

Public Science as a Network: The Congresses of Russian Naturalists and Physicians in the 1860s–1910s

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Abstract: *The paper examines a changing audience present at the major academic conventions in the Russian Empire in the second half of the 19th century – the congresses of Russian naturalists and physicians. Like similar national academic congresses in other European countries of the same age, the congresses of Russian naturalists and physicians served as important sites of academic socialisation, exchange and public dissemination of knowledge. The paper provides a detailed analysis of the dynamics of gender, regional and professional background, and institutional affiliation of registered participants. In this way it is able to demonstrate social and geographic expansion of public science in the late imperial Russia, and the role of the imperial universities, as the principal organisers of the conventions, in the process. In particular the paper focuses on the geography of science in the Russian empire, by tracing and analysing the involvement of different regions of the country, with their varied ethno-cultural background and traditions of scholarship, in the events.*

Keywords: *academic congresses, geography of knowledge, Russian empire, public science*

In the 19th century, academic congresses became important institutional means facilitating the traffic of knowledge and the making of academic communities. National academic congresses, which emerged in Western Europe after the Napoleonic Wars, were a part of a broader trend towards the making of national institutions for science. The congresses were a form of representation and advancement of science at a national level: they were instrumental for

expanding its audience, enhancing prestige of scholars, and linking the ‘centre’ and ‘periphery’ of science – provincial societies and major universities, amateur enthusiasts and established academics. Most often the congresses were deliberately conceived as itinerant events, taking place at different cities and towns of a nation-state. Therefore their geography can provide some insights into their role in the making of an ‘imagined community’ of a nation. (On academic congresses in the 19th century Europe see Fox, 1980; Ausejo, 1994; Casalena, 2006; 2007; Withers, Higgitt & Finnegan, 2008). This paper examines the congresses of Russian naturalists and physicians – a major academic forum for natural sciences that was established in the Russian empire in the late 1860s and convened periodically till the outbreak of the First World War. It focuses on changing the composition of the congress audience. My aims here are twofold. Firstly, I am about to explore the relations between the universities, as the leading centres of scholarship in that era, and a broader public. Secondly, I am going to consider the involvement of different regions of the multi-ethnic and multi-cultural Russian Empire in the academic events, which positioned themselves as a showcase for Russian (national) science.

The congresses of Russian naturalists and physicians: their history and institutional infrastructure

Like many other academic institutions, national (or rather empire-wide) congresses were introduced in the Russian Empire with some delay, when compared to the leading countries of science and scholarship in the 19th century, such as Britain, France, Germany, Switzerland or Italy. In Russia they were a product of the ‘Great Reforms era’ of the 1860s – the decade of major political, social and economic reforms, epitomised by the abolition of serfdom in 1861. The idea to set up periodic conventions of naturalists was first conceived by Professor Karl Kessler (1815–1881) in the late 1850s. In the 1860s, he emerged as one of the principle advocates and lobbyists of the congresses. The Ministry of Education eventually succumbed to his and his colleagues’ entreaties and authorised the first congress of Russian naturalists to be convened in the late December 1867 – early January 1868 in St Petersburg. The St Petersburg University, where Kessler served as Professor of Zoology, hosted the event (Pogozhev, 1887; Tikhonovich, 1953; Savchuk, 1994).

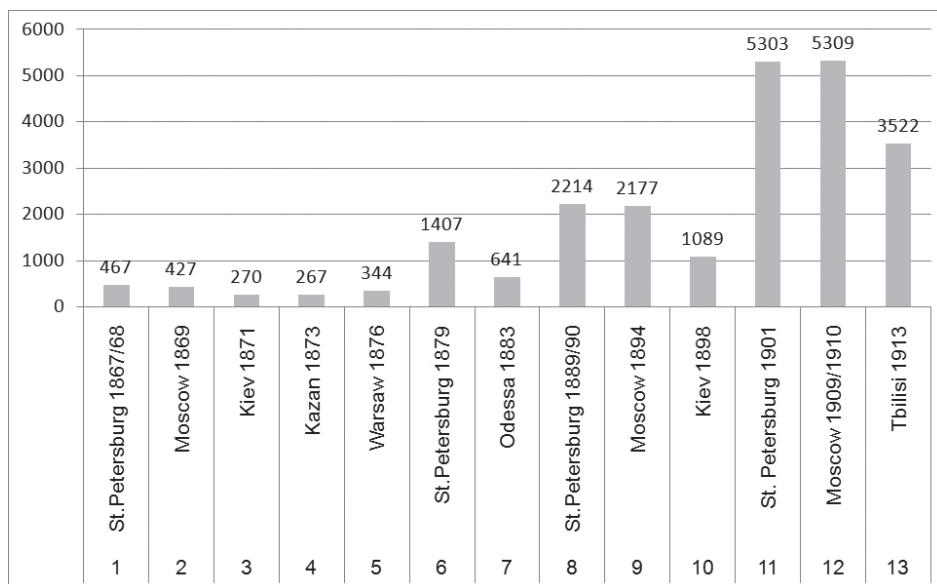
Obviously, the idea itself was borrowed from Western Europe. Russian naturalists were quite familiar with German and Swiss congresses; however it was the British

Association for Advancement of Science with its annual meetings that provided the greatest inspiration – precisely because its congresses were run by a permanent public body (Liubimov, 1869). In Russia, Kessler and some of his colleagues at the St Petersburg and Moscow universities strongly advocated the idea of establishing a national (in practice, an imperial) association; yet this part of their vision never materialised, even if proposals for an association were repeatedly discussed at the congresses (*Vtoroi s''ezd*, 1869, pp. 1–4 [2nd pagination], 1–4 [5th pag]; *VIII s''ezd*, 1890, pp. xlxi–xlxi, 69; *Dnevnik XII s''ezda*, no. 2, 1909, pp. 5–9). The failure to establish the Russian Association at the early stage, in the late 1860s–1870s, could be accounted for not only by a very cautious policy pursued by the Ministry of Education towards any public initiative but also by a rather reluctant stance taken by the universities themselves. The first congress of Russian naturalists petitioned the government for the setting up of naturalists' societies, which would be affiliated with the universities. The emperor consented and in 1868–1869 the naturalists' societies were founded at the St Petersburg, Kazan, Kharkov, St Vladimir (Kiev) and Odessa universities, i.e. at all the universities of the empire where naturalists' societies were not already functioning (*Obshchestva estestvoispytatelei*, 1990). Subsequent attempts undertaken by a few prominent St Petersburg scientists, notably by a botanist Andrei Famintsyn (1835–1918), to coordinate their activities and to make societies publish their *Transactions* jointly, met a muted but effective resistance (*Vtoroi s''ezd*, 1869, pp. 1–4 [5th pag]).

Therefore until the very end of the tsarist period, the congresses of Russian naturalists were run by the universities with financial support provided principally by the Ministry of Education. The Ministry encouraged the university and other higher education school faculty members, as well as secondary school teachers, to attend the congresses by authorising paid leaves for those employees who wished to take part in the event. However the congresses were open to much broader audience: anyone 'interested in natural sciences', who paid a small conference fee, could sign up as a registered participant (*Trudy pervogo s''ezda*, 1868, p. v; *Trudy tret'ego s''ezda*, 1873, pp. 1–2). Indeed, from their early days the congresses attracted a substantial number of people who had no university affiliation. Already the first two congresses, which took place in St Petersburg and Moscow in the late 1860s, drew several hundred registered participants. In the next decade, as the congresses moved away from the two capitals of the empire to Kiev (1871), Kazan (1873) and Warsaw (1876), the number of attendants perceptibly declined; however the return of the 6th congress to St Petersburg in 1879 was marked by a dramatic increase of its audience. The growth continued in the 1880s–1910s, although each time when a congress was held outside of the two capitals – in Odessa (1883), Kiev (1898) or Tiflis (Tbilisi, 1913) – the numbers dropped again.

By the early years of the 20th century the congress audience reached mammoth proportions, exceeding five thousands participants.

Figure 1. Number of registered participants at the congresses of Russian naturalists



Sources: *Trudy pervogo s'ezda*, 1868, pp. xv–xxxiv; *Vtoroi s'ezda*, 1869, pp. 1–21; *Trudy tret'ego s'ezda*, 1873, pp. 11–23; *Spisok chlenov IV s'ezda*, 1873; *Trudy V s'ezda*, 1877, pp. 4–16; *Rechi i protokoly VI s'ezda*, 1880, pp. 1–33; *VIII s'ezd*, 1890, pp. iv–xxx; *Dnevnik IX s'ezda*, 1894, no. 1, pp. 22–55, no. 3, pp. 15–24, no. 5, pp. 23–32, no. 10, pp. 52–62; *Vysochaishe utverzhdennyi X s'ezd*, 1898; *Tikhonovich*, 1953.

Reconstructing congress audiences: a note on sources

My reconstruction of the congress audiences is based on lists of registered participants that were published either in the *Diaries* or in the *Proceedings* of the congresses. These lists contained not only the names of congress attendees but also their institutional and/or professional affiliation, their place of residence, and a section or a discipline they were interested in. Of course, some people provided more details about themselves than others; institutional/professional affiliation is the category for which the data are missing in a quite substantial number of cases. Sometimes I was able to verify the data or fill in the gaps using external data, but that was usually the case when prominent scholars or university faculty were involved. The place of residence is a less ambiguous category with a far smaller proportion of missing data. However the results are

likely to be skewed in favour of those cities which hosted a particular congress, since it is often hard to establish whether people gave their permanent or temporary address they used while staying in this city. At the early congresses participants indicated only one section they opted to register, while later on it was apparently possible to sign in for several sections. So far I have failed to find the lists of participants for the 7th, 11th, 12th and 13th congresses.

Institutional affiliation, professional background and gender

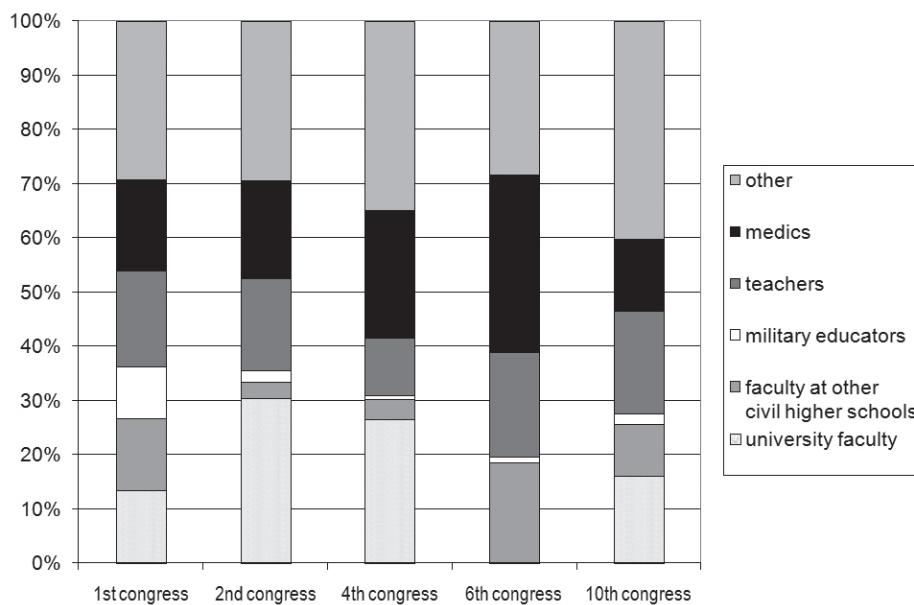
No doubt, for the vast majority of these people their participation at a congress was a singular event: about 2,580 persons attended the first six conventions (1867–1879). Among them only about 420 (or 16%) returned to visit another congress. Later the ratio remained essentially unchanged: by 1898 no less than 7,400 people attended the congresses of Russian naturalists (the actual figure must have been even bigger, as no data exist on the participants of the 7th congress), yet only about 1,260 members (or 17%) visited more than one convention.

In the course of time the congresses of Russian naturalists lost their even pace: the rhythm was first broken in the 1880s, when the gap between the 7th and the 8th congresses exceeded six years (instead of two or three years in the late 1860s–1870s). But it was in the early decades of the 20th century that the failure to convene at regular intervals became graphic: it took about ten years to organise the 12th congress in Moscow (December 1909 – January 1910) after the 11th congress in St Petersburg in 1901. The reasons for the delays are not yet quite clear. A long interval in the 1880s could possibly be accounted for by a hostile political climate in the country. However it would be more difficult to explain the slackening rhythm in the 1900s—the period of a rapid expansion in education and research, and the institutionalisation of new applied disciplines. Perhaps, it was the very growth of the congress audience that jeopardised these events: obviously they became difficult to manage, while their openness to general public must have compromised their academic objectives. The institutional formation of new fields of knowledge undoubtedly played its role as well: the early decades of the 20th century were also the time when much smaller conventions, focused on a particular discipline such as meteorology, entomology or applied geology, were established (see *Trudy Vserossiiskogo s'ezda deiatelei po prakticheskoi geologii*, 1908; *Protokoly zasedanii II meteorologicheskogo s'ezda*, 1910). Therefore it is difficult to judge at the moment whether the congresses of Russian naturalists had a potential for future, or with the outbreak of the First World War they were about to dissolve and be

replaced by specialised conventions of mathematicians, physicists, geographers, and others, as it would indeed happen in the Soviet Russia in the 1920s.

The data available on professional or institutional background of registered participants are not quite satisfactory; however, there are some indicators suggesting that the university and higher school faculty composed about one quarter of the audience at the early congresses and their share remained relatively stable in the course of time, experiencing perhaps some decline at the 6th congress in 1879 but recovering by the last years of the 19th century. Another relatively stable group was formed by professional educators who composed about 15–20% of all registered participants. Finally, already in the late 1860s–1870s a substantial part of the audience consisted of the members of medical professions (physicians, dentists, pharmacists and veterinary specialists). These people became particularly visible at the 6th congress, when their share exceeded 30%. Indeed, we may assume that the first upsurge in the number of registered participants that took place at the same congress was at least partially accounted for by a growing interest in the congress expressed by medics.

Figure 2. Congress participants by occupation or institutional affiliation



Sources: see Fig. 1. The data for the 6th congress do not allow us to differentiate between the university faculty proper and the faculty employed by other non-military higher schools. Therefore on the graph these people are lumped together under the category 'Faculty at other civil higher schools'.

The audience of the first two congresses was exclusively male: it was only at the 3rd congress (Kiev, 1871) when the very first (and the only) woman showed up at the convention. Anna Volkova opened the way for other women: a few more attended the next congress in Kazan in 1873. Yet at the Warsaw congress (1876) their number dropped down again to just two ladies. It was only at the 6th congress at St Petersburg in 1879 when they began to form a sizable group (61 female participants on the list), even if proportionally their increase did not match the enlargement of the congress audience in general. A real growth occurred later, at the 8th congress (St Petersburg, 1889–1890): the number of female participants increased more than threefold, while their share among the participants grew up from 4.3 to 9.6%. The next congress in Moscow (1894) confirmed their increasing visibility, yet the move to Kiev, where the 10th congress took place in 1898, apparently discouraged women more than men from taking part in the event.

Quite predictably, the women who attended the congresses of Russian naturalists gravitated towards ‘softer’ subjects, such as geography and anthropology, while they were underrepresented at the sections on physics, mathematics and chemistry. Like in some other countries their role initially was rather passive: the very first woman, who did not only attend the conference but presented her paper and chaired a session at the 6th congress, was Sofia Pereiaslavtseva (1851–1903), a graduate of Zurich University who would later earn an international reputation in marine zoology (On her see Mitrofanova, 1905). At the 9th congress one more woman ventured to address the meeting as a speaker: this time she was Maria Pavlova (1854–1938), a graduate of Sorbonne, the wife of the leading Russian geologist Aleksei Pavlov, and a future prominent Russian palaeontologist on her own right (further on her see Borisiak & Menner, 1939). Yet even fifteen years later, at the 12th congress in Moscow (1909–1910) there were just ten women among the 478 speakers (*Dnevniki XII s'ezda*, 1910).

The opening of the Russian naturalists’ congresses for female speakers and audience could be seen as rather belated and slow, yet it was quite comparable with the advances in other areas of public scholarship in Russia. Indeed, one way to assess the changing composition of the congress audience is to compare it to the public, who attended similar conventions for the humanities—the Russian archaeological congresses. These meetings were instituted in the same period (the first archaeological congress took place in Moscow in 1869) and met even more regularly than the naturalists’ congresses till 1911. For the very first time women appeared at the 5th archaeological congress (Tiflis, 1881), and with the course of time their visibility at the archaeological congresses (measured by their share of the audience as a whole) remained quite comparable with the situation at the

naturalists' conventions (*Trudy V arkheologicheskogo s'ezda*, 1887, vol. 1, pp. xi–xii; *Trudy VI arkheologicheskogo s'ezda*, 1886, vol. 1, p. liii–lxii; *Trudy XIV arkheologicheskogo s'ezda*, 1911, vol. 3, pp. 32–42 [2nd pag]).

Geography of congresses and its impact

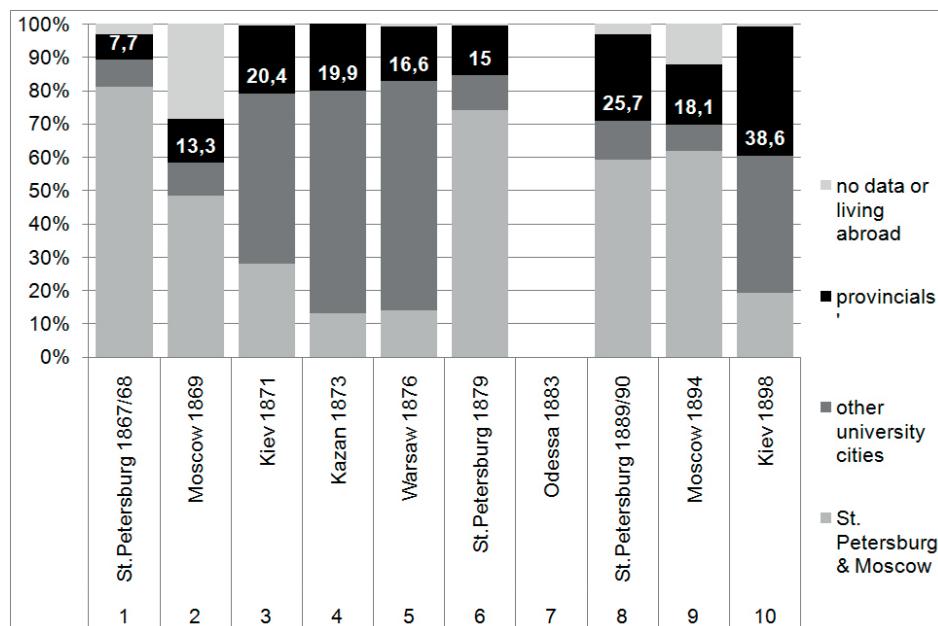
The fact that the naturalists' congresses were organised by the universities determined the choice of their venue: except the very last meeting (Tiflis in 1913) all previous assemblies took place in the university centres of the empire. Predictably, St Petersburg, as the capital, hosted the largest number of conventions (1867–1868, 1879, 1889–1890, 1901), it was followed by Moscow (1869, 1894, 1909–1910); twice the congresses met in Kiev (1871 and 1898), once in Kazan (1873), Warsaw (1876) and Odessa (1883). In this respect the naturalists' conventions differed from the Russian archaeological congresses. The archaeological congresses also originated in the two capitals of the empire: the first one convened in Moscow (1869), the second one in St Petersburg (1871), then followed the meetings in Kiev (1874), and Kazan (1877). Later on, the archaeological congresses occasionally returned to the university seats (Odessa in 1884, Moscow in 1890, Kiev in 1899, Kharkov in 1902). However from the 1880s, their geography rapidly expanded to encompass Tiflis (1881), Yaroslavl (1887), Wilna (Vilnius, 1893), Riga (1898), Yekaterinoslav (now Dnepropetrovsk, 1905), Chernigov (1908) and Novgorod (1911) (Lebedev, 1992, pp. 100–101).

Much wider geography of the archaeologists' conventions can be accounted for by the fact that they were much smaller events (even in the 1910s the number of their participants did not exceed three hundred people) run by the Moscow Archaeological Society – an independent public association, very loosely tied to the university milieu. Another factor might have been at play as well: at least from the 1890s the choice of location for archaeological congresses was very much determined by the advancement of field research in a particular region. Venues were chosen because of the interest, which a particular town or city could generate with its archaeological monuments and excavation sites (Lebedev, 1992, pp. 100–101). As for the congresses of Russian naturalists, apparently, their organisers were keen to show not the field sites but laboratories, museums and research libraries. Characteristically, when participants had to vote for the location of the next naturalists' convention, the sections on chemistry or mathematics tended to favour St Petersburg, while botanists and zoologists were more inclined to support the idea of changing the location (*Trudy V s'ezda*,

1877, pp. 66–68; *Rechi i protokoly VI s'ezda*, 1880, pp. 281 [1st pag], 26, 74, 123–124, 169, 238 [2nd pag]).

The choice of the city, which would host the convention, had serious implications for the composition of the congress audience. For obvious reasons, the biggest share of congress participants always came from the very city, which served as the congress venue. Since all the congresses of Russian naturalists and physicians, with a sole exception of the very last 1913 congress in Tiflis, always convened in the university centres, it could only mean that these events reinforced the university domination not only in academic research and education but in the sphere of public science as well. Nevertheless, there was always a sizable group among the audience who resided in the provinces. Evidently, the congresses always functioned as a powerful magnet for a much broader region outside the city, which hosted a convention. For reasons, which are not yet clear, Kiev as the congress venue proved to be particularly conducive to expanding the congress membership by attracting people from near-by towns and provinces: the proportion of provincials was markedly higher at the two Kiev congresses (1871 and 1898) as compared to the conventions held elsewhere.

Figure 3. Congress participants by place of residence



Sources: see Fig. 1.

Overall, there are some indicators that by the late 1890s the share of provincials among the public was on the increase. Perhaps even of greater importance was a steady albeit uneven expansion of interest in the congresses expressed by professionals and members of general public from a geographical perspective. Compare, for example, the two congresses, which took place in Kiev with the time gap of almost thirty years in between them. Of the participants of the 3rd congress less than thirty people lived outside of the capitals, university cities and provincial administrative centres (i.e. the centres of *guberniia*), while the list of geographical names referring to their places of residence consisted of fifty entries. At the 10th congress, the same list contained 224 entries; a substantial number of people came from small towns and even villages and hamlets.

Science and empire: naturalists from Finland and the Baltic provinces at the congresses

However the congresses' outreach into the 'deeper provinces', was remarkably uneven: some of the regions were much more involved in these events than others, and the 'mobilisation of the periphery' only exacerbated this trend. Two universities of the Russian Empire that were located on its north-western fringe, in the Baltic provinces and Finland, that is the University of Dorpat and the University of Helsingfors, exhibited much weaker links with the congresses from the early days. A few people from both universities showed up at the 1st congress in St Petersburg but abstained already from the 2nd one. In the next decade, before the 6th congress at St Petersburg (1879), no faculty member from Helsingfors ever attended these conventions, while it was only Professor Konstantin (Caspar) Grewingk from the University of Dorpat who showed up at the 5th congress in Warsaw (1876). On the contrary, the faculty members from other imperial universities, including the one in Warsaw, never failed to come to these events, even if the universities at Warsaw and Odessa were not particularly strongly represented. The 1879 convention in St Petersburg, like the very first congress, which had also been held in the capital of the empire, in a relative proximity to both Helsingfors and Dorpat, did attract quite a number of scholars from these two institutions. For the next, 7th congress the exact data on the participants are missing, but the last three 19th-century conventions leave an impression that till the 1890s none or very few scholars from Helsingfors took any interest in the congresses of Russian naturalists and physicians. However the attitude of the Dorpat faculty members perceptibly changed in the 1890s, as the university outlook was profoundly transformed by the intervention of the Russian imperial administration.

Figure 4. Congress participants from Finland and the Baltic provinces

Congresses:	1st	2nd	3rd	4th	5th	6th	8th	9th	10th
Helsingfors	5					8	7	1	
Dorpat	4		1		1	15	3	3	11
Riga			1		1	2	16		5
Reval						2	11	1	2
Other places in the Baltic provinces		1					1	6	3

Sources: see Fig. 1.

In the late 1880s, the Ministry of Education committed itself to converting the University of Dorpat from a German-speaking institution catering for the young generation of local Baltic nobility to a regular Russian university. From 1889 Russian was gradually introduced as the principal language of instruction while a number of new professorships and assistantships were created. These measures resulted in a substantial turnover in the university faculty: many German subjects left the school, while Russian professors and junior faculty members came over to take up vacant and newly established positions (Petukhov, 1906). In 1893, the city and the university itself were renamed to Yuriev. The transformation had an immediate impact upon the contacts between the university and the congresses of Russian naturalists and physicians: two recently appointed professors of Russian cultural background, Leonid Lakhtin (1863–1927) and Franz Levinson-Lessing (1861–1939) showed up at the 9th congress in Moscow (1894), while the 10th congress in Kiev attracted at least six faculty members from the School of Physics and Mathematics at the Yuriev University. No similar change occurred in Helsingfors: its faculty members, in rather few numbers, attended the conventions only when these meetings took place in St Petersburg.

Perhaps the difference between the three Baltic provinces and the Great Duchy of Finland, on one hand, and the rest of the European part of the empire, on the other, was even more pronounced when a broader audience of the congresses, beyond the university faculty, is examined. Till the 6th congress in St. Petersburg (1879) just three residents from Riga and Pernau (Pärnu) came to the congress, while all those congress members who lived in Helsingfors belonged to the university faculty. However from the late 1880s–1890s the pattern slightly changed: this time Helsingfors' residents were not the university professors but local doctors and secondary school teachers (mostly of ethnic Russian

background). At the same time two other cities of the region emerged, where the local public expressed some interest in the congresses of Russian naturalists – Riga and Reval (Tallinn). Both places were major Baltic ports with a rapidly growing population and increasingly assertive Russian educational and cultural establishments. Still the congresses of Russian naturalists were attended by very few people who resided in other towns of the Baltic provinces, while none ever came to the congresses from Finnish cities and towns, apart from Helsingfors.

Contrasting pattern: the Polish, north-western and Ukrainian provinces

It would be wrong to project the same lack of interest onto other regions on the western fringes of the Russian Empire, even if these regions also had their own distinctive traditions of education and scholarship, stretching back to the times when these territories were a part of the Polish-Lithuanian Commonwealth. No doubt, a brutal suppression of the two Polish uprisings in 1830–1831 and 1863–1864 followed by the policy of Russification pursued by the Russian government could partially account for a far greater integration of these regions into imperial network of scientific congresses. Indeed, the closure of the Warsaw Main School after the outbreak of the Polish uprising in 1863, and the subsequent establishment of a Russian-speaking Imperial University of Warsaw in 1869 epitomised the nature of the academic policies applied by the Ministry of Education at St Petersburg towards Russian Poland. The Warsaw University and the Agricultural Institute established in New Alexandria (Pulawy) in the Lublin Province in 1869 were the two principle centres in Russian Poland that maintained steady links to the congresses of Russian naturalists. It was particularly true for the early conventions, when almost all congress participants from Poland were affiliated with the Main School—the Warsaw University. However the 5th congress, which took place in Warsaw in 1876, altered the situation dramatically by attracting not only the residents of Warsaw but also naturalists and physicians from other places in Russian Poland. Certainly, quite a number of them were Russians, but if we can use personal and family names as an indicator of ethnicity, we may presume that quite a number of Poles did not abstain from the event. When the next, 6th congress returned to St Petersburg in 1879 the number of participants from Poland had dropped. Nevertheless this time the Polish provinces were much better represented than it had been the case before the convention in Warsaw. Ten years later, in 1889–1890, at the 8th congress in St Petersburg the Polish provinces were even better represented: their increasing visibility evidently matched a broader trend towards the expansion

of the congress audience. Indeed, only one half of Polish participants came from Warsaw – the rest were from other cities and towns, while those from Warsaw were evenly divided between the university and other affiliations. In other words, the 5th congress in Warsaw had a profound impact upon naturalists of the region who for the first time entered this informal network in substantial numbers, and its effect apparently did not vanish afterwards.

Figure 5. Congress participants from Russian Poland

	1st	2nd	3rd	4th	5th	6th	8th	9th	10th
Warsaw	3	2	6	5	192	32	41	23	30
New Alexandria				2	10	2	6	8	14
Other	1		1		23	8	35	2	6

Sources: see *Fig. 1*.

As for the south-western (the Ukrainian) and the north-western (the Lithuanian and Belarusian) provinces of the empire, naturalists from these areas were very visible at the congresses from the beginning. The two congresses held at Kiev, undoubtedly, were particularly important for attracting participants from the nearby provinces. The case of the north-western region is more intriguing: there was no university or a proper higher school there, and the population density was much lower than in the south. However people from this region were quite conspicuous at the early congresses, as there were very few provincials who attended these events.

Figure 6. Congress participants from the north-western (Lithuanian and Belarusian) provinces

	1st	2nd	3rd	4th	5th	6th	8th	9th	10th
Wilna	2	5	2	1	2	10	14	1	3
Mogilev	1	4	4			3	5	1	1
Minsk		1	1		1	3	10	1	1
Bialystok	2	2			2		5		1
Dunaburg	3	3	2		1	2	1		
Other places	2	7	2		2	7	36	5	16

Sources: see *Fig. 1*.

Figure 7. Congress participants from the South-Western (six Ukrainian) provinces

	1st	2nd	3rd	4th	5th	6th	8th	9th	10th
Kiev	8	6	98		16	24	58	33	303
Kharkov	7	11	21	10	10	38	81	37	36
Poltava			1			1	4	16	17
Other places in the Ukrainian provinces	2	4	15	2	2	18	51	28	88

Sources: see Fig. 1.

Most of them were secondary school teachers, and this fact suggests that in order to account for a quite unusual visibility of the north-western provinces on the map of the congress audience we should look into the history of schooling in this area. Indeed, there are reasons to believe that in the late 1860s and 1870s natural history was much better taught in the secondary schools of the Wilna educational circuit than elsewhere, since almost all secondary schools in the Russian Empire that had been focused on sciences (as distinguished from the classical curriculum) in the 1860s, were located within the circuit (Loskoutova, 2003).

Conclusions

Certainly, further research is needed to understand behind-the-stage mechanists, which determined the inclusion and exclusion of certain figures, institutions, social groups or geographical regions. We need to know more about formal and informal ways, in which both speakers and their audiences were recruited. At the moment it is clear, however, that the congress audience, particularly at the early stage, was rather uniform in terms of the social outlook and institutional affiliation of the participants. The university faculty played the dominant role by providing the key speakers and organising the events, while the most visible groups among the public were secondary school teachers and doctors. In the course of time, as the audience expanded dramatically and new disciplines were introduced onto the program, the conventions of Russian naturalists and physicians began to attract a very different social stratum of professional people, experts in applied disciplines, such as agronomy, veterinary, forestry, and statistics, who often lived and worked outside of the major university seats.

At the same time, different regions of the Russian empire were very unevenly involved in the academic networks established by the naturalists' congresses. While the Lithuanian, Belarusian, Ukrainian and even Polish provinces were to a larger or lesser degree integrated into the congress network, the Baltic provinces and Finland in particular remained very loosely connected to these events, at least till the turn of the 19th century. Of course, the inclusion of the Warsaw and Dorpat/Yuriev University faculty was achieved due to the policy of Russification pursued by the Ministry of Education that in practice meant the coming over of Russian professors and junior faculty members to staff these institutions. These people had been already well-integrated into the Russian university community by the time they moved to Warsaw or Dorpat, and no wonder they were eager to maintain their contacts by attending the congresses. Nevertheless, the links I have been able to trace between these fringe areas and the naturalists' conventions cannot be neglected when the making of academic communities on a regional, national, imperial or international level in Eastern Europe is discussed.

Acknowledgements

The paper is based on research undertaken as a part of a project 'The making of fundamental biological research in Russia: institutional framework, funding, results, 1860s–1920s', funded by the Russian Foundation for Basic Research (ref. no. 10-06-00093a).

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