

Saunas and Lice in Lithuania in 1941–1944

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ABSTRACT

German officials viewed the prevention of typhus, both in Lithuania and in other occupied territories, as one of the key sanitary tasks in protecting the Wehrmacht. As a result, German officials and Lithuanian medics took various measures to prevent the disease's spread, including the use of the saunas. The article reveals the efforts to expand the sauna network under German occupation. On the other hand, these attempts to change the population's everyday habits by force in the interest of stopping the spread of epidemics apparently had no deeper effect on the culture of cleanliness in Lithuania.

KEYWORDS: saunas, sanitation, delousing, prevention, everyday life, Lithuania

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Introduction

As the field of research into everyday history (*Alltagsgeschichte*) in Germany developed,¹ some scholars criticized its application to the history of the Third Reich and suggested that this was an attempt to divert attention away from the crimes committed by the Nazi regime.² According to the American historian Christopher Browning, however, everyday history is indeed neutral.³ In addition, understanding “the boundaries [of everyday life] is possible only when they face a challenge: war [...] or a global crisis not only shows that the boundaries of everyday life can always be recreated, but also that various turning points are temporary, and the extreme situations that unfold afterward also become routine.”⁴ This claim is also confirmed by changes to the established norms of daily life in Lithuania between 1941 and 1944, when the war interrupted normal habits and routines. Under these conditions, the population was forced to make changes to their diets, ways of dressing, and other aspects of daily life. Lithuanian medics and the Germans occupiers meanwhile grew increasingly concerned over sanitation, especially in regard to the spread of communicable diseases. In fact, improving sanitation had undoubtedly been a primary aim of Lithuanian medics even before the war, for, even in the inter-war period, one in four or five residents of Lithuania could die from infectious diseases.⁵ During the Soviet occupation from 1940 to 1941, there had also been attempts at curbing the spread of various diseases. The Anti-Epidemic Board organized campaigns to vaccinate the populace against smallpox, typhoid, diphtheria, and dysentery.⁶ When German forces occupied Lithuania, the Soviet regulations remained in force.

National Socialist occupiers focused especially on the prevention of typhus fever. The Germans’ fear of typhus fever was probably related to the victims

¹ DAVID F. CREW: *Alltagsgeschichte: A New Social History “From Below”?*, in: *Central European History* 22 (1989), 3/4, pp. 394–407, here p. 394.

² CHRISTOPHER R. BROWNING: *Ordinary Man: Reserve Police Battalion 101 and the Final Solution in Poland*, New York 1998, p. xix.

³ “As a methodology, however, the history of everyday life is neutral. It becomes an evasion, an attempt to ‘normalize’ the Third Reich, only if it fails to confront the degree to which criminal policies of the regime inescapably permeated everyday existence under the Nazis.” *Ibid.*

⁴ NERINGA KLUMBYTĖ, KRISTINA ŠLIAVAITĖ: Įvadas: Nekasdieniškos kasdienybės: Visuomenė, istorija ir galia [Introduction: The Extraordinary Everyday: Society, History and Power], in: *Lietuvos etnologija* (2017), 26, pp. 7–11, here p. 7.

⁵ JONAS ŠOPAUSKAS: *Ligotumas Lietuvoje mirties priežasčių ir apkrečiamų ligų registracijos duomenimis* [Morbidity in Lithuania Based on Registration Data on Causes of Death and Communicable Diseases], Kaunas 1939, p. 39.

⁶ Summary of the activities of the anti-epidemic board within the territory of the LSSR, in: *Lietuvos centrinis valstybės archyvas (LCVA)* [Lithuanian Central State Archives], col[lection] R-769, inv[entory] 3, file 276, pp. 7–8.

who died of the disease after World War I.⁷ Germany played a leading role in global scholarship before and during the National Socialist period: in epidemiology, preventive medicine, public health policy, occupational health laws, and compensation for certain health disorders. Germany was also exceptionally advanced in clinical medicine. It is thus no surprise that German medical education became exemplary.⁸ In Nazi Germany, medical professionals were bound by the rules for medical procedures passed in 1931, which, according to Michael Grodin, were broader in many aspects than the Nuremberg Code and the later Declaration of Helsinki. These medical professionals did not apply the rules, however, to Jews, Roma, the mentally ill, and other people the Nazi regime deemed worthy of persecution.⁹ The policy of “racial hygiene” worked similarly in the occupied lands, but ensuring the health of the local population was not a priority. This explains why health policy in Lithuania was mostly limited to the prevention of epidemic diseases.¹⁰ Establishing and maintaining suitable hygiene habits among the local population was a priority for the German occupying government to impede the spread of epidemics.¹¹ Saunas were seen as an important tool in realizing this aim, and this required a sufficient network of properly maintained saunas, as well as organization for their effective use.

This article analyzes the process of sauna use and the transformation of lice eradication habits in Lithuania from 1941 to 1944 in order to determine how the German occupying government influenced the spread of the sauna network and the establishment of new routine habits. One of the main methods applied was the comparative method, which was used to compare sauna use habits among different Lithuanian regions (e.g., Suvalkija, Aukštaitija) and the pre-war situation. Besides revealing the influence of the occupying government on local society, the development of similar research could contribute to determining the German occupying government’s goals and actual, achieved results. This would require combining the existing political macro and social micro level studies, although the number of the latter studies is limited, especially for the everyday sphere during the Nazi

⁷ LEWY STONE, DAIHAI HE, STEPHAN LEHNSTAEDT, Yael ARTZY-RANDRUP: Extraordinary Curtailment of Massive Typhus Epidemic in the Warsaw Ghetto, in: *Science Advances* 6 (2020), 30, <https://www.science.org/doi/10.1126/sciadv.abc0927> (2022-03-22), p. 1.

⁸ M. MICHAEL COHEN, JR.: Overview of German, Nazi, and Holocaust Medicine, in: *American Journal of Medical Genetics, Part A* 152 (2010), 3, pp. 687–707, here p. 688.

⁹ *Ibid.*, pp. 689–690.

¹⁰ ARŪNAS BUBNYS: *Vokiečių okupuota Lietuva (1941–1944)* [German-occupied Lithuania], Vilnius 1998, p. 438.

¹¹ “The occupant administration was more concerned with prevention in the field of health than the provision of medicines and treatment.” *Ibid.*

occupation.¹² The World War II period has been largely neglected, even as the field of twentieth-century social history in Lithuania has grown.¹³ This relative dearth of studies on these questions for the Lithuanian context limits the possibilities for comparative studies with neighboring countries—and those further afield—where the historiography on these questions has made more significant gains.

The issue of sanitation in Lithuania during World War II has thus far been studied in Western and Lithuanian historiography in terms of health care in Lithuania's ghettos.¹⁴ Other aspects of sanitation in Lithuania during this period have received less attention. Information about the health situation during the years under German occupation can be found in papers by Arūnas Bubnys,¹⁵ Juozas Meškauskas,¹⁶ and other authors. Bubnys confirms that the National Socialist administration was more concerned with preventive measures than with the provision of medicines and treatment.¹⁷ In addition to the research already mentioned, archival sources have proven to be most important in revealing the state of sanitation in Lithuania from 1941 to 1944.¹⁸

¹² For example, some aspects about diets or leisure activities have already been investigated: MANTVYDAS LUGOVOJUS: *Kasdienis gyvenimas Kaune vokiečių okupacijos metais (1941–1944): Būstas, maistas ir pramogos* [Daily Life in Kaunas during German Occupation (1941–1944): Housing, Food and Entertainment], in: *Kauno istorijos metraštis* (2016), 16, pp. 122–137. J. BRASLAUSKAS: *Gyventojų aprūpinimas ir kasdienis gyvenimas nacių okupuotoje Lietuvoje* [Supplies for the Population and Daily Life in Nazi-Occupied Lithuania], in: *Genocidas ir rezistencija* (2016), 40 (2), pp. 28–50.

¹³ At present, studies on the pre-war period and Sovietology dominate in twentieth century Lithuanian history research.

¹⁴ CHRISTOPH DIECKMANN: *Deutsche Besatzungspolitik in Litauen, 1941–1944*, 2 vols., Göttingen 2011; SOLON BEINFELD: *Health Care in the Vilna Ghetto*, in: MICHAEL A. GRODIN (ed.): *Jewish Medical Resistance in the Holocaust*, New York 2017, pp. 106–140; JACK BRAUNS: *Medicine in the Kovno Ghetto*, *ibid.*, pp. 155–163; MIRIAM OFFER: *Medicine in the Shavli Ghetto: In Light of the Diary of Dr Aaron Pik*, *ibid.*, pp. 164–172; ARŪNAS BUBNYS: *Kauno getas, 1941–1944* [The Kaunas Ghetto, 1941–1944], Vilnius 2014; ARŪNAS BUBNYS: *Vilniaus getas, 1941–1943* [The Vilnius Ghetto, 1941–1943], Vilnius 2013.

¹⁵ BUBNYS, *Vokiečių okupuota Lietuva*, pp. 438–441.

¹⁶ JUOZAS MEŠKAUSKAS: *Lietuvos medicinos istorija: Medicinos mokslas, gyventojų medicininio ir socialinio aprūpinimo istorinė ir dokumentinė apžvalga* [History of Medicine in Lithuania: Medical Science, Historical and Documentary Review of Medical and Social Provision of the Population], Čikaga 1987, pp. 690–709.

¹⁷ BUBNYS, *Vokiečių okupuota Lietuva*, p. 438.

¹⁸ Some of the main documents in the Executive Health Board collection R-627 about saunas, disinfection, etc. Similar information can also be found in other collections of LCVA: e.g., the Biržai district municipality collection 805; the Telšiai district state health office collection R-417; the Vilnius district head's collection R-685. The latter documents are also often associated with the Executive Health Board, which was the main institution coordinating health care in Lithuania.

Saunas in Lithuania in the Early Twentieth Century

A better understanding of the developments under German occupation requires an awareness of some aspects of the pre-war state of the Lithuanian sauna network. Saunas were not evenly distributed in Lithuania in the nineteenth and twentieth centuries, and their position in the daily rhythm of life of the population differed as a result. According to the researcher of regional history Vladas Trinkas, there were only a few saunas in Žemaitija between 1914 and 1918; saunas during this period were more prevalent in the Mažeikiai district. Trinkas says that historically—and still today—saunas have been more popular in northern and eastern Lithuania. In an interview about the period from 1900 to 1914, an inhabitant of Tetervinai, a village in the Pasvalys district (Aukštaitija), recalled that taking a sauna was quite common and that almost every farmer in their village had a sauna facility, which they would fire up every two or three weeks.¹⁹ “The sauna district begins at Tryškiai-Kuršėnai, Gruzdžiai, Žagarė, and more around Šiauliai and beyond to the north. There are more of them all over eastern Aukštaitija. Dzūkija meanwhile had very few such saunas. In their place, they used those ‘saunas’ where they dried the flax (this is also where they washed).”²⁰ When writing about the present situation, Trinkas probably had in mind the time when the survey was conducted (1939), and not the time of the article’s publication (1943). However, the situation at this time would have also at least partly reflected the hygiene situation during World War II, as daily routines change relatively slowly.

Medics noted the need for saunas on numerous occasions even before the outbreak of the war. The press cited an idea expressed by the famous German writer and poet of Jewish origins, Heinrich Heine, who said: “whoever loves their nation must lead it into the sauna.”²¹ In order to encourage the construction of saunas, the Chambers of Agriculture included them in farmstead installation publications,²² and, in 1934, they even published detailed instructions on how to build one’s own sauna.²³ In addition, in the interwar period, saunas were inventoried. The total number of all types of saunas, according to

¹⁹ Memoirs of P. Žagrakalys. Written down by J. Žagrakalys, 1972-03-01, in: Lietuvos istorijos institutas (LII) [Lithuanian Institute of History], Manuscripts Department, col. 73, file 225, p. 305.

²⁰ VLADAS TRINKA: Kūno švara Lietuvos kaime [Body Cleanliness in the Lithuanian Countryside], in: Gimtasai kraštas (1943), pp. 302–313, here p. 308.

²¹ LAZARIS EPŠTEINAS: Kova su nešvarumu [Fighting Dirt], in: Lietuvos žinios, 1927-10-02, no. 229, included in: Extracts from various newspapers about lice, fleas, bedbugs, and other pests spreading infectious diseases, in: Lietuvos mokslų akademijos Vrublevskių biblioteka (LMAVB) [Wroblewski Library of the Lithuanian Academy of Sciences], Manuscripts Department, col. 95 (JE)-302, p. 20.

²² VLADAS ŠVIPAS: Pirtis ir skalbykla [Sauna and Laundry], in: Kaimo statyba, Vilnius 1936, pp. 230–232.

²³ VLADAS ŠVIPAS: Ūkininko pirtis [Farmer’s Sauna], Kaunas 1934.

1928 census data, indicates that there were 39,747 (with 36,701 village saunas). The largest numbers of saunas were found in the districts of Biržai, Panevėžys, Utena, Rokiškis, and Zarasai, among others. In 1928, according to the records, a total of 4,686,662 people used the saunas appearing on the list. It was also calculated that 2,151,184 people bathed in rivers and lakes in 1928. It was found that people bathed less often in open bodies of water in those districts where there were more saunas. In the Biržai district 402,007 people bathed in saunas, whereas only 44,396 bathed in lakes and rivers. In the Marijampolė district, on the other hand, 6,709 people used saunas, while 43,555 bathed in rivers or lakes.²⁴

In terms of changes to everyday life, it is important to note that the habit of washing in the sauna cannot be unilaterally related to the material state of the country alone. Many sources confirm that saunas were least popular in Suvalkija, even though this was one of the wealthiest regions in Lithuania. The abolition of saunas (as a fire hazard) in the eighteenth century in Užnemunė undoubtedly had an impact in this regard,²⁵ and they did not become widespread in the interwar years, either. The 1928 census does not include a single village sauna in the Vilkaviškis district.²⁶ According to a local doctor, Agnietė Steponaitienė-Ambraziejūtė, the residents of Suvalkija were known for being wealthy, but their lack of washing habits and saunas was simply astounding:

“Around Kaunas, a majority of farmers had installed sauna-washing rooms, where the whole family would wash once in a while. But the people of Suvalkija were rather backward in this respect. [...] A majority were not used to and did not like washing. They have no washing rooms and have no intention of getting them. They usually clean themselves as follows: before holidays, religious feasts, fairs, or when going visiting, they wash the top part of their body as far as their waist in a trough or basin. The area below the waist remains untouched, even though those regions should be washed no less frequently than the mouth. Before a major celebration, the people of Suvalkija would wash in barrels.²⁷ On Christmas Eve or on Easter Saturday, they would heat up a barrel of water and sometimes several people would wash in that water, perhaps even the farmer’s entire family. [...] Those who lived near a lake or river were luckier, as they could at least wash in the summer. But those who lived far away from a river really struggled in summer. They were forced to bathe in dams, swamps, or small pools, even though the water quality there was truly poor.”²⁸

²⁴ M. Ss.: Lietuvos pirtys [Lithuanian Saunas], in: Savivaldybė (1931), 1, pp. 29–30.

²⁵ ALFREDAS BUMBLAUSKAS, ALFONSAS EIDINTAS, ANTANAS KULAKAUSKAS, MINDAUGAS TAMOŠAITIS: Lietuvos istorija kiekvienam [Lithuanian History for Everyone], Vilnius 2018, p. 44.

²⁶ M. Ss., p. 30.

²⁷ Barrels (*bačka*) or tubs (*kubilas*) for washing were also called *žlugtas* by people in Suvalkija: TRINKA, p. 310.

²⁸ AGNIETĖ AMBRAZIEJŪTĖ-STEPONAITIENĖ: Kūno švara: Paruošiamoji medžiaga radijo paskaitai, 1929 m. rugpjūčio 20 d. [Body Hygiene: Notes for a Radio Lecture, 1929-

According to Steponaitienė-Ambraziejūtė, the bathing habits of people from Suvalkija should not fall behind those from Kaunas, as the lack of saunas had a dire impact on their image.²⁹ In trying to explain this phenomenon, she referred to the lack of such bathing habits and the fact that this habit had not formed in the sphere of daily life. She says that farmers thought along the following lines:

“Our parents did not bathe or take saunas, nor did our grandparents or their parents, so there is no reason for us to wash, our parents survived all right, so we shall survive without washing as well. The new generation is raised such that they do not even consider having to wash frequently, or that bathing houses, or saunas, are necessary.”³⁰

These deeply engrained habits had an immense influence on everyday routines and steered the rhythm of daily life accordingly. While the material environment undoubtedly played a role in the interaction of habits and the material environment, it is likely that deep-rooted habits were the more significant factor. World War II documents likewise confirm the lack of saunas in Suvalkija, which is why the bathing habits discussed in the Steponaitienė-Ambraziejūtė’s radio lecture notes would have at least partly coincided with the actual situation at the time.³¹ She was not the only person who spoke about the lack of saunas.³² As part of plans to build a swimming pool in the interwar period, “the director of the department of health, Dr. Mickus, persistently highlighted that the question of saunas was of prime importance in our land: first of all we must provide the conditions for people to wash themselves clean, and only then can we teach them to swim.”³³

With the start of the first Soviet occupation, the executive committee’s resolution on the mandatory maintenance of saunas outlined in detail the main

08-20), in: Lietuvos nacionalinė Martyno Mažvydo biblioteka (LNB) [National Library of Lithuania], Manuscripts Department, col. 25-481, p. 2.

²⁹ Ibid., pp. 3, 8.

³⁰ Ibid., p. 3.

³¹ Marijampolė district doctor’s announcement, 1942-05-11, at their conference in Kaunas, in: LCVA, col. R-627, inv. 1, file 223, p. 15.

³² The press also wrote about the poor condition of saunas, highlighting that many Lithuanian doctors considered body hygiene to be of secondary importance: VYTAUTAS JUŠKYS: Odos švara ir ligos [Body Hygiene and Illnesses], in: Mūsų rytojus, 1928-05-03, included in: Extracts from various newspapers (as in footnote 21), p. 29.

³³ V. KVIKLYS: Kovodami su parazitais išvengsime ligų [We Will Prevent Diseases by Fighting Parasites], in: Ūkininko patarėjas, 1939-11-16, included in: Extracts from various newspapers (as in footnote 21), p. 53. In locations where saunas were a rarity, they would be fired up only two or three times before major celebrations. Everywhere else, they were used once or twice a month. According to TRINKA, p. 309, in 1939, they were used two or three times a month. If there was a shortage of saunas, three families at a time would attend at once (first the men, then the women). It was not just the intensity of sauna use that changed, but also some of the habits in the way they were used – a family often used the same bunch of birch branches when they were taking a sauna, but later on each member had their own.

sanitation requirements for constructing new saunas. Incidentally, orders for the construction of saunas (for example, in Kaunas) had been announced even before the war. New public saunas with facilities for at least twenty bathing cubicles had to be designed such that they could be transformed into disinfection centers without any additional rebuilding efforts. The staff were to be free of any infectious diseases and were subject to regular monthly check-ups.³⁴ These were just some of the many official instructions.

When Germany invaded the Soviet Union and occupied Lithuanian territory, memories of World War I and the sanitation problems of that time were still rather fresh in society. In response, in 1942 the Executive Health Board director Balys Matulionis spoke at the congress of all the district and city doctors (some German officials were also likely to have been present), outlining possible sanitation guidelines under the conditions of occupation. He described Lithuania as a historically peasant country where the majority of the population lives in villages and small settlements, with only a minority living in larger cities, which is why rural locations were identified as the main focus of health care.³⁵ According to him, each war could be associated with a decline in sanitary conditions and an increase in epidemics, which is why such matters had to be a priority in order to protect Lithuania from epidemic diseases (such as typhus fever).³⁶ General sanitary conditions in Lithuania, or in the other occupied countries, were hardly a priority for the Germans. Protection from the spread of epidemic diseases, meanwhile, was of the utmost importance, which is why the German efforts to improve sanitation focused on this sphere in particular. One of the main instruments in fighting these diseases were saunas, which is why they and the Jewish mikvah were sometimes repurposed as disinfection chambers.

A census of saunas was also conducted, taking note of the total number and the owner of each sauna as well as its dimensions, the number of hours it could be open in a day, etc. In 1942, there were 350 public saunas in Lithuania (already including the Vilnius region), of which 294 were fit for use, and 57,704 family saunas³⁷ (with 56,999 suitable for use).³⁸ If the newly joined Ašmenos and Svyriai districts had not been counted, the number of family saunas would have been a little smaller—55,257 (of which 54,614 were suitable). If we compare the sauna statistics for 1928 and the period of German

³⁴ Mandatory resolution of the executive committee for the maintenance of sauna sanitary conditions, date unknown in: LCVA, col. R-769, inv. 3, file 9, pp. 22–27; Kaunas district mandatory resolution no. 18, 1941-05-05, for the maintenance of sauna sanitary conditions, Kaunas 1941 [archival evidence is missing here – it doesn't look like a book or publication].

³⁵ Speech by Matulionis at the congress of all district and city doctors, 1942-05-11 to 1942-05-12, in: LCVA, col. R-627, inv. 3, file 40, not pag.

³⁶ Ibid.

³⁷ Their identification as family saunas most likely meant they were an equivalent to village saunas.

³⁸ Sauna statistics for 1942, in: LCVA, col. R-627, inv. 3, file 334, p. 197.

occupation, we see that the number of village saunas that were fit for use by 1942 had increased by 17,913 (in 1942 in the Vilnius region, there were 2,412 suitable family saunas). Statistics were most likely not collected for the number of new saunas built in 1941 and 1942.

Sauna Renovation and (Re)building

In order to protect themselves from the spreading typhus epidemic, German officials ordered that some saunas had to be transformed into disinfection chambers. For example, an order issued by the Vilnius regional commissioner on 12 December 1941 gave residents fourteen days to repurpose a sauna in the Vilnius district, yet due to a shortage of iron and the fact that winter was an unsuitable time for such work, the population did not go through with this reconstruction.³⁹ This process undoubtedly took place in Lithuania, probably most intensively from 1942. There is documentation of orders that new saunas had to be built, existing ones had to be repurposed, and that Jewish mikvah had to be transformed into disinfection chambers. One ritual Jewish bathing house was planned to be converted into a sanitation center with a disinfection chamber on Lukšio Street in Kaunas.⁴⁰ An Alytus district doctor also wrote about the demand for the Jewish community's mikvah and that one such so-called Jewish sauna was already being used in Butrimonys. In his view, construction would have to be completed before the next winter to ensure that there would be at least one sauna in each village.⁴¹

The executive officer for health affairs requested the preparation of three types of sauna designs. The first was a five-person village sauna that farmers could install themselves. It consisted of a bathing room with a barrel for heated water and an annex for getting dressed. A township ten-person sauna had to include a bath, several showers, and a disinfection chamber. The design for a district city, thirty-person sauna had a waiting room, a room for getting undressed, two bathing rooms, a hot steam room, a room for getting dressed, two baths, showers, and a disinfection chamber.⁴² When commenting on the latter design, the director of the hygiene institute said it more or less met with sanitary requirements, but that more showers had to be planned in all three

³⁹ Notice from the Vilnius District Health Board, 1942-05-08, to the Executive Health Board about the fight against typhus, *ibid.*, inv. 3, file 330, p. 401.

⁴⁰ Notice from the head of the health department and the Kaunas city epidemiologist, 1941-12-18, to the Executive Health Board's sanitation department regarding the installation of disinfection chambers, *ibid.*, inv. 1, file 89, p. 63.

⁴¹ Notice from an Alytus district doctor, 1942-06-30, to the director of the Executive Health Board's sanitation department, *ibid.*, inv. 3, file 330, p. 479.

⁴² Notice from the executive health affairs officer, 1942-04-03, to the executive construction board department, LCVA, col. R-627, inv. 3, file 334, p. 77.

sauna types.⁴³ Most importantly, by adding his comments, the institute director showed he was focused not just on the conditions under German occupation but primarily trying to predict the possible future requirements after the war:

“We could presume that sports will become increasingly popular in post-war Lithuania, and to this aim there will be demand for more convenient and cheaper means of maintaining personal hygiene. Public shower facilities will be necessary in cities and towns. It should also be considered whether they should be designed separately or together with saunas.”⁴⁴

In the surviving desired sauna designs project, a total of 87 new public saunas were slated for construction in Lithuanian cities and towns, each with a disinfection chamber and a hot-dry air room nearby. The largest number of saunas was planned for Vilnius (16) and Kaunas (12). In 1942, there were 8 suitable public saunas in both Vilnius and Kaunas, so their number had to increase significantly. More than one was planned for construction in Panevėžys (3), Šiauliai (3), Marijampolė (2) and Ukmergė (2), while one each was planned for numerous other towns.⁴⁵

It is quite difficult to determine the actual number of saunas installed, as it is unlikely that a summary report was prepared, while the surviving documents usually only recorded one-off instances of sauna construction. One was described in a notice by a doctor from the Kaunas district, where the local administration had firmly decided to build a new sauna with a disinfection chamber. The construction plan and all the materials had already been prepared, the foundations were laid, and columns for the walls were already standing.⁴⁶ In the Biržai district, where the number of saunas was already relatively larger compared to other regions in Lithuania, according to the district board's notice, the *Bürgermeister* and rural sub-district heads had the obligation of organizing sauna construction in all the towns, villages, and in the city. They had to be built through the joint efforts of the population who would eventually use them, and until they were constructed, orders were given to eradicate lice by using flax-drying rooms often built as part of barns in the region.⁴⁷ It is difficult, however, to identify how this obligation functioned. The implementation of certain parts of this requirement is questiona-

⁴³ The spray heads mentioned in the document were probably the equivalent of a simplified shower.

⁴⁴ It was also mentioned that the district sauna had to be enlarged. A hair-cutting facility was also to be planned nearby. Notice from the head of the hygiene institute, 1943-03-11, to the executive health inspector regarding the sauna construction project, in: LCVA, col. R-627, inv. 3, file 213, p. 1.

⁴⁵ Project for new saunas, *ibid.*, file 334, pp. 199–200.

⁴⁶ Notice from a Kaunas district doctor, 1943-12-09, to the Executive Health Board Sanitation Directorate, *ibid.*, file 329, not pag.

⁴⁷ Notice from the Biržai district construction department 1942-01-10, to a Biržai district doctor, the Biržai *Bürgermeister* and all small rural district elders in the Biržai district regarding the construction of new saunas, in: LCVA, col. 805, inv. 1, file 431, p. 63.

ble, especially the part about the collective construction of saunas. This is probably an unfulfilled aspiration.

Aside from the saunas being newly constructed, some were renovated. A doctor from Vilkaviškis described this process.⁴⁸ Similar information exists about other locations, as well.⁴⁹ Nonetheless, these sauna statistics are not yet conclusive evidence of the sanitary situation. Juškys' observation was very important:

“It is not enough to have numerous saunas, it is necessary that as the number of saunas increases, the level of culture of the population should also grow, because otherwise this will be merely a formal, rather than a fundamental task. This is especially evident in the cases of Balbieriškis, Jonava, and Vilnija, to which the eyes of our social cultural educators should turn.”⁵⁰

It is unclear whether the above-mentioned sauna construction project was an officially certified document, as it is more similar to a draft version. However, certain features of progress in this sphere can be spotted, which were unavoidably overshadowed by the bombing of cities and outbreaks of fire. The lack of saunas remained even after World War II, as bringing about a radical change to the situation over a short period of time was obviously difficult.⁵¹

Delousing of the Population

The German occupying administration issued orders to build or remodel saunas to fight typhus. Because this disease is transmitted via lice, their eradication became one of the main sanitation objectives at the time. Under war conditions, lice populations swelled, but they had been relatively noticeable in the daily life of the population even before World War II. Already in 1932, Aleksandras Račkus, a doctor of Lithuanian origin who at that time lived in Chicago, reported:

⁴⁸ Vilkaviškis district doctor's review on sanitation in 1941, in: LCVA, col. R-627, inv. 1, file 122, p. 579.

⁴⁹ It is unknown whether the Nemenčinė rural district elder was writing about the reconstruction of saunas as delousing centers, or their renovation, but he did state: “in the rural district in question, saunas were improved in every village and town.” Notice from a Nemenčinė elder, 1942-02-05, to a Vilnius district head about the improvement of saunas and delousing of the population, in: LCVA, col. R-685, inv. 4, file 34, p. 78.

⁵⁰ VYTAUTAS JUŠKYS: Dėmėtosios šiltinės 1941–1942 mt. epidemija [Spotted Fever in 1941–1942 Epidemic], in: Vyriausiosios sveikatos valdybos žinios (1943), 5, pp. 283–340, here p. 326.

⁵¹ Publications released by the LSSR's Ministry of Health Sanitary Education Chambers in the 1960s were still lamenting the insufficient number of saunas: J. STARKAS: Statykime pirtis [Let's Build a Sauna], Vilnius 1960; J. ŠTARKAS: Apie kūno švarą ir pirčių naudojimą [About Body Cleanliness and the Use of Saunas], Vilnius 1962; A. SAVULIONIS: Statykime pirtis [Let's Build a Sauna], Vilnius 1963.

“Each American who has visited Lithuania and returned talks a lot about fleas and lice. These parasites really annoy American visitors. Lice and fleas are so rare in America that there are people who have never seen these parasites in their lives. Young Americans, having heard their parents’ stories about fleas, become so interested in them that they go straight to the entomology section in a museum to check out European flea exhibits.”⁵²

A press article announced in a sarcastic manner that, in the years 1918–1920, Lithuania had suffered more from lice than from attacks by the Bolsheviks, Bermontians, and General Łucjan Żeligowski.⁵³ As a result, they had already developed a variety of ways to combat lice even before the German occupation. One of these methods was public education to combat myths that prevailed in everyday life and persisted even during World War II. Back in 1927, the doctor Lazaris Epšteinaiš wrote: “Our first step must be to spread knowledge about hygiene within the population, as far as the darkest corners of our land.”⁵⁴ Another doctor, Vladas Kviklys, countered a common belief that lice lived within the human body: “First of all, everyone should remember that it is wrong to think that lice come out of the body and can therefore not be eradicated completely. This is not true!”⁵⁵ It was also thought that they came from sweat or simply appeared on a person under severe stress.⁵⁶ The appearance of lice was also often understood through the prism of occult practices.⁵⁷

Under German occupation, the Lithuanian press frequently included medical reports informing the population that lice did not spontaneously appear on a person due to stress and that lice did not live within the human body.⁵⁸ Attempts were made to override the erroneous conviction that lice were necessary for the human body because they were supposed to destroy undesirable materials on the human body.⁵⁹ Many myths related to hygiene were rife during the war years as well—just as under normal life conditions; changing habits was a rather slow process, and the erroneous convictions that provided the foundation for conditions of daily life were difficult to overcome. Epšteinaiš noted back in 1927 that

⁵² A. RAČKUS: Blakės, blusos ir utėlės [Bed Bugs, Fleas and Lice], in: *Sveikata brangus žmogaus turtas*, 1932-05-05, included in: LNB Manuscripts Department, col. 63-61, p. 8.

⁵³ Apie utėles [About Lice], in: *Lietuvos ūkininkas*, 1924-12-12, included in: Extracts from various newspapers (as in footnote 21), p. 13.

⁵⁴ EPŠTEINAIŠ (as in footnote 21).

⁵⁵ KVIKLYS (as in footnote 33).

⁵⁶ Apie utėles, blusas ir blakes [About Lice, Fleas and Bedbugs], in: *Ūkininko patarėjas* (1927), July, included in: Extracts from various newspapers (as in footnote 21), p. 18.

⁵⁷ Apie utėles (as in footnote 53).

⁵⁸ Extracts from various newspapers (as in footnote 21), p. 25.

⁵⁹ Naikinkime dėmėtosijs šiltinėj platintojus [Let’s Destroy the Distributors of Spotted Fever], in: *Ūkininko patarėjas*, 1943-10-29, included *ibid.*, p. 65.

“Over many centuries, people have become used to lice, considering them an inconvenience at most. Thus, it is understandable why it is so hard to change the psychology of our people. It is hard to instill in them an understanding of the danger posed by a lice infestation. What is even more difficult is teaching them to fight those parasites.”⁶⁰

During the German occupation, the both the German forces and local medical professionals intensified their efforts to combat potentially dangerous misunderstandings within everyday life. It is difficult, however, to pinpoint the specific mental changes that took place or the appropriation of propaganda in the sphere of hygiene.

According to the instructions of the *Reichskommissar für das Ostland*, the commissariat in each district had to have at least one large delousing center. As a means of adapting to the existing living conditions, bathing could also be done in saunas. Where there were no saunas, instructions were given to build facilities for the eradication of lice.⁶¹ In the instructions for the modification of simple village saunas into sweating and disinfection chambers, elders were ordered to ensure that each village should have two saunas a reasonable distance from one another. One was to be for sweating out the body, the other for disinfecting clothing. In order to reach the required temperature, the saunas themselves had to be modified somewhat. They were heated from the so-called *priepirtis*, or sauna annex. This structure, which had typically been separated from the sauna by a wooden wall, now had to be replaced by a brick wall.⁶²

According to the mandated procedure, the person being deloused would first undress and leave a set of cleaned clothing in the entry room to the sauna. Male persons were then to have their heads and faces shaved. One appointed person was responsible for the de-lousing. This procedure was performed using a creolin soap solution, to which kerosene was ideally added. Also, the instructions explicitly called for the use of a brush, for lice could cling to the skin quite firmly. The attendants overseeing the delousing procedure could ask for the disinfection to be repeated if any lice were still visible. After their body had been deloused, the person would have to wait in a bare minimum of clothing while the rest of their garments were disinfected.⁶³ A temperature of ninety degrees was needed for delousing, and it was recommended to keep clothing at this temperature for one to one and half hours. The temperature did not have to exceed 100 degrees. If pieces of paper placed

⁶⁰ EPŠTEINAS (as in footnote 21).

⁶¹ Notice from the *Reichskommissar für das Ostland*, 1941-12-23, to the general commissioners, in: LCVA, col. 805, inv. 1, file 431, p. 76.

⁶² As outlined in the instructions of December 1941 for the use of village saunas for delousing, *ibid.*, pp. 55–56.

⁶³ Notice from the Kaunas district commissar, 1941-12-09, to the Lazdijai district head, in: LCVA, col. 653, inv. 1, file 1, p. 6; Instructions for delousing procedures, in: LCVA, col. R-627, inv. 1, file 89, p. 1.

on the window ledge began to turn brown, this meant the temperature had to be reduced.⁶⁴ In at least one instance, in the disinfection chamber near the sauna in Rokiškis, clothing that had been hung up there even happened to catch fire.⁶⁵

While the legislation outlined a general framework for maintaining basic hygiene within the population as described, this process was not always so straightforward in the context of everyday life. There was a shortage of disinfection attendants, while the director of the Executive Health Board, Matulionis, wrote that the existing personnel were not fully qualified.

“These visits would reveal some oddities. Pest eradication was being conducted in one rural district village hut using sulfur vapors. Of course, ‘*lege artis*.’ But imagine our surprise when upon opening one ‘pest-eradicated’ shack, a flock of live ‘chemical-treated’ chicks escaped that had not been noticed in time.”⁶⁶

The poor living conditions of the population also meant that the application of disinfection procedures was not always successful.⁶⁷ In order to more effectively halt the spread of disease and increase the number of disinfection and pest eradication personnel, the Executive Health Board organized educational courses that highlighted bathing in rural village conditions.⁶⁸ The instructions for organizing sanitation activities in villages mandated that villagers should heat water on their stoves to dilute the disinfectant, while wealthier villagers were ordered to iron the clothes they would be changing into after delousing. Clothing set aside for washing had to be thrown into a corner, where disinfectant would be poured on them. This liquid also had to be sprayed on beds, floors, walls, and all other surfaces and objects. As the liquid had a strong, lingering odor, villagers had to wash their clothes and other items for a long time before the smell disappeared completely.⁶⁹

The lack of building materials was sometimes used as an excuse for not re-fitting saunas as delousing centers. However, in a majority of places, this cleansing nonetheless took place according to the instructions given—one sauna was for bathing, and the other was used for delousing clothing.⁷⁰ Orders were issued to transform all private saunas in the Telšiai district into public saunas, so that people who did not have their own saunas could use them,

⁶⁴ Instructions, December 1941, for using village saunas for delousing procedures, in: LCVA, col. 805, inv. 1, file 431, pp. 55–56.

⁶⁵ Announcement for the sanitation check from 1944-06-15 to 1944-06-18 in Rokiškis city, in: LCVA, col. R-627, inv. 3, file 213, p. 28.

⁶⁶ JUŠKYS, p. 290.

⁶⁷ Notice from the Vilnius district board, 1942-05-08, to the Executive Health Board regarding typhus, in: LCVA, col. R-627, inv. 3, file 330, p. 402 [emphasis in original].

⁶⁸ Executive Health Board notice, 1941-12-12, to all the district and city doctors, in: LCVA, col. 415, inv. 1, file 2, p. 37.

⁶⁹ Instructions for pest eradication in rural conditions, in: LCVA, col. R-769, inv. 3, file 95, p. 24.

⁷⁰ List of villages in the Šumskas rural district, 1942-01-30, with the number of inhabitants who were deloused, in: LCVA, col. R-685, inv. 4, file 34, p. 78.

providing they brought their own firewood. The orders of a doctor from this district allowed appropriating any sauna for disinfection and delousing purposes. The owner would provide firewood at prices set by the government, while the municipality provided firewood for poorer villagers who could not pay.⁷¹ Information has survived suggesting that sometimes, according to the terminology at the time, town saunas were synonymously referred to as delousing centers without any special modifications being made.⁷² The only sauna in Kretinga was referred to in this way, despite not being actively used due to a shortage of firewood, until the building was taken over by the German supervisors of the train station in Kretinga. According to one epidemiologist, there was not a single public sauna in operation in the district at the time. Many other places must have also faced similar firewood shortages.

By highlighting the importance of proper hygiene habits, information distributed to the local inhabitants frequently encouraged them to cleanse themselves personally. The head of the Department of Sanitary Education, Kazys Grinius, recommended eradicating lice in houses using hot soap solutions on the bare floor of rooms, as well as those objects which could be carried outside and any walls not covered in plaster, while a whitewash was recommended for plastered walls.⁷³ Articles published in the local press recommended washing clothing, bedding, and similar articles more often, also adding that the shortage of laundry powders and the like was not an appropriate excuse for avoiding laundering such items. Despite the major shortage of soap and other products, the article suggested, people could also use soft rain water or melted snow and ash lye.⁷⁴

One of the main instruments for eradicating lice was the bread oven: inhabitants were urged to use the opportunity to clean their clothes while completing routine housework: "As soon as the bread has baked, place your clothes inside the oven while it is still hot and keep them there for around one hour. It is best if underclothes, mattresses, and bedding are boiled in lye. The old mattress straw should be burned."⁷⁵ Other measures were also available, including drying out clothes, putting them into quarantine, or placing them on an anthill.

The intensified fight against lice during the period of German occupation is also illustrated in decrees such as the following issued by the district board in Biržai: "All people with a lice infestation must immediately register [their

⁷¹ Telšiai district head's order no. 12, in: LCVA, col. R-627, inv. 1, file 150, p. 59.

⁷² Announcement about the sanitation check conducted in Kretinga and Tauragė from 1944-05-29 to 1944-06-08, *ibid.*, inv. 3, file 213, p. 3.

⁷³ KAZYS GRINIUS: Dėmėtoji šiltinė (Typhus exanthematicus) [Spotted Typhus (Typhus exanthematicus)], in: *Lietuvių kalendorius 1943 metams*, Kaunas 1943, p. 56.

⁷⁴ Naikinkime dėmėtosios šiltinės platintojus (as in footnote 59), p. 66.

⁷⁵ D-ras Vatiekūnas: Saugokimės dėmėtosios šiltinės! [Let's Watch out for Spotted Typhus!], in: P. A. Balsas, March 1944, included in: *Extracts from newspapers about typhus and the parasites that cause it*, in: LMAVB Manuscripts Department, col. 95 (JE)-185, p. 3.

case] with the city and rural district municipalities.”⁷⁶ If a commission found lice on someone who had not registered the infestation, the person could be fined. It is unclear to what extent similar methods were applied in different districts, but a number of documents record the number of those deloused. Most importantly, this information testifies to the forcible means by which the regular boundaries of everyday life were being redrawn.

A notice from the health board in Vilnius district indicates that small rural district heads had to ensure that the elders would organize regular bathing of villagers in saunas, and that delousing procedures would be carried out no less than once a month. Elders had to appoint trustworthy villagers who were aware of the importance of hygiene for this purpose; they would then oversee the procedures and the implementation of the required organizational work. Anyone who did not participate willingly would be bathed and deloused by force,⁷⁷ and such individuals would be reported.⁷⁸ It is likely that some officials certainly took this part of the decree seriously, as the Rudamina rural district head stated that “the issued decree is being carried out with due diligence and dedication. In the larger villages, saunas have been adapted for delousing the population. All elders have been given strict orders to make people attend the sauna every second week for the purposes of delousing.”⁷⁹ The Telšiai district head ordered that “families where a lice infestation has been registered will be forced into the sauna.”⁸⁰ Sources from the period of German occupation recorded the numbers of people deloused in specific villages. In the Turgeliai district, delousing was carried out on a total of 5,170 people,⁸¹ 6,603 in Šumskas,⁸² and 9,686 in Mickūnai,⁸³ while in the Riešė district, calculations were also made of how many saunas were and were not prepared for the disinfection of the population (281 were prepared, eleven still had to be readied).⁸⁴

⁷⁶ Notice, 1942-11-14, to the Biržai City *Bürgermeister* and rural district heads regarding the registration of lice-infested individuals, in: LCVA, col. 805, inv. 1, file 431, p. 158.

⁷⁷ According to the terminology used in the document—using police measures.

⁷⁸ Notice from the Vilnius District Health Board, 1942-05-04, to a Vilnius district head about stopping the spread of typhus, in: LCVA, col. R-685, inv. 4, file 34, p. 219.

⁷⁹ Notice from a Rudamina rural district head, 1942-01-28, to a Vilnius district head about the delousing of the population, *ibid.*, p. 71. Although this record is not very detailed, the possibility of misinformation cannot be ruled out.

⁸⁰ Order no. 12 of the Telšiai district head, in: LCVA, col. R-627, inv. 1, file 150, p. 59.

⁸¹ For example, 200 people in Balandiškės village, 80 in Mankuniškės, 30 in Baišiškės: List of villages in the Turgeliai rural district indicating the number of inhabitants who were deloused, in: LCVA, col. R-685, inv. 4, file 34, p. 76.

⁸² List of villages in the Šumskas rural district, 1942-01-30 (as in footnote 70).

⁸³ List of locations in the Mickūnai rural district where delousing procedures were carried out, in: LCVA, col. R-685, inv. 4, file 34, pp. 87–88.

⁸⁴ List of disinfection saunas (prepared and not prepared) and locations within the boundaries of the Riešė rural district where delousing of the population was carried out, *ibid.*, pp. 83–85.

Conclusions

In the rhythm of daily life, the formation of sauna habits was greatly influenced by the already well-established habits adopted from past generations. An example is the Suvalkija region in the nineteenth and early twentieth centuries, where village saunas were used least of all despite the fact that this region was one of the most economically and culturally advanced in Lithuania. The latter aspect only serves to confirm that habits of everyday life change at a slow pace. That is why the sanitary instructions appearing in the pre-war press coincided with the content in periodicals from 1941 to 1944.

The German occupation highlighted pre-war sanitation issues in Lithuania, but efforts to solve these problems were hampered during the war years due to the lack of building materials. Both German officials and local medical professionals responsible for sanitation sought to promote procedures aimed at stopping the spread of epidemics in Lithuania. Aside from active propaganda, attempts were sometimes made to change the everyday habits of the population by force. These measures were merely an external solution and had no deeper effect on the culture of cleanliness in Lithuania. They were more of a “quick-fix” to fight against the outbreak of epidemics, with no continuity into subsequent daily life.

The development of the sauna network, which took place both during the interwar years and during the first Soviet occupation in 1940–1941, had the opportunity to continue under the German occupation. The goal of Lithuanian medical professionals to solve Lithuania’s sanitary problems coincided with the German occupying government’s aims of protecting itself against epidemics. During the war, the right conditions did not exist for progress in this sphere due to the lack of building materials, but attempts were nevertheless made to build new saunas or renovate existing ones. The final number of established saunas or the number destroyed in the war cannot be calculated. It is likely that changes were mostly noticeable in the building and renovation of public saunas. However, these changes were rather insignificant as most were overshadowed by war events.

Bibliography

Unpublished Sources

- Lietuvos centrinis valstybės archyvas (LCVA):
col[lections] R-415, R-417, R-627, R-685, R-769, R-805.
- Lietuvos istorijos institutas (LII), Manuscripts Department:
col. 73.
- Lietuvos mokslų akademijos Vrublevskių biblioteka (LMAVB), Manuscripts Department:
col. 95 (JE)-302.
- Lietuvos nacionalinė Martyno Mažvydo biblioteka (LNB), Manuscripts Department:
col. 25-481, 63-61.

Literature

- BEINFELD, SOLON: Health Care in the Vilna Ghetto, in: GRODIN, pp. 106–140.
- BRASLAUSKAS, J.: Gyventojų aprūpinimas ir kasdienis gyvenimas nacių okupuotoje Lietuvoje, in: *Genocidas ir rezistencija* (2016), 40 (2), pp. 28–50.
- BRAUNS, JACK: Medicine in the Kovno Ghetto, in: GRODIN, pp. 155–163.
- BROWNING, CHRISTOPHER R.: *Ordinary Man: Reserve Police Battalion 101 and the Final Solution in Poland*, New York 1998.
- BUBNYS, ARŪNAS: *Vokiečių okupuota Lietuva (1941–1944)*, Vilnius 1998.
- BUBNYS, ARŪNAS: *Vilniaus getas, 1941–1943*, Vilnius 2013.
- BUBNYS, ARŪNAS: *Kauno getas, 1941–1944*, Vilnius 2014.
- BUMBLAUSKAS, ALFREDAS—EIDINTAS, ALFONSAS—KULAKAUSKAS, ANTANAS—TAMOŠAITIS, MINDAUGAS: *Lietuvos istorija kiekvienam*, Vilnius 2018.
- COHEN, JR., M. MICHAEL: Overview of German, Nazi, and Holocaust Medicine, in: *American Journal of Medical Genetics, Part A* 152 (2010), 3, pp. 687–707.
- CREW, DAVID F.: *Alltagsgeschichte: A New Social History “From Below”?*, in: *Central European History* 22 (1989), 3/4, pp. 394–407.
- DIECKMANN, CHRISTOPH: *Deutsche Besatzungspolitik in Litauen, 1941–1944*, 2 vols., Göttingen 2011.
- GRINIUS, KAZYS: *Dėmėtoji šiltinė (Typhus exanthematicus)*, in: *Lietuvių kalendorius 1943 metams*, Kaunas 1943, p. 56.
- GRODIN, MICHAEL A. (ed.): *Jewish Medical Resistance in the Holocaust*, New York 2017.
- JUŠKYS, VYTAUTAS: *Dėmėtosios šiltinės 1941–1942 mt. epidemija*, in: *Vyriausiosios sveikatos valdybos žinios* (1943), 5, pp. 283–340.
- KLUMBYTĖ, NERINGA—ŠLIAVAITĖ, KRISTINA: Įvadas. Nekasdieniškos kasdienybės: Visuomenė, istorija ir galia, in: *Lietuvos etnologija* (2017), 26, pp. 7–11.
- LUGOVOJUS, MANTVYDAS: *Kasdienis gyvenimas Kaune vokiečių okupacijos metais (1941–1944): Būstas, maistas ir pramogos*, in: *Kauno istorijos metraštis* (2016), 16, pp. 122–137.
- MEŠKAUSKAS, JUOZAS: *Lietuvos medicinos istorija: Medicinos mokslas, gyventojų medicininio ir socialinio aprūpinimo istorinė ir dokumentinė apžvalga*, Čikaga 1987.
- OFFER, MIRIAM: *Medicine in the Shavli Ghetto: In Light of the Diary of Dr Aaron Pik*, in: GRODIN, pp. 164–172.
- SAVULIONIS, A.: *Statykime pirtis*, Vilnius 1963.
- ŠOPAUSKAS, JONAS: *Ligotumas Lietuvoje mirties priežasčių ir apkrečiamų ligų registracijos duomenimis*, Kaunas 1939.
- SS., M.: *Lietuvos pirtys*, in: *Savivaldybė* (1931), 1, pp. 29–30.
- ŠTARKAS, J.: *Statykime pirtis*, Vilnius 1960.
- ŠTARKAS, J.: *Apie kūno švarą ir pirčių naudojimą*, Vilnius 1962.

STONE, LEWY—HE, DAIHAI—LEHNSTAEDT, STEPHAN—ARTZY-RANDRUP, Yael: Extraordinary Curtailment of Massive Typhus Epidemic in the Warsaw Ghetto, in: *Science Advances* 6 (2020), 30, <https://www.science.org/doi/10.1126/sciadv.abc0927> (2022-03-22).

ŠVIPAS, VLADAS: *Ūkininko pirtis*, Kaunas 1934.

ŠVIPAS, VLADAS: *Pirtis ir skalbykla*, in: *Kaimo statyba*, Vilnius 1936, pp. 230–232.

TRINKA, VLADAS: *Kūno švara Lietuvos kaime*, in: *Gimtasai kraštas* (1943), pp. 302–313.

