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A FOREIGN LADY: THE POLISH EPISODE IN THE INFLUENZA PANDEMIC OF 1918

Abstract

The essay describes the Polish episode in the 1918–20 influenza pandemic, situating the occurrence in the European and international context, and covering some relevant research issues. The topic is introduced by a brief discussion of the most recent hypotheses regarding the genesis of the pandemic and how it related to the World War in its declining phase. The core section, discussing the situation in Poland, begins with a description of the civilisation crisis caused by the frontline recurring across the country and the policies pursued by the occupational powers and the tough sanitary conditions implied by these developments. A survey of accessible sources is preceded by an outlined reconstruction of the course of the epidemic in various areas of the country, delineation of its timeframe, description of the symptoms and of the responses to the disease, attempts made to prevent its dissemination, and treatment methods in use at the time. The author seeks to determine the basic figures such as the morbidity and mortality rates, as compared against the data available for the other countries. In conclusion, considered are the presumed reasons behind the disappearance of the 'Spanish flu' epidemic experience from Polish collective memory.

Key words: 'Spanish flu' pandemic(s) 1918–20, epidemiology, war damage, hygiene

I
THE 'SPANISH FLU': HYPOTHESISING ON ITS ORIGINS

22 May 1918 saw the Madrid daily *El Sol* make headline on a yet-undiagnosed 'fashionable' disease that was spreading amongst the soldiers of the city's garrison. The title of the article was humorous and its tone reassuring. There was no indication that the affliction was anything else than a seasonal flu which during the previous years had taken the lives of several dozen or, perhaps, a hundred victims

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per year. The dwellers of Madrid, absorbed with celebrating the days of St Isidore, their Patron Saint, neglected the threat and nicknamed the invading influenza a 'Soldier from Naples', after the most popular air of the theatrical season. The illness and the song were spreading amidst the crowded street festivals and ballrooms, offering the infected no chance to escape either of them. A tragedy followed soon: within a month, more than a thousand died in the town. Altogether, nearly 8,000,000 were affected in the Iberian Peninsula, including King Alfonso XIII himself, with the eventual death toll numbering more than 260,000.[1] All in all, Spain was one of Europe's most affected regions, though it was not the first.

The moment a Reuters dispatch, compiled in a tone resembling that of the *El Sol* coverage, notified Western Europe of the epidemic, it had been raging there for more than a month. Dozens of thousands soldiers in the warfront and civilians in the towns were affected; yet, the first, springtime wave of the influenza was mild, with no severe noticeable setback or spectacular fatal cases, and thus was not much discussed in the press. But there was one more reason for the cautiousness: almost three decades earlier, the previous worldwide pandemic of influenza, called the 'Russian flu' because of its original outbreak country, attracted interest of the ebulliently developing mass media – so enormous that hysteria spread across the world. Now, as the war was on, the rules of censorship, often imposed on journalists by editors, did not favour the publishing of morale-affecting morbidity statistics. The fear rationing policy basically called for neglecting influenza-related threats – an approach that later on apparently hindered the action of the sanitary services doing their best to eradicate the epidemic.[2] No such restrictions functioned in Spain, a country that had not joined the war: so, the local newspapers were full of articles and reports informing the public on the unfolding epidemic; such releases were keenly reprinted by the sensation-thirsty foreign journals and magazines. It was already in early June that most European newspapers reported on a 'Spanish influenza' or 'Spanish flu' (the Polish popular nickname

[1] Antoni Trilla, Guillem Trilla, and Carolyn Daer, 'The 1918 "Spanish Flu" in Spain', *Clinical Infectious Diseases*, xlvii, 5 (2008), 669.

[2] Mark Honigsbaum, *A History of the Great Influenza Pandemics. Death, Panic, Hysteria, 1830–1920* (London and New York, 2014), 233.

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being *hiszpanka* – a [female] 'Spaniard'), instead of their 'native' counterparts.[3]

The Spaniards, who several centuries earlier had disseminated many a fatal disease to all directions, could now guess what the actual reason for the plague that gnawed them might have been. While they had not joined the war, they could not avoid its menacing consequences. It was through their country that the war's 'tendons' were extended: the railroads used by poor Andalusian peasants going to the south of France to take up jobs left over by mobilised workers, or by Portuguese soldiers ordered to join the Flanders front. The inward-bound brought with themselves an influenza that was named, on that occasion, a 'French flu'.[4] Again, the name was wrong: the pandemic, whose first act was just taking place in Europe, had its prologue completely elsewhere.

Where exactly, then? There are several concepts about this. American historians have identified the vicinity of a small town named Haskell, in Kansas, as the source. It was there that, in March 1918, farmers living among cows, pigs and poultry began catching an illness whose symptoms resembled flu, but whose course was much severer in nature, with several killed. Scattered across a limitless prairie, isolated farmsteads would have been the least plausible source of an epidemic, were it not for the fact that the United States were setting out for the war. Since the spring of the preceding year, the ranks of the country's army had increased dramatically, from one hundred thousand to two and a half million. The country saw the emergence of hastily erected enormous training camps; the second largest, named Camp Funston, was built in Kansas to herd over 50,000 fresh recruits there. The sanitary requirements, deliberately developed in order to prevent the outbreak of epidemics, eventually lost to overpopulation, poor supplies, and the severe continental early spring. Chilled soldiers cooped up around fires in underheated tents or barracks, with no access to blankets or warm underwear; many of those soldiers came

[3] Szymon Słomczyński, 'Kostusi widocznie znudziła się praca na frontach bojowych. Epidemia grypy hiszpanki w Polsce i na świecie jako zapomniane doświadczenie ostatnich miesięcy Wielkiej Wojny', in Daniel Grinberg, Jan Snopko, and Grzegorz Zackiewicz (eds.), *Wielka Wojna poza linią frontu* (Białystok, 2013), 98.

[4] Trilla, Trilla, and Daer, 'The 1918 "Spanish Flu"', 669.

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from the flu-affected area of Haskell.[5] Four weeks later, the number of those infected rose to several thousand, with dozens of deaths. Nonetheless, trained troops left the camp continuously, on a daily basis, setting about on their long journey to the East Coast ports, where they set sail for the warfronts in Europe.[6]

The conclusions drawn from this story would not withstand the data of the U.S. Army Medical Department. As it appears, it was already in December 1917 that the soldiers were affected by a wave of respiratory tract infections, with a mortality rate exceeding that from the spring of 1918. Thus, influenza had appeared in the North American continent long before the first Haskell cases were reported.[7] This concept has won popularity probably because of what happened later on: before the end of 1920, with the subsequent, seasonally recurring epidemic waves, more than 650,000 people lost their lives in the United States alone:[8] a figure that exceeded the death toll of any war this country had ever waged. With the conclusion of the story being this tragic locally, American historians were probably willing to see its origin in their country, Kansas being a natural choice.

A corresponding premise was plausibly the reason why an English virologist argued that the illness originally germinated at the British transit base in Étaples, on the coast of the English Channel.[9] As reported by soldiers who have been through the place, they would have preferred fighting in first-line trenches than facing what they were bound to face. A hundred thousand males: mercilessly trained recruits from all the corners of the Empire, demoralised holidaymakers,

[5] A year later, in an essay published in an American medical journal, the author, a doctor investigating into the matter, put his thought straight forward: "… sanitary art has not arrived at the point at which it can adequately safeguard the lives of men against respiratory diseases who live under barrack conditions"; cf. 'Report on the Pandemic of Influenza', in *Reports on Public Health and Medical Subjects*, iv (London, 1920), 296; <http://influenza.sph.unimelb.edu.au> [Accessed: April 21, 2016].

[6] John M. Barry, *The Great Influenza. The Story of the Deadliest Pandemic in History* (London, 2005), 91–7.

[7] Mark O. Humphries, 'Path of Infection: The First World War and the Origins of the 1918 Influenza Pandemic', *War in History*, xxi, 1 (2013), 62–6.

[8] Niall P.A.S. Johnson and Juergen Mueller, 'Updating the Accounts: Global Mortality of the 1918–1920 "Spanish" Influenza Pandemic', *Bulletin of the History of Medicine*, lxxvi, 1 (2002), 111.

[9] Humphries, 'Path of Infection', 60.

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convalescents not yet completely cured, suffering injured soldiers, and those detained for infringements against discipline and duty, together with innumerable horses, cows, swine, geese, and hens, hopped-up by the mutagenic influence of some of the twenty-four toxic war gases used in the warfare, formed a psychological and biological incendiary mixture. 1917 saw the outbreak of a rebellion combined with a plague.[10] The soldiers were taken in by 'purulent bronchitis', as the affliction was described by the physicians. Since the people going on holiday or released from military service continuously streamed from France to the other end of the Straits of Dover, the military camps in the territory of England soon saw the appearance of similar cases, with symptoms resembling those characteristic of the 'Spanish flu' outburst. Still, the sickness did not reach beyond the walls of the barracks and the civilian population remained unaffected – which was not the case a year later, though. If that was the first chord of the epidemic, the influenza must have crouched for several months, as if in waiting for an extra impulse, a conclusive ingredient to ensure its contagiousness and deathliness on a global, pandemic level. A concept has been coined that suggests such a sequence of events and, moreover, enables to combine the American and the European hypotheses into a cohesive whole. According to this concept, the missing element came from Asia, specifically – from China.

The Chinese population was affected to an extent as well, but the diagnosis said it was 'pneumonic plague'. The recognition was proposed by White specialists – and one cannot resist identification of a sense of superiority over a community that allegedly functioned in poor hygienic conditions and was prone to infections which the Western world had successfully handled long ago. In the autumn of 1917, roughly at the time when the other continents saw the appearance of the first cases of infection, the plague went through the entire northern area of China, from Beijing to Nanking; however, in spite of its awesome name, the symptoms were rather mild and the mortality rate low, given the local conditions. A year later, the epidemic was back, producing a much larger harvest. This time, the doctors – local ones, for a change – had no doubts: it *was* influenza. Its first wave would have probably passed unnoticed, with no global consequence,

[10] Douglas Gill and Gloden Dallas, 'Mutiny at the Étaples Base in 1917', *Past and Present*, lxix, 1 (1975), 88–112.

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had it not been for the rotating machinery of the war. Counting on some territorial gains based on participation in a future peace conference, the Middle Kingdom continued to forge stronger ties with the Entente countries, and thus allowed Britain, France, and Russia to form a Chinese Labour Corps (CLC) and to recruit volunteers for work at the rear of the front. Dozens of thousands of men were arriving at the base in the British concession area at the coast of West Korean Bay to subsequently reach Europe, *via* the ports of Japan, the Pacific, the American land, and the northern Atlantic. In spite of the warnings given by the officers supervising the recruitment procedure, the rules of quarantine were violated and thousands of sick men went aboard vessels. In the 1917 Christmas season, the readers of a Canadian daily dipped into the articles on a menacing plague that was harrowing China, with not a faintest idea that some twenty-five thousand inhabitants of the plague-stricken area were being transported through their own country in sealed railcars. Their target station, with the East Coast ports and transit bases in England on their way, was the backside of the front in Flanders and the factories scattered across France; however, the final destination for many a Chinese patient was a collective hospital for foreign workers, which was set up not far from (guess where?) Étaples. Between January and August 1918, a total of sixty-four fatal instances of pneumonia and tuberculosis were recorded there. Moreover (an apparently rather insignificant detail, which appears crucial for understanding the situation), swine were fatally affected as well. As of 2 May, the local medical unit's war log officially stated that an influenza epidemic had begun. The epidemic expired three months later, with people dying of it all over the world.[11]

The argument that might prevail in the dispute over the origins of the pandemic was a milder course of its main wave, as observed in China in the latter half of 1918. This would suggest that the inhabitants of that country had become immunised as they had come across this particular variety of flu a year earlier. It is nonetheless legitimate to ask whether the lack of reports on high morbidity rates or on fatal cases indeed proves that the locals were case-harden, or, perhaps, no relevant sources or data have survived? No detailed information present, and no material available for virological testing, tells us to

[11] Humphries, 'Path of Infection', 75–7.

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approach the theory in question as a hypothesis – which is the case with its American and European counterparts as well.[12] However, if the birth and outbreak of the pandemic is to be considered not as a result of a rare biological coincidence but, rather, as yet another tragic consequence of the war and the very unique conditions the war brought about, then the 'Chinese scenario' comprises, and excellently illustrates, all the elements of the occurrence.

The armies of England and France have sucked men from factories, farms, and workshops. Vacancies were to be supplemented by workers from the other end of the world: the pressure on the enlistment organisers was so severe that they neglected evident proofs of the emerging epidemic and the rudiments of safety. Tens of thousands of sick people set about making a long journey, and encountered thousands of sailors, railwaymen, and soldiers as they went on. All of them became the couriers of the epidemic; the ships, trains, and temporary transit camps were the 'brooders'. The outbreaks of local epidemics in North America, which preceded the pandemic spread, coincided with the transit dates of CLC transports going through Canada and the U.S. The military bases in France, where soldiers lived next to swine and poultry, saw the occurrence of what is described by bacteriologists as 'antigenic shift':[13] the animal (possibly, avian) and human viruses merged within the organism of an affected pig, forming a completely new variety. Evolutionary alterations and mutations of the genotype, which normally take a number of months to occur, took place within a matter of several hours, whilst the immunological system of the affected organisms had no time to work out even a basic immunity. The new, dangerous variety of the virus was like a sparkle that fell onto the European powder-keg, which was bursting at the seams with constantly moving masses of people deprived of adequate medical care. Eventually, the entire continent fell victim to the outburst, almost at once; somewhat later, the whole world got infected.

[12] Christopher Langford, 'Did the 1918–1919 Influenza Pandemic Originate in China?', *Population and Development Review*, xxxi, 3 (2005), 494–5.

[13] Lidia B. Brydak, *Grypa i jej profilaktyka* (Poznań, 2004), 45–51.

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II
"ENTIRE COMBUSTIBLE MATERIAL": THE PROGRESS OF THE EPIDEMIC IN THE POLISH TERRITORY

If Europe was a tinderbox, then the Polish lands would have been a dynamite stick stuck into it. The residents of the country that was emaciated by the war and the economic policies of its occupiers had nothing to eat, and nowhere to live. Like in 1812, during the 1915 retreat from the Kingdom of Poland the Russian army employed the 'burnt land' tactics, destroying villages, crops, and driving eastwards masses of banished small farmers. Those who managed to stay and save their farmsteads were wrecked by predatory requisitions. Early in the spring of 1919, a delegate of the Ministry of Labour and Social Care reported to the headquarters that the army march routes best indicated were where assistance was needed the most urgently. In the eastern districts of the former Russian Partition, a mere 10 per cent of the rural population could survive till the harvest on their own, whereas 60 per cent among them were so-called emigrants, who had returned from expulsion into Russia: shabby, ill, living in some sheds or cabins, eating tree bark and bread made with straw.[14] The situation was somewhat better in urban areas, but even there some residents committed suicide because of famine.[15] Inflation, growing even severer owing to a currency chaos, was raging; since the withdrawal of the German administration, prices had grown twofold to fourfold.[16] With the destroyed industry, joblessness reached 90 per cent; the provincial areas were looted by regular racketeering gangs and no-less-ruthless Polish army or gendarmerie troops.[17] In an estate located in the Brzesko

[14] Warsaw, Central Military Archive [Polish: Centralne Archiwum Wojskowe (hereinafter: CAW)], 'Szefostwo Sanitarne Naczelnego Dowództwa WP', sign. I.301.17.1, 'Sprawozdanie z położenia i potrzeb ludności ze stanowiska opieki społecznej w powiatach brzeskim, kobryńskim, prózańskim i słonimskim'.

[15] Stanisław Karpiński's testimony in Agnieszka Dębska (ed.), *Polski wir I wojny* (Warszawa, 2014), 169.

[16] CAW, 'Szefostwo Sanitarne Naczelnego Dowództwa WP', sign. I.301.17.1, 'Sprawozdanie z położenia'.

[17] Warsaw, The *Sejm* Archive [Polish: Archiwum Sejmowe (hereinafter: AS)] comprises (fund 'Sejm Ustawodawczy [The Legislative Sejm] 1919–1922') at least forty-six interpellations submitted by MPs and describing abuses, violent acts and murders committed by Polish soldiers, gendarmes, policemen and members of other formations in the course of legal and illegal requisitions. It is really hard to assume that these interpellations (available at: <https://bs.sejm.gov.pl/-

http://dx.doi.org/10.12775/APH.2016.113.08

District, the administrator reinstated a serfdom system on behalf of the heritress who was staying in a 'sanatorium for the insane'.[18]

The dreadful living conditions expectedly added to the dissemination of the disease. The sanitary conditions, which were kept decent during the war, mainly owing to a cordon set up by the German and Austrian services, eventually broke down. The bathhouses, delousing and quarantine stations, partly evacuated together with the withdrawing occupying troops, and partly pillaged by looters, were in ruins. The emerging Polish army hunted for doctors and nurses, paramedics and orderlies. With the shortages in medical personnel, in medicines, clean utilities, underclothes and linen, and in foodstuffs, patients in provincial hospitals were fed with stew made of crows shot by the ward head:[19] all this turned the hospitals into seedbeds of contagious diseases. Epidemics of typhoid fever, smallpox, and dysentery were breaking out. Endemic tuberculosis and venereal diseases intensified. The 'Spanish flu' was trapped into the whirl – and, like in a whirl, the details related to this epidemic have vanished without trace.

A detailed report issued in 1920 by the United Kingdom's Ministry of Health describing the course of the flu pandemic contains a whole lot of maps, tables, and data for countries on which attention was focused at the time as well as some exotic areas, such as the Samoan Islands. There was an exception, though: the statistical map of Europe, sketched by a H.M. civil servant, featured a white spot extending from Stettin, Breslau and Prague up to Kiev and Petrograd. For the other areas, an attempt at, at least, a fragmentary description of the development of the plague was made, or a short commentary added explaining that no relevant information was available. Nothing is said with regard to Poland, as if the country did not at all exist, politically or even, downright, geographically.[20] For a historian searching for reliable knowledge this is quite frustrating, but symptomatic too.

F?func=scan&scan_code=TIP&scan_start=0&local_base=2RP_SU_SJ_IP> [Accessed: April 21, 2016]) were merely used as tools in political struggles between parliamentary factions.

[18] *Ibidem*, <https://bs.sejm.gov.pl/F?func=find-b&request=chrząszcza&find_code=WRD&adjacent=N&x=0&y=0> [Accessed: April 21, 2016].

[19] *Ibidem*, 'Sprawozdanie stenograficzne z 8. posiedzenia Sejmu Ustawodawczego z dnia 27 lutego 1919 r.', 305–6, <https://bs.sejm.gov.pl/F?func=direct&doc_number=000020983> [Accessed: April 21, 2016].

[20] *Reports on Public Health*, 199–201.

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The volume and the course of the Polish episode of the pandemic remains a puzzle, for the most part. No official statistics are extant regarding the first, summer/autumn wave of epidemic for the provinces then still under a partial or complete control of German or Austro-Hungarian administration – the areas that in late 1918/early 1919 began forming a re-established Polish Republic. The files of the Polish Ministry of Public Health, set up in spring 1918, including documents of the Contagious Diseases Section affiliated to the Department of Epidemiology, and a fund of more than 900 folders kept by the Supreme Extraordinary Commissariat for Eradication of Epidemic Diseases were burnt root-and-branch on 3 November 1944, when the Germans incinerated the building of the Archives of Modern Records in Warsaw.[21] But even if these documents had survived, they would probably contain no data on the 'Spanish flu'. In line with the regulations then in force, municipal and district doctors were bound to inform the provincial (voivodeship) health departments of every single case based on a shortlist prepared with respect to contagious diseases such as typhoid fever, dysentery, or pox: influenza was, for a change, a seasonal, mild-in-intensity 'endemic' disease.[22] The item *influenza* was featured in the tables of medical officers' reports. The 1918–20 archival fund of the Supreme Command's Sanitary Leadership comprises a number of such lists, but these, regrettably, come from various units and periods, not broken down for monthly or annual summary reports, and show the scale of the epidemic quite fragmentarily.

There is the press on top of that; however, as mentioned before, it appears problematic to make up a picture of the epidemic based on the period's daily papers and other journals, since the journalists' attitude toward writing of the flu was ambivalent. The topic was attractive and interest-arousing, but there clearly were reasons for approaching it circumspectly: the most obvious among these reasons was the rapid development of political events, overshadowing everything else. The contents of various periodicals, when compared, make the differing approaches apparent. *Kurjer Poznański*, a major daily issued in

[21] Elżbieta Więckowska, 'Archiwalia dotyczące zwalczania chorób zakaźnych w okresie 1919–1924 w zasobie Archiwum Akt Nowych w Warszawie', *Medycyna Nowożytna*, iv, 1–2 (1997), 197–202.

[22] Tomasz Janiszewski, 'Epidemia influenzy czyli t.z. choroby hiszpańskiej w Krakowie', *Przegląd Lekarski*, 40 (5 Oct. 1918), 270 ff.

http://dx.doi.org/10.12775/APH.2016.113.08

Wielkopolska (Greater Poland), which at that time was a province of the declining German Empire, wrote willingly and frequently of the flu in September and October 1918, never going beyond the local context, though. Published in the *Generalgouvernement* (General Government), a partly autonomous area then, *Kurjer Warszawski* reported, for a change, on the severe course the epidemic took in various countries and capital cities of Europe, consistently understating, if not merely ignoring, the situation at their own doorstep. The former partition of Poland unexpectedly fostered the development of industry press, with medical doctors issuing their own periodicals in each of the three provinces; these medical periodicals, when reporting on the 'Spanish flu', tended to write volubly about epidemiological issues, clinical symptoms, and therapies. Still, the technical expatiation was interspersed with quite an amount of interesting information – such as data expressed in figures, scarce and thus valuable. The information of utmost interest from the social history point of view, concerning the civilisational, cultural, and psychological context of the epidemic, is extensively spread among the surviving sheets in the archives, stenographic records of parliamentary sessions, newspaper columns, and pages of books.

A short article entitled '"Hiszpańska" gorączka' [The Spanish Fever] and published in *Kurjer Warszawski*, on 21 July 1918, was one of the earliest traces of the plague in central Poland. In its author's words, the mass-scale 'suffering' has been unfolding in the town for several months now, the affliction being a regular influenza brought from the East. This calming text comprises a sting of political criticism, discreetly emphasising the overall attenuation and poor immunological response prevalent among the population as a factor stimulating the mass character of the incidence. Moreover, the East is clearly mentioned as the direction from which the disease has originally come.[23] The theory according to which the epidemic came from Ukraine was confirmed by an article published in the industry journal *Gazeta Lekarska* a year later, when the epidemic was over: its author stated that the first cases appeared in Lwów (L'viv), but not earlier than in July.[24] Based on what *Kurjer Warszawski* reported, the

[23] '"Hiszpańska" gorączka', *Kurjer Warszawski*, 199 (21 July 1918).

[24] Jan Puterman, 'Epidemia influenzy w r. 1918', *Gazeta Lekarska*, 12 (22 March 1919).

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date ought to be shifted several months backwards. This would mean that in as early as May 1918, affected were the inhabitants of both Galicias – the one on the San River and the one on the Bay of Biscay.

In the midst of the summer, influenza attacked the dwellers of Cracow; as a local doctor put it, the epidemic soon "embraced the 'entire combustible material'", which was to say that everyone whoever had no immunity established fell ill.[25] Instead of a spread trend, it is more purposeful to point to an almost simultaneous occurrence of several seed cases across the country. Like in the West, where the outbreak of the epidemic severely restricted the offensive potential of the German army at the last stage of the *Kaiserschlacht* offensive,[26] the soldiers were the most prone group in Poland as well. In the last days of August, when the infantrymen of Garwolin and artillerists from Ostrów Mazowiecka yielded to the influence of the 'Spanish flu', the proportion of the sick in the Polish Armed Force reached 10 per cent, which, given the army's numerical force of 1,200, was no particularly disquieting result. The affliction showed its smooth, summertime version, not yet sharpened by heavy weather conditions. No complications or fatal cases were found;[27] however, once the summer started turning into autumn, the situation deteriorated. By October, influenza prevailed in L'viv, Kielce, Zagłębie Dąbrowskie [Dąbrowa Basin] area, as well as in Wielkopolska; as *Kurjer Warszawski* reported, "now-a-days, one is quite easily happening to die" of the flu.[28]

The influence of the epidemic strike on the functioning of local communities is best illustrated by short 'Provincial Chronicle' texts disseminated in the autumn 1918 issues of *Kurjer Poznański*. Most of them spans between picturesque but imprecise statements, such as "mass appearances of the illness" (in Jarocin), intimidating domination of the "Spanish flu" (in Radzyń), or multiplying fatal incidents, with not a single house "without several ill at a time" (in Ostrów Wielkopolski), and close-ups that, as if within a spotlight, illuminate

[25] *Ibidem*.

[26] In July 1918, during the Second Battle on the Marne, almost 400,000 soldiers got cut off from the ranks of the imperial army by the 'Spanish' flu epidemic. See Eckard Michels, 'Die Spanische Grippe. Verlauf, Folgen und Deutungen in Deutschland im Kontext des Ersten Weltkriegs', *Vierteljahrshefte für Zeitgeschichte*, lviii, 1 (2010), 6–7.

[27] 'Epidemia influenzy w wojsku polskiem', *Gazeta Lekarska*, 34 (24 Aug. 1918).

[28] 'Echa z prowincji', *Kurjer Warszawski*, 287 (17 Oct. 1918).

http://dx.doi.org/10.12775/APH.2016.113.08

the forgotten aspects of life and death in the plague-stricken country. Some of these episodes are tragic, one example being the story of a young widow from Poznań who, devastated at the death of her husband, an installation electrician, shot herself dead with a revolver, thus orphaning her five-year-old daughter. Another sad story was about the soldiers of Śrem: in a company of eighteen-year-old recruits, the outbreak of flu was regarded as an act of collective simulation, apparently meant to prevent the group from being dispatched to the front; consequently, they were refused assistance, and sixteen of the company eventually died.[29] The logistical crisis also attracted attention of journalists and readers: 45,000 of the staff of the Prussian railway gave in to the 'Spanish flu', with the resultant temporary cancelling of a number of passenger services. Other forms of communication were also limited: in many small towns of the Province of Poznań postmen ceased to deliver mail, telegraphers stopped sending cables, post offices operated for a few hours a day[30]; the depleted editorial teams did not issue new editions of their newspapers. The holiday taking place on the occasion of St Michael's Day was extended; in some districts, community, secondary, and tertiary schools remained closed until mid-November.[31]

There was at least one case of things turning unexpectedly humorous. In Rawicz, where the "bed-riddenness" grew "explicitly perilous", the local "cinematograph" (cinema-theatre) was closed. A *Kurjer* editor was overtly satisfied: "The 'Spanish flu' is not harmful at least in one respect, as it may put an end, be it for a short time, to appliances as anti-cultural as cinematographers."[32] The moral balance of the Wielkopolska community has probably remained unshaken, though: in Poznań and the villages in its vicinity, a religious retreat for landed-gentry maidens was cancelled for the very same reason.[33]

With accounts from the best-developed region of Poland being thus sparing in detail, nothing certain can be said about the course and outcome of the epidemic in the backwoods of Masovia or Galicia – apart from the fact that those areas were affected. In as late

[29] 'Kronika Prowincjonalna', *Kurjer Poznański*, 235 (12 Oct. 1918), 'Dodatek'.
[30] *Ibidem*, 238 (16 Oct. 1918).
[31] *Ibidem*, 236 (13 Oct. 1918).
[32] *Ibidem*, 244 (23 Oct. 1918).
[33] *Ibidem*, 258 (9 Nov. 1918).

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as February 1920, more than a year after the main wave of the epidemic elapsed, a peasant party's deputy from Sub-Carpathian region interpellated the Government on whether they were aware of the dramatic situation prevailing in Nowy Sącz Land districts, which were being devastated by the 'Spanish flu' and typhus.[34] Like in the other areas, the war and its aftermath was the epidemic's most loyal ally once again. The country lay in ruins, completely destroyed by the reappearing warfront; several years after the destruction, the villages lay in shreds, the fields lay fallow and waste. The peasant families, ragged and barefooted, vegetated in makeshift shelters and dugouts.[35] The cattle either had died, or had been eaten or confiscated when the war was on; the residual stocks, mostly potatoes, were brutally requisitioned by the supplies expeditions of the Polish Army (then under formation).[36] All this, combined with the winter conditions, which in these areas lasted up to six months, makes the press reports on whole families and villages dying out not exaggerated at all.

Jalu Kurek, a poet and prose writer associated with the Sub-Carpathian region, was one of the few to portray the epidemic at its most frightening, and horrifyingly miserable. His descriptions of the outbreak of cholera and flu in the rural environment were distant in time – late nineteenth century versus the 1920s – concerned the same site and a similarly tragic course and outcome. The poor, undernourished dwellers of the foothill or mountain villages had completely no access to medical care. Doctors from nearby towns did not bother about the rural patients, and the latter had no money to use the doctors' services anyway. Alcohol, the last rites (though, in many cases, priests would stay locked at their presbyteries, refusing even to anoint the sick), and a brutal and primitive isolation (wrapped in a sheaf of straw, the sick peasant was placed aside – lucky if she or he could fade away under a roof, having someone to serve them a hunk of sleazy pabulum on a shovel) served as the only means of treatment

[34] AS, 'Sejm Ustawodawczy 1919–1922, interpelacje poselskie', <https://bs.sejm.gov.pl/F?func=full-set-set&set_number=037711&set_entry=000007&format=999> [Accessed: April 21, 2016].

[35] CAW, 'Szefostwo Sanitarne Naczelnego Dowództwa WP', sign. I.301.17.1, 'Sprawozdanie z położenia'.

[36] AS, 'Sejm Ustawodawczy', <https://bs.sejm.gov.pl/F?func=find-b&REQUEST=kossowa&x=0&y=0&find_code=WRD&ADJACENT=N> [Accessed: April 21, 2016].

http://dx.doi.org/10.12775/APH.2016.113.08

available. People toppled over in their backyards, huts, and dugouts; the villages resounded with the weakening cries of those who had frightened the others from being aided. Even in the large city of L'viv, which could offer medical emergency service, instances were reported of sick who waited in their beds for a dozen hours to be helped, next to their already-dead relatives;[37] this being the case, more gruesome cases must have taken place in the distant villages. There was no-one to record the incidence or mortality rate; what is more, nobody ever endeavoured to learn, on the spot, what the illness that decimated the community actually was.[38]

Even the experts were not certain, though. It is quite probable that in the autumn of 1918, in Poland and all around Europe people believed that a 'Black Death' had returned. As a *Kurjer Poznański* journalist reported, some physicians supposed that the prevalent epidemic was 'a sort of bubonic plague with a smooth tinge'.[39] This was confirmed by a doctor from Cracow who found that the clinical picture resembled such a plague, with the mortality reaching 12 per cent in the hospitals of this central hub of Małopolska [Lesser Poland].[40] The same newspaper denied the gossips whereby a pneumonic plague had broken out in Germany.[41]

III
'BLACK DEATH'. SYMPTOMS AND TREATMENT METHODS OF INFLUENZA

When reading this today, comparing a flu to a plague seems incomprehensible. Influenza appears endemically nowadays, and warnings of potential threat it might bring about are not approached seriously, except by specialists. In daily discourse, the disease's name is used to describe common cold. This is different for (bubonic) plague: the very

[37] Szymon Słomczyński, 'Czyż koniecznie naprzód muszą być ofiary? Lwowianie w walce z epidemią grypy hiszpanki jesienią 1918 roku', in Kazimierz Karolczak and Łukasz T. Sroka (eds.), *Lwów, miasto – społeczeństwo – kultura*, ix: *Życie codzienne miasta* (Prace Monograficzne, 688, Kraków, 2014), 181.

[38] Jalu Kurek, *Grypa szaleje w Naprawie* (Kraków, 1959), 166–82; *idem*, *Księga Tatr* (Pisma wybrane, Kraków, 1955), 194–204.

[39] 'Listy z Krakowa', *Kurjer Poznański*, 237 (15 Oct. 1918).

[40] *Ibidem*, 236 (13 Oct. 1918).

[41] *Ibidem*, 245 (24 Oct. 1918).

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name resounds with the horrific plagues of the Middle Ages, mass mortality and the accompanying repulsive symptoms: the blackening and bleeding ulcers in the parts of the body considered intimate. Still, at its acute stage, with respiratory tract complications, influenza does resemble plague – in the latter's pneumonic, rather than bubonic, variety. A hospital ward administrator, himself a physician who between November 1919 and July 1920 dealt in a Warsaw lazaret house with almost a thousand patients suffering of influenza, reported in a clinical readout a detailed description of the symptoms – from the least to the most severe cases.[42] When reading this report, the shock and fear triggered by the 'Spanish flu' becomes easy to understand.

Almost eighty per cent of the infected suffered from a mild version of influenza, characterised by a slight infection of upper respiratory tract, conjunctivitis, and a higher temperature of the body: exactly the symptoms associated with 'flu' today. The others were abruptly knackered out by a fever of up to 40 degrees, severe attenuation, headaches and ostalgia, and a progressing infection of the respiratory apparatus, with the bronchial tubes and the lungs.[43] Such patients were weighed in the balance for a few days, a third of them falling into a critical condition.[44] This group developed a haemorrhagic pneumonia: every desperate attempt at catching breath ended with a red foam appearing on the patient's mouth, haemorrhages or effusions – from nose, ears, excretory system's foramina, and female genital tract – having been of daily occurrence. The infected looked horrible. Their destroyed alveoli could no more supply the blood with life-giving oxygen, and their bodies were overwhelmed by cyanosis: the face turned bluish; the mouth, the ears, or the fingertips necrosed, causing awful pain. The infected eyeballs and swollen eyelids made livid excrescences protruding on both sides of the blackened nose.[45] Added to all that were prostration, hallucinations, and anxiety disorders – the nervous system infection symptoms. Fear was an imminent part of the epidemic. It was experienced by the sick: cases were reported

[42] Szczęsny Bronowski, *Epidemja grypy w latach 1918–1920. (Jej istota, objawy, zapobieganie i leczenie)* (Warszawa, 1922).

[43] The speed at which the sickness progressed gave rise to more nicknames of the influenza, such as 'swift catarrh', 'black scourge', or 'rapid ball'; see Słomczyński, 'Kostusi widocznie znudziła się praca', 98.

[44] Bronowski, *Epidemja grypy*, 15–21.

[45] *Ibidem*, 24.

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of patients knocking the window panes and jumping out onto the street, frantic with fear.[46] Those unaffected, once confronted with the shocking symptoms and the mass scale of the infection, were no less prone to fear. Similarly to the medieval Black Death, the 'Spanish flu' broke the consensus determined, as it were, by the preceding influenza epidemics, according to which the weakest groups, children and the elderly, were to fall victim, rather than anyone else. This time, nobody was safe: on the contrary, men and women in the prime of life were the most endangered.

Rafał Jabłoński, a cognoscente of Warsaw and its history, frustrated by the scarce reports on the epidemic in the local press of autumn 1918, made a suggestion in his article on the flu that the disease had mainly been present in obituaries. When an obituary said that the deceased has 'suffered shortly but harshly', one could be certain that he or she had fallen victim to the influenza epidemic. This author's attention was caught by the young age of the deceased, most of whom came to the end of their lives aged twenty to forty.[47] Jabłoński's observations are confirmed by data from other sources and for other cities. At Cracow's St Lazarus's hospital, 49 per cent of patients recovering from flu represented this particular age interval; half of them did not survive.[48] The deaths statistics published in *Kurjer Poznański*'s column 'Księgi stanu cywilnego' [Marital Status Registers], mentioning fatal cases reported (probably for Poznań only) as for 16/17 October 1918, the moment of peaking intensification of the epidemic in Wielkopolska,[49] had deaths of sixty-two people recorded for the two days, of which twenty-seven (over 43 per cent) were of the age suggested by Jabłoński. Adding teenage patients, the number of deaths of 'young' people, whose vast majority was caused by 'Spanish flu', reached thirty-three, which was over a half of all the deaths recorded for the said dates. The examples of Poznań, Warsaw, or Cracow well fit into the global model: the high mortality of patients in their prime was characteristic of the pandemic, because of the

[46] *Ibidem*, 28.

[47] Rafał Jabłoński, 'Hiszpańska grypa roku 1918', *Życie Warszawy* (19 Nov. 2009), <http://www.zw.com.pl/artykul/421633.html?print=tak> [Accessed: April 21, 2016].

[48] Antoni Krokiewicz, 'Spostrzeżenia nad epidemią grypy hiszpańskiej', *Przegląd Lekarski*, 27 (12 July 1919).

[49] 'Księgi stanu cywilnego', *Kurjer Poznański*, 236 (13 Oct. 1918).

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extreme virulence of the virus causing it. In cases of regular, mild flu, the immunological system of the attacked organism: the leukocytes, with use of the cytokines they produce, destroy the contagia before they can form any lodgements in the viable organs, such as the lungs and the brain. As for cytokines, their effect is toxic in itself, and cause unpleasant symptoms such as fever, headache, or sore throat. In the specific 'Spanish flu' case, the viruses could instantaneously, within a matter of several hours, reach into the depths of the respiratory system, all the way to the lungs. The cytokines following the viruses, in an attempt to kill the encroachers, destroyed the alveoli, burning out the delicate mucous membrane they are padded out with. The more robust the organism, the more irruptive its defence reaction; in some patients, the lungs were literally flooded with blood. The strength of the immunological system, which made young people the most resistant in the population, came as a death trap in the case of the 1918 epidemic.[50]

In order to efficaciously treat the patients, doctors had to find answers to the two basic questions: what is, actually, the sickness that is affecting their charges, and what is (are) the reason(s) behind the sickness. As discussed earlier, the answer to the first query was at least vague. The multiple names of the plague – influenza, 'Spanish' fever, mild-form (mild-symptom) plague – and the different hypotheses as to its reason(s) (dengue fever, a mosquito-borne tropical disease, having caused the summer wave of the epidemic, according to one theory[51]) reflected the uncertainty about what the epidemic essentially was. The claims expressed by experts in the press arguing that reappearance of a regular seasonal flu was not anything to be feared reflected their own wishful thinking rather than undeterred belief that the bacteriologists they referred to were absolutely right. These bacteriologists were about to realise that their proposed theory on the reasons of the plague appeared erroneous.

On the eve of the pandemic outbreak, it was commonly believed that influenza was a bacterial disease. In the course of the previous worldwide plague, in the years 1889–90, Richard Pfeiffer, a student of Robert Koch (the discoverer of the tubercle bacillus, anthrax bacillus [*Bacillus anthracis*, and *Vibrio cholera*]), employed with the Berlin Koch

[50] Barry, *The Great Influenza*, 248–9.

[51] '"Hiszpanka"', *Kurjer Warszawski*, 269 (29 Sept. 1918).

http://dx.doi.org/10.12775/APH.2016.113.08

Institute for Infectious Diseases, isolated from the victims' tissues a bacterium that was found to commonly appear in them. In late nineteenth and early twentieth century, the *Bacillus influenzae*, otherwise termed Pfeiffer's bacillus (after its discoverer's name), was commonly regarded as the flu infection factor. This is why, as bacteriologists found no such suspicious microbe in the bodies of the killed by the 'Spanish flu' in 1918, they were disposed to argue that some other sickness was responsible for the epidemic.[52]

However, given the reports coming from all over Europe, they had to change their minds. In the secretions from the noses, throats, and lungs of the sick or the dead, herds of germs were swarming: streptococci, staphylococci, and mycobacteria, with no pattern discernible with respect to their appearance: their presence was, clearly, *resultant of* the infection, rather than had caused it. In late August 1918, the *Kurjer Warszawski* editorial team requested Stanisław Serkowski, a renowned bacteriologist and professor with the University of Warsaw, for explaining what the 'Spanish sickness' actually was.[53] The reply he gave was ambiguous, which corresponded with the period's knowledge. Serkowski was resolute in challenging the assumption that the epidemic had been caused by Pfeiffer's bacillus; yet, he confirmed that it was an *influenza*, from a clinical viewpoint. He could only make a guessing about the actual reason(s) behind it, and his speculation appeared astonishingly apt: he namely suggested that the reason behind the influenza, *vel* a 'Spanish sickness', was "ultramicroscopic germs, so-called *virus invisibile*". Although the notion of 'virus' had been known for some twenty-five years,[54] the instinct of a researcher who was active in the peripheries of the world of science at the time is pretty impressive – especially if one compares his hypothesis with the other views or ideas functioning at that very time with regards to the reasons of the epidemic and the consequent treatment methods.

Since the actual reason remained unknown, the primary purpose of the treatment was to alleviate the symptoms: cough, dyspnoea, fever, and pain. In mild cases, medical intervention was regarded, quite rightly, as irrelevant. In his attempt to convince the others

[52] Barry, *The Great Influenza*, 261, 265.

[53] '"Choroba hiszpańska"', *Kurjer Warszawski*, 238 (29 Aug. 1918).

[54] The influenza virus was finally isolated by British bacteriologists in 1933.

http://dx.doi.org/10.12775/APH.2016.113.08

to this approach, a physician from Sosnowiec quoted an ordinance issued in Italy in 1385 (sic!), which charged medicos with a penalty of fine for overly frequent visits to influenza patients. Remaining in bed, 'keeping oneself warm', and a healthy diet were recommended by the Polish doctor instead. In face of the patients' suspiciousness with regard to the competencies of a physician who was reluctant to prescribe medicaments, he recommended them, in a rather frivolous manner, to administer quinine with vodka, ascribing a treatment effect mostly to the latter ingredient.[55] Alcoholic beverages as a basic medicament reappeared in reports from Polish provincial areas (the drunken apparently moved around not-as-yet-infected in epidemic-stricken rural areas[56]) as well as from some remote parts of the world (in Norway, then under prohibition, the king was said to have allocated half a bottle of cognac per family as a panacea against the 'Spanish flu'[57]). Probably a similar criterion was at work – the benign properties of a product, ensuing from its unavailability – for a mother in Poznań region, who was reported to have healed her child with using warm butter with honey.[58]

The good mood among the experts began vanishing as the sickness turned critical. The doctors, more or less aware of their limitations, resorted to any available substance and method, blending in the treatments they applied some centuries-old superstitions with the most recent scientific achievements.

It was the ambition of most of the researchers, in line with the spirit and attainments of the time, to develop an efficacious vaccine that would prevent the infection or seriously relieve its symptoms. The unsuccessful attempts ensued from erroneous premises. As the virus remained unidentified, microorganisms appearing in the patients' mucosa, from Pfeiffer's bacillus to pneumococci (known today to all parents), became the starting point for composing a number of vaccines. Such 'cocktails' of bacteria would not prevent a flu infection at all; their efficacy, as far as alleviating upper respiratory system infections was concerned, was tartly summarised by the already-quoted

[55] Puterman, 'Epidemia influenzy'.

[56] Kurek, *Księga Tatr*, 194–204.

[57] 'Z dalszych stron', *Kurjer Poznański*, 262 (14 Nov. 1918).

[58] Oil could have been used as an ersatz, instead of butter; 'Lekarstwo na hiszpankę?', *Kurjer Poznański*, 247 (26 Oct. 1918).

http://dx.doi.org/10.12775/APH.2016.113.08

Warsaw bacteriologist: "so far, all that can be said of them is, they have proved non-harmful."[59]

What remained was passive therapy. The list of specifics was long, spanning from the familiar aspirin, alleviating fever and pains, through the (aforementioned) quinine, 'exciters' or psychoactive agents – such as adrenaline, strychnine and codeine, applied in breathing or circulatory-system disorders, or Salvarsan – the first synthetic bactericide and syphilis-buster, which foreshadowed antibiotics.[60] Silver, gold, or tin suspensions were also in use, as antiseptics.[61] Although silver-based preparations are still in use in our day, it is hard to get rid of alchemic associations and a conviction that the treatment based on such preparations may be noxious, at the end of the day – as is the case with arsenide or mercury, otherwise recommended in certain critical cases.[62] Some surgical interventions, irrespective of what they really were, do not arouse much controversy. In the autumn and winter of 1918, at the Mokotów Military Hospital in Warsaw, the doctors continuously applied detrimental, painful, and inefficient practices such as causing artificial imposthumes (abscesses), or phlebotomy (bloodletting).[63] The erroneous conviction about the efficiency of such practices was rooted in the principles of the 'heroic' age of medicine, so named after the science's father Hippocrates, who was considered equal to Greek heroes (or demigods), or, after the psychological profile required in yielding to such treatment. According to the binding doctrine, human health was conditional upon a balance of four humours, or liquids, filling the body: blood, phlegm, yellow bile and black bile. A sickness ensued as a result of increased amount of either of these, which was easy to diagnose. If a patient suffered of haemorrhage or effusion, this meant that his or her organism was getting rid of an excess of blood – the recommendable

[59] Bronowski, *Epidemja grypy*, 41.

[60] *Ibidem*, 45; Puterman, 'Epidemia influenzy'.

[61] Lyon, 'Nowe sposoby leczenia grypy', *Gazeta Lekarska*, 32 (9 Aug. 1919).

[62] Mercury-based preparations were popular owing to the several centuries' tradition of applying them in healing syphilis, with alleged successes ensuing from the peculiar course of this particular sickness. Syphilis develops in stages, alternated by remission phases (sometimes lasting several years). After the first symptoms, with mercury applied (in most cases), the lues turned into latency, which was erroneously interpreted as convalescing thanks to the medicine administered.

[63] Bronowski, *Epidemja grypy*, 44.

http://dx.doi.org/10.12775/APH.2016.113.08

assistance consisting in letting even more blood. When phlegm obstructed the upper respiratory tract, the treatment was based on bringing about the appearance of pus-filled ulcers, with use of caustic mustard plasters; then, by cutting the ulcers, to reduce the quantity of the malefic humour. With these assumptions considered true, the torture applied to the 'Spanish flu' victims at the Warsaw hospital could have made sense; unfortunately, it brought a tragic end to many of them. None of the six patients who had had their blood let survived: notably, two deceased after turpentine injections targeted at the stomach and the thighs, meant to develop abscesses. The fact that the remaining thirteen did survive was considered a confirmation of the advisability of the selected method. Artificial generation of ulcers was probably commonplace in Europe. In the summer of the following year, a French trade newspaper confirmed that, given no efficiency of vaccines and chemical preparations, this was the most recommendable curative.[64]

The picture of medics continually resorting to methods as drastic and, it should have seemed, disgraced tells us a lot about the condition of the medical art and the mentality of those practicing it at the time. The Cartesian breakthrough, the birth of a mechanistic theory of nature and the ensuing development of modern medicine came in the end of the seventeenth century across resistance from those learned physicians who protested against their craft being stripped of the theological element and the human body of its holistic self-healing potential, as controlled by the soul. The doctrine they had developed, referred to as a neo-Hippocraticism or vitalism, remained popular over centuries as it proved capable of successively adapting certain achievements of chemistry and microbiology.[65] The early twentieth century could still see a successful coexistence of mutually exclusive practices: the most recent ones, some of them not yet proved scientifically, and some very old ones, applied because of the attachment to tradition and the will to make use of any and all methods of treatment available. A peculiar dichotomisation is also discernible in the cultural discourse involving the epidemic. Such partly rational and partly mythological idea about the 'Spanish flu' heavily influenced the particular position it has occupied in collective memory.

[64] Lyon, 'Nowe sposoby leczenia grypy'.
[65] Władysław Szumowski, *Historia medycyny* (Warszawa, 1961), 268–74.

http://dx.doi.org/10.12775/APH.2016.113.08

Probably the most suggestive attempt at collectively coping with the flu contagion was recently evoked by Szymon Słomczyński, a researcher focusing on these developments. He describes a 'black wedding party' – a ceremony featuring a pair of indigent orphans, which was held in autumn 1918 in Cracow.[66] Organised at the expense of the local commune, the ceremony, which the bride or the groom could never have afforded, was meant as a supererogation that might have inclined God to reverse the blade of the pestilence from the local community; however, the circumstances and the course it took were pretty unusual. The rite was carried out at a cemetery, next to a freshly dug-out grave, and was not run by a rabbi but by a layperson. The custom, which broke a series of religious bans, had been known to Polish Jewish communities at least since the seventeenth century,[67] fitting well into the basic (and characteristic also of Christians) element of 'plague-time' daily practice, that is, the principle of 'carnival *à rebours*': death and manifestations of life – play, joy, uncontrollable consumption – meeting each other.[68] Compared to the 'black wedding' ceremony, the processions and prayers begging for reversal of the plague, as ordained at that same time by the Archbishop of L'viv, seem downright conventional.[69] From a medical point of view, both ceremonies, which primarily consisted in gathering a large number of people in a small space, could have only 'done good' to the proliferating epidemic.

IV
"COLOSSAL NUMBERS OF THE INFECTED". AN ESTIMATION OF THE POLISH EPISODE OF THE PANDEMIC

How many people were actually affected by the 'Spanish flu' in the Polish territory between 1918 and 1920? How many got killed? Was the intensity of the epidemic higher than in other European countries, and did the influenza pose a more serious problem than the typhoid (spotted) fever? Which group was the most infection-prone: the civilians, the soldiers, rural or urban residents? There are no clear answers that can be given to these persistent questions. One can only

[66] Słomczyński, 'Kostusi widocznie znudziła się praca', 101–5.
[67] *Ibidem*.
[68] Monika Sznajderman, *Zaraza. Mity dżumy, cholery i AIDS* (Warszawa, 1994), 37.
[69] Słomczyński, 'Kostusi widocznie znudziła się praca', 104.

http://dx.doi.org/10.12775/APH.2016.113.08

try and reconstruct the picture by interpreting the figures that have somehow survived.

The most reliable data refer to Warsaw and the death toll taken locally by the plague. The situation was described in 1920 by doctor Władysław Szenajch, Chief of the local 'Karol and Maria' Hospital, in *Przegląd Epidemjologiczny*,[70] a scientific periodical published by the then-recently established Central Epidemiological Institution. Szenajch referred to a record of deaths kept by the Magistracy's (i.e., municipality's) Statistics Department whereby between July 1918 and February 1920 a total of 1,189 people died of influenza, virtually as part of two violent waves of the epidemic. The first wave stroke in September 1918. The mortality curve rose rapidly, until February 1919 (the month it faded out), with a total of 490 deceased, ninety-two fatal victims for the second week of December alone. The second wave, which (expectedly) meant an increased number of afflictions, came between the second and the third week of December 1919. This wave proved even more violent than that from the preceding year, taking away 473 lives within eight weeks, of which 158 within the first week of January alone. For the remaining months of the period under discussion, the number of victims was less than ten per week. This statistics, backed with a diagram (published, surprisingly enough, a year later in a completely different article),[71] seem trustworthy owing to their minuteness. Dawid Nisenson, another merited Warsaw doctor, a specialist in lung diseases of the Jewish Community Hospital (*Szpital Starozakonnych*) in the district of Czyste, suggested, in an article published a year earlier,[72] that the mortality rate during the epidemic could have been even higher. In the year 1918 alone, Nisenson argued, the 'Spanish flu' killed 586 in the capital city. He drew his figures from the same source, the Statistics Department of the Capital City of Warsaw. The chart drawn by Szenajch featuring the weekly mortalities enables us to reckon that 406 people had died before the end of 1918. While the related figures are clearly different, they at least help determine the order of magnitude.

[70] Władysław Szenajch, 'Z epidemiologii influenzy w Warszawie', *Przegląd Epidemjologiczny*, i, 1 (1920), 53–5.

[71] Stanisława Adamowiczowa, 'Ze statystki influenzy 1920 roku', *Przegląd Epidemjologiczny*, i, 3 (1920/1), 319.

[72] Dawid Nisenson, 'Wojna, a choroby zakaźne w Warszawie', *Gazeta Lekarska*, 34 (23 Aug. 1919).

http://dx.doi.org/10.12775/APH.2016.113.08

Nisenson moreover quoted the number of lethal cases of pneumonia, i.e., 689. It obviously cannot be assumed that all of them had resulted from flu complications, but the guideline may be indicated in the data for the previous years. In 1916 and 1917, there were four to five deaths of influenza, against 308, on average, of those of pneumonia. In 1918, an avalanching increase in influenza-caused deaths translated into a more-than-twofold increase in pneumonia fatalities. One may, therefore, risk the assumption that a half of the deaths in the latter category was related to those of the former. This altogether makes up 900 fatalities as for 1918 and enables us to state, based on both sources, that within the twenty months of the epidemic, 1,000 to 2,000 victims died in Warsaw alone.

This figure can be verified based on the data from other European cities, possibly similar to Warsaw in terms of location and size. With the war losses incurred, the Polish capital numbered 820,500 dwellers as at 1 January 1919[73] – thus closely comparing to Prague and Budapest, the nearby capital cities, with the populations of 712,027[74] and 928,996,[75] respectively. According to a UK Ministry of Health's report, before the end of 1918, 1,100 deaths were reported for Prague and 3,387 for Budapest; thus, the estimates from the preceding paragraph seem plausible. Given the problem, highlighted above, of unreported incidences of illness and (probably) demise, the sizes of the comparable agglomerations, and no record of victims of pulmonary complications available for Prague, the figures proposed by Doctor Szenajch seem much understated. Nisenson's findings, for a change, seem more reliable, though probably somewhat 'temperate'. There is, furthermore, a different mortality coefficient behind the differing statistics for Prague and Budapest. The Czechoslovak capital saw a peak, of 9.4 per cent, for a short time in the third week of October. The rate was much higher for Budapest, fluctuating in the autumn and winter weeks between 4 per cent and as much as 26 per cent, averaging at 14 per cent.

In order to assess the total number of 'Spanish flu' cases on the basis of indicative statistics of deaths – for Warsaw, other urban

[73] *Ibidem*.

[74] <http://openhistory.net/> [Accessed: April 21, 2016].

[75] <https://en.wikipedia.org/wiki/Demographics_of_Budapest.> [Accessed: April 21, 2016].

http://dx.doi.org/10.12775/APH.2016.113.08

areas, and Poland as a whole – the mortality coefficient needs being determined; otherwise, more detailed information is needed on the volume of the epidemic. While the sources available only provide shreds of data, the following simulations, no less than the intended purpose, may render the reader familiar with interesting, though piecemeal data.

According to a quite general report in *Kurjer Warszawski*, a fourth of the population of Kielce was affected in October 1918. With this criterion applied to Warsaw, the resultant number of cases would exceed 200,000, spread across four months. When confronted against the death toll, amounting to nine hundred, a mortality coefficient is produced at 0.4 per cent. Compared to the rates for Prague and Budapest, the rate looks unconvincing, which is not to deny its credibility.

Similar figures appeared in the messages coming from Cracow, but they prove pretty ambiguous, once again. Out of 320 'Spanish flu' patients treated at the internal diseases department at St Lazarus Hospital, 77 died in the last four months of 1918, accounting for a high death rate – 25 per cent.[76] Since this concerns critical cases which were subject to inpatient treatment, the total number of fatal victims cannot be determined based on such data. A vast majority of the flu-suffering stayed at home, never bothering the statisticians with their suffering, and therefore the overall mortality rate was much lower. Docent Tomasz Janiszewski found outright that during the last, autumn epidemic wave the mortality rate for Cracow as well as other cities was around 0.5–1 per cent, not in excess of the latter figure.[77] This could have been quite a valuable indication (Janiszewski, the Chief Municipal Physician, the archetype of the literary figure of Doctor Judym [featured in Stefan Żeromski's novel *Ludzie bezdomni*], was certainly well informed): the point is, it was proposed on 5 October 1918. Janiszewski also quoted the number of fatal victims and complication cases for the past week (41), but this is not really interpretable due to lack of further data. Was it the peaking moment, or rather, just a beginning, as was the case with Warsaw? While this author mentions a "colossal" number of the infected, with the given coefficient of mortality it can be stated at 4,100 cases maximum: not an impressive figure, even if weekly, for a city with a population of 180,000.

[76] Krokiewicz, 'Spostrzeżenia nad epidemią'.
[77] Janiszewski, 'Epidemia influenzy'.

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The last portion of statistics comes from Poznań. The local *Kurjer* reported[78] that the autumn wave of epidemic peaked at the penultimate week of October, with 97 victims bid farewell to their lives; between the beginning of the epidemic and the middle of November, a total of 300 died. What this tells us is that the virus was extremely aggressive: in a town several times smaller than Warsaw, it could put as many people to death within a single week. The plague allegedly became fading in November, with 49 deaths reported for the month's first week. Since mid-November, *Kurjer* ceased publishing information on the flu, as opposed to obituaries of young women and men dying "after the struggle with a serious disease". Before the region's journalists entirely switched to political affairs, they minutely reported that the number of patients affected by the 'Spanish flu' recorded with the municipal health insurance fund was 1,700 (i.e., 13 per cent) out of 13,000 registered patients. Since there are no other data available, these figures can be accepted as a scale of affliction for the city as a whole; let us bear in mind, though, that the fund's beneficiaries were mostly members of the local elite. The middle class and the proletariat, unregistered and debilitated by a tough nutrition situation, fell victim to the 'Spanish flu' probably at a larger degree. With the percentage of affliction among fund members applied to the whole city, the total number of cases is 20,553, with the overall mortality of 1.4 per cent. With use of the option stated for Kielce, taking into account the foregoing conclusion, the number of cases would go up to almost 40,000, the mortality proportion being 0.75 per cent. The averaged mortality coefficient for both models does not, in fact, exceed 1 per cent, as foreseen by Doctor Janiszewski from Cracow.

With no numerical data available for the provincial areas, the estimates taken from the rural areas might be applied, if approached as minimal. In summarising and concluding the above speculations, one finds that the first wave of the epidemic affected within the Polish Republic's territory, in autumn and winter 1918/19, 3,400,000 to 6,570,500 people per year (at a minimum), of which 68,000 to 130,000 died.

These data stand up the confrontation with statistics for other countries. In spite of a high (14 per cent) mortality coefficient in Budapest in autumn 1918, it averaged for the entire epidemic

[78] *Kurjer Poznański*, 247 (25 Oct. 1918); *ibidem*, 256 (7 Nov. 1918).

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in Hungary (as for 1918–20) at 1.27 per cent,[79] ranging among the highest across the continent. In a European country whose population – 32,830,000 in the period in question – was the closest to that of Poland, some 80,000 are reported to have died during the epidemic per annum, with a mortality rate of 0.73 per cent.[80] Whereas comparing Poland against Brazil might seem astonishing, with an identical population (Poland having approx. 5,000 inhabitants more), the number of deaths reported for each of the epidemic waves was similar in both countries to the outcome of the above simulation – 60,000 each.[81]

Hence, it could be stated that the Polish epidemic of the 'Spanish flu' unfolded similarly and was governed by the same rules as in other countries of the region. Due to the aforementioned peculiar reasons – war damage, hunger, disorganised healthcare system, and migrations of people – the assumption becomes apparent that the scale of affliction must have been much larger than in the West. It has nonetheless to be borne in mind that in the beginning of the twentieth century, the Western countries saw the outset of a process of epidemiological transformation, that is, structural change in the reasons of deaths – from contagious diseases and high baby mortality rates into persistent or chronic diseases. Putting it otherwise, in contrast to the situation in the East, flu did not have to compete there (in a literal and figurative sense) against other communicable diseases. In Poland, given the concurrent epidemics of typhus, pox, tuberculosis, or syphilis, the number of influenza victims ought, consequently, to have been lesser. The fact that the Polish Republic, along with Hungary and Spain, was among the most severely 'Spanish flu'-stricken countries (ignoring the former Russian Empire area), attests to how powerful and serious the plague was. What additionally makes the Polish episode of the worldwide pandemic peculiar is the fact that it has been ignored, in some apparently puzzling manner. The people in Poland were getting affected and dying much in the same (if not in a more severe) fashion as those in the West; and yet, with a few exceptions, their sufferings remained individual, anonymous, outside the main current of public opinion and the interests of the

[79] Johnson and Mueller, 'Updating the Accounts', 113.
[80] *Ibidem*.
[81] *Ibidem*, 111.

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authorities, sanitary and medical alike. Influenza took the offensive, took its toll, and faded away, overshadowed.

V
A FORGOTTEN EPIDEMIC. WHY HAS THE PLAGUE EXPERIENCE DISAPPEARED FROM POLISH COLLECTIVE MEMORY?

The Polish equivalent of 'influenza' or 'flu' – *grypa* – comes from the French *grippe*, which is, in turn, based on *(s')(a)gripper* (to grasp, grip, grab hold of): the sickness mercilessly grabs hold of its victim, who cannot normally function anymore. The term 'influenza' has a different, much older and much more dramatic derivation: at its Latin core, it means 'influence', referring to the impact believed to be exerted by the celestial bodies bringing about the disease when in a damaging conjunction. Dating back to ancient time, the doctrine was an elegant variety of the miasma theory according to which the communicable diseases afflicting the mankind originated amidst disgusting odours and poisonous air, and were transmitted and disseminated across the world by the air. For rather apparent reasons, foetor was considered the main epidemic factor well until the latter half of the nineteenth century, when it should have finally been 'dethroned' by the achievements of microbiology and the theory of contagious diseases. In reality, though, like bloodletting or deliberate development of ulcers, foetor enjoyed an important place in the sanitary landscape for a much longer time. "… people are talking again of miasmas, of some abstruse influences", an outstanding American bacteriologist reportedly said (as quoted by *Gazeta Lekarska*).[82] A periodical named *Polska Gazeta Lekarska*, published in L'viv, summarised (in a spring 1922 issue) at length an article published by the official magazine of the United States' largest medical association, whose author argued that influenza pandemics were related to the action of the Sun – specifically, the anticyclones (high pressure zones) caused by it. Since no pathogenic germ had been discovered and the attempts at preventing the epidemic ended up in a failure, the apparent conclusion was that the plague, or the 'venom', was airborne.[83]

[82] Simon Flexner, 'Epidemjologja a obecne epidemje', *Gazeta Lekarska*, 12 (22 March 1919).

[83] Richter, 'Rozwój pandemii grypy zależy od stanów cyklonicznych powietrza', *Polska Gazeta Lekarska*, 11 (12 March 1922).

http://dx.doi.org/10.12775/APH.2016.113.08

And there was no need to persuade the native epigones of the miasma theory, or rather, of an odd hybrid of the old and new views of the sources of flu: the journalists, officials, and even doctors looking into the sanitary condition of Poland had long been well aware of the reason behind the blights harassing the Republic. It was, clearly, the omnipresent dirt and filthiness.

"The 'Spanish flu' has intensified its offensive on Cracow, and feels pretty comfortable there. Any illness would find it fit to dwell in such a scrapheap …", a Galician correspondent with *Kurjer Poznański* remarked, with a characteristic indulgence.[84] Doctor Janiszewski chimed in the opinion: the city was not quite reputable in this respect. Asked by the local press whether the ubiquitous grime and squalor, water supply cuts, and common undernourishment could have intensified the proliferation of flu, he would say yes but admitted that removal of these factors would not eliminate the threat of epidemic. The conclusions he drew from the prevalent situation were somewhat dichotomous. As the chief city physician, he appreciated the efficiency of the modern procedures of reporting and registering all the influenza cases, dividing the city area into circuits managed by trustworthy officials, isolating and meticulous diagnosing of patients, providing new beds to hospitals, and preventing the practice of 'pilfering' the doctors, paramedics, or disinfectors by the military. On the other hand, this same man claimed that it was no less crucial to have the city thoroughly cleansed, on a one-off basis, for which purpose subsidies or, in case of evading the duty, expedient penalties ought not to be spared. The Warsaw-style figure of warden was seen as a sustainable remedy: "several thousand brooms sweeping, be it carelessly, the streets a few times a day will produce a better result that the existing system is capable of."[85] How could he believe in his own words if he mentioned, in the same article, breathing in dust among the reasons behind the illness?

"*When a disease insinuates itself so potently into the imagination of* an era, it is often because it impinges on an anxiety latent within that imagination", the American oncologist and author Siddhartha Mukherjee states in his bestselling biography of cancer.[86] He gives the example

[84] 'Listy z Krakowa'.

[85] Janiszewski, 'Epidemia influenzy'.

[86] Siddartha Mukherjee, *The Emperor of All Maladies: A Biography of Cancer* (New York, 2010), 185.

http://dx.doi.org/10.12775/APH.2016.113.08

of AIDS, which in the eighties hit the Western world's raw nerve of quandary related to the sexual revolution ended a decade earlier; the other case in point is cancer, which epitomises the turn in the 'object of awe' among the safe and sumptuous societies: external fears, such as war or famine, have been replaced by an inner one, materialising in the form of senility, decomposition, and tumour. In 1918, the influenza virus did what it could to be remembered, to become a metaphor of its time. It travelled the world and the seven seas, gaining a pandemic potential in many distant places and diverse organisms, human and animal alike. Finally, it ideally adopted to the conditions that ensured it a global success. All the same, the memory of it has blurred – not only in Poland but worldwide. One of the virus's most famous biographies charges it (in its title) with the responsibility for having provoked a 'forgotten pandemic'. Why is it so? Let us look for a guideline: quite unexpectedly, it can be distilled from a poem.[87]

The poem, probably satirical in the intent of its author (signed 'Z. T.'), published by *Kurjer Poznański* of 10 November 1918, tells a story about an incidental meeting of two friends, one of them being a convalescent who has struggled with the 'Spanish flu' over the last week. He was administered all the possible treatment options, several aspirins, down-comforters and feather-blankets, and even a respirator. The procedure did without bloodletting, so the patient survived, and recovered. Sagging, astonished that his briefcase was so weighty, he goes out into the street:

Idąc, spotkał się z kolegą.	There's his mate coming, by all odds:
Niech Cię wszystkie Bogi strzegą!	'O be you guarded by your gods!
Żyjesz? Świat się wali, rety,	Still living? The world almost blew,
Z Austrii bigos i kotlety!	Blimey! Austria's all hunter's stew!
Ty nic nie wiesz? – Głową wstrząsa,	Do not you know?' – He shakes his head,
Lecz radośnie kręci wąsa,	Then curls his moustache, with no dread,
Goniąc myśli pogmatwane...	Chasing his labyrinthian thoughts:
Miałem już – i nie dostanę!!!...	'Have had it yet; now, no more spots!!'

The convalescent's optimism could have been precocious. Doctors warned against leaving the bed too early, as this was the shortest way to complications and death; but this is not the point. The dialogue of the acquaintances showed the fundamental issue about the flu.

[87] 'Na marginesie. Hiszpanka', *Kurjer Poznański*, 259 (10 Nov. 1918).

http://dx.doi.org/10.12775/APH.2016.113.08

The healthy man was into politics and carefully watched the events unfolding at breakneck speed, whereas the patient remained utterly alienated in his own world: the only thing that interested him was the suffering he has been through and his own saved existence. With the actual reasons of the epidemic remaining unknown, there was no efficient prophylaxis in place, and so the illness was losing its social potential and the patient became completely unattractive to the outer world. One of the great plagues of the early twentieth century, influenza was confined to individual experience – as was the case with tuberculosis or syphilis, the stigmatising afflictions attributed to unique individuals, excelling in their genius and in their decline.[88] Facing any of these, "everyone created their own narrative of the illness", as Virginia Woolf once put it.[89]

The insistent trend to associate the 'Spanish flu' with contaminated dust, miasmal air, and deplorable hygienic conditions, contrary, in many aspects, to the scientific findings and common sense, attempted to place the illness within a comprehensible and useful context. Fear of dirt, destruction, and decomposition called for being turned into a metaphor. Dirt, destruction, and decomposition were the imminent characteristics of a country emerging on the rubble and debris – and were no less essential than enthusiasm, courage, or patriotism. The age-old superstitions and the achievements of microbiology merged into one. The plagues were a vanguard of the enemies surrounding Poland and always came from the outside. In the summer of 1918, when influenza came from the east, the inhabitants of Warsaw called it a 'Ukrainian' or 'Volhynian' flu (*ukrainka*; *wołynka*)[90], or even a 'Bolshevik disease'.[91] A member of the Parliament, who described a desperate situation shared by Polish mountaineer families resulting from lack of food and other basics, and thus forced to smuggle such products from Czechoslovakia, was convinced that those people were getting infected abroad and then bring a typhus or a 'Spanish flu' into where they live, rather than conversely.[92] Struggle with communicable

[88] Sznajderman, *Zaraza*, 6.

[89] Honigsbaum, *A History of the Great Influenza*, 232.

[90] '"Hiszpańska" gorączka'.

[91] Słomczyński, 'Kostusi widocznie znudziła się praca', 98.

[92] AS, 'Sejm Ustawodawczy 1919–1922, interpelacje poselskie', <https://bs.sejm.gov.pl/F?func=full-set-set&set_number=037711&set_entry=000007&format=999> [Accessed: April 21, 2016].

http://dx.doi.org/10.12775/APH.2016.113.08

diseases required time, patience, enormous effort, and money. Established in 1920, the Supreme Extraordinary Commissariat for Eradication of Epidemic Diseases took such efforts in the four subsequent years, seeing the plagues gradually fading.[93] In 1919, rituals and incantations were at work as no efficient, expedient action could be taken. Notably, the first paragraph of the joint instruction of the Ministry of Public Health and the Ministry of Internal Affairs was calling upon 'the residents of the State of Poland' to "universally and carefully cleanse themselves, as well as their apartments, equipments, clothing, underwear and linen, of any-and-all dirt and vermin."[94] In the light of these words, it is now easier to understand Doctor Janiszewski's belief that the 'Spanish flu' could be extinguished with use of the brooms of several dozen Old-Town caretakers.

Typhus (called at that time 'murine' or 'endemic' typhus) offered, for a change, a metaphorical potential and ideally fit the desired socio-political context. Its appearance in the Kingdom of Poland was endemic; in the course of the combined German and Austro-Hungarian offensive in 1915, resulting from the retreat of the Russian army and the resulting refugee crisis, a typhus epidemic broke out and was not suppressed until the war ended. By mid-1919, more than 320,000 cases were recorded, with some 20,000 lost lives.[95] Both diseases featured similar symptoms, apart, certainly, from the pulmonary complications (high fever, headache, cardiac and nervous system disorders). Rash and blotches, which additionally described the typhus (*tyfus plamisty* is, literally, 'blotched typhus' in Polish), also occurred with flu, just like flu-like symptoms of cyanosis appeared alongside typhus. Certainly, at the time both epidemics prevailed in Poland, a whole lot of cases of typhoid were recognised as flu, and the other way round. The peculiar thing about typhus was the much higher mortality and method of infection. A dozen years before then, it was believed that typhoid germs were disseminated by air, though the cases of this particular illness were often seen as related to the vagabonds, seasonal

[93] Elżbieta Więckowska, 'Zwalczanie ostrych chorób zakaźnych w pierwszym roku istnienia Polski niepodległej 1918–1919', *Przegląd Epidemiologiczny*, liii, 1–2 (1999), 219.

[94] *Eadem*, 'Centralny Komitet do Walki z Durem Plamistym (1 sierpnia 1919 – 5 marca 1920)', *Przegląd Epidemiologiczny*, lii, 1–2 (1998), 206.

[95] CAW, 'Szefostwo Sanitarne Naczelnego Dowództwa WP', sign. I.301.17.20, 'Zwalczanie tyfusu plamistego i masowe oczyszczanie ludności'.

http://dx.doi.org/10.12775/APH.2016.113.08

workers, and immigrants coming into contact with locals. It was only in 1914 that a discovery was made, at a department of the Institut Pasteur in Alger, which revealed that typhus was disseminated by lice – specifically, their excrements, when rubbed into the bite cuts by the scratching transmitter.[96] The discovery was extremely important for the way the illness was perceived. Soon afterwards, hygiene and its new branch called parasitology proposed a clear interpretation of typhus and the role of typhus in a country's sanitary policy.

As opposed to the mysterious and volatile influenza germ, lice was a clear and pronounced target, tied up with disastrous sanitary conditions. Many believed, arguably, that the insects were simply born out of dirt, as flies were begotten of horse sweat.[97] Eradication of the contagion consisted in concrete, materially efficient actions of some symbolic importance, such as forming a sanitary cordon to cut off the epidemic-stricken area, setting up quarantine stations, disinfection chambers and baths, mass laundering of clothes, haircutting and body washing: briefly speaking, universal and careful cleansing, as postulated by the government. It soon turned out that anti-typhus sanitary regulations can be instrumental in politics. The features of lice were ascribed to their carriers, who were stigmatised as distributors of the contagion; it was easy, then on, to attach more labels.[98] Certain social groups could thus be controlled and stigmatised, under the pretext of care for hygiene. The first to be victimised were the re-emigrants coming back from Russia, the typhus 'nursery' – not to mention the Jews, those traditional scapegoats in European epidemics.

The sanitary landscape of Poland in the years 1918–20 was dominated by combating typhus and its 'life guards': lice and dirt. The 'Spanish flu' could not rival against such attractive competitors. Even if some of its victims had their faces blackened and blood poured out of their mouths before dying, it was, at the end of the day, a regular seasonal flu whose origin was unknown but one thing was certain: it was to disappear with the season of the year.

In the classical Greek, *typhos* meant smoke. Hippocrates used the name to describe a condition where the patient is semiconscious

[96] Paul Weindling, *Epidemics and Genocide in Eastern Europe 1890–1945* (Oxford and New York, 2000), 14–15.

[97] Hans Zissner, *Szczury, wszy i historia* (Warszawa, 1930), 51, 53.

[98] *Ibidem*, 34–5.

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or groggy, his or her mind befuddled, incapable of memorising or formulating thoughts. "We lived like in a smoke", a Polish poet and diplomat remarked in his diary, in the autumn of 1918.[99] It seems that the Polish episode of the 'Spanish flu' took place in clouds of smoke that obliterated a majority of occurrences.

trans. Tristan Korecki

SELECTED BIBLIOGRAPHY

Adamowiczowa Stanisława, 'Ze statystki influenzy 1920 roku', *Przegląd Epidemjologiczny*, i, 3 (1920/1), 316–30.

Barry John M., *The Great Influenza. The Story of the Deadliest Pandemic in History* (London, 2005).

Bronowski Szczęsny, *Epidemja grypy w latach 1918–1920. (Jej istota, objawy, zapobieganie i leczenie)* (Warszawa, 1922).

Brydak Lidia B., *Grypa i jej profilaktyka* (Poznań, 2004).

Flexner Simon, 'Epidemjologja a obecne epidemje', *Gazeta Lekarska*, 12 (22 March 1919).

Honigsbaum Mark, *A History of the Great Influenza Pandemics. Death, Panic, Hysteria, 1830–1920* (London and New York, 2014).

Humphries Mark O., 'Path of Infection: The First World War and the Origins of the 1918 Influenza Pandemic', *War in History*, xxi, 1 (2013), 55–81.

Janiszewski Tomasz, 'Epidemia influenzy czyli t.z. choroby hiszpańskiej w Krakowie', *Przegląd Lekarski*, 40 (5 Oct. 1918), 270 ff.

Johnson Niall P.A.S. and Mueller Juergen, 'Updating the Accounts: Global Mortality of the 1918–1920, "Spanish" Influenza Pandemic', *Bulletin of the History of Medicine*, lxxvi, 1 (2002), 105–15.

Langford Christopher, 'Did the 1918–1919 Influenza Pandemic Originate in China?', *Population and Development Review*, xxxi, 3 (2005), 473–505.

Mujherjee Siddartha, *The Emperor of All Maladies: A Biography of Cancer* (New York, 2010).

Nisenson Dawid, 'Wojna, a choroby zakaźne w Warszawie', *Gazeta Lekarska*, 34 (23 Aug. 1919).

Puterman Jan, 'Epidemia influenzy w r. 1918', *Gazeta Lekarska*, 12 (22 March 1919).

'Report on the Pandemic of Influenza', in *Reports on Public Health and Medical Subjects*, iv (London, 1920).

Słomczyński Szymon, 'Czyż koniecznie naprzód muszą być ofiary? Lwowianie w walce z epidemią grypy hiszpanki jesienią 1918 roku', in Kazimierz Karolczak and Łukasz T. Sroka (eds.), *Lwów, miasto – społeczeństwo – kultura*, ix: *Życie codzienne miasta* (Prace Monograficzne, 688, Kraków, 2014).

Słomczyński Szymon, 'Kostusi widocznie znudziła się praca na frontach bojowych. Epidemia grypy hiszpanki w Polsce i na świecie jako zapomniane doświadczenie

[99] Edward Ligocki, *Dialog z przeszłością* (Warszawa, 1970), 187.

http://dx.doi.org/10.12775/APH.2016.113.08

ostatnich miesięcy Wielkiej Wojny', in Daniel Grinberg, Jan Snopko, and Grzegorz Zackiewicz (eds.), *Wielka Wojna poza linią frontu* (Białystok, 2013).
Szenajch Władysław, 'Z epidemiologii influenzy w Warszawie', *Przegląd Epidemjologiczny*, i, 1 (1920).
Sznajderman Monika, *Zaraza. Mity dżumy, cholery i AIDS* (Warszawa, 1994).
Szumowski Władysław, *Historia medycyny* (Warszawa, 1961).
Trilla Antoni, Trilla Guillem, and Daer Carolyn, 'The 1918 "Spanish Flu" in Spain', *Clinical Infectious Diseases*, xlvii, 5 (2008), 668–73.
Weindling Paul, *Epidemics and Genocide in Eastern Europe 1890–1945* (Oxford and New York, 2000).
Więckowska Elżbieta, 'Archiwalia dotyczące zwalczania chorób zakaźnych w okresie 1919–1924 w zasobie Archiwum Akt Nowych w Warszawie', *Medycyna Nowożytna*, iv, 1–2 (1997), 197–202.
Więckowska Elżbieta, 'Centralny Komitet do Walki z Durem Plamistym (1 sierpień 1919 – 5 marca 1920)', *Przegląd Epidemiologiczny*, lii, 1–2 (1998), 205–14.
Więckowska Elżbieta, 'Zwalczanie ostrych chorób zakaźnych w pierwszym roku istnienia Polski niepodległej 1918–1919', *Przegląd Epidemiologiczny*, liii, 1–2 (1999), 211–20.
Zissner Hans, *Szczury, wszy i historia* (Warszawa, 1930).

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