

ELECTRIC ROMANTICISM. LITERATURE AND SCIENCE IN THE EARLY 19th CENTURY POLAND

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Abstract: *In my paper I would like to outline the electric genesis of the school of Romantic literature which emerged in the years 1820-1830 in Poland. I analyze literary metaphors covering the subject of electricity in works of Adam Mickiewicz, and the theory of romantic literature belonging to Maurycy Mochnacki who explained the importance of literature in the context of electricity. I claim that the key impulses for the emergence of a new sensitivity were introduced through scientific speculation about the nature and operation of electricity by Polish and Western scientists. The metaphor of electricity designated this invisible, but active force in the world of dead matter. It became an allegory for the activist that shares its soul with nature. It was synonymous with fire and in early popularization practices it was described simply as “heavenly fire”. Furthermore, it designated the role of cognizing subject. In romantic theory the action of speculative reason, the unfettered force of penetration of matter resembles the effect of free, electric power in the ether. Due to such speculative, metaphysical meanings the metaphor of electricity was a key element of romantic imagination, marking the social and cultural experience.*

Keywords: Polish literature; Romanticism; electricity; speculation; science and technology.

Introduction

When I declare in the title to describe the relationship between literature and science, the reader probably assumes the existence of a specific border between the two

resulting from distinguishing characteristics of the fields of literature and science. How did scientific theories affect the minds of poets in the nineteenth century? How did scientific methods change the way writers described the world? The questions that concern me in this text immediately pose a few methodological difficulties, which I would like to begin with. Following the links between literature and science defined in this way, we compare two fields - which, following Pierre Bourdieu, should be understood as peculiar economies of circulation of symbolic capital (Bourdieu, 1975). If we approach the problem of interconnectedness in this way, the question of the flow of ideas and representation becomes of secondary importance. Meanwhile, speaking about electricity, I want to emphasize that its operation is not limited to appearing in a general symbolic order. Firstly, because the symbolic order was not preceding electricity; the order was rather produced by electricity. Secondly, the **power** of electricity in its cultural manifestations results from the cross-linking of many fields.

My proposition aims to show the agency of electricity. Talking about the agency of objects, I refer to Actor-Network Theory. Bruno Latour offered a transition from a structuralist model - where the act of reasoning and defining actors is dominated by a sort of 'precession' of abstract structures - to a performative model - where the emphasis is put on the **action** that produces the meaning. Strictly speaking, the primary action is connection. Agency is achieved only in the act of configuration. In this approach proper hierarchy is restored: all structures become of secondary importance because they are only effects of acting actors whose performance is now put to the fore. Thus, Latour proposes a new model that determines a different policy of using 'others' in sociology. It is dedicated to emphasize the absurdity of the representational model of science - when, as scientists, we often do not take the basic effort to fill in such concepts as 'power', 'field', 'habitus', and instead use them as empty

terms just in place of what should constitute their essence - a combination of actors operating under cover. Of course, Latour does not simply dismiss these operative systems - which he describes as **panoramas** - but he urges to treat them as local sites rather than well ordered zoom:

It is from those powerful stories that we get our metaphors for what 'binds us together', (...) the general outline of society's architecture, the master narratives with which we are disciplined. It is inside their narrow boundaries that we get our commonsensical idea that interactions occur in a 'wider' context (...) and that there might be a Zeitgeist the spirit of which has yet to be devised (Latour, 2005: 189).

This fragment is important to me because, so far, the issue of electricity has not been included in the aforementioned "the master narratives with which we are disciplined". Latour's opposition to classical sociology marks the path of my search for the agency of things: the phenomenon of electricity in the culture of the first half of the 19th century. Efficiency is not achieved through the social within a given field - and its characteristic internal 'diffusion' of practices and symbols in the dynamics of competition, but in connections. It also means focusing efforts on performance understood semiotically - the associations are both discursive and real, while they strive to code a new reality (Latour, 1993).

The power of this discourse on electricity resulted not from some kind of unparalleled power of science or the advantage of the scientific field over the literary field, but from its relational, assemblage character. Mary Fairclough tried to show the complexity of generating knowledge about electricity at the intersection of what is cultural, social and religious in the European Republic of Letters. According to the author, the language of electric science was not limited to the scientific; it was rather co-produced by other discourses (e.g. religious), thanks to which this

language became figurative and productive. She wrote that since the 1740s:

Experimenters employ the concepts of ‘anima’ or soul, and ‘aether’ to account for electrical phenomena, and such use of spiritual terms raises further debate about the distinction between material and immaterial existence, and the function of faith in experimental endeavour. **These texts demonstrate how discussions of electricity are never confined to philosophical or scientific matters, but are deployed, often polemically, in discussion of religious, cultural and even political beliefs** (Fairclough, 2017: 31 [my emphasis – PU])

Due to such **hybridization** in terms of concepts and individual motivations, electricity worked not only in the field of specific (scientific) practices, but has become a kind of universal actor, spilled over the discourse. The multitude of its uses, and analogously the multitude of connoted worlds that electricity informed, created some kind of meta-language. It seems that electricity served as a metaphor on many levels – from literary to ideological. Even without literal references to electricity we can trace its performance – by associations of such terms like ‘aether’, ‘spirits’ ‘sparks’, ‘flying’, ‘permeating’, ‘striking’, ‘lightning’. All of them had their share in building the fundamental domain of Romantic literature.

My proposition is particularly associated with this approach and strives to link more closely the scientific with the social by conducting a case study of translation and transformation. Literature was not only a ‘witness’ or a ‘medium’ of science, but built on it its theory. This approach makes easier the description of the modes of operation of electricity in the Romantic period. While the topic may be more intuitive in British literature, thanks to the personification of these connections in *Frankenstein* by Mary Shelley, in the Polish case these influences are

still unrecognized. I believe this is because the agencies of electricity dispersed and did not find their homogeneous representations. When we continue to 'zoom' for well defined structures we will not see the micro-performances. When we switch the focus to metaphors considered as practices – rather than representations – we will definitely see how introducing the theme of electricity stabilizes the process of the discourses.

Electricity in Polish science and philosophy

In accord with Fairclough thesis, I find that the first translations of electricity in physics in Polish science are actually made by religious authorities. One of such physicists and priests, Andrzej Trzciński, who lectured in Cracow Academy around 1786, told his students that electricity:

The Heavenly Fire seems to be not a minister of Fear, but the minister of blessing, while it carries out beneficial effects, giving life to the nerves and the spirit (...). The Heavenly Fire has apparently secret power, which animates nerves of the bodies like rain refreshes an earth or wind clears an air (Trzciński, 1787, [no pagination]).

In this short passage Trzciński linked together the mythological question of lightning with its medical potentialities. Furthermore, he associated God's blessing with vitality, thus solving the problem of the origin of life by binding it with electrical force coming from God himself. His theory was a genuine summary of some western-European efforts in linking electricity and the divinity, electricity and medicine was undertaken by, e.g., Franz Mesmer, Pierre Bertholon, Edward Nairne, whom Trzciński placed in bibliography.

Meanwhile, a secular wing of scholars gathered in Warsaw and, after 1803 in Vilnius (i.e. after establishment of University), endorsed a more empirical attitude towards

electricity. They focused on a physiological description rather than a metaphysical explanation in accordance with the mechanical philosophy and rules of experiment (Shapin, 1984). Various works from this period mention the same features of electricity. Its visible signs are light, spark, crackle, electric breeze, attraction and repulsion. Moreover, most physicists emphasize the evident-hidden dichotomy, claiming that “this matter is spilled all over nature so that there is no place where it can be hidden and cannot be found” (Scheidt, 1786: 28). Most of them compare electricity to fire, calling it “a **breath of fire**” (Hube, 1791: 397 [my emphasis – PU]). This phrase brings to mind ‘breathing’ and that image is not without further connotations. We find a similar interpretation in the popular *Elementary Lessons* translated from French. The author Louis Cotte talks about the nature of physical phenomena in the form of a dialogue: “Q[uestion]: To what do they attribute the phenomenon of electricity? A[nswer]: They attribute it to the **exhaust** of a very subtle matter, which they believe to be **elementary fire**, that is, the most active and the purest one” (Cotte, 1809: 121 [my emphasis – PU]). Electricity is also translated in terms of its medical properties. An interesting example is the thesis promoted in a textbook, *Physiology or Physics of the human body* [*Fizjologia czyli Fizyka ciała ludzkiego*] dedicated to practitioners, written in 1809 by the dean of the medical faculty in Warsaw, Jacek Dziarkowski. He claimed that “according to all likeness to the truth, the animal body encloses the living, unequally more [than plants] subtle, volatile, and supposedly unknown elements: light, electricity” (Dziarkowski, 1809: 31). The level of absorbing these elements determines the diversity of animal and plant life. The difference in how bodies respond to such subtle matter as electricity also marks the boundary between man and animal. The author suggests that this is due to the greater sensitivity of humans to electricity - which ultimately builds the human nervous system.

In the face of such far-reaching speculations – completely understandable in the case of electricity because of no clear evidence about the structure and function of electricity in nature – rector in Vilnius, Jan Śniadecki claimed that “electrical phenomena (...) in physics cannot be made into a decent, thorough, and reliable science” (1837: 264). He knew that the very phenomenon lacked profound theory and the current state of knowledge was very dispersed. But even empirical-rational studies, which tried to be ‘objective’ in a sense given by British mechanical philosophy, often became a source of metaphysical meaning. We can see it even in metaphors used in Polish textbooks in order to teach electrical science. In 1786 a translation of the treatise belonging to the Italian naturalist Cesare Beccaria was published in Vilnius by the Polish botanist Stanisław Jundziłł. Beccaria divides electricity into artificial and atmospheric. The latter relates to phenomena observed in nature – storms, hail, tornadoes, earthquakes and even volcanic eruptions are to him the result of electricity. Artificial electricity is the result of human action involving the use of an electric machine. It is electricity which we “ignite from the industry of our will” (Beccaria, 1786: 2). Already in this short quote, one can see that Beccaria makes a significant shortcut – by removing the mediation of the machine as an intermediary between man and effect, that is, electrical phenomena. He consistently creates such image, especially when he describes the construction of an electric machine: “**by parts of a machine I will understand a man** who will rub or rotate the glass, as well as various other electric bodies by participation that will touch the machine and serve to friction or rotate the glass” (5 [my emphasis – PU]). Beccaria (together with Jundziłł) naturalizes the action of electricity. Considering it as a force accompanying the actions of human will and *vice versa* man becomes a homogeneous element of the machine. This perspective

brings man and electricity closer - as if the interaction of the two was obvious and common.

It is not only the metaphor that determines the metaphysical interpretations of electricity, but also the scientific experiences that Beccaria describes in such details that they can be easily performed by his readers. It can be assumed that students at the Vilnius University, equipped with a large electric machine, were conducting group experiments with electricity. Beccaria's textbook describes a whole host of different experiments, including the ones popularized by Jean Antoine Nollet and Stephen Gray (Fara, 2002), which involve the transmission of electrical discharge through human chains. Here is the collective experience Italian scholar proposes:

Let there be a chain of the persons A. B. C. D. E. F. G. H. etc. X. Person A. brings the glass to the conductor with his left hand and takes left hand of B with his right hand; B. has the end of an iron chain under his right leg, and C. has the other end with his left hand; let D. put his left hand on the head of C., and let the finger of the right hand approach to the left ear of E, and let F touch his left hand to the right ear of E, and hold his right hand at the end of the iron rod; H, let the left hand hold the other [side of the rod], G. with both hands hold the center of the rod etc. Finally, the X, who is at the end of the chain, while holding the H's hand, should bring the finger to the rod of the charged glass. The concussion will go, from the left arm through the chest, along the right arm of A; hence, through the left arm of B, and through the right leg, it will go to the chain; from the chain, it goes through the right shoulder of person C and through his head to the right hand of D, then through the other shoulder of D, along the finger it will flow from one ear to the other of person E, then it will run from one shoulder to the other person F and through the rod it will flow to H, not touching person G, although he holds on to the iron bar with

both hands: because the shortest path is along the bar. (Beccaria, 1786: 159-160).

Such an experiment not only illustrates the operation of the electricity flow and the operation of the Leiden jar. In practice, it creates something like a human machine. It is like playing a game - touching the ear or head of a colleague from the school bench had to provoke peals of laughter among students, exceed a certain conventional boundary, connect pupils into one collective body - all of this attracted by the power of electricity. Physical and social bonds are formed during such a show. But it also demonstrates, in a somewhat witty way, the physical nature of these bonds. According to what the aforementioned Dziarkowski, the noble Warsaw physician stated, feeling within the human body appears as a result of human susceptibility to electrical force. The electric force enables connectedness, experiencing and living together. Last, but not least, the phrases 'etc', invite the readers (students) to create new bonds. If there are more than 10 persons in class, they have to use their imagination and creativity to add next people to the chain in order to experience electricity, and thus togetherness. All the effects of forming an electric chain find their reflection in the poetry of Adam Mickiewicz.

Electrical devices: the poetry of Adam Mickiewicz

Before it was commonly used in technological devices and associated with the issue of industry, the term electricity was also used in the discursive and social devices. This was stated a few years ago by Siegfried Zielinski in his book *Deep Time of the Media* (2006), where he described the original discursive uses of electricity in communication strategies, which later formed the basis of the invention of the telegraph. The issue of communication in the nineteenth century, as a term coined at the intersection of physics, medicine, engineering and social sciences, was raised also by Laura

Otis in her book *Networking. Communicating with Bodies and Machines in the Nineteenth Century* (2001). According to the author, metaphors of network were informed by various discourses – communication systems and medicine among others. Furthermore, they shared common fields of significance and influenced each other. Thus, nervous systems were imagined similarly to the way electricity machines worked. Conversely, the importance of communication systems was justified by comparison of them to an organism which can gain self-awareness only through the construction of sensitive ‘nervous’ filaments. Such hybridization is not only a proof of the practical intermingling of mechanical and organic categories used to be considered as nested in irreconcilable dualism. It can serve as an argument supporting inter-disciplinary research of cultural manifestations of scientific practices that are often omitted by positivist historians of science looking only for technologies in a narrow sense.

Mickiewicz played a crucial role in introducing new sensitivity into poetry in Poland. Born in 1798, after finishing primary education, he began studies at the Vilnius University. He spent the first year at the physical faculty, then moved to study literature and the teaching profession (Weintraub, 1954: 12). Mickiewicz and his friends founded the Philomath Society, which included students - representatives of the natural, medical and philological sciences. This group was a source of discussion and help as well as new cognitive horizons - where novice poets and physicists met - supporters of animal magnetism, religious believers, people dedicated to mathematics and electricity explorers. In 1822 Mickiewicz made his debut with *Ballads and Romances*, which historians of literature considered the most important manifesto of Romantic poetry and established the date of its publication as the symbolic beginning of Romanticism in Poland. In 1824, alarmed by the spread of liberal, democratic and independence sentiments at the University, Nikolai Novosiltsov - the tsarist administrator

of the University and of the education system in Poland - brought a show trial to young students (Flynn, 1988: 121). As a result, some of them ended up in prisons, and most of them were sent to Russia. Until the outbreak of the November Uprising in 1830, Mickiewicz stayed in St. Petersburg, and then in Rome. After the fall of the uprising - in which he had not participated - he stayed in Dresden, where he wrote *Forefathers' Eve*, part III, and then emigrated to Paris - the center of the intellectual life of Poles (Weintraub, 1954; Koropeckyj, 2008). Soon after that he was proclaimed the national bard. His works, such as the *Ode to Youth*, the dramatic poem *Konrad Wallenrod*, served as a symbolic matrix of the experience of enslavement and constituted a specific cultural code among the romanticizing participants of the uprising.

Written around 1820, with a dedication to friends from the Philomaths circle, *Ode to Youth* expressed their main ideas - energetic work, the strength of friendship and faith in the power of education. Although it was published after the author's authorization no sooner than in 1838, it circulated in copies, was passed on orally or from hand to hand (Górski, 1977: 16), inspired a new generation to adopt a new attitude towards reality:

Youth! Up and **over the horizons rise**,
And **smoothly penetrate**
With Thy all-seeing eyes
The nations small and great.
(...)
Up and reach the **places out of sight**,
Break that to which the brain can do no harm!
Youth! Mighty as an eagle's is Thy flight,
As a **thunderbolt** - Thine arm!

Hey, arm to arm! **By chains**
Let's bind the earth around;
To one focus bring each sound,
To one focus spirits bring and brains!
(...)

While in the land of men a night so dumb,
The elements of Will are yet at war;
But Love shall soon burst forth like fire;
Out of the dark, the world of **Soul will come,**
In Youth's conceived desire,
By friendship braced forever more.

(Mickiewicz, 2007, 48-53 [my emphasis – PU]).

The eponymous “Youth” emphasizes the generational difference between the students’ brotherhood and the authorities, who called on young people to submit to the rational-empirical program of the Enlightenment. As can be seen in the poem, the enlightenment works differently in the imagination of young Mickiewicz. It is not the universal light of reason brought by arduous education of masses, but rather that mysterious force of union that is able to “break that to which the brain [reason] can do no harm!”. Contrary to the light of the old, the light of youth is dynamic, transcending the real world, connecting with some general plan and the goal of divine.

Light is not just Sunlight - it is rather a product of another phenomenon, different from the distant, inaccessible Sun. In this poem young Mickiewicz uses the theme of electric force as a source domain. It represents the power of the young generation – pointing to the ability of youth to overstep bounds in the same way as electric force does – penetrating the strongest materials, enlightening the dark. Most importantly, all of this happens as a collective effort. Therefore, the original electric device receives a communicative function in this poem. It serves both as the ritual and the practice of togetherness. Mickiewicz almost literally echoes the electric experiment – adding to it the philosophical inscription, that the evident feeling of being together contains a secret power. Thanks to this stylistic device, Mickiewicz restores agency to man - or more precisely - to collectives. Institutions are no longer legitimate, but what transforms the world are spontaneous associations – their

enthusiasm and willingness generate the sparks of new light and power. Therefore in the last words of the poem he promises a new sun. He welcomes “Dawn of Liberty” and assures that it is the carrier of “Redeeming Sun so bright” (Mickiewicz, 2007: 53). No wonder then that these words accompanied insurrectionists who stood against the Russian administration.

Walicki called the fall of November Uprising in 1831 a national catastrophe, which triggered a new idea - messianism. He described this experience as “a hope born out of despair; as a result of multiple deprivations; as an expression of an increased feeling of self-importance combined with a sense of enforced rootlessness and isolation in an alien world (emigration)” (Walicki, 1982: 242). *Forefathers’ Eve*, part. III¹, written under the influence of these events, ideologically sought to create a story about the sacrifice of Poles. The protagonist of the drama, Konrad, depicts as much an alter-ego as he represents the figure of disappointed insurgents who try to find out the meaning of, how they imagined, the innocent victim - a nation that tried to regain independence.

The action takes place in Lithuania. The heroes are arrested students awaiting a trial, which is led by a ruthless Senator. The prisoners predict their fate - they will certainly be sent to Russia or will be imprisoned in accordance with the devastating policy pursued by the Russian governor. This situation is clearly autobiographical - the characters represent friends - Philomaths, whom the author mentioned in the

¹ The partition of *Forfathers’ Eve* is not an easy concept, while there is hardly any continuity of plot thread in the cycle. Each part was written in distinct time span (part IV - 1820-21, unfinished part I - 1821, part II - 1823, part III - 1832), different convention and expresses various ideas. Polish title - “Dziady” - refers to ritual (forefathers’ eve), but also to people who contact spirits, or even to beings on the frontier of the supernatural world. Crossing the barriers of the material and spiritual world is a very loose theme that binds these works into one cycle.

dedication and preface. Mickiewicz used the Vilnius trials as a figure of martyrdom and a harbinger of the catastrophe of the November Uprising, as he believed that something supernatural happened then: “in the affair of the students of Wilno there was something mystical and mysterious” (Mickiewicz, 2016: 173). One of the University employees favoring the Senator - called in the drama the Doctor - is killed by lightning which struck through a window that was open at night, attracted by silver rubles (received from the Russians). Mickiewicz based this story on a genuine motif. Indeed, August Bécu, a lecturer in medicine, about whom there were numerous rumors that he had betrayed the students, the regulars of his salon in Vilnius, died in 1824 of a streak of lightning. Mickiewicz dramatized this story, making it a divine intervention - a sign that God sided with the victims, not the torturers, giving the eminent surgeon a black legend.

The axis of the drama is an “Improvisation”, called by the critics the ‘Great Improvisation’. Some scholars even thought that the original seed was this long monologue, to which Mickiewicz added the scenes introducing the context and background to the plot (Kallenbach, 1897). Another eminent Polish expert on Romanticism, Juliusz Kleiner, stated that the structure of the drama resembled a triptych. In the first part, Konrad challenges God in the Improvisation. Konrad’s pride is balanced by Father Piotr’s repentance and penance. He is opposed to Konrad - thanks to his deep faith and devotion to God, he intercedes for Konrad and enables his conversion. The central part is Father Piotr’s vision in which he sees the sense of suffering of Poles and the future fate of Poland. Followingly, the third point is the aforementioned divine intervention - and the punishment of the Doctor (Kleiner, 1948, 413). The contact with the silent God, announced in the title of the drama, is a kind of paradox that is resolved by a dualism of attitudes. Konrad is a man of action, a man of poetry, who works actively. However, without faith personified in Father Piotr, he is not able to really

influence the fate of the world. Here the basic message of Mickiewicz's messianism is revealed: "The salvation for Poland will come, it will be brought about by a great, divinely-inspired man, uniting in himself Konrad's heroism with Father Peter's obedience to God" (Walicki, 1982, p. 247).

In the Prologue we get a preview of the power inherent in Konrad. One of the angels says:

Ah, mortal! If thou only knew thy **power!**
When but a thought, like a **spark in the mist** [cloud]
Shines in thy mind unseen, great **stormclouds** lour
To pour forth gentle rain or savage tempest.
If but thou knew, that as each thoughts alights
There gather round in silence, and stand by
Like **storm-hounds**, angels both sooty and **bright:**
– Will dash to hell, or **flash out in the sky?** –
Yet thou, like a steep cloud, fly on aloof,
Knowing not where thou art borne, nor what thou do.
Ah, mortals! Each of you might, imprisoned, alone,
By thought and faith overturn the stoutest throne!
(Mickiewicz, 2016: 180 [my emphasis – PU]).

By comparing the formation of thoughts in the head of a human to generating lightning in a cloud, he introduces a new kind of dynamics, but also evokes **great strength of thought** and something that is the silent knowledge of this comparison, i.e. the possibility to actively influence matter and minds of people as well as their vital forces. The thunder will therefore be an excellent metaphor for the rebellion born out of the inner effort of the work of thought. Just as masses of swollen clouds cause an increase in tension, so the metaphorical 'internal tension' will become something more momentous, capable of creating new, physical phenomena – lightning killing traitors and oppressors.

Before Konrad extrapolated his thought-power, the other prisoners had gathered in one cell to celebrate Christmas Eve. This scene allows to see the difference

between the main character and his brothers. He is clearly lost in thought, he does not listen to friends and clearly goes mad. The expression of this is “Little Improvisation” - a trance into which he falls; at the same time, an announcement of proper improvisation. One of the inmates notices Konrad’s different condition and warns the others: “Brothers! His spirit’s left his body now / And wanders far away with stars / (...) Look at his eyes: / How strongly do they smoulder beneath the lids (...)” (201). A watchful observer notices some sparkling of the body, the visible sign of which are **the flames under the eyelids**. His condition worsens and he finally shouts out “I rise! Above the cliff’s summit, I fly” (203). It describes the experience of flight, being in the sphere of clouds above humanity. It also gives him a feeling of power. He announces revenge with his “eye of lighting” (203). Terrified by this “devil’s song”, they decide to transfer him to his cell to try to rest.

Konrad’s monologue, called “Great Improvisation”, is an outbreak of individual pride, an accusation of God of indifference and insensitivity, and above all, equating himself with the Creator. It is also an explosion in another sense. Górski pointed out that although dreams are the main medium of communication, in the improvisation Konrad has the other, more material power to cross the border of both realities. In fact, his song is a flight itself - a moment of ecstasy, as if the spirit had freed itself from the body and, as the protagonist announces, in the highest poetic rapture he plays his song on the stars (Górski, 1977: 120). This release from the body is a kind of physical transformation. The hero literally ‘intensifies’ himself: “Tonight I’ll know! This moment is my fate / Tonight I flex² the sinews of my soul!” (Mickiewicz, 2016: 208). **He**

² In the original, Konrad used the verb “natężać”. It can be translated as “to strain”, but it must be mentioned that “natężenie” means also “amperage” and the verb was used in the context of electric science, meaning “to strengthen an electric current”.

transforms into a subtle spirit, a thought, which permeates the world. He promises to overthrow power, because he is made of similar matter as he describes in his credo:

What is my feeling?

Ah – only a spark.

What is my life

Ah – a flash in the dark.

What are they now, tomorrow's thunderbolts?

Only a spark.

And the ages, which before me lie unrolled?

A flash in the dark.

From what is man this microcosm, born?

From but a spark.

(Mickiewicz, 2016: 212).

Hidden in the bosom of the nation - like an electric current in nature - a new hero is capable of collecting energy from his own suffering. In his struggle with God (in fact with himself) he intensifies the strength of his thoughts - and the one well-directed according to the Evangel - that is able to actively influence the fate of the world. He probably had generated the power of the lightning that finally, with God's help, stroke the Doctor.

In *Ode to Youth* and *Forefathers' Eve*, part III, one can discern the same position of the Romantic subject. In conditions of collective rapture - guaranteed by friendship, spiritual connection, and common goal - a person becomes an entity much more powerful than existing alone. Also thanks to the power of his imagination - producing equally powerful, all-penetrating thoughts - man exceeds the limits of mundane existence. Like electricity, subtle, spiritual matter, a human is able to hover over the world, penetrate and actively influence it. Such philosophical speculation, practiced on the heterogeneous grounds of physical science, religion, and politics, constitutes a new project of the Romantic man.

Electro-spiritual cognition: *On Polish Literature in the Nineteenth Century* (1830) by Maurycy Mochnacki

In the beginning I would like to situate Mochnacki's ideas in the only slightly sketched cultural image of the epoch. He belonged to a group of young, liberal journalists, who strove to create a new system of national patterns and attitudes. Grouped around the periodical "Warsaw Diary" ["Dziennik Warszawski"] (1825-1829), they formed the most dynamic, critical thinking center of young Polish poetry (especially Adam Mickiewicz and Józef Bohdan Zaleski). They understood criticism not only as practice of reviewers in the field of literature, but more broadly - in relation to all institutional activities of a slowly developing country. A common opinion expressed in this milieu was that literature was an effect, an expression of a deeper and broader national activity. Therefore, they wanted to create a conscious citizen, who identifies with the national community and lives with the ills of his country: industry, politics, literature, etc. This direction of journalism and politics marked the transition from the universalistic model of the Enlightenment to the local model. The main tool and metaphor was a **spirit**, which characterized a new sensitivity towards which defenders of classical aesthetics and philosophy were expressing far-reaching distrust.

In my opinion, this happened for two main reasons. First, the method of historical science was modified. This change was brought about by Joachim Lelewel, lecturer in history at the University of Vilnius, journalist and creator of cultural life, and later also a leading activist during the November Uprising. According to Lelewel, a historian should become a flexible observer, try to identify with people acting in past centuries. Such a Romantic-scientific method assumes that the historian-observer reconstructs as much as possible the entirety of cultural life in past epochs in order to be able to **emotionally connect** with its representatives and thus **recognize the spirit** of the given history (Stanley, 2006: 52-84). This method had a

huge impact on the young Romantics. Lelewel was not only a mentor, teacher, and privately a close friend of Mickiewicz, but also worked closely with Mochnacki's Warsaw group, and published in "Warsaw Diary" and other press journals of this group. "Let us not try - wrote Mochnacki - to tear through the mystical veil of the past, (...) but let us recognize its value in terms of **feeling and imagination**, and in terms of Poetry and Philosophy" (Mochnacki, 1910: 33 [my emphasis - PU]). This *credo* of the young critic was definitely inspired by the new philosophical and historical approach.

However, it cannot escape our attention that both the position of Lelewel and the entire Warsaw group, who define spirit as the highest quality of cognition, also results from its high status granted by physics and chemistry. This can be seen, above all, in attempts to describe the work of the spirit, its "physiology" and the connection of the spirit of history with the spirit of man. Such a significant attempt is Maurycy Mochnacki's *On Polish Literature in the Nineteenth Century [O literaturze polskiej w wieku dziewiętnastym]* (1830). This treatise is, in the opinion of many literary historians, the crowning achievement of attempts to present the theory of Romantic literature in Poland. At the same time, it is so symptomatic for the described literary culture that the first part of the treatise on Mochnacki is devoted to the exposition of the physical properties of matter. This is the main feature of Mochnacki's speculativism. He constructs the theory of romantic cognition referring to the physical interpretations of the connection between man and nature. Should we ignore this description? Purify the field of physics, chemistry and literature, or follow their relationships - which are only productive as relationships? I find it a misunderstanding to ignore Mochnacki's references to nature - especially in the light of Latour's works cited in this article. Following the author of *We Have Never Been Modern*, I see in the Mochnacki's treaty a **hybrid forum** that, in line with the modern way of

operating, was divided into what constitutes an inept philosophy of nature and what concerns literature. However, if we do so, we will lose sight of the **connection that generates productive power**. If the context could be so easily separated from the main and significant matter of deliberation, as we, historians and theorists of literature, do, then a somewhat strange hypothesis could be reached - that the matter of considerations, which we call context, is redundant, that the author could calmly do without it.

Mochnacki, born in 1804, died in 1834, having experienced, in the opinion of his biographer Stanisław Pieróg, a conscious, Romantic life (Pieróg, 1982). He studied law at the University of Warsaw from which he was dismissed by the Russian authorities for belonging to patriotic unions. At the age of 21, he made his debut as a journalist and argued with the mainstay of classicism in Poland, Jan Śniadecki. Then he worked in the editorial offices of Warsaw magazines, the mentioned "Warsaw Diary" (1825), and "Polish Isis" ["IzysPolska"] (1826-1828). The latter was an interdisciplinary journal, in which papers on philosophy, literature, inventions and natural sciences were published - including a dozen on electricity. Then he founded his own magazine, "Polish Newspaper" ["Gazeta Polska"]. After the outbreak of the November Uprising, he fought as a common soldier in the battle of Olszynka Grochowska - the bloodiest battle of the war - and then in several more battles, for which he was awarded the highest military award, the Cross of the Virtuti Militari Order. After the Uprising's collapse he emigrated to France. He died in Auxerre of tuberculosis (Baar, 2004: 751-752).

Mochnacki's work is certainly a manifesto of the new literary school. However, the author tries to distance himself from the controversies discussed in the Warsaw community - about the struggle of the Romantics with the Enlightenment classics. One could say that the program of national literature which he postulated, does not gain its

legitimacy in the field of current debates, but it finds its justification rather in his 'natural history'. First and foremost, the postulated literature seeks to **capture and express the spirit** - the spiritual tissue of material reality and the foundation of the entirety of social life. In ancient ages this spirit was more closely connected with life, it manifested itself almost everywhere on the surface of human activities. The critic states that in the modern age "the light of man's primordial angelic nature has ceased!" (Mochnacki, 1830: 4-5). This utopian view of the past is intended not only to accuse civilization's progress of fragmentation of skills, division into states, professions, etc., and thus of dispersal of the spiritual cohesion. It aims to compare primordial human nature to **angelic light** - and relate the physiognomy of the spirit to this physically explainable phenomenon.

Secondly, attention should be paid to the author's deliberations on the spirit itself and its functions, which he leads in reference to selected biological, chemical and physical theories. Mochnacki is guided by a pre-evolutionist thesis about progress and development. He argues with the opinion that nature is devoid of reflectiveness. Its development and interconnection indicate a hidden intellectual element in it. For example, when the crystals are split open, you can see patterns of leaves and flowers on them, which Mochnacki considers to be evidence that the dead crystals 'foreshow' in their structure living beings, e.g. plants.

[Nature] works, but does not know its actions and movements (...). However, it is soberly aiming at it. She contained in a hard stone a spark of fire, a flash of light; sound in metals. Light and sound are the soul of things; the materiality of these beings then is questionable. - It is the first, most distant representation of a certain intellectualism in nature (1830: 15).

Therefore, the critic observed in nature an evolution from primitive beings to higher organizations - endowed with life. In general, development leads nature from inertia to the concept of itself. This argument, characteristic of pre-evolutionism, defines humans as the ultimate goal of nature's 'endeavors'. Therefore, the operation of the human mind is the activity of nature, since the human mind is the highest form of natural-material organization. In this way, both nature and culture cease to be two separate, opposing beings. In Mochnacki's criticism, they become fluid, continuous processes transforming into each other - and the catalyst for this change is the human being. It is worth emphasizing that nature ceases to be just "being" for him, but becomes a process. Krystyna Krzemień-Ojak, a researcher of the works of the Polish critic, drew attention to this. Mochnacki, she wrote, "recognizes nature as a creative process. It produces creations that cannot be understood by decomposing into form and matter. The form has now become something external, abstract, dead" (Krzemień-Ojak, 1975: 61).

Thus, we come to the third very important point in Mochnacki's interpretation of nature: the relationship between man and nature. In another work he defined this relationship directly: "nature is an image of human mind, if eternal laws, for rotation of celestial circles, are also laws of the course of our thoughts in a way that human mind is an image of the world" (1910: 9). This tangle of concepts is intentional. Mochnacki takes for granted the interpenetration of mind and nature in such a way that they resemble and represent each other. The key term is 'reflection', which means the ability to reflect and the human thought itself. Both fields of meaning define each other. Human thought, Mochnacki seems to say, is in fact a certain phase, a certain system of nature present in man. However, the manner in which this presence is generated remains a mystery to both experience and scientific experiment. The interconnection of the processes of

nature and human thought is already a “phenomenon of a higher order”. At this point, Mochnacki addresses the shortcomings of the empiricist program. The law for bonding the nature and thought is a secret. It is a matter of genius fueled by great intuition and imagination, who can create such works that reconcile nature and the human mind. Namely, a genius can create such things that are able to **physically** impact upon people.

Even when the rule for the combination of nature and thought remains hidden, the critic allows himself to speculate on this matter. This is where the metaphor of electricity comes into play. Thanks to it the combination of nature and man is not a vain hypothesis, but a materialistic condition. It is electricity that conditions this connection. It serves primarily as an example of a smooth, continuous transition between matter and thought. Literature should deal with the spirit, invisible phenomena, as modern natural sciences do, as – Mochnacki argued – “the old *ars separatoria, segregatoria*, - (today’s chemistry) – starting its research of the heaviest substances, from metals, with time, it moved to imponderables, to the research of air, light, magnetism, electricity” (1830: 37). He devotes more attention to the last one: “Electric fluid spilled underground, on the ground and in the air, gives elasticity to the muscular system and to the subtle [irritable] plant fibers” (pp. 20-21). Electricity affects both people, their muscular and nervous systems, and at the same time is a revitalizing force for plants. This combination directs the author towards a more dignified question: ‘Aren’t those beings most active in organic nature also the most powerful actors in organic or inorganic [nature] - and vice versa?’ (p. 20). The group of bodies - like electricity - which Mochnacki enrolls among the most active imponderables in nature, is for the author a proof of the possibility of a bridge between organic and inorganic bodies. Such supposition stands behind the comparison between imponderable beings and thoughts. It supports also the

thesis about the active influence of one natural body on another, as well as the possibility of the evolution of life from inorganic matter (which was essentially the subject of research by scientists before Darwin – e.g. Jean-Baptiste de Lamarck).

Due to such argumentation, Mochnacki constructs a romantic cognition system. The function of literature is related to the speculated physical structure of the world. Mochnacki creates an analogy between the actions of thought and the action of significant radiation - subtle and free matter - electricity. When he defines “thought” in this system, he admits that it is **“a radiant being, hidden in us, invisible, spreading in all directions, in the shape of a wave of disturbed water, and everywhere generating a sense of vision!”** (1830: 17 [my emphasis – PU]). Furthermore, he pushes the very meaning of allegory much further than the abstract relationship. His allegory is even more, it is an explanation of literature by the principles of radiant beings. Thought becomes a physical being that physically acts upon bodies in space - attracting, enlightening, and giving them a vital power. It clearly refers to electricity that focuses in one all these actions. The aim of an extensive introduction to the philosophy of nature in a work originally devoted to literature is to explain this analogy. Therefore, the author describes the Mickiewicz poetry as “a blast of a fiery spirit, stream of pure elation, the highest lyrical inspiration, flame of love” (180). He calls him “the one who sees luminously” as other poets that unify their soul with the spirit of the nation. “Seeing luminously” corresponds with metaphor of all-penetrating, electric gaze introduced in poetry by Mickiewicz. For Mochnacki it indicates a metaphor that organizes the entire argument. The role of literature is to **“pull [the hidden spirit] to the light”**, meaning visualizing something in the form of light. It brings to mind experiments with electricity. Thus, the writer’s task is to bring out the spirit, “intensify” it and “spill it” around the world. That kind of literary action

resembles producing an electric current with an electric machine. In addition, he claims that oppositely to a Romantic project of cognition, enlightenment critics could not answer the need for national community: “In the land of their fabrication, you do not have that **blind power that draws us together** with the **telluric** property of each original” (1830: 204 [my emphasis – PU]).

Mochnacki built his key argument on the necessity to explore the manifestations of the national spirit in artistic and cultural works by using the metaphor of electricity. From the science of electricity he derived far-reaching theses about the relationship between organic and inorganic matter, and also adopted some speculations about the identity of the spirit of the world and radiant bodies operating in space. Based on such a physical structure of the world, literature and art constitute important human action; they simply extract and condensate eternal light – the power that brings people together. Art works by analogy with electricity – a subtle fluid – is able to ignite a fire in people’s hearts, expand according to the strength of its intensity, striving for a chemical-like transformation. By combining a poetic word with physical, electro-spiritual communication, Mochnacki was able to give literature the highest cognitive status.

Conclusion

There is, of course, not enough space in this article to describe the feedback that occurs in science under the influence of messianic literature and theory. It is worth mentioning that at the end of the 1830s, there appear such figures as Józef Źochowski, a physicist, teacher and messianist, who constructs his own electromagnetic devices and promotes the thesis about the identity of the spirit of the world and electromagnetic matter. My goal was to show the circulation of electricity and its fundamental mediation for Romantic literature. It is thanks to electricity that some works, such as *Ode to*

Youth and Forfathers' Eve, part III, were able to describe the experience of a new sensitivity and explain reality in a way that Poles experienced it in the violent 20's and 30's of the nineteenth century. There is no doubt that the practices of translating and experiencing electricity, not only in a scientific sense, but in a broader sense - affecting social life, determined the ways in which the Romantics described the world. Since electricity was itself an untamed object of scientific endeavors it hardened speculation about being an eligible method. In this sense, the science of electricity has established speculation as the desired (and only possible) way of knowing. The opening of this metaphysical gate, was inaugurated by science, which for obvious reasons was created as a mixture of: religion, politics and other modes of existence. This breakthrough seems to me to be the source of Romantic literature in Poland, without which the understanding of its impact on contemporaries remains incomplete.

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