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ROCZNIK

HISTORII PRASY POLSKIEJ

Polskie czasopiśmiennictwo
popularnonaukowe
do 1939 roku
— zarys historyczny i rozwój

**Polish popular-science
magazines until 1939
— a historical outline
and development***

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SŁOWA KLUCZOWE:
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in the interwar period (1918–1939)

ABSTRAKT

Tematem niniejszego opracowania są dzieje czasopism popularnonaukowych wydawanych na ziemiach polskich od XVIII wieku do 1939 roku. Początkową datę wyznacza rok 1758, kiedy to ukazał się pierwszy polski periodyk popularnonaukowy „Nowe Wiadomości Ekonomiczne i Uczzone”. Badany zbiór objął 128 tytułów zróżnicowanych zarówno formalnie, jak i treściowo.

ABSTRACT

This article outlines the rise and development of popular science periodicals in Poland from the 18th century until 1939. Their history begins in 1758 with the publication of *Nowe Wiadomości Ekonomiczne i Uczzone* [Latest Economic and Learned News]. Our corpus includes 128 periodicals representing a great diversity of formats and content.

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Streszczenie

W latach 1758–1939 na ziemiach polskich ukazywało się 128 tytułów czasopism popularnonaukowych, z tego 19 przypadło na XVIII wiek, 50 na XIX i 61 na dwudziestolecie międzywojenne (dwa czasopisma założone w XIX stuleciu ukazywały się do 1939 roku). Za główny cel artykułu — zgodnie z przyjętymi w prasoznawstwie procedurami badawczymi — obrano: ustalenie wielkości badanego zbioru, wskazanie jego linii rozwojowej oraz uwarunkowań stymulujących lub hamujących ów rozwój, zarówno globalnie, jak i w poszczególnych podokresach. Pierwsze polskie czasopismo popularnonaukowe (półuczone), „Nowe Wiadomości Ekonomiczne i Uczzone” ukazało się w 1758 roku z inicjatywy Wawrzyńca Mitzlera de Kolofa. Kolejne miały najczęściej charakter magazynów przenoszących na grunt polski wiedzę o nowych odkryciach i wynalazkach. Popularyzowały wiedzę ekonomiczną, rolniczą, medyczną, przyrodniczą, historyczną, filozoficzną, z zakresu nauk ścisłych. Stymulatorem rozwoju czasopism popularnonaukowych na ziemiach polskich w XVIII i XIX wieku stały się wzorce zagraniczne — głównie niemieckie, angielskie, francuskie. Czerpano z nich nie tylko gotowe lub przerabiane teksty, ale też formułę wydawniczą i elementy struktury wewnętrznej. Ewolucja czasopisma popularnonaukowego w XIX wieku polegała na przechodzeniu od naśladownictwa wzorów zagranicznych do tworzenia modelu opartego na materiale krajowym, zarówno pod względem treści, jak i zespołu autorskiego, który tworzyli polscy uczeni, z rozszerzającą się nieustannie ofertą tematyczną, inspirowaną zapewne modą lub społecznym zapotrzebowaniem.

Rok 1918 otworzył nowy etap w dziejach polskich czasopism popularnonaukowych, pomimo trudnej sytuacji politycznej i gospodarczej, która wymogła przesunięcie na dalszy plan popularyzacji nauki, społecznicy, naukowcy i wydawcy zakładali pisma popularyzujące historię Polski, krajoznawstwo, nauki biologiczne i ścisłe, ochronę przyrody, nauki techniczne oraz medycynę. Tę ostatnią łączono z promocją zachowań prozdrowotnych i higieny, gdyż zadaniem priorytetowym kolejnych rządów Rzeczypospolitej była walka z chorobami społecznymi i poprawienie stanu sanitarnego kraju. Z deklaracji programowych pism wynika, iż redakcje, oprócz funkcji poznawczych, czyli upowszechniania wiedzy o rozwoju i postępie nauk, osiągnięciach naukowych, starały się realizować postulaty ówczesnej pedagogiki, uczyły i wychowywały przez rozbudzanie zainteresowań, rozwijanie indywidualnych zdolności oraz inspirowały do samodzielnych badań naukowych.

The period spanning 18th and early 20th century was underscored by rife public debates on science, key directions of its development, advances, overall impact on progress, and its functions within a society. Generally utilitarian nature of science gained particular significance in terms of successive technological revolutions, and consequently — technological progress¹. Due to its systematically growing impact, its popularization simply became a necessity in shaping social awareness, whereas on Polish lands it was also one of numerous ways of expressing national identity.

Highlighting the need to popularise science was, on the one hand, a natural consequence of its almost “everyday prevalence” in everyone’s life, while on the other, a key factor shaping a “thinking man’s” outlook at the time, as it was supposed to affect both the development of one’s intellectual prowess, while through promoting moral principles and ethical values also effectively condition one’s moral fibre. On Polish lands, this process of popularisation was much slower, as its pursuit was very much constrained by prevalent political circumstances, overall economic and mental backwardness, feeble local academic setting, and rather low standards of general education.

The Authors of the present study drew their inspiration from one of the historical approaches to this issue, i.e. popularisation of science in print, and more specifically, by popular-science journals. A historical outline of the latter, dating back to the mid-18th century in Poland, has not yet been addressed by a separate, quantitative and analytical study, even though some aspects have already been the subject of various academic publications, notably authored by Danuta Hombek² oraz Renata M. Zajęc³, and Mieczysław Klimowicz⁴, Elżbieta Aleksandrowska⁵, Stanisław Salmonowicz⁶,

¹ S. L ille y, *Ludzie, maszyny i historia. Zarys historii rozwoju maszyn i narzędzi na tle przemian społecznych*, przeł. W. Chitruk, wyd. 2, Warszawa 1963, s. 140.

² D. H ombek, *Prasa i czasopisma polskie XVIII wieku w perspektywie bibliologicznej*, Kraków 2001.

³ R.M. Zajęc, *Czasopisma popularnonaukowe w Polsce w latach 1945–1989*, Kraków 2016.

⁴ M. K limowicz, *Mitzler de Kolof. Redaktor i wydawca*, [w:] R. Kaleta, M. K limowicz, *Prekursorzy Oświecenia. „Monitor” z roku 1763 na tle swoich czasów*, Wrocław 1953, s. 219–326.

⁵ E. A leksandrowska, *Czasopiśmiennictwo*, [w:] *Słownik literatury polskiego Oświecenia*, red. T. Kostkiewiczowa, wyd. 2, Wrocław 1991, s. 50–58.

⁶ S. S almonowicz, *Toruńskie czasopisma naukowe w XVIII wieku*, „Rocznik Toruński” 11 (1976), s. 215–227.

Jerzy Łojek⁷, Jarosław Kurkowski⁸, as well as by Leszek Zasztowt⁹ and Grażyna Wrona¹⁰.

The keystone of the adopted research strategy consisted in developing an adequate definition of a popular-science journal, regardless of the ones already well established in academic circulation¹¹, which would facilitate having it adapted to, firstly, changing historical circumstances, and, secondly, effectively identifying certain universal, ahistorical features of a popular-science periodical. A popular-science journal was then defined as a periodical publication, implementing principal assumptions and objectives of science popularisation, construed in terms of its actual academic merit, as well as institutional and organizational constraints, dedicated to disseminating academic scope of knowledge, intended for a non-specialist recipient of diverse interests, boasting a certain potential for a reception of an academically structured content.

The readers at large therefore become an all-important target in the editorial mission statements, with whom the editorial boards were very much intent on interacting through a diversity of ways. This group of periodicals was characterised by focusing on a specific academic area, or on a group of related academic disciplines. The Authors regarded the respective mission statements as the key editorial features advertising specific scope or respective publishing profiles of those magazines, areas of academic expertise, and their intended readership.

Dilemmas regarding the actual selection of the most pertinent set of publication titles were accompanied by controversies related to the choice of the most fitting classification system for the task. This difficulty was principally owed to several non-uniform systems of classification pertaining to respective areas of academic knowledge, characteristic for the period under study. With a view to establishing the thematic groups common to all journals, whilst allowing for potential controversies, a division into general, popular-science journals was proposed, to be further sub-

⁷ J. Łojek, *Polska prasa w latach 1661–1831*, [w:] *Prasa polska w latach 1661–1864*, pod red. J. Łojka i in., Warszawa 1976.

⁸ J. Kurkowski, *Warszawskie czasopisma uczone doby Augusta III*, Warszawa 1994.

⁹ L. Zasztowt, *Popularyzacja nauki w Królestwie Polskim 1864–1905*, Wrocław 1989; tenże, *Popularyzacja nauki w Królestwie Polskim na tle dyskusji teoretycznych przełomu XIX wieku*, „Rozprawy z Dziejów Oświaty” 1983, t. XXV, s. 59–92, s. 59–92.

¹⁰ G. Wrona, *Polskie czasopisma popularnonaukowe w XIX wieku. Ewolucja formy i treści*, „Rocznik Historii Prasy Polskiej” 2007, z. 2, s. 5–31.

¹¹ S. Dziński, *Czasopisma popularnonaukowe*, [w:] *Encyklopedia wiedzy o prasie*, red. J. Maślanka, Wrocław 1976, s. 50; M. Rogoż, *Czasopisma popularnonaukowe dla dzieci i młodzieży w latach 1989–1996*, „Rocznik Historii Prasy Polskiej” 2000, z. 2, s. 153; W.M. Kolas, *Współczesne czasopismo popularnonaukowe. Studium analityczne na przykładzie „Wiedzy i Życia” oraz „Świata Nauki”*, „Rocznik Historii Prasy Polskiej” 1998, z. 1/2, s. 151; R.M. Zajac, *Czasopisma popularnonaukowe w Polsce...*, s. 19; A. Daum, *Wissenschaftspopularisierung im 19. Jahrhundert. Bürgerliche Kultur, naturwissenschaftliche Bildung und die deutsche Öffentlichkeit 1848–1914*, München 2002, s. 341.

-divided into the ones dealing with humanities and social sciences, natural sciences, medical and health sciences, and technical sciences. Each subdivision was to be further refined into specific thematic fields.

The beginnings of popular-science journal publishing in Poland are invariably associated with the activities pursued by one Wawrzyniec Mitzler de Kolof, a great lover of Enlightenment, the publisher of “*Nowe Wiadomości Ekonomiczne i Uczzone*” [*The New Economic and Scientific News*]. It was he who was actually driving the initiative of popularisation of scientific knowledge in Poland through periodical publications since 1758. Subsequent publishers of popular-science magazines, i.e. Piotr Świtkowski, Józef Mejer, Tadeusz Podlecki, Ignacy Grebel, Jan Maj, gallantly followed suit, while struggling with financial difficulties, and popular indifference. In the late 18th c., not only did these periodicals popularise academic knowledge, but also became appreciably instrumental in clamouring for social and political reforms within the country. During the period of Poland’s lost sovereignty, they enjoyed steady development resulting from a sheer greed of knowledge, as well as the need to aid popular education. In 1918, following the regaining of its independence, Poland appreciably intensified the efforts aimed at enhancing general level of education, be that through regular schooling, or out-of-school education, let alone a self-education drive. This greatly contributed to the appearance of new titles on the publishing market and their thematic focusing.

In the period spanning 1758–1939, some 128 popular-science magazines were published in Poland, 19 of which in the late 18th c., when the last attempts aimed at having the country reformed were undertaken. Fifty titles were published in the years 1795–1918, i.e. during the Period of Partitions, while in the interwar period as many as 61 periodicals¹² were regularly published, which only goes to show how substantial was the actual demand for such magazines in independent Poland, busily rebuilding its statehood after a long period of lost sovereignty.

Throughout the period under study, Warsaw was the hub of publishing in Poland. No wonder that 69 popular-science periodicals were published in the capital, accounting for almost 53% of all titles published on Polish lands. Much fewer periodicals appeared in other major publishing centres, i.e. 15 titles (12%) in Krakow, and even one less in Lvov (11%). Ten titles (8%) were published in Poznań, 6 (5%) in Łódź, and two magazines (1.5%) in Katowice. Individual titles appeared in other locations, i.e. Vilnius, Cieszyn, Częstochowa, Kalisz, Kołomyja, Leszno, Puławy, Sosnowiec, Tarnów. In the three cases, the publishing venues were subsequently changed.

Popular-science journals were published mainly by individuals; in the 18th c. predominantly by printers, publishers, and booksellers, whereas in the 19th c. they

¹² This inconsistency of the data (128 instead of 130 titles) is due to the fact that two magazines (“*Wszeczeńświat*” and “*Ziemia*”) created in the nineteenth century were still being published in the period spanning 1918–1939.

were joined by journalists, social activists, and teachers. They were the most numerous group, credited with publishing 81 titles in total (63%). Consequently, it was principally the ones occupationally related to the printing business and distribution services that should be credited with a most significant role in driving overall popularisation of science initiative in the 18th and 19th c., and also its propagation through this particular communication channel within a social fabric.

The other important group of publishers were various societies and professional associations which initiated the publishing of 31 titles (24%). Other publishers comprised academic researchers (3), publishing cooperatives (3), and state offices (2). Some individual titles were published upon the initiatives of specific museums, production plants, state institutions, seats of higher learning, or editorial boards. In two cases, a single title boasted several publishers, whereas in one case there was a change of a publisher.

The set of journals under study is characterised by a large discrepancy in the frequency of publication of particular titles. Popular-science journals were published as a rule as the monthly magazines — 65 titles (50%), much fewer periodicals, i.e. 16 titles (12.5%) were the weekly magazines, and fewer still, i.e. 15 (12%) were the bi-weekly ones, while 4 (3%) were published as quarterlies. In this particular sub-set there were only 2 newspapers, 2 bi-monthly magazines, 1 ten-monthly magazine, 1 magazine released every six months, and 1 annual periodical. In the case of 4 periodicals (3%), the issues were openly claimed irregular, whereas in the case of 4 ephemeris it was hard to judge the intended frequency of the issues. It is also worth noting that the editors of 13 (10%) magazines changed the frequency of their publication, while offering various explanations, most often related to financial difficulties.

Popularity and overall financial standing of the journals at issue is reflected primarily by their market survival rate. Pertinent data mined from that particular period give good grounds to believe that their life was rather brief. Half of them, i.e. 64 (50%) never survived two years, of which 45 (35%) were published for several months only (up to 1 year). Only 29 (23%) managed to span 2–5 years in circulation. In view of the above, all other titles may well be dubbed pretty seasoned survivalists, of which 16 periodicals (12.5%) fall within the 5–10 years range, and 11 titles (9%) within the 10–15 years range. Out of the total number of 128 magazines, only 4 (3%) survived from 15 to 20 years in circulation. Four periodicals, though, managed to remain in circulation in excess of 20 years, i.e. “Wędrowiec” [*The Rambler*] (1863–1906), “Miesięcznik Galicyjskiego Towarzystwo Ochrony Zwierząt” [*The Galicia Society for the Protection of Animals Monthly*] (1876–1916), “Wszechświat” [*The Universe*] (1882–1939), “Ziemia” [*The Planet Earth*] (1910–1939). It is well-worth noting at this juncture that *The Universe*, presently still in circulation, happens to be rated amongst the longest published periodicals on natural world. The magazines at issue were characterized by a short survival rate on the publishing market, due to multiple

reasons, notably the financial ones, small readership, problems with the inflow of valuable and interesting content, and, above all, the editors' inability of coming up with a consistent and inspiring formula for their publications.

The journals under study were assessed in terms of their content in line with the classification of sciences currently in place, which consequently made it possible to indicate some regularities in its development and popularisation in the press. By far the largest number of periodicals popularised natural sciences. Within the select period, 42 titles were published, i.e. 33% of the surveyed set. They were not found homogeneous, as they comprised periodicals of general nature, as well as those dedicated to a scope of biological sciences, Earth sciences, agricultural sciences, e.g. "Uwagi Tygodniowe Warszawskie" [*The Warsaw Weekly Notes*] (1768–1769), "Wybór Wiadomości Gospodarskich" [*The Selection of Farming News*] (1786–1788), "Przyroda i Przemysł" [*Nature and Industry*] (1856–1858), "Przyrodnik" [*The Naturalist*] (1871–1873), "Przyroda i Przemysł" [*Nature and Industry*] (1872–1880/1881), "Przyjaciół Zwierząt" [*The Friend of Animals*] (1879–1880), "Wszechświat" [*The Universe*], "Przyroda" [*Nature*] (1903/04–1905), "Przyroda i Technika" [*Nature and Technology*] (1922–1939), "Urania" (1922–1934, 1936–1939), "Przyrodnik" [*The Naturalist*] (1924–1926), "Czasopismo Przyrodnicze Ilustrowane" [*The Illustrated Nature Magazine*] (1927–1939). It is well-worth noting that the movement for the protection of animals, initiated by the end of the 19th c., pursued and expanded its scope of activities not only in Warsaw and Kraków, but also in Lvov, Łódź and Poznań.

This group also comprised 12 titles (9%) popularising the Earth sciences. As richly illustrated geographical and travel magazines, they understandably boasted high popularity among their readers; their origins dating back to the 19th c. Those periodicals principally aimed at furnishing Polish readers with information on the little-known countries and regions in terms of their geography, ethnicity and historical background — "Dziennik Podróży Lądowych i Morskich" [*The Diary of Overland and Maritime Travel*] (1827), "Kolumb" [*Columbus*] (1828–1829), "Naokoło Świata" [*Around the World*] (1901/02–1907). At that time also some more "tourism-oriented" magazines appeared on the publishing market, e.g. "Wędrowiec" [*The Rambler*] (1883), "Ziemia" [*The Planet Earth*], "Turysta" [*The Tourist*], and "Orli Lot" [*The Eagle's Flight*] (1920–1939). Their appearance may well have been inspired by the need to have the Polish readership more interested in the national heritage, long postulated by many editors, as well as by the formation of the fledgling country lore studies, not so much as a *bona fide* academic discipline just yet, but presumably more like a social movement.

The other group was made up of popular-science journals of general profile, releasing the content well-grounded in different areas of academic expertise. This sub-set, comprised of 41 periodicals (32%), was far from homogenous in character, though, as the majority of titles would be prone to changing their scope depending on the actual type of inflow material, sometimes openly pandering to the needs of their

target readers. In the 18th c., the semi-academic periodicals, e.g. “Nowe Wiadomości Ekonomiczne i Uczone” [*The New Economic and Scientific News*] (1758–1761, 1764, 1767), “Wiadomości Literackie” [*The Literary Newsletter*] (1760–1763), “Różne Uwagi Fizyczno-Chemicznego Warszawskiego Towarzystwa” [*The Assorted Notes of the Warsaw Physical and Chemical Society*] (1769), “Zbiór Różnego Rodzaju Wiadomości” [*The Collection of Mixed News*] (1770), “Magazyn Warszawski” [*The Warsaw Magazine*] (1784–1785), “Biblioteka Fizyko-Ekonomiczna, Nauczająca i Bawiąca” [*The Physics and Chemistry Library — Teaching and Entertaining*] (1788) were very much modelled on the European publications, uncannily resembling the 19th c. illustrated encyclopaedias in their overall visual appeal.

At the time, the actual choice of publishing content was not really subject to any specific formal, nor logical ordering, e.g. “Skarbiec dla Dzieci” [*Treasure Throve for Children*] (1830), “Magazyn Powszechny” [*The Popular Magazine*] (1834–1843/44), “Przyjaciół Ludu” [*The People’s Friend*] (1834/35–1847), “Powszechny Pamiętnik Nauk i Umiejętności” [*The Popular Diary of Sciences and Skills*] (1835), “Muzeum Domowe” [*The Home Museum*] (1835–1837), “Magazyn dla Dzieci” [*The Children’s Magazine*] (1835–1836; 1845), “Księga Świata” [*The Book of the World*] (1851–1861/62), “Skarbczyk Domowy” [*The Home Treasure Throve*] (1863), “Nauka dla Wszystkich” [*Science for Everyone*] (1904). In the period spanning 1918–1939, periodicals of a general profile used to be established, e.g. “Wiedzę i Życie” [*Knowledge and Life*] (1926–1939), “Chcę poznać Wszystko” [*I Want to Learn about Everything*] (1928–1931), or “Wiedza dla Wszystkich” [*Knowledge for Everyone*] (1931–1932), or “Na Drogach Wiedzy” [*Along the Pathways to Knowledge*] (1939).

On the other hand, 27 periodicals (21%) were dedicated to medical sciences, which originated in a paramount need to spread around medical knowledge and principles of hygiene, with a view to combating diseases, a rise in contracting infections, incidence of epidemics, as well as improving overall sanitary standards within the cities and rural areas alike. The first periodical “Praktyka Lekarska” [*The Medical Practice*] (1785) was not credited with sparking a particularly enthusiastic response, but medical issues were also being addressed in other semi-academic magazines. In the 19th c., social medicine was born on the Polish lands, and consequently, was the need to spread around the key sanitary principles within the society. Popular-science journals took it then upon themselves to get involved in the health-promoting education and general prevention effort (“Dziennik Zdrowia dla Wszystkich Stanów Zjednoczonych” [*The Health Diary for all Social Strata*] (1801–1802), “Przyjaciół Zdrowia” [*Living a Healthy Life*] (1861–1863), “Zdrowie” [*Minding One’s Own Health*] (1877/78–1880), “Lekarz” [*The Physician*] (1903/04–1904/05)).

In the reborn Poland, social diseases and generally poor hygiene were a major problem, which the physicians and social activists alike were intent on combating, also by way of publishing various magazines aimed at addressing and promoting key medical

and hygiene issues, e.g. “Walka o Zdrowie” [*Caring for One’s Health*] (1918–1919), “Przyjaciel Zdrowia Ludu” [*The Friend of People’s Health*] (1919–1921), “W Służbie Zdrowia” [*In the Service of Health*] (1934–1935), “Higiena Ciała” [*Bodily Hygiene*] (1925–1927), “Orędownik Zdrowia” [*The Advocate of Health*] (1926–1931), “Higiena Życia Codziennego” [*Everyday Hygiene*] (1926–1930), “Czystość” [*Cleanliness*] (1928–1931, 1938–1939), “Droga do Zdrowia” [*The Pathway to One’s Health*] (1931–1939), “Lekarz Domowy” [*The Home Physician*] (1933–1934), “Dla Zdrowia” [*With Health in Mind*] (1934–1939), “Medycyna dla Wszystkich” [*Medicine for Everyone*] (1936–1937).

The humanities and social sciences were represented by 13 periodicals (10%) dedicated to history and adjunct sciences, archaeology, classical philology, philosophy, history of art, ethnography, economics. By way of an example, let us bring up “Historia Polityczna Państw Starożytnych” [*The Political History of Antiquity*] (1771–1772), “Skarbiec Polski” [*Poland’s Treasury*] (1859–1860), “Nasze Dzieje” [*Our Historical Heritage*] (1908), “Kosciuszk” (1893–1896), “Herold Polski” [*Poland’s Herald*] (1907/08–1908), “Pamiętnik Sztuk Pięknych” [*The Fine Arts Diary*] (1850/54–1855), “Wiedzę Filozoficzną” [*The Outline of Philosophy*] (1921–1922), “Z Otchłani Wieków” [*From the Treasure Throve of History*] (1926–1939), “Przeszłość” [*The Past*] (1929–1936), “Filomata” [*The Lover of Science*] (1929–1939), and “Wiadomości Ludoznawcze” [*The Anthropology Newsletter*] (1932–1934), “Archiwum Heraldyczne” [*The Heraldic Archives*] (1937–1939). Apart from their cognitive, informational and integration functions, these journals also exerted both an educational and patriotic impact of crucial importance within the period under study.

The least numerous group were the magazines dedicated to popularising technical sciences, comprising 5 titles, i.e. merely 4% of the entire set under study. Periodicals popularizing technology date back to “Izys Polska”, published in 1820–1828. Then, Polish readers had to wait for over a century before the next publication appeared, i.e. “Wynalazki i Odkrycia” [*Inventions and Discoveries*] (1927). This merely proves how far behind Poland had fallen in relation to Western European countries. Having been availed of no other alternatives, Polish readers keen on any current news from the domain of technology and inventions, had to search for such specific content in the periodicals dealing with life sciences at large.

Regardless of the actual period of publication, the periodicals popularising technology addressed current status and development prospects of specific branches of industry, as well as tackled the issues of natural resources, and disseminated certain scope of knowledge regarding technological advances among their readership, while arousing due interest in the work of Polish engineers and technicians. During the interwar period, four more titles appeared: “Wynalazki i Odkrycia” [*Inventions and Discoveries*] (1927–1930), “Wiedza i Wynalazczość” [*Knowledge and Inventiveness*] (1931), “Przemysł i Wynalazki” [*Industry and Inventions*] (1935), “Technika, Rzemiosło, Wynalazki” [*Technology, Crafts, Inventions*] (1937–1939).

With regard to identifying the specific readership of popular-science journals, due reference should be made to specific periods, as their reading potential was dependent not so much on the needs and interests of individual readers, as on a prevalent educational standards in place at the time, individual level of education, as well as the actual extent of both social and civic awareness.

The period spanning 1758–1795

The first Polish semi-academic magazine “*Nowe Wiadomości Ekonomiczne i Uczone*” [*The New Economic and Scientific News*] came into being thanks to strenuous efforts of one Lawrence Mitzler de Kolof, a propagator and a great enthusiast of Enlightenment ideas. Similar initiatives were subsequently taken up by progressive book publishers and distributors, e.g. Jan August Poser, Tadeusz Podlecki, Ignacy Grebel, Jan Maj, clergy, Piotr Świtkowski, Jan Chrzyciel Albertrandi, Józef Mejer, Franciszek Paprocki. Backed in their endeavours by several enlightened magnates (e.g. the Załuski and Czartoryski families, Józef Jabłonowski, Jan Małachowski, etc.), whilst also enjoying the royal benevolence, as well as being aided by the first fledgling scientific associations, e.g. The Scientists Society, The Warsaw Society of Physics and Chemistry, they successfully launched 19 periodicals. Highly involved in several political, economic, cultural and educational reform projects, they boldly ventured into the domain of risky publishing undertakings aimed at reforming the Polish society through the dissemination of scientific knowledge.

The first semi-academic magazines, modelled on German and French publications, mostly reprinted the content of foreign magazines, frequently in exact translations. Non-availability of original texts was a characteristic feature of that period. The publishers were also involved in collecting the materials, translations, editing, printing, advertising and distribution. This actually posed quite a challenge, considering that certain titles were published on a daily or weekly basis. This in turn resulted in the so called knock-on effect, delaying the edition of subsequent issues, as well as the publishers’ failure to adhere to the adopted frequency of issues. Over the years, some publishing associates joined in the effort, although they never worked on the publishing teams, maintaining rather loose relations with the editorial offices.

A characteristic feature of this 18th c. sub-set is its ephemeral character and rather short market survival rate, mainly due to rather feeble public interest. A small number of permanent subscribers resulted predominantly from a lack of interest in this type of publications, and generally low educational standards within Polish society. Religious publications and calendars were still the mainstay reading matter

in the households of nobility, especially out in the provinces. Warsaw, as a political, academic, and cultural centre of the country, became the publishing hub, as well as the principal consumer of semi-academic periodicals; only four of them appearing outside the capital.

Most often these periodicals disseminated the news of new discoveries and inventions, with a view to making use of them in practice, as well as popularised knowledge in economics, agriculture, medicine, history, philosophy, on the natural world, and on the world of science.

Semi-academic periodicals do not actually constitute a group of publications boasting some unique features that would distinguish them from the non-serial ones. Just like regular books, they do have a title page indicating the title, a subtitle, name of a publisher or an editor, dedications, aphorisms, number of a successive edition, venue of publication, and an address of the printing house. Most often, a continuous pagination is applied throughout, which allows joining and binding the individual parts into volumes, and then offering them on sale.

A regular layout of those periodicals failed to develop, either. Despite the editors' attempts, with the exception of "Dziennik Handlowy" [*The Commercial Daily*] (1786–1794), it proved non-feasible to maintain a division into permanent sections and columns. Generally speaking, the layout very much depended on the actual scope and type of available material, original texts, and translations. The readers complained about the choice of content, poor quality of translations, inadequate language, and the lack of illustrative material.

Generally low level of public interest is further corroborated by the lists of subscribers which attest to their small number, originating predominantly amongst the lay and clerical magnates, nobility in senior positions at the royal court, various officials, and some bourgeoisie. It is worth noting that only two titles were specifically intended for women readers, i.e. "Polak Patriota" [*The Polish Patriot*] (1785), and "Magazyn Warszawski" [*The Warsaw Magazine*]. A small number of regular subscribers resulted in pretty low print runs (circulation), usually not exceeding 500 copies. Conversely, overall impact of semi-academic periodicals on Polish society was rather negligible; most of them ephemeral in character, anyway.

Not every title originating in the set under study is eligible for being referred to as a "popular-science journal", even though in every single one of them all due attempts were made to have a certain scope of academic knowledge popularised. Particular attention was paid to its practical applicability, as well as to making use of the advances of scientific research, with a view to enhancing overall quality of one's life was fervently advocated by the editors. Potential target readers were the landed gentry, i.e. Polish nobility, which hardly ever tried to make any sense of economics for household use. Jan Pazdur had put it rather aptly concluding that reminding the nobility of the need to work, and promote self-improvement in various areas of

life, would not really wash too well with them as a rule¹³. Blatant arrogance, an overdeveloped sense of social superiority, and national pride only further reassured them in the belief that an established social order actually granted them the right to maintain the status quo, whilst shying well away from all technological novelties and modern inventions coming from Europe.

When addressing overall social impact of the first popular-science journals, it should be acknowledged that it was rather negligible. With the exception of “Pamiętnik Polityczny i Historyczny” [*The Political and Historical Diary*] (1782–1792) and “Dziennik Handlowy” [*The Commercial Daily*], they reached out to niche recipients, and outside of metropolitan Warsaw did not exert much influence on the life of people inhabiting the Polish-Lithuanian Commonwealth at the time.

The Partitions of Poland — a period spanning 1795–1918

Popular-science journals became an important medium tasked with fleshing out a popular notion of science and the scientists in public awareness on Polish lands in the 19th century. Their establishment, development, and public popularity were to have been determined primarily by the two factors, i.e. appearance of such periodicals throughout Europe, and non-existence of native counterparts, to have been potentially established with the aid of local resources, obviously with all due allowances made for the intellectual capabilities of the target readership.

Those journals aimed to provide their readership with a certain amount of basic or extended scope of knowledge on various scientific advances, key directions of research, discoveries and inventions, and indicate a certain potential for having them applied in everyday life. The editors also undertook to stimulate in their readers the need for collecting and absorbing this forthcoming information, be that for cognitive, educational, or self-educational purposes, as well as for patriotic reasons. Within the period of the country’s lost sovereignty further development of those periodicals was observed.

In the period under study, 50 popular-science journals were published on Polish lands. In the 19th c., a steadily increasing emphasis was put on acknowledging the linkage between science and technology, thus underpinning individual hopes for enhancing overall quality of everyday life, as well as on the advances in natural sciences; all the above laying the actual groundwork for making such publishing

¹³ J. Pazdur, *Polskie czasopiśmiennictwo techniczne okresu od 1831 do ok. 1870 r.*, Warszawa 1976, s. 18.

initiatives even more target-oriented and efficient in execution. At the same time, there was an ongoing debate regarding public perception of an academic researcher (scientist) and overall need to have it ingrained with positive connotations. At that time, the individuals involved in the popularisation drive were very much intent on expanding the range of their instruments in order to increase overall social impact of their efforts, as well as attempted to have their message specifically profiled, effectively adjusting it to fit in well with the intellectual capabilities of their intended recipients. Popular-science periodicals as the front-runners were therefore put on a special mission.

In terms of the actual number of journals published, Warsaw boasted the top score (26), Kraków followed with 9, Lvov with 7, and Poznań with just 3 titles to its credit. Individual titles represented small locations like e.g. Kołomyja, Leszno, Puławy, or Tarnów. In one case there was a change of a publishing venue.

Much like in the previous century, these publications were to a large extent characterised by a rather short survival rate on the market. More than half of the titles (26– 52%) remained in circulation for up to 2 years, out of which 18 never made it through the first year. This was predominantly due to financial difficulties resulting from a small number of regular subscribers, and problems with the inflow of valuable and inspiring content, as well as to rather limited editorial skills and an inability to come up with a publishing formula for the journal that would prove attractive enough to its readers, whilst remaining fully on a par with their expectations and preferences.

The publishers (42) originated mainly from amongst the booksellers, printers, and proprietors of publishing ventures, but also the scientists, journalists, social and educational activists. On the other hand, it is worth highlighting at this juncture that very few scientists got individually involved in establishing any new publishing ventures. In line with prevalent Polish tradition, it was they who were expected to promote science within the society, and ensure professional consolidation of their colleagues through commonly pursued research projects, even though geographically dispersed in result of the country's political partitioning.

Out of all periodicals in circulation at the time, the most numerous group was made up of popular-science journals of a general profile (21), then came the ones with the natural sciences focus (19), followed by the humanities and social sciences (5), medical and health sciences (4), and technical sciences (1). The periodicals specifically intended for the young readers, like “Skarbiec dla Dzieci” [*Treasure Throve for Children*] (1830), “Ziemomysł” (1830), were quite a novelty in publishing at the time, as were the medical journals, e.g. “Dziennik Zdrowia dla Wszystkich Stanów” [*The Health Diary for all Social Strata*], the geographically profiled ones, e.g. “Dziennik Podróży Lądowych i Morskich” [*The Diary of Overland and Maritime Travel*], “Kolumb” [*Columbus*], and the technical journals like “Izys Polska”.

Indubitably, the development of popular-science journals on Polish lands in the 19th c. was stimulated by foreign models, primarily German, English, and French. Not only did they serve as the sources of ready-made, or easily editable content, but also provided the actual publishing formula at large, let alone the key layout components. Having said that, domestic popular-science journals were also subject to evolution, if a bit slow to come, moving from a straight imitation of foreign models to the creation of a publishing formula well-grounded in the materials of domestic origin, be that in terms of the actual content and the authorship, whereby the content was actually contributed by Polish academicians, its thematic offer steadily expanding, presumably inspired either by local fads, or even *bona fide* social demand.

With regard to most titles, the layout of 19th c. periodicals was based on the traditional formula of a scientific journal, consisting of a main manuscript section followed by an informational, referential, and a review section. This was further augmented by the materials of advisory or self-help character, educational-cum-entertainment ones closely related to the scope of activities pursued by various patron societies and institutions, as well as by the section dedicated to official announcements. This diversity must have stemmed from the very essence of the popularisation drive, as well as the actual mission of a popular-science journal.

The period spanning 1918–1939

The regaining of independence by the country was conducive to the intensification of activities in the area of social education, school and out-of-school education, as well as a scope of self-education. It was with great enthusiasm that the levelling-out of the economic, cultural and, above all, educational differences existing between the three partition areas of the country was approached. Eradication of common illiteracy, particularly manifest in the eastern provinces, soon became the red-priority issue for the now revived Polish state.

Establishment of multifunctional educational institutions for adults, and the reconstruction of general, secondary and higher education system proved conducive to the growth of general readership and absorption of a certain scope of knowledge on general progress and advances in science. Consequently, appreciably more people developed genuine interest in science and technology, whose much accelerated development rate was clearly manifest following the end of World War I. Popularisation of science in that time was related not only to the scope of activities pursued by various academic and educational institutions, but was still initiated by a number of dedicated individuals, e.g. scientists, physicians, teachers, etc.

In 1918, a number of brand-new perspectives opened up for Polish popular-science journals, so that by 1939 some 61 titles were regularly published. Despite rather

challenging political and economic situation of the country, which actually forced the popularisation of science effort to be shifted more into the background, social activists, scientists, and publishers established magazines focused on popularising Poland's history, thematically-oriented sightseeing tours, science, life sciences, technical sciences, and medicine. The latter one was combined with promoting general hygiene and a healthy lifestyle, as the priority task of the successive governments consisted in combating social diseases and improving overall sanitary conditions across the country.

Being well aware of the lack of adequate medical knowledge within the society, as well as rather poor general education standards, physicians undertook large-scale popularisation activities, also by making use of popular-science magazines in those endeavours. The popularisation drive was therefore still very much related to filling up the gap in general education, in conjunction with self-education, permanent learning schemes, and patriotic upbringing, whilst highlighting throughout, very much like back in the 19th c., a utilitarian nature of science, as well as its appreciable potential for enhancing overall quality of one's everyday life.

Metropolitan Warsaw still remained the very hub of the publishing market of popular-science periodicals (30–50%). Other centres could claim to their credit the following number of publications: Poznań (7), Łódź (6), Lwów (6), Kraków (4). Non-academic localities are also worth mentioning: Katowice (2), whereas in Cieszyn, Częstochowa, Kalisz and Sosnowiec — the single titles only were published. Two magazines had their publishing venues changed. Individual persons continued to prevail among the publishers (25), while an increasing number of associations, including academic ones (24) was a novelty. Those periodicals were characterised by a short market survival rate, though, as 25 titles (41%) remained in circulation for up to 2 years only, out of which 17 never made it through the first year of publication.

In terms of the actual content, though, the most numerous groups were formed by the magazines focused on medical (22) and natural sciences (22), which was a certain novelty. Compared to previous publishing periods, a certain downturn was encountered in the number of general profile publications (7), accompanied by an opposite trend with regard to the technology-oriented titles (4). Humanities and social sciences were popularised in 6 periodicals only.

While assessing an internal layout of the interwar periodicals, it was established that a traditional division into the main article section, followed by an informative and bibliographical one, was maintained, as well as was the development of individual components through introducing further thematic subdivisions. That model of a popular-science journal was predominantly based on the publications contributed by domestic authors, as the cooperation with Polish academicians proved far more advantageous; any reprints from foreign publications published only occasionally. Introduction of higher standards in the periodicals in terms of the actual academic merit was not really accompanied by any appreciable efforts to have their graphic

design in any way diversified, though. Consequently, their overall visual appeal, as compared to their 19th c. counterparts, was invariably lost.

The historical outline of Polish popular-science periodicals, meant to give some insight into a diversity of publishing efforts undertaken, and the aspirations that actually underpinned them, their originators, editors and publishers, targeting their readership throughout various historical periods, is characterised by a certain universality in terms of their functions and missions within a society. Different political, economic and cultural constraints accounted for their discrepant quantitative and qualitative development. This notwithstanding, all those publishing ventures were very much united by a common strategy in popularising science at large.

This unity was made possible by utilitarianism, invoked already a great many times throughout, always underscoring the interaction between a contributing author-cum-academician and his target readership. Individually, or collectively undertaken publishing initiatives, made it possible to get in touch with the scientists at work, as it were, and thus fully appreciate the actual effects of their efforts manifest in everyday life circumstances. Those endeavours, also very much pursued through popular-science periodicals, were initiated predominantly by a number of truly dedicated individuals, whose scope of personal involvement and perseverance effectively ensured their continuity.

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