that they are bound to their place forever, and thus are even more co-feeling with their surroundings. They must be. They cannot run.<sup>41</sup>

<sup>35</sup>Zajązkowska, *Patyki, badyle*, 7, 10.

<sup>36</sup>Marder, 152-154.

<sup>37</sup>Marder, 65.

<sup>38</sup>Marder, 66.

<sup>39</sup>Marder, 180.

<sup>40</sup>Zajązkowska, *Patyki, badyle*, 8.

<sup>41</sup>Zajązkowska, *Patyki, badyle*, 133.

4.

At this point, one must inevitably pose the question of the reading competencies and capacities of the one who attempts to undertake the deciphering and reading of the “hieroglyphs of anatomy”, as well as the question of the effectiveness of such efforts.

The reading subject in Zajązkowska’s work bears the features of Borges’s librarian. In *Patyki, badyle* [Sticks, stalks], this subject is above all a subject of knowledge – a subject of scientific competence and specialized skills. Its position in the text – the position of an expert, an authority, a guide – is built upon its familiarity with laws and principles: of biology, physics, and chemistry, but also of the practice of science and the production of knowledge. For Zajązkowska not only describes, reports, and explains: whether it be the survival strategies of horsetails and mosses, “the survivors of the Devonian,” as “sensitive hydrographers of the forest”; or the processes by which trees heal their wounds, which prompt her to ask about “the primordial source of nature’s self-creation”; or the influence of the moon and its gravitational field on plant movements; or finally, the law of apoptosis – the programmed self-destruction of plant cells – as a necessary act of life. The authority of this subject of knowledge is authenticated by numerous illustrations: microscopic photographs, graphs, diagrams, but also – crucially – by accounts of the practice of research, of laboratory work. Thus, we read both about filming plants with time-lapse techniques, and about the strenuous efforts to keep them alive, and about bombarding them with rays of light or drops of water, and, finally, about the endless killing, slicing, and turning them into hundreds of slides on a microscope stage.

This knowledge and these skills are the *sine qua non* condition of any reading whatsoever. Zajązkowska writes: “When someone learns even a little of the language of anatomy, they can attempt to read its sentences written by plants in dialogue with their environment”. And she immediately adds:

For plant anatomy is their intimate language. Learning it is laborious and offers no guarantee of success, but it gives hope that one day it will be possible to decipher the code at the true source of existence. Every linguist knows this thrill.<sup>42</sup>

This thrill – this desire for meaning, for the knowledge of meaning – was also known to the inhabitants of Borges’s Library of Babel as they searched for the total book, “the cipher and perfect compendium of all other books.”<sup>43</sup> Botanists – “prisoners of Euclidean space,” as Zajązkowska notes – find themselves in a situation similar to theirs. Only, condemned to the schematized and standardized language of science and subordinated to the rules of knowledge production, they must usually satisfy this desire through simplification, generalization, or a more or less abstract model: “In our laboratories, at closed symposia, in the codified language to which only we have access – we standardize, polish, categorize, and turn chestnuts into spheres, or better yet, into cubes of  $x g$  in mass”<sup>44</sup>. The case of *Arabidopsis thaliana*, “the saddest plant in the world”, because it has been “crowned by science as the model”,

<sup>42</sup>Zajązkowska, *Patyki, badyle*, 60, 61.

<sup>43</sup>Borges, 116.

<sup>44</sup>Zajązkowska, *Patyki, badyle*, 54–55.

obliged to “bear witness to sequoias, poplars, poppies, or lemon balm”<sup>45</sup>, becomes in her account yet another (one of many) indication supporting the Foucauldian conviction that discourse – in this case, the discourse of science – does not reflect reality but imposes upon it its images and representations. The awareness of the limits of knowledge and of the non-final, non-conclusive character of scientific findings, expressed in *Patyki, badyle* more or less explicitly, nevertheless has a positive dimension. It is capable of activating the potential for exegesis and for translation.

Doubting the cognitive capacities of science – its ability to grasp with precision, to decipher and express, the full scope of plant expression and creativity – does not invalidate the cognitive effort. Nor does it discredit the knowing subject; rather, it allows the subject of understanding to come into being: the one who attempts to comprehend this whole (the infinity of nature’s continual self-creation)<sup>46</sup>. To understand – meaning first of all to subject it to conscious reflection, one that both orders and explains, and at times to set in motion a procedure of inquiry whose spirit is hermeneutic, a search for meaning.

Zajączkowska – although, to be scientifically precise, one should say: the textual subject of her work – assumes both of these roles at once. Both roles are likewise shaped by the desire for meaning, although in each of them this desire leans in a different direction. In the case of understanding, it leans toward rescuing singularity from the grip of generalized abstraction. For after all, “each form quietly creates a personal pattern, enchants with its intricacy, and awakens an entire cascade of questions about the path it has taken through time”<sup>47</sup>.

The subject of understanding comes to the fore in the narrative–reflective sections. The life stories of individual beings or the narrativized accounts of life processes unfolding at the micro-, or even nano-scale, incline one to conclude that for the subject of understanding, the meaning of the record of life is the life itself – the spatiotemporal movement of the plant, whose vector is directed toward what is other, and which can be told. Only here, the understanding at issue no longer belongs to the domain of theoretical knowledge, founded on distance from the world, but rather to practical knowledge, through which plants, inhabiting their own perceptual reality (*Umwelt*), belong to their surroundings (in both senses at once) and remain “impossibly close to us”<sup>48</sup>. The subject of understanding is therefore identical with the subject of existence: the concrete existence of Urszula Zajączkowska, but also existence understood as a meaningful belonging-to-the-world, as a being-with the world (as Heidegger translated *ver-stehen*). For this reason, the narrative in Zajączkowska – functioning as a tool of exegesis, explication, and translation of the meaning of the records of plant life – does not lead to the stating or confirming of something banal: it is, it exists, it lives (*or conversely*: it is not, it does not exist, it does not live), but rather emphasizes and accentuates co-existence. Yet the experience or sensibility of co-existence here does not consist in becoming entangled in narrative-stylistic-linguistic attempts to do justice to plant agency, to invent a voice for plant subjectivity, or to work out strategies of plant narration capable of grasping and expressing the specificity of a plant perspective (which is usually an expression, above all, of

<sup>45</sup>Zajączkowska, *Patyki, badyle*, 123, 125.

<sup>46</sup>“To experience the limit of understanding infinity, it is enough to go into the forest in the rain”. Zajączkowska, *Patyki, badyle*, 85.

<sup>47</sup>Zajączkowska, *Patyki, badyle*, 54.

<sup>48</sup>Zajączkowska, *Patyki, badyle*, 73.

human hubris), nor does it consist in reducing the plant world to a mere backdrop for affective-impressionistic self-portraits. Indeed, anthropomorphizing narrativizations of life processes can produce an image of them, making their significance and role more accessible – as in this fragment:

It is warm, springtime, the branches are being clasped by the claws of birds. Sunlight. The cells of the fresh wood are watery, soft, and pliable. People go outside. They warm their faces in the sun. The leaves are light green. The cells mature for a moment, grow, begin to stiffen their walls, and then they only digest themselves from within, killing themselves. But it was meant to be that way from the beginning: from their formation they contain tiny vesicles that are known eventually to burst, releasing enzymes that digest the entire living protoplast. They chisel themselves out, devour themselves, collapse into nonexistence. Springtime chirping. Light – finally spring light – the wood cells are now empty. Like an apartment after a move, with the spirit of a former existence, except that into these wooden rooms water will soon break in, flooding them completely, right up to the ceiling. For this death exists so that their interiors may be filled with water. And it will soon flow vigorously, from the roots to the spring flowers and the young leaves for which we have longed so much<sup>49</sup>.

Although we are given here a cognitively fruitful example (one of many that weave through the pages of this prose) of how knowledge is taken up and shaped by narrative, the meaning of the narrative itself (as well as the meaning of plant life), though present, is only approximated; it does not express itself directly. And that meaning is, no more and no less, the spatial and temporal non-autonomy of plants – their subjection to the law of the other, and their incomplete grounding in being, in existence.

And that meaning is, no more and no less, the spatial and temporal non-autonomy of plants – their subjection to the law of the other, and their incomplete grounding in being, in existence. In the fragment above, that “other” toward which the organism turns, toward which it initiates a more or less direct movement, is light (“the sun”, “spring light”), the changing season (“warmth, spring”), water, but also the human being longing for flowers and young leaves. By turning toward them, the plant becomes what it is.

The co-existence toward which Zajączkowska’s subject of understanding gravitates can only ever be an approximation, a coming-closer: it accepts, at face value, the impossibility of fully harmonizing or attuning the different *Umwelten* (human and plant). The encounters with plant life that Zajączkowska cultivates – whether in the quiet, sterile space of the laboratory or during her nocturnal wanderings through the backstreets of Wołomin, whose photographic and verbal notes also fill the volume – may bridge this gap, but they do not eliminate it entirely. Put differently: the intersection of two worlds that occurs in the encounter with a plant is above all an intersection of two different relations to the world, two ways of inhabiting it, which – in order to remain themselves – cannot be reconciled. The desire for meaning is a desire for otherness – for the preservation of otherness. This lack of congruence, this mismatch, separateness, and alterity resound perhaps most powerfully when, in Zajączkowska’s reading, plants – generating meaning in a bodily, material, finite way – mark time: they spatially express their own time and the time of the other. And this time turns out to be asynchronous with human time, or else it flows beneath the threshold of human perception:

<sup>49</sup>Zajączkowska, *Patyki*, badyle, 31.

The time of trees – visible in their growth, regeneration, and death – when set against our time of growth, regeneration, and death, forecloses our ability to see the becoming of trees. We don't stand a chance. [...] How can we accommodate, in our consciousness, the fact that plants, on their own time scale, grow quite vigorously, often in pulses – not only in the rhythm of day and night, but in their own rhythm, arising from their character, their specificity – precisely the kind of variability that allows us to distinguish a nettle from a violet? What are we to do with this? What are we to do with the indeterminacy of these differences?<sup>50</sup>

Zajączkowska's scattered remarks about the human scale of perception – defined as much by the limits of the body and of time as by the limits of imagination (“the temporariness of life and the violence of the eye”<sup>51</sup>) – a scale that gives us no chance of “seeing and experiencing”<sup>52</sup> those smallest and largest particles of nature, offer insight into the very practice of reading nature as she cultivates it. This practice seems to bear the marks of a... literary reading – that is, one whose object is also the reader herself. For it is meant to be an experience of the whole subject, embracing nearly all aspects and dimensions of the individual. No longer merely an experiment or investigation regulated by a predetermined procedure, designed to confirm or refute a previously formulated thesis, but also a personal and person-involving engagement in a certain event of understanding and meaning that unfolds in the course of reading. An event in which the experiencing-understanding subject is also the experienced-understood. Put differently: what takes place in the act of reading nature is co-existence, co-presence of the reader and the read, but also of the active subject in the role of the object of reading.

To conclude, I will cite a passage in which a sensitivity to this co-existence is, somewhat perversely, cultivated in yet another sense. The chapter devoted to synanthropic plants (those that accompany human beings) draws on certain generic conventions of the hymn. At moments, it becomes a song of praise, extolling the species that overgrow “backyards, roadsides, dumps, wastelands, cultivated fields”<sup>53</sup> – a song inlaid with frequent apostrophes addressed to them. Its coda, however, takes the form of a kind of reminder and admonition, directed not to the plants but to the readers, and intended for *their* (the plants') well-being:

It matters to them only that we remain ourselves – that is, appropriating, exploiting the environment, transforming nature in ways absolutely unique to us. Then they, too – the synanthropic plants, our companions, the links in chains of connection with us, forming the ecosystems of cities, villages, mines, rail tracks, flophouses — steadfast and unbelievably loyal. Human<sup>54</sup>.

translated by Paulina Zagórska

<sup>50</sup>Zajączkowska, *Patyki, badyle*, 44, 132.

<sup>51</sup>Zajączkowska, *Patyki, badyle*, 131.

<sup>52</sup>Zajączkowska, *Patyki, badyle*, 73.

<sup>53</sup>Zajączkowska, *Patyki, badyle*, 156.

<sup>54</sup>Zajączkowska, *Patyki, badyle*, 159–160.

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# KEYWORDS

biosemiotics

L I B E R N A T U R A E

**ABSTRACT:**

This article is an attempt to develop and apply the concept of reading nature within an interpretive practice directed at the poetic and prose works of Urszula Zajączkowska. In the notion of reading nature, at least two distinct intellectual traditions can be identified. The first reaches back to the concept of the book of nature, i.e. the *liber naturae*, rooted in early medieval theology and philosophy. The second consists of scientific proposals emerging from the field of biosemiotics. To read nature would therefore mean, first, to understand its existence, its forms, and its modes of being as semiosis and as *poiesis*. Second, it would mean, in probing its meanings, to employ practices characteristic of reading. In Urszula Zajączkowska's work, reading nature encompasses both the decoding of "the hieroglyphs of anatomy" and their exegesis and translation – practices that open onto the experience of co-existence.

## EXPRESSION OF PLANTS

### co-existence

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