

Urban Knowledge Transfer between the Cities of Warsaw, Krakow, Lviv and Poznan at the Turn of the Nineteenth and Twentieth Centuries

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ZUSAMMENFASSUNG

Städtischer Wissenstransfer zwischen Warschau, Krakau, Lemberg und Posen an der Wende vom 19. zum 20. Jahrhundert

Die gesellschaftliche und Unterhaltungspresse war in den polnischen Gebieten im 19. Jahrhundert darum bemüht, aus dem Westen stammende Modelle zur Modernisierung und Umgestaltung als Werkzeuge zu nutzen, um eigene positivistische, religiöse, sozialistische oder auch nationalistische Weltanschauungen zu propagieren. Die Öffentlichkeit sollte so dazu bewegt werden, politische und gesellschaftliche Reformprojekte in möglichst großer Breite zu unterstützen. Ein ganz anderer Ansatz lässt sich in den Büchern, Broschüren und Zeitschriften von Technikern, Ingenieuren und weiteren ähnlichen Berufsgruppen feststellen: Hier wurden Denkanstöße und Beispiele aus dem Ausland im Detail untersucht, erwogen und verglichen. Auffällig ist dabei, dass ein recht großer Anteil der dabei entstandenen Lösungsvorschläge aus dem benachbarten Ausland, also ganz aus der Nähe, stammte. Hierbei spielte natürlich die Durchlässigkeit der Grenzen zwischen den drei Teilungsmächten Österreich-Ungarn, Russland und Preußen bzw. Deutsches Reich eine wichtige Rolle. Wissenschaftler und Ingenieure aus Lemberg, Krakau, Warschau oder Posen erschufen und nutzten Netzwerke, die auf Publikationen, Besuchen, Ausstellungen und Kongressen beruhten, sowie auch persönliche Kontakte, die ihnen dabei halfen, gemeinsam die immer vielfältigeren Probleme der Stadtentwicklung zu bewältigen.

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Introduction

The last decades of the nineteenth century in Central and Eastern Europe marked a period of growing tensions between the empires that had ruled over the entire region since early modern times. Historians have long regarded the political and intellectual rivalries within these empires as the dominating factor driving the course of events in this part of Europe. However, this tendency has lately been challenged by new scholarship emphasizing the need for inter-imperial co-operation rather than focusing on conflicts. Such co-operation encompasses the exchange of knowledge pertaining to the management of overseas colonies, for example, or the politics towards the nations in Europe¹, which were under the rule of Germany, Austria and Russia. In this article, I will argue that this co-operation was far more complex, as it was not only the imperial elites who maintained contacts and shared knowledge, but also the intellectuals within the ruled nations, and co-operation was not limited to the centers and peripheries of empires², but rather operated across various regions and also involved cooperation between peripheries. Thus, the picture of regional co-operation in the last decades before the great conflict of 1914-1918 can be seen in greater detail.

These contacts developed because of a common need to find ways of dealing with new processes of social and economic change, commonly referred to as European “modernity.” An example of this concerns the issue of managing large cities and will be dealt with in this paper. In my view, there were two types of such “knowledge discourse” in the period. On the one hand, the social and popular press in the provincial regions of Europe presents the historian with an example of the discourse in which modern social relations, examples of (mainly Western) innovations and models of managing cities are used as tools for propagating different world views (positivistic, socialistic, nationalistic, or confessional) with the aim to persuade the public to back broad social and political projects. On the other hand, another approach, or discourse, can be found in sources created by technicians, engineers and other professionals from the period—in their books, brochures and in the press. Here, on the contrary, foreign thought and examples are examined in detail, critically considered and compared without (or almost without) any political bias.³ The issue of urban knowledge transfer is an example of such a prag-

¹ VOLKER BARTH, ROLAND CVETKOVSKI: Introduction—Encounters of Empires: Methodological Approaches, in: IDEM (eds.): *Imperial Co-operation and Transfer, 1870-1930*, London et al. 2015, pp. 3-35, here p. 12.

² Which is in itself quite a new field of research, cf. JÜRGEN OSTERHAMMEL: *Die Verwandlung der Welt: Eine Geschichte des 19. Jahrhunderts*, München 2009, pp. 664-665.

³ This assumption stands against recent scholarly works highlighting traces of nationalistic struggle in the output and activity of scholars and scientific institutions in the nineteenth century; cf. e. g. MITCHELL G. ASH, JAN SURMAN (eds.): *The Nationalization of Scientific Knowledge in the Habsburg Empire, 1848-1918*, Basingstoke 2012.

matic approach. In terms of their scale and complexity, problems such as public health in the cities, sanitary infrastructure, urban transport and providing affordable housing were new in the nineteenth century and therefore had to be solved by—among other things—highly skilled professional experts.⁴ New solutions for large cities, along with the issue of putting them into practice and their propagation throughout Europe, were the key factors in managing urban growth. That is why examining the body of theoretical work written by these professionals is crucial for understanding the process of nineteenth-century urbanization.

One more important aspect is the range of that urban knowledge transfer. The above-mentioned problems were universal in character, that is, they manifested themselves similarly in the large cities of different nations and states. It was only a matter of chronology that distinguished the urban centers of Western Europe—where the process of urban growth had already gathered momentum in the first half of the century—from Central or Eastern Europe, where it emerged at a slower pace, and only from about the mid-century. It was only in the fin-de-siècle period, when social and industrial progress gave rise to large cities in virtually all the regions of Europe, that urbanization was found difficult to manage without recourse to the experience of counterparts abroad. This period saw a tightening of international ties in many respects, including the emergence of mass tourism, the establishment of numerous international committees, societies and movements, and the organizing of mass events such as the Olympic Games. In contrast, the region of Central and Eastern Europe, which was under the rule of the three already mentioned empires, witnessed rising political conflicts towards the end of the nineteenth century. The two great coalitions, the Triple Alliance and the Triple Entente, made international relations and communication in this region much tougher. In this article, I will present a case study of the region divided by the borders of the Austrian, Russian and German empires, which had previously formed the core of the Polish part of the Polish-Lithuanian Commonwealth, in order to address the issue of urban knowledge transfer during the difficult years before the First World War. I will argue that inter-imperial cooperation between cities of this region was indeed developed, despite the generally unfavorable political conditions and weakening economic ties between the three partitioning powers.

Urban modernization could, of course, be the subject of national and imperial discourse, as presented in MALTE ROLF: *Imperiale Herrschaft im Weichselland: Das Königreich Polen im Russischen Imperium (1864-1915)*, Berlin et al. 2015, pp. 276-278, but the production and distribution of urban knowledge was less prone to the mentioned tendencies because of its technical and pragmatic character.

⁴ A broad survey on the perception and conception of cities in Britain, France, Germany and the USA can be found in ANDREW LEES: *Cities Perceived: Urban Society in European and American Thought, 1820-1940*, New York 1985.

Two more remarks must be added here. I will draw examples from the largest cities in this region (Lviv, Krakow, Warsaw and Poznan⁵) without referring to the international conventions and exhibitions outside of the region that were also attended by Polish professionals. My aim here will be to depict their regional cross-border cooperation, and I will present only general assumptions; more can be revealed after detailed research into the activity of particular members of the technical elite.

Inter-imperial Intellectual Ties

The territories in question were inhabited, to a large extent, by people who spoke the same language, who had belonged to a nation with a long political tradition, and whose modern intellectual elite had appeared already in the eighteenth century.⁶ These territories included the so-called Grand Duchy of Poznan, Galicia and the Kingdom of Poland. The beginning of the nineteenth century saw the development of new professional groups of intellectuals centered in new institutions founded by the propagators of the Enlightenment in Poland. A larger chain of scientific centers developed in the second half of the century, just when the partitioning powers began to exert a negative influence on the development of the formerly common Polish cultural (and also scientific) life. It was a time when the Polish intellectuals realized that their aim should be to build institutions and networks that could counteract these unfavorable tendencies, an aim which initially affected their research (they concentrated mainly on those fields that encompassed the broad issue of studying and preserving the remnants of the national past⁷).

Meanwhile, the national and ethnic composition of the urban authorities began to change during the period in question. Warsaw, the capital of a theoretically sovereign state in 1815-1831, had ethnically Polish authorities.

⁵ I am not including Vilnius, which was an important Polish intellectual center in the first half of the nineteenth century, because the Polish (and later Lithuanian) character of its scientific output began to be challenged (for political reasons) by the Russian authorities after the uprising of 1863/64, which began transforming it into a culturally Russian center. The region ceased to be the center of the Polish-Lithuanian territories and became the cultural periphery at that time. For more details cf. ANDRZEJ ROMANOWSKI: *pozytywizm na Litwie: Polskie życie kulturalne na ziemiach litewsko-białorusko-inflanckich w latach 1864-1904* [Positivism in Lithuania: Polish Cultural Life in the Lithuanian-Belarusian-Infant Region in 1864-1904], Kraków 2003.

⁶ Cf. MACIEJ JANOWSKI: *Birth of the Intelligentsia 1750-1831*, Frankfurt am Main 2014 (A History of the Polish Intelligentsia, 1).

⁷ This did not pertain to the medical sciences, which thrived throughout the period in question, as the demands for good doctors and hygienists persisted unaffected by political events, cf. ALINA HINC: *Kontakty między towarzystwami naukowymi na ziemiach polskich pod zaborem—stan i potrzeby badań* [Contacts between Scientific Societies in the Polish Territories under Partition—State and Needs of Research], in: *Roczniki Dziejów Społecznych i Gospodarczych* 73 (2013), pp. 79-121, here p. 113.

These began to be replaced by Russian ones after 1831, a process that gained momentum after 1864 when the second uprising against Russia failed. The authorities in Lviv, the capital of Austrian Galicia, were restructured after 1773 and reinforced by newly arrived officials from Austria and the Czech lands. That trend reached Krakow only after 1846, when the city lost its political semi-independence as a separate republic (1815-1846). Both cities saw the creation of self-government under the domination of the Polish and assimilating Jewish officials after 1870 and 1866 respectively. The magistrate and council in Poznan was already dominated by Germans in the first half of the century (which was achieved by means of, among other things, a barrier of relatively high financial census), though the ethnic Polish character of the authorities partly persisted until 1848.⁸ These changes led to a situation where the urban ruling class was perceived by the Polish-speaking professionals to be a separate group. This did not mean that the professionals were in open opposition to the regime; most of them remained loyal, but the result was nevertheless a situation where the national distinctiveness of the ruling class was an important factor influencing the relations between both groups. This situation can be observed most clearly in Warsaw. Hence, it is not only the state authorities in the period in question who can be viewed as different types of imperial “actors” in the political and cultural life of the cities, but the municipal officials (with the exception of the Galician ones after the *Ausgleich*) should also be placed within the same group. On the other side, the technical press in the Kingdom of Poland, which was run almost entirely by Polish-speaking professionals and their organizations, can be placed in another group. It is hard to argue that this knowledge was propagated for any confrontational reasons, but its output could be considered as a challenge to the imperial milieu.

The aforementioned press included several important titles. From the 1860s, new technical magazines and journals began to be founded in the Russian partition and later in the Austrian one. *Przegląd Techniczny* (Technical Review) was established in 1866, followed by *Inżynieria i Budownictwo* (Engineering and Civil Building) in 1879. Both were printed in Warsaw. In 1877, *Dźwignia* (Lever) was first published in Lviv as an organ of the Polytechnic Society and was later renamed *Czasopismo Techniczne* (Technical Journal). The most important journal of hygiene in Warsaw was the already mentioned *Zdrowie* (Health), established in 1885. *Przegląd Higieniczny* (Hygienic Re-

⁸ ROLF (as in footnote 3); FEODOSIJ STEBLIJ: Administratyvno-pravovnyj status: Systema upravlinyja [Administrative-legal Status: the System of Government], in: Istorija L'vova u tr'och tomach. Vol. 2: 1772 – žovten' 1918, Lviv 2007, pp. 10-11; VASIL' KISELYČNYK: Mis'ke samovrjabuvannja [Urban Self-government], ibidem, pp. 185-198; JANINA BIENIARZÓWNA, JAN M. MAŁECKI (eds.): Dzieje Krakowa. Tom 3: Kraków w latach 1796-1918 [History of Krakow. Vol. 3: Krakow 1796-1918], Kraków 1979, pp. 39-43, 200, 225-228; ZOFIA OSTROWSKA-KĘBŁOWSKA: Architektura i budownictwo w Poznaniu w latach 1780-1880 [Architecture and Building Industry in Poznan in 1780-1880], Poznań 2009, pp. 240-241.

view) was established in Lviv in 1900. These exemplary periodicals were important because they informed about the life of technical societies in other cities: Warsaw, Krakow, Lviv and Poznan.

The importance of urban knowledge, along with the problem of sharing it with other centers (that is, its dissemination), can be found in academic literature as early as the 1980s, for example, in the work of Marjatta Hietala.⁹ She describes how study visits, publications, and international congresses created new fields of science that helped decision makers in managing the growth of British, German and Nordic cities around 1900. The Polish territories experienced a different path, as the magistrates were dominated (not in terms of their numbers, but rather their importance) by officials sent from Russia, Austria and Germany. The importance of professionals (engineers, etc.) as members of councils and special committees both within and outside of the urban authorities is stressed by Malte Rolf, who writes about the “technicization” of municipal management in the Russian partition. The lack of urban self-government as a way of limiting Poles’ access to politics resulted in difficulties in solving urban problems, so the need for technical professionals arose. Actively involving members of the Polish-speaking technical elite in the building of urban infrastructure was eventually deemed to be politically beneficial and was seen to be the key achievement of Russian rule in Poland.¹⁰ Galicia presented a different example. Technical professionals could be active not only as “external” experts but also as members of the self-ruling class—urban officials, employed in municipal councils and their sub-departments—where they could directly influence local politics and implement their knowledge¹¹. This was a characteristic feature of urban development on the Continent (unlike in Britain)¹².

During the second half of the century, the need for professional technical knowledge began to grow, especially in the cities, which were experiencing unprecedented growth. This need, caused by the enormous problems which arose in the cities, forced the municipal authorities to search for new solutions at home and abroad. Scientists and engineers in large cities within the three aforementioned political territories began to work together, not so much because of political reasons (though such motives can be also discerned), but motivated more by civilizational and technical aims. They established and made use of multiple ties with one another by means of the press, research

⁹ MARJATTA HIETALA: *Services and Urbanization at the Turn of the Century: The Diffusion of Innovations*, Helsinki 1987.

¹⁰ ROLF (as in footnote 3).

¹¹ ŁUKASZ TOMASZ ŚROKA: *Rada Miejska we Lwowie w okresie autonomii galicyjskiej 1870-1914: Studium o elicie władzy* [The City Council in Lviv in the Period of Galician Autonomy 1870-1914: A Study of the Governmental elite], Kraków 2012, pp. 106-111.

¹² ANTHONY SUTCLIFFE: *Towards the Planned City: Germany, Britain, the United States, and France, 1780-1914*, New York 1981, p. 25.

trips, exhibitions and congresses, as well as through personal contacts, all of which helped them in the joint task of resolving the increasing urban problems.

This kind of cooperation was not a totally new phenomenon. Cross-border scientific ties had been cultivated in the previous decades by various institutions and groups including scientific societies and universities (in Krakow, Lviv, as well as in Warsaw and Vilnius before 1831).¹³ They had the goal of sharing knowledge, books and exhibits in order to foster cooperation between scholars from the scientific centers of the neighboring partitions. The activity of the oldest, the Warsaw Society of the Friends of Sciences (1800-1832), despite its initial ambitions, was generally limited to the work of local scholars. Cooperation between the Poznan Society of the Friends of Sciences (from 1857) and the Krakow Scientific Society (from 1856, initially from 1815) was also limited.¹⁴ The exchange of knowledge was more effectively practiced in Galicia during the autonomous era towards the end of the century, when there was a slight increase in the number of students moving here from the other partitions. At this time, some Warsaw scientists moved to Krakow, while scholars from Poznan preferred Lviv.¹⁵ Galicia, later called the Polish Piedmont thanks to its favorable political climate, served as an inter-partitional scientific forum. A secondary aim behind all this scientific activity was to help resist the cultural repression that Polish society suffered in the nineteenth century. Intellectuals from the German partition were the first to develop the idea of building economic and social foundations for an (eventual) future independent state through everyday “organic” work.

This idea, positivistic in character, had already appeared in the 1840s. Its main premise was to work on the well-being of the nation, to lay the foundations for economic prosperity rather than to obtain immediate independence by means of military action or revolutionary activity. This helped to create a favorable intellectual climate for the future dominance of positivistic thought, which subsequently took hold after the failed uprising of 1863/64 in the Kingdom of Poland. According to its guidelines, pragmatic action was fa-

¹³ There is a body of literature on the formation, education, cross-border ties and dilemmas of the so-called “intelligentsia” in the three partitions. Cf. e. g. MAGDALENA MICHŃSKA: *Inteligencja na rozdrożach 1864-1918* [Intelligentsia at the Crossroads 1864-1918], Warszawa 2008; IRENA HOMOLA: “Kwiat społeczeństwa ...” (Struktura społeczna i zarys położenia inteligencji krakowskiej w latach 1860-1914) [The Flower of Society ...] (Social Structure and an Outline of the Position of Krakow’s Intelligentsia in 1860-1914), Kraków—Wrocław 1984; Witold MOLIŃSKI: *Inteligencja polska w Poznańskim w XIX i początkach XX wieku* [The Polish Intelligentsia in the Poznan Region in the 19th and the Beginning of the 20th Centuries], Poznań 2009.

¹⁴ HINC (as in footnote 7), pp. 84, 88-91.

¹⁵ Cf. WALENTYNA NAJDUS: *Zakordonowe powiązania Galicji w dobie porozbiorowej* [Galicia’s Inter-border Ties in the Era of Partitions], in: WŁODZIMIERZ BONUSIAK, JÓZEF BUSZKO (eds.): *Galicja i jej dziedzictwo*. Vol. 1: *Historia i polityka*, Rzeszów 1994, pp. 157-173.

vored, especially with the aim of healing social interrelations, improving the material culture of the nation and fostering prosperity. A distant goal for the positivists in the Polish cultural centers was also independence, which is why this worldview should be regarded as somewhat idealistic. Nevertheless, it led to some concessions from the partitioning states, for example in the field of education (the creation of a school of higher education in Warsaw, which, despite functioning for only a few years, educated a generation of Polish specialists¹⁶, not to mention the numerous schools which were founded during the autonomous era in Galicia from 1870s). Similar concessionary developments took place in the field of science, including the founding of the aforementioned scientific societies in Poznan and Krakow. This positivistic period also provided an opportunity for Poles to demonstrate, not only that revolutionary associations work across borders, but also that the knowledge needed for economic development could, and should, be exchanged more broadly.

The relations between Polish intellectuals thus spanned the partition borders throughout the nineteenth century, however, this does not mean that these relations and contacts were frequent and widespread. The decades of independent growth of different scientific centers in the three regions also led to huge differences (especially in the field of economics¹⁷) and relative isolation. The political restrictions, which were much more damaging in the Russian and German partitions, unfavorably influenced the way theoreticians and activists could work (these restrictions involved banning the establishment of new institutions, limiting the scope of activity of those already permitted, rejecting proposals to organize conventions, or even limiting some intellectuals' possibilities to travel abroad¹⁸).

Urban Knowledge and the Impact of Urban Engineers

Polish urban thought began to develop and become more versatile around the middle of the century, a time when the tradition of devising urban regulations according to the rules and worldview of the Enlightenment was still very much alive.¹⁹ In Warsaw, the largest city as well as the most important intel-

¹⁶ STANISŁAW FITA: *Pokolenie Szkoły Głównej* [The Generation of the Central School], Warszawa 1980.

¹⁷ ADAM GALOS: *Tendencje integracyjne i dezintegracyjne na ziemiach polskich w dobie powstaniowej (do 1914 r.)* [Integrative and Disintegrative Tendencies in the Polish Territories in the Post-uprising Era], in: HENRYK ZIELIŃSKI (ed.): *Drogi integracji społeczeństwa w Polsce XIX-XX w.*, Wrocław 1976, pp. 9-34, here p. 10.

¹⁸ MAKSYMILIAN MATAKIEWICZ (ed.): *Polskie Towarzystwo Politechniczne we Lwowie 1877-1927: Księga pamiątkowa* [Polish Polytechnic Society in Lviv 1877-1927: A Souvenir Book], Lwów 1927, pp. 20-21, 67; GALOS (as in footnote 17), p. 35.

¹⁹ Referring to the history of architectural theory in Poland till the first half of the 19th century cf. ZYGMUNT MIESZKOWSKI: *Polscy teoretycy architektury (XVI-XIX w.)* [Polish Theorists on Architecture], Kraków 1972.

lectual center in the Polish territories, these ideas were propounded by the Regulating Committee (Komitet do sporządzenia planu regulacyjnego), who were involved in working over a general regulatory plan of the city in the years 1856-1867. After that period, its duties were taken over by a building department in the provincial government and, in 1876, by the magistrate's office (who also prepared a kind of regulatory plan for the city²⁰). All these institutions were responsible for laying out new streets, widening the existing ones, and for regulating the height of new buildings and the size of their courtyards. This sort of spatial planning did not take other problems into consideration. In 1862, Karol Gregorowicz published an important book on urban hygiene—a milestone in urban thought.²¹ This was a thoroughly conceived and vividly written elaboration of the actual situation in Warsaw, with maps indicating the hygienic characteristics of all the city's urban plots. This book helped the intellectual elites realize the catastrophic hygiene situation in the city, where many centrally located properties were hardly suitable for habitation. To be sure, the situation was not exceptional in Europe, especially if we consider the living conditions and hygiene in London in the first half of the nineteenth century. It was, however, a huge surprise for many, as Warsaw had, until then, been considered a healthy (though not very orderly) city.

The list of urban problems was at that time already multi-faceted. Hygienic considerations presented a serious issue and there were multiple ways to solve the problem of cleanliness and preventing contagions. First of all, proper sanitation, that is, the building of municipal facilities (for example, slaughterhouses) and systems like sewers and waterworks had to be introduced into the cities in compliance with modern standards that had been worked out in such countries as Great Britain and Germany. New solutions were needed also for the systems of waste disposal, which had caused a rapid deterioration in the general level of sanitation. This last issue was noticed and brought into the public discourse by doctors, most notably Stanisław Markiewicz and later Gustaw Fritzsche.²² It was already the subject of scrutiny in the technical press in 1866.²³ In 1879, broader discussions took place and more options of

²⁰ S. MODLIŃSKI: Kronika ruchu konstrukcyjnego w kraju [Chronicle of the Construction Activity in the Country], in: *Inżynierja i Budownictwo* (1879), 14, pp. 123-124.

²¹ KAROL GREGOROWICZ: Warszawa pod względem topograficznym, higienicznym i geologicznym [Warsaw in Its Topographical, Hygienic and Geological Respect], Warszawa 1862.

²² STANISŁAW MARKIEWICZ: Kwestia kanalizacyi miast [The Issue of Building Urban Sewer Systems], Warszawa 1869; GUSTAW FRITZSCHE: Asenizacya miast [Town Sanitation], in: *Ateneum* 4 (1879), 11, pp. 366-373. Cf. ALEKSANDER ŁUPIENKO: Some Remarks on the Birth of Modern City Planning in the Polish Territories (1850-1914): The Impact of the Hygienic Movement, in: *Mesto a Dejiny* (2016), 2, pp. 18-34.

²³ W. D.: Uwagi nad kwestyą oczyszczenia miast, ze względu ekonomicznego i sanitarnego [Remarks Regarding the Issue of Cleaning the Cities, in Economic and Sanitary Terms], in: *Przegląd Techniczny* 1 (1866), pp. 138-151, 289-312.

waste disposal were proposed²⁴, as it was the time when new waterworks and a sewer system were proposed by the Russian president of Warsaw, Sokrat Starynkevič, who was honestly engaged in the well-being of the city he was appointed to lead. This investment, which also served to some extent the auto-legitimization of the urban authorities, being non-elective in its character, led to heated discussions, with opponents loudly voicing their objections.²⁵ *Zdrowie* published reports about the sanitary status of the city, proving an important factor in developing urban knowledge. In Galicia, plans for new sewers in Lviv and Krakow were also discussed in the press.²⁶ Another related issue was that of public and private toilets—their design and hygiene. This was a part of the waste disposal issue, but also pertained to the building industry. It was an especially important problem dealt with by the Warsaw hygienists in the 1880s.²⁷ New ways to disinfect microbes in pipes, toilets, cesspools, etc. were also worked out. These problems were crucial at the time as human life was at stake and the authorities risked popular unrest in the cities if they did not attempt to solve them.

A whole new array of issues regarding the planning of cities was related to proper ventilation, which could make cities more comfortable and help reduce other threats to hygiene. The importance of ventilation in private apartments was fully realized in this period²⁸ and, on a more general scale, it was also deemed to be a crucial factor in designing city streets. To that end, streets were to be constructed as wide arteries, which was in line with the ideas of the Enlightenment, but was also supported by new scientific arguments (that exposure to sunlight helped destroy microbes).²⁹ These arguments were resisted by urban planners under the influence of the work of Camillo Sitte.

²⁴ To these options we can count a system of sewers that piped the waste with the help of water; a system of waste disposal in tightly covered barrels, i. e. the system used at that time; and a system of pneumatic sewers, popular in England. The waste could be piped into the fields outside the city to fertilize them (this was later deemed unhygienic). Cf. S. O.: O dezynfekcyi miast oraz pojedynczych domów [Of the Disinfection of Cities and Single Houses], in: *Inżynierja i Budownictwo* (1879), 3, pp. 21-23.

²⁵ Cf. WŁODZIMIERZ K. PESSSEL: *Antropologia nieczystości: Studia z kultury sanitarnej Warszawy* [Anthropology of Insalubrity: Studies on the Sanitary Culture of Warsaw], Warszawa 2010.

²⁶ Cf. the thorough calculations presented in the case of the sewers of L'viv: KAROL POMIANOWSKI: Projekt kanalizacji miasta Lwowa [A Project of Lviv's Sewer System], in: *Czasopismo Techniczne* 29 (1911), 1, pp. 5-7; 2, pp. 17-21; 6, pp. 69-72. About the issue cf. PAVLO GANKIN: *Kanalizacja miasta L'vova (vid počatku XV st. do 1939 r. [Lviv's Sewer System (from the Beginning of the 15th century to 1939)*, L'viv 2015, pp. 65-74.

²⁷ *Ustępny w Warszawie* [Toilets in Warsaw], in: *Zdrowie* (1888), 12, p. 422.

²⁸ Cf. *Co pomaga szerzeniu się chorób epidemicznych? [What Allows Epidemic Diseases to Spread?]*, in: *Inżynierja i Budownictwo* 3 (1881), p. 15.

²⁹ JÓZEF LIPCZYŃSKI: *O regulacji ulic jakoteż innych obszarów w miastach [Of the Regulation of Streets as Well as of Other Areas in the Cities]*, in: *Czasopismo Techniczne* 12 (1894), 17, pp. 131-137.

Their point of view was quite different from that of the hygienists: the main obstacle in urban planning was the rigid rule of straight arteries and the widespread simplifying conventions prevailing in city plans.³⁰ Here, the point of view of the physicians and engineers was challenged by urban planners more oriented towards the aesthetic form of cities.

Moreover, urban planners in Galicia, who were not only consulted but also led many offices and departments themselves, proposed to prepare modern and comprehensible regulatory plans for cities. This task was seen as vital in Germany, where prominent urban planners such as Joseph Stübben and Reinhard Baumeister put great effort into popularizing and developing such plans. In Krakow and Lviv, the idea was propagated at conventions and congresses of architects and urban technicians, especially from the 1890s. The main event that resulted from these activities was a great urban planning competition for a comprehensive regulatory plan of Krakow at the end of the 1910s.³¹ In 1914, there were also preparations for a contest to come up with a regulatory plan of Lviv. The resulting plans were, however, often criticized for their rigidity and their “German character,” as one of the publicists put it.³²

Another issue was the education and hiring of qualified municipal engineers in the administration, which led to a professionalization of administrative services. The quality of urban hygiene and safety depended not only on the laws but also on the staff of the municipal offices. The problem of providing good technicians for that purpose—in medium-sized Galician towns as well—was discussed in the press and during conventions.³³ And last, but not least, the idea of monument preservation was developed, mainly in Krakow (which served as a cultural capital of the Polish nation). Art historians from

³⁰ Desirable urban effects could be achieved by applying varied forms of streets and breaking the straight building lines by offsetting groups of houses. Cf. e.g. FRANCISZEK MACZYŃSKI: Najnowszy Lwów [The Newest Lviv], in: *Architekt* (1908), 9, pp. 91-97.

³¹ Cf. IGNACY DREXLER: Konkursowy plan regulacji Wielkiego Krakowa [Competition-Plan for the Regulation of Greater Krakow], in: *Czasopismo Techniczne* 29 (1911), 4, pp. 48-51; 5, pp. 63-67. See also DR. JAN RAKOWICZ: O wprowadzeniu w życie planu regulacyjnego miasta wogóle i w zastosowaniu do Wielkiego Krakowa [Putting an Urban Regulatory Plan into Practice in General and Its Application to Greater Krakow], in: STANISŁAW GABRIEL ŻELEŃSKI, ROMAN INGARDEN (eds.): *Pamiętnik VIgo Zjazdu Techników Polskich od 11go do 15go września 1912 w Krakowie, Kraków 1914-1917*, pp. 158-161; W. BARCZEWSKI: Znaczenie zdrowotne regulacji miast [The City Regulation's Significance for Health], in: *Przegląd Higieniczny* 4 (1905), 12, pp. 273-283.

³² TADEUSZ NIEDZIELSKI: Style w budowie miast [Styles in Urban Planning], in: *Architekt* (1914), 1-2, pp. 1-12.

³³ BRONISŁAW BIEGELEISEN: O potrzebie inżynierów sanitarnych [The Need of Sanitary Engineers], in: ŻELEŃSKI/INGARDEN (as in footnote 32), pp. 113-125. Cf. also ARTUR KÜHNEL: Stanowisko techników w służbie miejskiej w Galicji [The Position of Technicians in the Municipal Service in Galicia], in: *Czasopismo Techniczne* 32 (1914), 13, pp. 158-159; 14, pp. 168-171; 15, pp. 181-182.

Krakow became the main activists defending the demolition of monuments that were endangered during this period of fast urban development and restructuring³⁴. One of those intellectuals, Stanisław Tomkowicz, published many books concerning architectural heritage and defended Krakow's ancient sculptures and churches, for example, in his publication from 1887.³⁵ In 1909, he wrote an important book "The Disfiguring of the country" promoting the preservation of monuments as well as the German way of defending the country's landscape and cities (*Heimatschutz*). Tomkowicz criticized the general trend of demolishing ancient ruins to facilitate road and rail communication or the practice of highlighting certain chosen monuments by tearing down their surroundings. He also propagated an idea contrary to the point of view of urban hygienists. He proposed to leave (or even build) narrow streets in the cities to avoid the 'madness' of the straight lines of ventilated streets.³⁶

Foreign Excursions and Personal Ties

Let us now turn to the issue of other forms of knowledge dissemination. The most important of these were the personal contacts and study trips, the activity of the societies of technicians and hygienists, and the international conventions and exhibitions that were organized between and across the three countries.

The role of the imperial "actors" must be emphasized here. When working on larger plans for urban infrastructure (waterworks, sewer systems, etc.), city councils and magistrates usually sent representatives (along with members of the Polish technical elite hired by these offices) to visit chosen cities abroad and to study the solutions used there. It was research of this kind that led Warsaw's authorities to invite William Lindley, a renowned specialist from Britain, to plan the city's infrastructure. The Warsaw sewer system, an example of a relatively early modern solution to the problems of municipal water hygiene, could later serve as a template for other cities in the Polish territories and abroad. The technical and health institutions also organized scientific trips, not only within the borders of their own state. The Polytechnic Society, an organ of the Technical University in Lviv, sent its members to Prague in

³⁴ Cf. ALEKSANDER ŁUPIENKO: Architectural Heritage and Nation Building in the Kingdom of Poland and Galicia Before 1914, in: ROBERT KUSEK, JACEK PURCHLA (eds.): *Heritage and Society*, Kraków 2019 (in print).

³⁵ STANISŁAW TOMKOWICZ: *Nieco o zabytkach krakowskich, ich miłośnikach i ich niszczycielach* [Some Remarks about the Monuments in Krakow, Their Admirers and Destroyers], Kraków 1887.

³⁶ IDEM: *Szpecenie kraju. Z powodu broszury Pawła Schultze: "Die Entstellung unseres Landes"* [The Disfiguring of the Country. On Occasion of the Brochure of Paul Schultze: "Die Entstellung unseres Landes"], Kraków 1909, pp. 15-17. See also a similar article by IDEM: *Przeciw zabrzydzaniu kraju* [Against Making the Country Ugly], in: *Architekt* (1909), 5, pp. 83-86.

1891.³⁷ New personal ties could be made during the visits of the urban technicians from Lviv to the Russian partition in 1885, where they studied technology in its rapidly growing—in contrast to Galicia—industrial centers.³⁸ In 1895, technicians from Galicia attended the provincial exhibition in Poznan, which resulted in broadening Galician interest in a region³⁹ where intellectuals suffered from the practice of limiting access to municipal decision-making to Germans alone. Lviv's (and Krakow's) ties with Poznan had already been strengthened at the dawn of Galician autonomy⁴⁰, and they included physicians and naturalists as well (see below). With the help of such trips, engineers from Galicia wanted to share their knowledge with their counterparts in the Poznan region.

That sharing of knowledge was not limited to groups. Some more renowned personalities were also active in this respect, as their scope of influence went well beyond the confines of the state borders. To give an example of a profession not yet mentioned, we should consider Adolf Suligowski, a Warsaw lawyer, whose interest also lay in urban issues (financing infrastructure, providing decent homes for the poor, voicing the need for urban self-government, etc.), who left a body of evidence detailing his activity. He also strove for inter-partitional collaboration between the various judiciaries and organized regular, quasi-private meetings of lawyers on Fridays, bringing in many of his counterparts from Galicia, where pressing urban issues were also discussed.⁴¹ Similar meetings were also held by architects. These were of a more ambitious character and were kept secret from the Russian authorities.⁴² Warsaw engineer Feliks Kucharzewski, who was famous for his writings popularizing technical knowledge, was also an expert on sewer and waterworks technology.⁴³ He not only published his work in periodicals in Galicia

³⁷ MATAKIEWICZ (as in footnote 18), p. 60.

³⁸ ROMAN DZIEŚLEWSKI: Z wycieczki naukowej politechników lwowskich do Królestwa [From a Research Trip of Lviv's Polytechnicians to the [Polish] Kingdom], in: *Czasopismo Techniczne* (1885), 2, pp. 19-21; 3, pp. 30-32.

³⁹ Cf. as evidence a series of articles about "technical life" in the Poznan region: *Z życia technicznego w W. Księstwie Poznańskim* [From the Technical Life in the Great Duchy of Poznan], in: *Czasopismo Techniczne* (1896), 17, pp. 189-191. The topic re-emerges in some following issues.

⁴⁰ A convention in Lviv was held in 1871 to host delegations from the Poznan and Silesian regions. A special city guide was published to serve those guests; ANTONI SCHNEIDER: *Przewodnik po mieście Lwowie* [A Guide to Lviv], Lwów 1871.

⁴¹ KRZYSZTOF POL: Adolf Suligowski, in: *Polski Słownik Biograficzny*. Vol. 45: Strzelecki Wiesław—Surma Czesław, Warszawa—Kraków, 2007-2008, p. 427.

⁴² STANISŁAW M. BRZOZOWSKI: Zdzisław Antoni Mączyński, in: *Polski Słownik Biograficzny*. Vol. 20: Maria Józefa—Mieroszewski Krzysztof, Wrocław et al. 1975, p. 327.

⁴³ For his proposals for this large infrastructure project in Warsaw see FELIKS KUCHARZEWSKI: *Wodociąg i kanalizacja w Warszawie* [Waterworks and Sewers in Warsaw], in: *Przegląd Techniczny* (1879), 7, pp. 25-62.

but also took an active role at conventions, as well as organizing technical societies in Warsaw during the more liberal period at the turn of the twentieth century. After 1900, Kucharzewski was also a member of one of the sections of the Academy of Learning (Akademia Umiejętności) in Krakow and a corresponding member of the Poznan Society of the Friends of Sciences.⁴⁴ Last, but not least, Ignacy Drexler, a leading Polish urban planner from Galicia whose career began before 1914, was also influential outside the partition borders and was published in *Przegląd Techniczny*. Emil Sokal, an expert on urban hygienic infrastructure from Warsaw, published articles disseminating knowledge about waterworks in, for example, *Czasopismo Techniczne*.⁴⁵ In the field of monument preservation and urban beautification, articles written by the famous Galician architect and theoretician Jan Sas Zubrzycki⁴⁶ and the architects Sławomir Odrzywolski and Franciszek Mączyński⁴⁷ can be found in the Warsaw press, while papers of the Warsaw art historian and theoretician Alfred Lauterbach were published in Krakow.⁴⁸ *Zdrowie* published information about urban infrastructure being built abroad, such as the new waterworks in Krakow in 1901 and in Lviv in 1902.⁴⁹ Publishing in the foreign press was that sort of activity that has left clear evidence in the sources and can thus be analyzed by historians. Other kinds of activity cannot be traced with such precision, because the exact topics of private discussions and the content of public lectures (very popular at that time but known today only by their titles) are hard or impossible to reconstruct. Further study of the biographies of the technicians in question will bring new material relating to these discussions to light.

⁴⁴ BOLESŁAW ORŁOWSKI: Feliks Kucharzewski, in: *Polski Słownik Biograficzny*. Vol. 16: Kubacz Franciszek—Legatowicz Ignacy, Wrocław et al. 1971, p. 58.

⁴⁵ EMIL SOKAL: Kanalizacja miasta Warszawy [Warsaw's Sewer System], in: *Czasopismo Techniczne* (1886), 3, p. 29; 4, p. 45; 5, p. 65.

⁴⁶ Opieka konserwatorska w dziedzinie architektury [Preservationist Care in the Field of Architecture], in *Przegląd Techniczny* (1909), 7, p. 89; 10, pp. 125-126; 11, pp. 137-138; 13, pp. 167-168.

⁴⁷ SŁAWOMIR ODRZYWOLSKI: Unarodowienie nowoczesnej produkcji architektonicznej polskiej [Nationalization of the Modern Polish Architectural Production], in: *Przegląd Techniczny* (1909), 12, pp. 147-148; FRANCISZEK MĄCZYŃSKI: Wielki Kraków [Greater Krakow], *ibidem*, 26, pp. 319-320.

⁴⁸ ALFRED LAUTERBACH: Architektura i indywidualizm [Architecture and Individualism], in: *Architekt* (1911), 10, pp. 143-146.

⁴⁹ S. D.: Nowy wodociąg krakowski [New Krakow Waterworks], in: *Zdrowie* (1901), 5, pp. 245-249; WIKTOR LEGEŻYŃSKI: Nowy wodociąg lwowski [New Lviv Waterworks], in: *Zdrowie* (1902), 9, pp. 677-683.

Institutions

The channels of knowledge transfer discussed so far have been to a greater or lesser extent informal. An important means of more formal communication can be found at the institutional level, which brought together a broad group of technical experts. On this topic, we can note the already mentioned Polytechnic Society (Towarzystwo Politechniczne), founded in 1876 in Lviv (first as the Society of Learned Technicians).⁵⁰ In Krakow, the Technical Society (Krakowskie Towarzystwo Techniczne) was founded in 1877. Scientists from the various partitions discussed current issues pertaining to the city: its sanitation facilities, public transport, as well as the general regulatory plans.⁵¹

Other scientists, for example hygienists in Galicia, gathered in associations such as the Society of the Friends of Health (Towarzystwo Przyjaciół Zdrowia), which was renamed the Hygienic Society (Towarzystwo Higieniczne) in 1905. They were also interested in the works and writings of the hygienists in the Russian partition, where the largest urban centers (Warsaw and Lodz) were located, and where sanitary problems demanding appropriate action had been a pressing issue for some time. An example of such an action was the decision of Warsaw's President Starynkevič to pursue the goal of building a modern waterworks and sewer system in the city in the late 1870s. That decision gave impetus for the creation of a separate hygienic society there. In 1879, the Warsaw Civic Sanitation Committee (Podkomitet Sanitarny Obywatelski), a consulting body formed by the Polish-speaking professionals, was established, while the "proper" Warsaw Hygienic Society (Warszawskie Towarzystwo Higieniczne) had to overcome serious obstacles before it could finally be legalized in the difficult political context of the Russian partition. That did not take place until 1898. Within this society, a special Department for the Hygiene of Cities and Apartments (Wydział higieny miast i mieszkań) was created that dealt with the problems of the city. In the same year, the Technicians' Society in Warsaw (Stowarzyszenie Techników w Warszawie) was created, a group that also dealt with general urban problems.⁵²

Certain aspects of urban monument preservation also had clear cross-border character. The professionals dealing with the issue were mixed in terms of their expertise and backgrounds, comprising scientists trained at the technical schools and artists trained in the academies. The whole new science of art

⁵⁰ BOLESŁAW ORŁOWSKI: Polski wkład w technikę i nauki techniczne [Polish Contribution to Technics and Technical Science], in: ANDRZEJ NOWAK (ed.): *Historie Polski w XIX wieku*. Vol. 4: Narody, wyznania, emigracje, porównania, Warszawa 2015, pp. 277-376, here pp. 369-370.

⁵¹ JÓZEF PIŁATOWICZ: *Ruch stowarzyszeniowy inżynierów i techników polskich do 1939 r.* Tom 2: Słownik polskich stowarzyszeń technicznych i naukowo-technicznych do 1939 r. [Association Movement of Polish Engineers and Technicians until 1939, vol. 2: Dictionary of the Polish Technical and Scientific-Technical Associations], Warszawa 2005, p. 49.

⁵² *Ibidem*, pp. 289 ff.

history, propagated in Krakow by Marian Sokołowski, Józef Łepkowski and Władysław Łuszczkiewicz, was founded on the premises of the historic-cultural unity of the former Polish-Lithuanian Commonwealth, and its propagators stressed the need to transcend the current borders. Sokołowski's theory of art, based on the templates of the famous Vienna school of art history, presented Polish art as an integral part of the Western artistic tradition and as a unity in itself⁵³. Already the first significant publication of the antiquarians (the predecessors of art historians and conservationists) was a broad overview of the three partitions (a separate volume was dedicated to each of them)⁵⁴, which was followed by general manuals written by, among others, Sokołowski in the 1880s and onward. A crucial issue in this regard was also the practice of preparing lists of monuments to be conserved (a practice known in France as *classement*). The pioneering role was played by Łepkowski, who explored the towns and villages not only in Galicia, but also in the Kingdom of Poland, and in Pomerania in the German partition⁵⁵ and the results were later published⁵⁶. The proponents of the movement organized study trips from Galicia to the German partition, where the earliest Romanesque monuments have survived. Reports of such journeys can be found in the press from that time.⁵⁷ Monetary contributions were also sent from these foreign regions to help finance the most important conservation projects in Krakow⁵⁸, which was deemed the "Polish Athens." The 1880s also saw the beginning of the first modern organization of conservationists in Galicia.⁵⁹ What is important here is the pioneering role played by the Galician professionals gathered within these institutions, who were given the chance to study the remnants from the past across the territory in question, before this was possible for their counterparts from the Polish Kingdom (for whom such opportunities were

⁵³ Cf. MAGDALENA KUNIŃSKA: Historia sztuki Mariana Sokołowskiego [Art History of Marian Sokołowski], Kraków 2014, p. 195 and passim.

⁵⁴ MICHAŁ BALIŃSKI, TYMOTEUZ LIPIŃSKI: Starożytna Polska pod względem historycznym, geograficznym i statystycznym opisana [Ancient Poland Described in Its Historical, Geographical and Statistical Respect], Warszawa 1843.

⁵⁵ BLANKA ANTONIEWICZ-GORAJ: Między teorią a praktyką: Aktywność Józefa Łepkowskiego w dziedzinie konserwacji zabytków [Between Theory and Practice: The Activity of Józef Łepkowski in the Field of Monument Conservation], in: Wiadomości Konserwatorskie (2005), 17, pp. 14-24, here p. 14 ff.

⁵⁶ Cf. e. g. JÓZEF ŁEPKOWSKI: O poszanowaniu zabytków ojczystej przeszłości [On the Esteem of Monuments of the National Past], in: Biblioteka Warszawska 1 (1863), pp. 122-131.

⁵⁷ Like the one to Kruszwica, reported to the Art History Commission in Krakow, cf. WŁADYSŁAW ŁUSZCZKIEWICZ: W Akademii [In the Academy], in: Kurjer Lwowski (1886), 297, p. 5.

⁵⁸ ANTONIEWICZ-GORAJ (as in footnote 55), p. 17.

⁵⁹ JERZY FRYCZ: Restauracja i konserwacja zabytków architektury w Polsce w latach 1795-1918 [Monument restoration and conservation in Poland in 1795-1918], Warszawa 1975, pp. 11-12.

limited prior to 1906, when the Society for the Care of the Monuments from the Past (Towarzystwo Opieki nad Zabytkami Przeszłości) was established.)

Such institutions could legally accept members from abroad and had funds to organize public events—a matter that will be dealt with later on in this paper—thus, they can be considered as a new means of maintaining contacts with experts from other cities.

Conventions and Congresses

Organizing conventions and congresses was one of the goals of these institutions. The so-called Polish Technicians' Conventions (Zjazdy Techników Polskich), which were initiated just a few years after the establishment of the Polytechnic Society, were very important in bringing together scientists from Warsaw, Lviv, Krakow and Poznan. The first one was held in 1882 in Krakow.⁶⁰ From the beginning, they were intended to host professionals from the other partitions, although mainly guests from the Russian partition attended. The presiding committees were deliberately formed by activists from the different partitions.⁶¹ In a commemorative book produced by the Polytechnic Society, the third convention was presented as the first truly inter-partitional one (in Lviv in 1894). At the time, a special permanent delegation dealing with conventions was formed, marking the beginning of closer collaboration between technical institutions in Lviv, Krakow and Warsaw.⁶² That delegation's task was to make sure that the trend of relatively intensive cross-border consultations may survive the obstacles that were expected to be raised by the Russian and German governments and urban authorities. The aim of these conventions was to discuss important problems regarding, among other topics, the growth and health of the modern metropolis. The building section of these conventions investigated building law and regulatory plans. For instance, during the fourth convention in 1901, the section proposed to speed up the process of preparing regulatory plans and to make them more detailed regarding issues of hygiene and fire safety.⁶³ In the congress proceedings, engineers from various cities published papers addressing the issues of regulatory plans, sanitation and municipal facilities. For our purposes, the most important of these conventions was held in 1912 in Krakow. It was accompanied by the first Professional Congress of Technicians Working on the Building and Hygiene of Cities (Zjazd zawodowy techników pracujących na polu bu-

⁶⁰ ORŁOWSKI, *Polski wkład* (as in footnote 50), p. 370.

⁶¹ JAROSŁAW CABAJ: *Zjazdy międzyzaborowe polskich środowisk naukowych i społeczno-zawodowych w latach 1869-1914: Część II* [Inter-partition Conventions of the Polish Scientific and Social-professional Societies: Part II], in: *Kwartalnik Historii Nauki i Techniki* 50 (2005), 1, pp. 51-78, here pp. 52, 54.

⁶² MATAKIEWICZ (as in footnote 18), p. 21.

⁶³ *Regulacja miast* [City Regulation], in: *Architekt* 2 (1901), 3, pp. 47-48.

dowy i higieny miast). That section was the largest at the convention, gathering around 100 delegates.⁶⁴ This meant that urban knowledge finally became a separate branch of scientific inquiry in its own right.

To get an idea of the scope of the inter-partitional ties that were tightened in this period, it is instructive to mention other conventions that certainly had some impact on the development of advanced urban science. There were conventions of lawyers and journalists that brought together delegates from beyond the borders.⁶⁵ Krakow and Lviv were nearly always the host-cities. Physicians and naturalists also began to hold inter-partitional meetings relatively early on. Their first convention was held as early as 1869 in Lviv, the second was planned for Poznan, but had to be postponed twice (in 1870 and 1872) and, eventually, could not be organized there at all⁶⁶—a clear demonstration of the complicated situation in the German partition. The situation repeated in 1898, when plans to hold another convention in Poznan had to be abandoned due to a police ban forbidding the participation of foreign guests, which triggered a reaction among scholarly circles.⁶⁷ Subsequent conventions had to be held in Galicia. The fifth congress, held in 1888 in Lviv, saw the publication of a special city guide⁶⁸ which had chapters devoted to descriptions of the geological and hygienic condition of the city. Almost all of these conventions had sections devoted to building and construction along with ones dedicated to hygiene and sanitation (dealing also with municipal facilities) and sections on healthy apartments. The chairs and vice-chairs of these

⁶⁴ Sprawozdanie sekcji higieny i budowy miast [Report of the Section of Hygiene and Urbanization], in: ZELEŃSKI/INGARDEN (as in footnote 31), pp. 91-136.

⁶⁵ CABAJ (as in footnote 61), pp. 56-65.

⁶⁶ At first the French-Prussian war complicated the issue, then the Prussian police department in Poznan announced a declaration forbidding the event, cf. Pamiętnik Drugiego Zjazdu Lekarzy i Przyrodników Polskich we Lwowie (19-24 Lipca 1875 r.) [Diary of the Second Convention of the Polish Physicians and Naturalists in Lviv (19-24 July 1875)], Lwów 1876, p. 3.

⁶⁷ The main official cause for this ban was the anxiety around the political activity of the Poles engaged in the convention. In fact, as the German press stated, the aim was to limit any Polish activity in the partition. The issue elicited much concern. The organizers sent announcements to the press, and the Galician scholars even sent one to the Polish Circle in the Viennese parliament. They claimed that the foreign guests were exclusively professionals, that the convention had a purely scientific character and that the whole scandal raised concerns about the freedom of scientific research. A brochure comprising abstracts from the convention papers was soon published to prove these arguments; cf. Z Wielkopolski [From Wielkopolska], in: Gazeta Narodowa 38 (1898), 191, p. 1; Zjazd polskich lekarzy i przyrodników [Convention of the Polish Physicians and Naturalists], *ibidem*, 209, p. 2; O swoje prawa [For the Sake of Our Rights], *ibidem*, 217, pp. 1-2.

⁶⁸ Przewodnik po Lwowie wydany przy współudziale Wydziału Gospodarczego V Zjazdu Lekarzy i Przyrodników Polskich [Guide to Lviv Published in Cooperation with the Economic Department of the 5th Convention of the Polish Physicians and Naturalists], Lwów 1888.

sections were composed of activists from the various partitions. Physicians from the public hygiene department organized their own exhibits. An example of this was at a convention held in Lviv in 1907, where there were sections devoted to hygiene in residential apartments and to municipal facilities.⁶⁹ The hygienists had to wait until 1913 for their own separate convention, when they gathered in Lviv. In summer of 1914, Lviv witnessed the largest event in this field—the Polish Hygienic Exhibition. Its fifth section was devoted to urban hygiene, that is, to the hygiene of apartments and houses, as well as to municipal sanitation and other facilities. That convention, like others, was broadly advertised, and was considered by experts from such cities as Warsaw, Lodz and Poznan to be an obligatory event because the exchange of knowledge at the inter-partitional level was becoming increasingly important for physicians.

Starting in 1888, conservationists held their own conventions. The most important of these was the First Convention of the Fatherland's Monument Lovers in Krakow in July 1911, which attracted participants from all three partitions.⁷⁰ Architects from the three partitions could gather at conventions organized by the Permanent Delegation of Polish Architects (*Stała Delegacja Architektów Polskich*), which held its first meeting in 1909 in Warsaw. Architects from Warsaw (Józef Dziekoński, Franciszek Lilpop, Tadeusz Szanior), Krakow (Władysław Ekielski, Franciszek Mączyński), Lviv (Alfred Zachariewicz, Wincenty Rawski) and Poznan (Roger Sławski) were able to make acquaintance and discuss their common problems. This and similar meetings were important, not so much because of specific common initiatives in the form of joint designs, but rather due to the common demands that could be expressed and new standards that were set, which led to the standardization of professional activity across all the partitions. The demands announced in the press included “the reform of architectural education, the development of professional periodicals, the need for closer reciprocal collaboration, common staging at conferences and exhibitions, and increased scientific and critical activity [...]”⁷¹ A year later, their gathering took place in Poznan.⁷² Finally, it should be mentioned that an inter-partition convention on monu-

⁶⁹ R. WÓWKONOWICZ: *Wystawa przyrodniczo-lekarska we Lwowie* [Naturalist-medical Exhibition in Lviv], in: *Czasopismo Techniczne* 25 (1907), 15, pp. 237-239.

⁷⁰ PAWEŁ DETTLOFF: *Z dziejów zjazdów konserwatorskich w Polsce: W stulecie I Zjazdu Miłośników Zabytków Ojczystych* [From the History of Conservationists' Conventions in Poland: On the Centenary of the First Convention of the Fatherland's Monuments' Enthusiasts], in: *Ochrona Zabytków* 58 (2010), 1-4, pp. 279-287.

⁷¹ [ANON.]: *Delegacja architektów polskich* [Polish Architects' Delegation], in: *Architekt* (1909), 6, pp. 99-104.

⁷² WŁADYSŁAW EKIELSKI: *Sprawozdanie z posiedzenia Delegacji Architektów Polskich w Poznaniu* [Report from the Session of the Polish Architects' Delegation in Poznan], in: *Architekt* (1911), 9, pp. 127-130.

ment preservation was held in Warsaw.⁷³ There was a widely known discussion at the time regarding the search for a national style. As the issue had an obvious all-Polish character, and as renowned architects from Warsaw (for example, Stefan Szyller) and Krakow (Sas-Zubrzycki) took the floor, it served as an important topic during the architects' conventions and can be included within the scope of urban science.

The conventions described above were regarded by the Russian and German authorities with nervous suspicion, as they were a way of (re)establishing inter-partitional Polish intellectual ties.⁷⁴ It is conceivable that officials from their respective internal affairs departments may have suspected that secret information was being exchanged at the conventions, a sensitive issue in the times of rising tensions and the arms race preceding 1914.

Exhibitions

Exhibitions played a similar role to conventions. They brought experts together as visitors, but their main aim was the dissemination of knowledge among the general public, which was especially important in the nineteenth century when access to knowledge was limited. Exhibitions were prepared so as to be easily accessible (if possible, they were free of charge) and their content comprehensible. Besides the stands with texts, there were many exhibits as well as stands (or showcases) displaying photographs. They were popular in Galicia⁷⁵ but were crucial for the Russian partition, where many other forms of knowledge transfer were limited. In Warsaw, it was the Warsaw Hygienic Society and the circle of activists working on urban knowledge development who had a decisive impact on the broadening of urban science. They organized the first expositions propagating modern hygienic ideas, including the subject of hygiene in large cities. In the spring of 1887, an exposition was set up in Warsaw under the guidance of Józef Polak and Wiktor Szokalski. The organizers met with serious obstacles because many people

⁷³ [ANON.:] Konferencya konserwatorska [Conservationist Conference], in: *Architekt* (1909), 6, pp. 108-111.

⁷⁴ Even the process of establishing new associations in the Russian partition after the Revolution of 1905 was the subject of detailed scrutiny, suspicion and reluctance on the part of the Russian officials. Cf. KAZIMIERZ KONARSKI: *Ruch stowarzyszeniowy w Warszawie w latach 1906-1915 (w świetle akt kancelarii Gubernatora Warszawskiego)* [The Association Movement in Warsaw 1906-1915 (in the Light of the Warsaw Government Chancellery's Files)], in: STANISŁAW TAZBIR (ed.): *Z dziejów książki i bibliotek w Warszawie, Warszawa 1961*, pp. 491-524.

⁷⁵ The main Lviv exhibition of 1894 was the subject of much scholarship. Here the special issue "Bilder vieler Ausstellungen. Großexpositionen in Ostmitteleuropa als nationale, mediale und soziale Ereignisse" of *Zeitschrift für Ostmitteleuropa-Forschung* 58 (2009), 1-2, should be mentioned (the papers of ANNA VERONIKA WENDLAND, HANNA KOZIŃSKA-WITT and MARCIN SIADKOWSKI).

thought that the society and the city were not yet prepared for such an event.⁷⁶ Its aim was to present foreign inventions and theories on hygiene to inspire Polish scientists and activists. Among the six committees working on the exhibition, one pertained to issues of interest, namely the Committee of Engineering and Building, where the engineer Alfons Grotowski played an active role. The building section of the exhibition primarily dealt with the issue of hygienic houses and apartments, as well as the need for public sanitation. Templates of healthy houses and apartments were presented, along with disinfection devices and examples of urban public utility buildings and sanitation systems.⁷⁷ It also became clear that the water and air in and around cities should be examined and cleaned. The second Warsaw hygienic exposition, organized by the same society in 1896, presented much the same scope of ideas and proposals within the building section, though generally it was larger in size.⁷⁸ One of many differences was also its impact; it was noticed and attended by many visitors from the Austrian and German partitions. It is also important to note here that samples, books, and exhibits from Galicia were presented at these exhibitions.

The advanced level of urban knowledge in the region was confirmed by a special exhibition in 1911 organized by the Warsaw Hygienic Society, the Urban Mortgage Society and the magistrate in Warsaw that was devoted solely to the cities within the Russian partition. Its aim was to promote good examples of municipal management to the urban authorities.⁷⁹ Another exhibition was scheduled for the autumn of 1914. It was planned by the same Warsaw Hygienic Society and was supposed to deal with issues such as population statistics, regulatory plans, garden-cities, provisioning the city, sewer systems, waste disposal, pavements, green areas, the building and furnishing industry and even street lighting.⁸⁰ The event did not take place, but the sheer enumeration of topics is impressive, especially if one compares the scope of previous exhibitions, which was limited to the solutions and ideas connected closely to issues of promoting personal hygiene, and the hygiene of the immediate human environment, i. e. residential apartments.

Also, the exhibitions organized by the museums of antiquities covered in their scope all three partitions, and also included the far eastern territories of

⁷⁶ ALFONS MALINOWSKI: Wystawa higieniczna w Warszawie [Hygienic Exposition in Warsaw], in: *Tygodnik Ilustrowany* (1887), 231, pp. 366-367; 232, pp. 382-383.

⁷⁷ Cf. *Katalog Wystawy Higienicznej w Warszawie* [Catalog of the Hygienic Exposition in Warsaw], Warszawa 1887.

⁷⁸ JÓZEF POLAK: O kilku szczegółach Wystawy higienicznej [On Some Details Concerning the Hygienic Exhibition], in: *Tygodnik Ilustrowany* (1896), 24, p. 466.

⁷⁹ Cf. the announcement in: *Architekt* (1909), 9, p. 171.

⁸⁰ *Architekt* (1914), 3, p. 53.

the former Commonwealth, which remained outside the Polish Kingdom.⁸¹ All these exhibitions and conventions were good opportunities for scientists from the different partitions to meet and exchange knowledge, as is shown in the example of the General Crownland Exhibition in Lviv in 1894. In the press from that time, we can trace evidence of delegations attending foreign events (even the less ambitious ones), for example a small provincial industrial exhibition held in Poznan in 1895, which was attended by a delegation of scientists from Galicia.⁸²

Conclusions

The scholarly societies, conventions, exhibitions and media described here were all means by which new and important urban knowledge could be disseminated and discussed. Here also, the differences between the partitions often proved to be a strengthening factor when we consider the gains from the knowledge transfer. While the rapid demographical and industrial growth of cities taking place in the difficult political context of the Russian partition could be instructive for the less developed Galician cities (for example, in the field of urban hygienic infrastructure), the Austrian partition and the issue of self-government had a huge (or even larger) impact on Warsaw. All of the conventions held in Krakow or Lviv ended with petitions to the provincial (or state) parliament, calling for the amendment of laws or the introduction of new by-laws. In Warsaw, even the sheer organizing of such gatherings met with serious obstacles. It was, therefore, during the revolutionary period of 1905/06 in the Russian empire, when a general call for municipal self-government was voiced by all the political fractions in the so-called Russian Poland.⁸³

These examples clearly show that nascent urban knowledge, the need for which turned out to be non-negotiable and obvious, had to be transferred not only from the center to the periphery, but also between the cities on the periphery itself, and independently of the state borders. This article does not present the details of the inner imperial ties, i. e. the connections between the regions in question and their capitals, but it is clear that the inner-partitional impact on all the four cities was enormous. The capitals not only served as templates (in this regard we can talk about “little Petersburg,” “little Vienna” and “little Berlin”), but also the direct force of unification stemmed from

⁸¹ TADEUSZ RUDKOWSKI: *Poglądy na zabytek w Polsce lat sześćdziesiątych XIX wieku* [Opinions about the Monuments in Poland in the 1860s], in: *Mysł o sztuce*, Warszawa 1976, pp. 119-133, here p. 120.

⁸² *Wystawa poznańska* [Exhibition in Poznan], in: *Czasopismo Techniczne* (1895), 21, pp. 181-184.

⁸³ KAMIL ŚMIECHOWSKI: *Searching for a Better City: An Urban Discourse During the Revolution of 1905 in the Kingdom of Poland*, in: *Praktyka Teoretyczna* (2014), 3, pp. 71-96.

those centers and in fact changed the cities in question. The inter-partitional Polish professional discourse and cooperation could not rival this tendency and had no such ambitions. The goal here could be to create a competing tendency, at the most.

That leads me to the conclusion that, while the exchange of knowledge between the Polish-speaking professional elite from each of the partitions had an obvious practical character (see the introduction), it can also be seen in my view as a tool of (re)building national common identity in the period of pervasive cultural threat on the part of Russia (constant de-Polonization of the public sphere after 1864) and Germany (open anti-Polish policy in the age of the so-called *Ostflucht* in the Poznan region). That intention can be discerned from the texts and speeches prepared on the occasion of the described conventions and meetings, and also from the general emotional and intellectual climate of the epoch, when the topic of a possible resurrection of the Polish state, for example in the form of a semi-independent Galicia or Kingdom of Poland (and rather not the Poznan region), kept on appearing in private conversations among the Poles. In this way, the cross-border contacts, which were helpful in setting common standards for each part of the former Poland, could serve simultaneously the goal of raising the civilizational level of the regions in question, and the goal of levelling the inter-partitional differences. This interpretation does not deny the logic of the imperial order in the region: professionals engaged in solving urban problems were at the same time tools of the imperial rule in each partition, serving as an important factor in preventing social unrest, which could still amount to a national uprising (the possibility of which did not disappear from the political imagery of the partition powers).

Finally, it must be added that the scientific cooperation and discussions conducted by Polish scholars and engineers owed their developing strength to the rising cosmopolitan culture of the *fin-de-siècle* period. Not denying this fact, it is important to note that this inter-imperial transfer of urban knowledge reciprocally reinforced that cosmopolitan culture. This was especially salient in the border area between the three largest European empires, even on the eve of the forthcoming civilizational struggle, and proves the initial hypothesis that examples of cooperation between the regions of the different empires should also be taken into account by the historians.