

Worn but not forgotten: the soviet shoes recycling in Ukraine in the 1920s

Tetiana Yu. Perga

Technical University of Berlin

PhD. (History), Research Fellow (Germany)

email: pergatatiana@gmail.com

ORCID: <https://orcid.org/0000-0002-8725-3451>

ResearcherID: <https://www.webofscience.com/wos/author/record/ACE-8751-2022>

Abstract.

The aim of the article is to analyze the emergence of Soviet state policy on shoe recycling in the early 1930s, focusing on the Ukrainian SSR as a case study. **Scientific novelty:** While a growing body of literature addresses Soviet daily life, materiality, consumption, and repair practices, the area of shoe recycling remains underexplored at both the Union and Republican levels. Examining this niche aspect offers insight into the complexities of Soviet economic strategies and ideological narratives around resourcefulness, self-sufficiency and waste recycling. **Research methodology:** The study draws on previously unexplored Ukrainian archival materials, statistical collections of USSR and Soviet legislation, enabling a comprehensive and multi-dimensional analysis of the economic, social, and political implications of shoe recycling. The article also includes a comparative analysis of shoe recycling practices in the USSR and Germany during the 1920s and 1930s. This comparative angle sheds light on how both countries—facing resource scarcity and aim for self-sufficiency - leveraged recycling within their leather and footwear industries, albeit with differing ideological drivers and practices. **Conclusions:** In this article, it is argued that Soviet shoe recycling was more than just a practical response to resource scarcity; it was also ideologically motivated, aiming to demonstrate the advantages of the socialist system. The shoe recycling policy became an essential component of a broader waste reutilization strategy that began in the early 1920s. The so-called "shoe problem" served as a catalyst for advancements in science, technology, and alternative materials, as well as for the establishment of a state-led shoe repair program, a key element in the recycling process. At the same time, the ambitious plans of the Soviet government faced implementation challenges due to shortages in the Soviet economy.

Keywords: shoes recycling, waste recycling, USSR, Ukrainian SSR, Third Reich, Weimar Republic.

Ношене, але не забуте: вторинне використання взуття в радянській Україні 1920-х років

Тетяна Перга

Технічний університет Берліну

кандидат історичних наук, науковий співробітник (Німеччина)

email: pergatatiana@gmail.com

ORCID: <https://orcid.org/0000-0002-8725-3451>

ResearcherID: <https://www.webofscience.com/wos/author/record/ACE-8751-2022>

Анотація.

Метою статті є аналіз становлення радянської державної політики щодо вторинного використання взуття на початку 1930-х років на прикладі УРСР. **Наукова новизна:** у той час як зростає кількість літератури, присвяченої радянському повсякденному житті, матеріальності, споживанню та практикам ремонту, ресайклінг взуття залишається недостатньо дослідженим як на союзному, так і на республіканському рівнях. Вивчення цього нішевого аспекту дає змогу зрозуміти складність радянських економічних стратегій та ідеологічних наративів щодо винахідливості, самозабезпечення та переробки відходів. **Методологія дослідження:** Дослідження спирається на раніше не досліджені українські архівні матеріали, статистичні збірки та законодавство Радянського Союзу, що дозволяє комплексно та багатовимірно аналізувати економічні, соціальні та політичні наслідки вторинного використання взуття. У статті також проведено порівняльний аналіз цієї практики в СРСР та Німеччині протягом 1920-1930-х років, котрий проливає світло на те, як обидві країни, які стикаються з дефіцитом ресурсів і прагнули до автаркії, використовували вторинно взуття в шкіряній та взуттєвій промисловості, хоча й з різними

.....
ідеологічними мотивами та практиками. **Висновки:** у цій статті стверджується, що ресайклінг радянського взуття був не просто практичною відповіддю на дефіцит ресурсів; а й ідеологічно вмотивованим заходом, що мав на меті продемонструвати переваги соціалістичної системи. Він став важливим компонентом ширшої стратегії вторинного використання відходів, яка почалася впроваджуватись на початку 1920-х років. Так звана «проблема взуття» послужила каталізатором прогресу в розвитку науки, технологій і пошуку альтернативних матеріалів, а також державної програми ремонту взуття, як ключового елемента його вторинного використання. Водночас реалізація амбітних планів радянського уряду зіткнулася з проблемами через характер радянської економіки дефіциту.

Ключові слова: вторинне використання взуття, ресайклінг відходів, СРСР, УРСР, Третій Рейх, Веймарська Республіка

The Problem Statement. Ukrainian SSR, Mykolaiv. On July 16 and 17, 1930, two major disturbances occurred in connection with the distribution of leather shoes. On the morning of July 16, a large crowd gathered outside Store No. 16. Accusations were heard from the crowd, directed at the store employees, who were allegedly hiding the shoes. Attempts were made to assault the store manager's assistant. On July 17, as early as 1 a.m., large lines began forming outside the stores... with crowds of 600–800 people. At the opening of Store No. 16, a crowd surge occurred, prompting the store administration to halt shoe distribution. This decision sparked public outrage. Significant crowding also occurred in the nearby park, where Central Workers' Cooperative employees were compiling lists for shoe voucher distribution. The appearance of mounted police especially enraged the crowd, particularly when one mounted officer charged at the crowd at full gallop. Shouts were heard: "We won't be frightened by whips; we have nothing to lose anyway, as we're already starving, barefoot, and in rags." [Specsvodka № 35]. Such incidents were not uncommon in the USSR during the 1920s and the first half of the 1930s, especially following the introduction of rationing for food and industrial goods.

In addition to addressing public dissatisfaction with the supply of essential and industrial goods, several other factors underscored the importance of sufficient leather shoe production in the USSR. Shoes symbolized the Soviet ideal of uplifting the working class and "liberating" the peasantry from poverty, while also reflecting the provision level for workers and supplying necessary equipment for factory workers and soldiers to perform their duties. Adequate footwear reduces dependency on imports and enhances mobility, productivity, and health among both urban and rural populations. The shortage of leather shoes and the difficulty in securing sufficient raw materials for production led Soviet leadership to launch a large-scale program for footwear reuse in the early 1930s.

The Aim of the Article. This article aims to analyze the emergence of Soviet state policy on shoe recycling in the early 1930s, using the Ukrainian SSR as a case study. It focuses on its reasons, peculiarities and problems of implementation. The institutionalization of this policy has not yet been the subject of extensive academic research, either at the Union level or within individual republics. Examining these cases will enhance the understanding of Soviet waste recycling practices prior to World War II and provide insights into the development of material culture and footwear consumption patterns in early Soviet society. To contextualize the early Soviet approach, comparisons will be made with European countries, particularly Germany during the Weimar Republic (1919–1933) and the early years of the Third Reich (1933–1940).

The Analysis of Sources and Recent Research. In her book "Shoes in National Socialism", Anna Sudrow examines the development of the footwear industry in the United States, Great Britain, and Germany from the mid-1920s to the late 1940s, linking this progression to political events and consumption patterns. She interprets the corresponding policies as outcomes of political priorities, ideological aims, decisions made within social structures, negotiations among social actors, and sectoral and institutional characteristics [Sudrow 2009]. This framework is equally applicable to Soviet footwear policy, which served not only economic purposes but also political priorities and ideological goals - to provide the proletariat and peasantry, now the dominant classes in Soviet society, with adequate quantity footwear made from leather or high-quality substitutes.

Currently, research on the history of footwear and waste recycling in early Soviet society is fragmentary. Some aspects of Soviet policy on paper waste have been examined by Brigitte Pristed [Pristed 2020]. The author of this article has analyzed the main conceptual and practical directions of waste recycling in the Ukrainian SSR, with a particular focus on rags [Perga 2023].

Literature examining everyday life [Eaton 2004; Kiaer, C., Naiman, E. 2005; Fitzpatrick 2008; Movchan, O. M. 2011], materiality [Golubev 2020], and consumption in early Soviet society [Gurova 2005; Vihavainen, T., Bogdanova, E. 2016; Skubii 2020] frequently references the issues surrounding clothing and footwear supplies in the USSR, which intensified after the introduction of the rationing system in 1928. Although this literature helps us reconstruct the context in which Soviet citizens lived during the early decades of Soviet rule, it lacks detailed data. However, it demonstrates that both the

state and the populace developed their own strategies to address shortages. Repair practices, which extended the lifespan of items and household goods, are among the most thoroughly documented solutions.

Today, there is a significant increase in research on repair practices. Soviet society is often described as a "society of repair," although repair practices have spanned centuries and have existed at least at the household level in all countries. Stefan Krebs and Heike Weber note that the gradual rise of consumer and throwaway societies in the 20th century led people, especially in wealthier regions, to place decreasing value on repair as a concept [Krebs, S., Weber, H. 2021, p.31]. However, this notion does not apply to the Soviet Union, where, due to a scarcity economy, many items were difficult to obtain, and authorities continually implemented experiments, improvement efforts, and crisis-response campaigns. As Ekaterina Gerasimova and Sof'ja Chuikina write, Soviet citizens were actively engaged in "repair projects" both as part of officially sanctioned social activity and within the everyday economy [Gerasimova, Chuikina, S. 2009].

When examining repair through the lens of materiality, researchers generally focus on specific repair practices, such as car repair (Tverdjukova 2018), transportation (Ruban 2020), social services (Borysenko 2008; Yankivska 2014) etc. What has been overlooked is the emergence of the first state programs related to footwear recycling, marking the continuation and expansion of waste recycling policies initiated in the early 1920s.

This study aims to fill an existing scholarly gap. Its sources include previously unexplored documents from Ukrainian archives, statistical collections from the USSR, and Soviet legislation from the first third of the 20th century.

The Results of the Research. Leather for Soviet industry. Significant attention was given to leather raw material procurement in the USSR, as it was used not only for footwear production but also for export, which generated currency. Consequently, the earliest decrees of the Bolshevik government focused on controlling leather raw material procurement. These included decrees such as "On the requisition at stations and docks of all manufactured and manufactured goods not purchased from warehouses stretching two days" [On the requisition at stations and docks 1917], "On Fixed Prices for Leather" [Resolution of the Supreme Council of the National Economy and the People's Commissariat of Food 1918], "On the Accounting of Finished Leather Imported from Abroad" [Resolution of the Supreme Council of the National Economy. On the accounting of finished leather 2018], "On Designating as Priority Work the Procurement of Animal Raw Materials, Leather, Furs, Goat Skin, Bristles, Hair, Wool, Horns, and Hooves" [Decree of the All-Russian Central Executive Committee. On the recognition of shock work 1918], "On the Establishment of the Main and Provincial Leather Industry Committees" [Resolution of the Supreme Council of the National Economy. On the Main and Provincial Committees 1919] etc. However, they and other decrees could not solve the problem.

Throughout the 1920s and 1930s, there was a catastrophic shortage of footwear in the USSR. Peasant families had 0.17 pairs of leather shoes per person in 1923-24, 0.28 pairs in 1928-1929, and 0.285 pairs in 1936 [Statistical table of the Central Statistical Bureau of the USSR "Purchase of footwear and fabrics 1953]; the families of factory workers in 1932 – 0.71 pairs, in 1933 – 0.73 pairs [Bjudzhety semejnyh fabrichno-zavodskih rabochih SSSR 1933]. The Soviet Union lagged significantly behind European countries in providing its population with footwear. For instance, in 1927, citizens of Germany averaged 1.3 pairs of shoes per person, those in Great Britain averaged 1.8 pairs, and in the United States, the figure was 2.6 pairs. Germans purchased a new pair of shoes every 6.5 months, while Americans did so every 4.5 months. Even in 1932, during the Great Depression, each German had an average of 0.9 pairs of leather shoes [Sudrow 2009, p.61, 132].

In the USSR during the interwar period, due to limited access to leather footwear and its excessive cost, most of the population, not only in rural areas but also in cities, wore non-leather shoes. In Russia, these included felt boots (*valenki*) with galoshes. American journalist Mendel Osherovich described the situation regarding leather footwear in Moscow in the early 1930s as follows: "Some wore boots with galoshes, while others wore boots without galoshes. What stands out most are the unattractive felt boots (knee-high felt boots) that people wear. These felt boots are worn not only by men but also by women" [Osherovich 2020, p.8]. In Ukraine, woven footwear such as *bast postoly*, *lapti*, and *khodaki* were more popular in rural areas. Peasants made them from fibers, vines, straw, or scraps of leather [Postoly, lapti, khodaky 2024]. Leather boots or shoes were a rarity, and it was quite common for entire families to share a single pair, wearing them in turns. During the summer, most people went barefoot. Urban residents tended to wear more leather footwear; however, the per capita availability depended on the financial situation of the owners. Wearing shoes was always a reflection and expression of high social status and economic well-being for their users. Most of the early Soviet population did not possess such status; therefore, very few people owned leather shoes.

The cultural consumption traditions of the Ukrainian population in the 1920s and 1930s had historical roots and differed from those of many European countries, where wooden footwear was

.....
predominantly used from the Middle Ages until the late 1930s. In Great Britain, this type of footwear was known as sabots. In Britain, Germany, and other countries, wooden shoes were a necessity for many social classes, including the poor and workers, although the disadvantages of wooden footwear included the rigidity of the soles and damage to wooden flooring. Footwear with wooden soles was often made from repurposed parts of leather shoes. Parts of old leather boots that could still be used were nailed to new wooden soles, thereby allowing for reuse. Used military footwear was particularly suitable for this purpose. The materials used included softwood from pine, and willow. In Germany, there were still 6,000 manufacturers of wooden footwear in 1933 [Sudrow 2009, p.82, 80], even though the production of leather shoes was beginning to develop actively. The durability of wooden footwear was attributed to its low cost - four times less than that of leather shoes.

The shortage of leather footwear in the USSR was caused by several factors, including the low capacity of the footwear industry, which, on one hand, was recovering quite slowly from the destruction caused by World War I (1914-1919), the Civil War in Russia (1918-1922), and the Bolshevik Revolution (1917). Thus, in 1923-1924, there were only 82 shoe enterprises across the Soviet Union, which increased to 109 in 1924-1925 and 125 in 1925-1926 [Industry 1925]. On the other hand, enterprises constantly faced a shortage of raw materials due to poor organization of the procurement process. The onset of collectivization in the second half of the 1920s and the Great Famine in Ukraine from 1932 to 1933 led to a significant reduction in the livestock population, as people began to slaughter or consume their animals: horses decreased by 54%, cattle by 46%, cows by 37%, and pigs by 37% [Itogi perepisi skota 1932], resulting in a contraction of the resource base for the leather industry.

Sheila Fitzpatrick points to another reason for the shortage of leather footwear: its inaccessibility for consumers due to the prohibition of individual labor following the rollback of the New Economic Policy (NEP) in 1928 [Fitzpatrick 2008, p.45] which had allowed the reintroduction of elements of capitalist relations and the expansion of the work of private entrepreneurs - cottage industries.

Strategies of Soviet Leadership to Overcome the Leather Problem

The development of the leather-footwear industry in the USSR during the interwar period was not only highly ideologized but also driven by a desire for autarky (self-sufficiency) aimed at creating a self-sustaining socialist economy that could stand independently of capitalist influences. By promoting autarky, the USSR sought not only to build economic independence but also to assert its ideological distinctiveness - the first socialist state in the world aimed to demonstrate its advantages, including consumption. A crucial component of this was ensuring the population with access to leather footwear.

The totalitarian political regime that began to take shape in the late 1920s relied on a command-administrative economy characterized by planning, which influenced the methods of development across many sectors, including leather-footwear.

To address the supply issue of footwear, the Soviet government implemented several strategies: the production of new leather shoes, the use of leather substitutes for this purpose, and the repair of footwear to extend its wear time, thereby reducing demand from the population. These strategies encompassed a wide range of organizational, financial, and technological measures that were part of a rationalization campaign affecting all almost areas of early Soviet society in the late 1920s.

To reduce the shortage of raw leather materials, Soviet authorities introduced the following measures:

- a) Stimulating the development of livestock farming.
- b) Harvesting secondary types of raw materials, such as dogs, pigs, camel, and seal skins.
- c) Rationalizing the collection, storage, sorting, and transportation processes.
- d) Economizing and rationalizing the use of leather raw materials, as well as utilizing waste and substitutes.
- e) Developing a more practical and simplified range of footwear, which was expected to significantly reduce leather consumption.

To eliminate the need for importing leather tanning agents, the construction of tanning-extraction factories using domestic raw materials was planned, along with the application of sulfate-cellulose extracts and various synthetic tanning agents [First Five-year plan 1928]. The increase in the yield of leather raw materials was to be achieved not only through the growth and consolidation of livestock but also through the rationalization of their removal, conservation, storage, sorting, and standardization. Plans included the construction of basic raw material warehouses for accumulating

products, concentrating, and specializing production, mechanizing processes, reducing internal transportation within factories, and introducing flow and conveyor systems in production.

The task of expanding the raw material base was to be accomplished using various surrogates and recycling elements employed abroad, such as rubber soles and heels, leather cardboard for backs, bridge scraps for re-gluing and for haberdashery, beech and maple for heel blocks, as well as the utilization of leather from old footwear.

Influence of “shoes problem” on the development of technologies

The leather shortage had a significant impact on the development of science and technology, highlighting the role of footwear in early Soviet society. Soviet scientists and practitioners conducted research to improve the quality of leather raw materials and refine technological processes in the footwear industry, with the goal of extending the lifespan of shoes. At the Plekhanov Institute of National Economy in Moscow, a leather laboratory and testing station were established under the All-Union Leather Syndicate. These facilities primarily focused on commodity studies related to standardization and process improvements in production, as well as methodological work and experimentation in leather tanning techniques.

Furthermore, a special sole committee and a scientific and technical council were created within the Syndicate. This initiative stemmed from the fact that, during the 1920s and 1930s, leather waste was repurposed for soles, which raised production costs. Technologists sought to reduce footwear production expenses while improving quality. As a result, extensive research was conducted on alternative materials, including rubber, which was eventually used for soles. However, rubber production was still in its early stages, and there was a shortage of this material, further complicating efforts to improve footwear quality.

Moreover, leather laboratories began to be established in footwear industry enterprises to ensure scientific control over technological processes. In 1918, there were six such laboratories; by 1923, their number had increased to 19; in 1925, there were 38; and by 1927, there were 50. Special expeditions from the institute conducted studies on tanning agents, examining plants that contained 15-20% of these agents, such as the Altai badyan and the Black Sea mimosa [Leather Industry Testing Station 1927].

In Ukraine, the Research Institute of the Leather Industry was established in 1932 under the Ministry of Light Industry of the Ukrainian SSR. The main areas of research focused on addressing problems related to expanding the raw material base, producing substitutes, recycling waste, reconstructing technological processes, controlling production, improving product quality, and exploring various tanning agents [TsDAVO, F.572, Op.1. Ref.1489. Arc.1]. Research in the field of tanning agents and the construction of tanning-extract plants using domestic raw materials, as well as the application of sulfate-cellulose extracts and various synthetic tanning agents, were intended to lead to the cessation of tanning agent exports during the second five-year plan [First Five-year plan 1928].

Starting in the early 1930s, the USSR initiated extensive research into the use of fish skins (such as pike perch, zander, and cod) and marine mammal skins (including seals, sea lions, and dolphins) as alternatives to cattle hides. In Ukraine, seals were harvested from the Caspian Sea, and dolphins were captured in the Black Sea for these purposes. The processing of Black Sea dolphin skins occurred at a factory in Simferopol. The second factory was opened in Russian Murmansk. Additionally, researchers experimented with the inner membranes of animals, such as stomach linings, pericardium, and intestines, as well as the skins of domesticated birds, like geese (Ustjuchenkov, 1933).

In Germany, the development of science and technology in the leather industry took a different direction. Adam Tuz writes that the significance of the Nazi era for Germany lay not in the creation of fundamental innovations, but in the widespread implementation and development of innovative technologies [Sudrow 2009, p.197]. Launched in 1936, the Four-Year Plan aimed for the widespread integration of chemistry across all sectors of industrial production, driven largely by the expansion of the military industry. Research primarily focused on material synthesis. In this context, the development of plastic and synthetic rubber production stands out. From that year onward, there was a surge in the development of material substitutes, leading to the establishment of a leather substitute industry. Initially, this industry combined enterprises producing both leather and rubber, but it later expanded to include producers of wood and textiles [Sudrow 2009, p.318].

The comprehensive measures for rationalization described above were intended to significantly reduce the leather consumption norm for shoe production, which was much higher in the USSR than abroad, and to lower the production costs across the leather and footwear industries by 31.5% by the end of the second Five-Year Plan, including 22% for leather and 38% for footwear. Soviet experts believed that by the end of the first Five-Year Plan in 1932/33, these measures would

enable the production of 125 to 145 million pairs of shoes, and through shoe repairs, an additional 150 to 175 million pairs [First Five-year plan 1928].

Recycling of Footwear

The 1920s, often referred to as the "Roaring Twenties," are characterized by the rapid growth of consumer society in capitalist countries. During this period, the leather industry flourished, leading to the emergence of a diverse range of products and the establishment of various footwear brands. Sociological research focused on shoe characteristics that influenced purchasing decisions, and the rise of chain stores facilitated product standardization [Sudrow 2009]. In contrast, the Soviet Union experienced markedly different trends.

The acute shortage of consumer goods, particularly new leather footwear, compelled Soviet regulatory authorities not only to implement measures for developing the raw material base and constructing state-owned footwear enterprises but also to seek effective ways to utilize old leather products. This led to the initiation of a policy for the secondary use of footwear. It began with Resolution No. 726 of the USSR People's Commissariat for Supply on June 20, 1931, "On the Organization of the Collection of Worn Footwear," [TsDAVO, F.4137. Op.1. Ref.36. Ark.111] which initiated widespread collection of used shoes for the purpose of repair and restoration.

It is worth noting that in the USSR, this state program started earlier than in Germany, where it was initiated by the Nazi regime as part of its efforts to achieve autarky. Beginning in 1934, due to a shortage of raw hides, many manufacturers began to consider skin waste as a raw material and transformed it into leather substitutes. The secondary processing of footwear was included in the Four-Year Plan that started in 1936, but the large-scale process only began in 1940, when the first batch of 20 million units was put into production. Old footwear was primarily used as leather uppers for shoes with wooden soles to produce urgently needed work shoes [Sudrow 2009, p.598].

In the USSR, the collection of old footwear and leather waste was entrusted to industrial cooperatives represented by the All-Ukrainian Central Union of Consumer Societies ("Vukoopspilka"). The collected footwear was to be transferred to 14 industrial unions across Ukraine [TsDAVO, F.2347. Op.1. Ref.26. Ark.110], which were responsible for delivering it to seven sorting and cutting centers. These centers, organized by the industrial unions on an urgent basis, were tasked with dismantling the footwear and preparing the necessary components for workshops focused on shoe restoration [TsDAVO, F.2347. Op.1. Ref.26. Ark.84]. The most suitable raw materials were then supplied to shoe factories under the Leather Trust, which was overseen by the People's Commissariat of Light Industry of Ukraine.

In 1930, 612 repair and restoration workshops were established in Ukraine, increasing to 4,100 by 1931. In the fourth quarter of 1930, 966,000 pairs of shoes were repaired, while in the same quarter of 1932, the number rose to 6.345 million pairs, indicating a sixfold increase [TsDAVO, F.572, Op.1, Ref.110. Ark.8].

All collection points and workshops organized the receipt of old leather footwear, classified into the following categories:

1. Military Footwear (soldier's boots, hospital shoes, and various leather horse harnesses, such as saddles, bridles, and other leather scraps; valued at 75-750 rubles per ton).
2. Industrial Footwear (special footwear, leather gloves, horse harnesses, leather aprons and sleeves, camel leather belts, rubberized items, rubber tires, and boot supports; valued at 65-600 rubles per ton).
3. Civic Footwear (various shoes and parts donated by the population; valued at 65-450 rubles per ton).
4. Miscellaneous Waste Footwear (collected from dumps and trash, of very poor quality, used as patches for repairing other shoes; valued at 20 rubles per ton) [TsDAVO, F.2347. Op.1. Ref.25. Ark.1].

The recycling process was aimed at maximum utilization with minimal waste. Old footwear was sorted into three quality categories: 1) suitable for repair or restoration; 2) suitable for use as repair materials; and 3) unsuitable for repair or restoration, which were sent to chemical industry enterprises to produce glue and bone meal. All waste generated during the restoration of old footwear was collected by "Vukoopshkira" (a department of "Vukoopspilka" responsible for leather collection), which, along with unsuitable footwear from the "miscellaneous waste footwear" category, delivered it to chemical industry enterprises [TsDAVO, F.2347. Op.1. Ref.31. Ark.55].

A typical directive from the leadership of the industrial cooperatives to their institutions read as follows: "All incoming old leather footwear should be brought into a liquid state right there in the workshops. If they are suitable for repair, repair them, if they are suitable for restoration, restore them, if they are suitable for use as mending material, steam them, and all parts that can be used to repair the toes, tongues, handles, jamb, patches, unions, as well as parts that can be used to repair insoles, backs, boots, and parts of the shafts, use them in production on site. What is left after sorting is only suitable for sugar and chemicals and should be temporarily stored until the following instructions [TsDAVO, F.2347. Op.1. Ref.26. Ark.84-85].

The procurement targets were high. For instance, in 1931, the plan for the procurement of footwear throughout the USSR was 14,500 tons, and it was to be collected during the second half of the year, i.e. in 6 months. The republics were to procure the following amount: The RSFSR - 1,090 tons, Ukrainian SSR - 2,730 tons, Belarussian SSR - 430 tons, the Transcaucasian SSR- 640 tons, the Uzbek SSR - 450 tons, the Turkmen SSR and Tajik SSR - 80 tons each [Handbook of Recycling Materials, p.62-62].

In 1932, the All-Union People's Commissariat of Light Industry set a footwear procurement plan for Ukraine, aiming for a threefold increase to 7 million pairs of shoes. For instance, the Kharkiv region was to collect 1.2 million pairs, Kyiv region - 1.5 million pairs, Odessa region - 500 thousand pairs, Dnipro region - 900 thousand pairs, Vinnytsia region - 500 thousand pairs, Donbas region- 1300 thousand pairs [TsDAVO, F.2347. Op.1. Ref.32. Ark.55].

To establish an effective national footwear repair system, a network of both mobile and permanent repair and tailoring workshops was created and supplied with the necessary leather for repairs. The leather was allocated at an approximate ratio of 1½ to 2 pairs of used shoes for every new pair. To meet the demand for repair leather, worn footwear was collected, along with substitutes like rubber for repairing soles and heels [First Five-year plan 1928].

In parallel with the repair shops, ateliers for individual tailoring of clothing and footwear were opened. However, this process was rather slow. As of mid-April 1932, the responsible institutions – National Commissariat of Light Industry of Ukrainian SSR, unions "Unionleather" and "State garment industry" and Industrial cooperation - had not fulfilled the Central Committee's task of opening workshops for tailoring shoes to individual orders, and only 265 out of 385 were opened, most of them idle due to lack of raw materials [On the implementation of the Central Committee resolution on the development of a network of workshops 1932].

The procurement of footwear was carried out in both urban and rural areas. People could independently turn in shoes at collection points run by procurement organizations, which were required to display procurement prices and information on incentivizing exchanges for goods. Additionally, collections were organized through direct household visits and partnerships with housing associations and cooperatives, which mobilized janitors and a network of collective and individual collectors. Efforts focused on high-yield collection sites, such as businesses, marketplaces, and dumps. Procurement organizations were also encouraged to establish kiosks at markets to facilitate drop-offs.

A motivational system was also developed for those turning in shoes. Those who agreed to donate shoes for recycling could have other pairs repaired without waiting in line or without tickets and could also receive refurbished shoes without waiting [TsDAVO, F.2347. Op.1. Ref.25. Ark.71a]. Collectors were required to establish special stockpiles of consumer goods (such as haberdashery) to incentivize footwear donors and to provide bonuses to procurement workers for meeting and exceeding collection targets [TsDAVO, F.2347. Op.1. Ref.22. Ark.71]. To facilitate the collection of footwear from the population, Soviet authorities turned to a proven incentive system from the late 1920s, offering scarce goods as rewards to residents in rural areas.

Footwear collection in Germany during the Weimar Republic and the Third Reich unfolded in a starkly different manner. Before 1933, this process was limited in scale and carried out by individual shoe companies through their workshops and collection points. In the Third Reich, households and the possessions of individuals persecuted by the Nazi regime became primary sources of collected footwear. Numerous testimonies from forced laborers describe sorting shoes stripped of labels bearing the names of their owners at various processing centers established by companies producing leather fibers. These were the shoes of millions of prisoners who perished in concentration camps across Europe. The Nazi regime mobilized not only numerous party organizations affiliated with the NSDAP but also schools, which were converted into secondary raw material collection points [Sudrow 2009, p.600].

Challenges in Collecting Old Footwear

In the USSR, the collection of old footwear faced numerous obstacles, as documented in various "Vukoopspilka" archival records indicating unmet quotas. For instance, in the spring of 1932, the Berdychiv Interdistrict Industrial Union sent a letter to "Utulunion" complaining that it had not

received a single kilogram of old footwear from the "Vukoopspilka" system or the Interdistrict Consumer Unions, despite existing agreements. The representative noted that "most district consumer unions ignore the need for footwear collection, and some refuse due to the complete absence of such footwear for sale within the system." In Berdychiv, three workshops with thirty-six shoemakers were set up under the cooperatives to restore old footwear. However, due to a lack of materials, these workshops were shut down [TsDAVO, F.2347. Op.1. Ref.26. Ark.148].

It can be assumed that the population was reluctant to turn in their old footwear due to the high cost and difficulty of acquiring new shoes, as well as the low price offered for old ones. Worn-out footwear was accepted at a rate of just 2 kopecks per kilogram [Shitc 1990]. At the same time, the cost of new leather shoes was prohibitively high. In 1931, shoes in regular stores cost 11–12 rubles (though they were often unavailable), while in commercial stores, the price ranged from 30 to 40 rubles [Fitzpatrick 2008, p.72]. However, even this expensive footwear was in short supply. Meanwhile, the average salary of Soviet citizens was small. For instance, workers in the recycling collection system earn between 120 and 150 rubles per month in 1930 [TsDAVO of Ukraine, Fund 2923].

A similar situation occurred in Germany, where old footwear was accepted at low prices - ranging from 5 to 15 reichsmarks - while new shoes cost around 60 reichsmarks. Additionally, the shoes available on the market were often of poor quality [Sudrow 2009, p.600-601]. In this context, the attitudes of the Soviet and German populations towards government initiatives were similar, reflecting the comparable circumstances regarding the quality, quantity, and pricing of old versus new footwear.

Due to the high cost of new shoes in the Soviet Union, the practice of restoring footwear was more common. However, this service was also expensive – to change a single pair of soles and heels cost around 4 rubles [TsDAVO, F.572. Op.1. Ref.110. Ark.10], making it difficult for many people to afford either new shoes or repairs. A witness account from the 1930s illustrates this reality: "One person shared how he had been wearing a pair of shoes for five years, showing how he had patched them up by sewing one piece to another" [Osherovich 2020, p.39].

It is worth noting that while the availability of footwear per capita was greater in Western countries, their excessive cost also made repair practices widespread and similarly expensive. In the Weimar Republic, for example, about one-third of total expenditure on footwear was allocated to repairs, with two-thirds going towards new purchases [Sudrow 2009, p.66]. Repairs were typically conducted at night to ensure that shoes could be worn again in the morning.

Amidst the scarcity of old leather shoes, Ukrainian cooperatives and workshops that purchased them often engaged in abuses. Apparently, this was one of the survival strategies of enterprises. For instance, the branch of the Interdistrict industrial union in Vinnytsia would send shoes that were unsuitable for refurbishment - lacking components like heels and insoles - to sorting bases, while keeping the more usable pairs for their own needs, trading them, or selling them to individual artisans [TsDAVO, F.2347. Op.1. Ref.26. Ark.144, 146].

In a letter to a representative from "Ukrpromleather," it was stated that, "despite the resolutions regarding the submission of old, worn-out shoes and other leather products for restoration by state enterprises, these enterprises have not yet delivered any products... In most cases, we are collecting shoes in poor condition... At one point, we contacted the trust ["Ukrleathertrust"], which suggested that its subordinate enterprises collect shoes for us. However, instead of submitting them, these enterprises set up repair workshops using old shoes and leather products for their own purposes. We consider this abnormal, as they are cutting the tops for patches while leaving the unusable remains idle" [TsDAVO, F.2347. Op.1. Ref.26. Ark.72].

Challenges in shoe repairs posed significant difficulties for workers across various industrial sectors. On May 8, 1931, the Soviet government issued a resolution from the Council of People's Commissars titled "On Supplying Workers with Workwear and Special Types of Clothing and Footwear" [On the supply of workers with industrial clothing 1931]. However, this initiative was not executed due to a shortage of raw materials. In March 1932, industrial unions in Mariupol, Berdyansk, Henichesk, and Mykolaiv were unable to repair fishermen's shoes during the spring fishing season because of a shortage of quality leather. The Poltava Interdistrict Industrial Union disrupted the sowing season in the region due to a lack of leather materials for repairing footwear and harnesses in rural areas. A similar situation occurred in Donbas region, where a special government resolution was issued to ensure the availability of materials for shoe repairs ahead of the sowing season [TsDAVO, F.572. Op.1. Ref.110. Ark.16-17].

In the Weimar Republic, the lack of footwear was considered a significant issue, as leather shoes were mandatory for attending school. As a result, many unemployed parents were unable to send their children to school due to the absence of suitable footwear [Sudrow 2009, p.71]. Although the Soviet Union did not have such requirements, many children, particularly in rural areas, also faced barriers to education because of a lack of shoes, especially during the colder months. The Third Reich also experienced a pressing need for shoes for various workers. For instance, in January 1942, the

Imperial Leather Industry Administration informed the Minister of Economy that, despite receiving 850,000 pairs of shoes, there was still a shortfall of 300,000 pairs [Sudrow 2009, p.601].

By 1940, the USSR had reached the benchmark of one pair of shoes per resident, with a total production of 40.8 million pairs for a population of 41.3 million [Main indicators of development of the national economy of the union republics 1967]. At this point, standardization of footwear had been established, and unified pricing was implemented. The collection of shoes was included in the nomenclature of organizations responsible for waste collection. By 1950, the per capita shoe production in the USSR had increased to 1.13 pairs of shoes [1917-1967, Standard of Living, Health Care, Population]. However, the quality of the footwear remained low [Minutes of the meeting of the pricing council 1933], and the variety available was limited.

Conclusion:

Between the two World Wars, large-scale state programs for recycling footwear were implemented primarily in countries pursuing autarky and facing raw material shortages, most notably the USSR and Nazi Germany. However, the measures adopted and the scientific and technological advancements in this area varied significantly, shaped by each country's local context and political regimes.

The case of Soviet Ukraine highlights the specificities of this process within the USSR. The state footwear recycling program of the early 1930s was a temporary solution to saturate the Soviet market with shoes until the footwear industry could meet demand. However, it was implemented within the constraints of a command-administrative economy, and the Soviet leadership's ambitious plans were hindered by a lack of sufficient raw materials and old footwear, which was limited in the context of a scarcity-driven economy. After World War II, as the market became saturated with new shoes, the collection of old footwear ceased, and the focus shifted to its repair. The infrastructure of repair workshops, established in the 1930s, evolved within the broader consumer service industry. The 1930s footwear recycling efforts reflect the deep integration of recycling principles into the Soviet economy, at least at the level of intentions and attempts.

Funding. The preparation of the article was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – project number 541235895.

References:

- Bjudzhety semeinykh fabrichno-zavodskikh rabochih SSSR.** [Budgets of family factory workers in the USSR.]. (1933). URL: https://istmat.org/files/uploads/47196/rgae_1562.329.62_1.12.pdf [in Russian].
- Borysenko, M.** (2008). Pobut miskykh meshkantsiv Ukrainy v 30-kh rokakh XX stolittia [Life of urban residents of Ukraine in the 30s of the 20th centuries]. *Etnichna istoriia narodiv Yevropy*, vyp. 24. 12–18. [in Ukrainian].
- Dekret Vserossijskogo Central'nogo Ispolnitel'nogo Komiteta.** O priznanii udarnymi rabot po zagotovke zhivotnogo syr'ja, kozhi, pushniny, kozovchiny, shhetiny, volosa, shersti, rogov i kopyt. [Decree of the All-Russian Central Executive Committee. On the recognition of shock work on the procurement of animal raw materials, leather, fur, goat skin, bristles, hair, wool, horns and hooves]. 1918. URL: <https://istmat.org/node/46630> [in Russian].
- Gerasimova, E., Chuikina, S.** (2009). The Repair Society. *Russian Studies in History*, 48(1). 58-74. [in English].
- Golubev, A.** (2020). *The Things of Life: Materiality in Late Soviet Russia*. New York: Cornell University Press 220 p. [in English].
- Gurova, O.** (2005). Ideologija potreblenija v sovetskom obshhestve [Ideology of consumption in Soviet society], *Sociologicheskij zhurnal* vyp. 4. 117-131. URL: <https://www.journal-socjournal.ru/index.php/socjour/article/view/894> [in Russian].
- Eaton, A.** (2004). *Daily Life in the Soviet Union*. Santa Barbara: Greenwood. 344 p. [in English].
- Fitzpatrick, S.** (2008). *Everyday stalinism: Ordinary life in extraordinary times: Soviet Russia in the 1930s*. Oxford: Oxford University Press, 312 p. [in English].
- Ispytatel'naja stancija kozhevennoj promyshlennosti** [Leather Industry Testing Station]. 1927. URL: <https://istmat.org/node/29367>. [in Russian].
- Itogi perepisi skota na 1 fevralja 1932 goda.** Vypusk 1. Chislennost' skota po evropejskoj chasti RSFSR, Ukrainskoj SSR i Belarusskoj SSR [Livestock census results for February 1, 1932. Issue 1. The number of cattle in the European part of the RSFSR, the Ukrainian SSR and the Belarussian SSR]. (1932). Moskva: Sojuzorguchet. 41 s. [in Russian].
- Kiaer, C., Naiman, E.** (2005). *Everyday Life in Early Soviet Russia: Taking the Revolution Inside*. Bloomington: Indiana University Press. 320 p. [in English].
- Kozhevennaja i obuvnaja promyshlennost'.** 1928. Pjatiletnij plan razvitija narodnogo hozjajstva SSSR (pervaja pjatiletka). [Leather and footwear industry. Five-year plan for national

-
economic development of the USSR (First Five-year plan)]. URL: <https://istmat.org/node/41351> [in Russian].
- Krebs, S., Weber, H. (2021). *The Persistence of Technology. Histories of Repair, Reuse and Disposal*. Bielefeld: Verlag. 287 p. [in English].
- Kornai, J. (1980). *Economics of Shortage*. Amsterdam: North Holland Publishing Company. 631 p. [in English].
- Movchan, O. M. (2011). *Povsiakdenne zhyttia robotnykiv USRR. 1920-ti rr.* [Everyday life of workers of the USSR. 1920s]. Kyiv: Instytut istorii Ukrainy NAN Ukrainy. 312 s.
- O snabzhenii rabochih proizvodstvennoj odezhdy i special'nymi vidami odezhdy i obuvi** [On the supply of workers with industrial clothing and special types of clothing and footwear]. 1931. URL: <https://istmat.org/node/54880> [in Russian].
- Osnovnye pokazateli razvitiya narodnogo hozjajstva sojuznyh respublik.** Chast' I Strana Sovetov za 50 let (Sbornik statisticheskikh materialov) [Main indicators of development of the national economy of the union republics. Part I. The country of the Soviets for 50 years (Collection of statistical materials)]. 1967. URL: <https://istmat.org/node/17051> [in Russian].
- O rekvizicii na stancijah i pristanjah vseh manufakturnyh i obuvnyh tovarov, ne vykuplennyh so skladov v techenie dvuh sutok** [On the requisition at stations and docks of all manufactured and footwear goods not redeemed from warehouses within two days]. URL: <https://istmat.org/node/28128> [in Russian].
- Oshervich, M. (2020). *How People Live in Soviet Russia: Impressions from a Journey*. Canada: Kashtan Press. 342 p. [in English].
- O vypolnenii postanovlenija CK o razvertyvanii seti masterskih po vypolneniju individual'nyh zakazov odezhdy i obuvi.** (Prinjato Politburo CK VKP(b) 16.VI.32 g.). Prilozhenie № 7 k p. 75/17 pr. PB № 104 [On the implementation of the Central Committee resolution on the development of a network of workshops for the fulfillment of individual orders for clothing and footwear. (Adopted by the Politburo of the Central Committee of the All-Union Communist Party (Bolsheviks) on 16.VI.32). Appendix No. 7 to paragraph 75/17 of the pr. PB No. 104]. 1932. URL: <https://istmat.org/node/55944> [in Russian].
- Perga, T. (2023). Waste for the Soviet Economy: Recycling of Rags in Ukraine in the 1920s. *Worldwide Waste: Journal of Interdisciplinary Studies*, 6(1). 4. <https://doi.org/10.5334/wwwj.97> [in English].
- Postanovlenie Vysshego Soveta Narodnogo Hozjajstva i Narodnogo Komissariata Prodoovol'stvija.** O tverdyh cenah na kozhu [Resolution of the Supreme Council of the National Economy and the People's Commissariat of Food. On fixed prices for leather]. 1918. URL: <https://istmat.org/node/31664> [in Russian].
- Postanovlenie Vysshego Soveta Narodnogo Hozjajstva. Ob uchete gotovyh kozh, vvozimyh iz-za granicy** [Resolution of the Supreme Council of the National Economy. On the accounting of finished leather imported from abroad]. 1918. URL: <https://istmat.org/node/31493> [in Russian].
- Postanovlenie Vysshego Soveta Narodnogo Hozjajstva. O Glavnom i gubernskih komitetah kozhevennoj promyshlennosti** [Resolution of the Supreme Council of the National Economy. On the Main and Provincial Committees of the Leather Industry]. 1919. URL: <https://istmat.org/node/35543> [in Russian].
- Postoly, lapti, khodaky: Yake vzuttia nosyly nashi predky** [Boots, slippers, walkers: What kind of shoes did our ancestors wear]. 2024. URL: <https://localhistory.org.ua/rubrics/strii/pletene-vzuttia/> [in Ukrainian]
- Pristed, B.B. (2020). Point of no return: Soviet paper reuse, 1932–1945. *Business History* 54(5). 946–962. <https://doi.org/10.1080/00076791.2020.1842875> [in English].
- Promyshlennost'** [Industry]. 1925. URL: https://istmat.org/files/uploads/32172/ctat_ezh_1924_promyshlennost.pdf [in Russian].
- Protokol zasedaniya soveta cenu** zamestitelja narkoma vneshnej torgovli M.A. Loganovskogo «Proekt bjuro cen vsesojuznogo ob"edinenija Torgsin ob izmenenii cen na muchnye, krupjanye tovary i obuvi». 15 avgusta 1933 g. 1933 [Minutes of the meeting of the pricing council at the Deputy People's Commissar for Foreign Trade M.A. Loganovsky's "Draft of the pricing bureau of the all-Union association Torgsin on changing prices for flour, cereals and footwear." August 15, 1933]. URL: <https://istmat.org/node/42951> [in Russian].
- Ruban, M. (2020). Do istorii reformuvannia zaliznychnoho transportu Ukrainy: rozvytok remontnoi bazy vahonnoho hospodarstva Donetskoj zaliznytsi (1925–1941) [A Story of the Reforms in the Ukraine's Railway Transport: Building Repair Facilities of the Donetsk Railway Rolling-Stock Sector (1925–1941)]. *Nauka ta naukoznavstvo* 3(109). 116 - 130. DOI: <https://doi.org/10.15407/sofs2020.03.116> [in Ukrainian].
- Shitc, I.I. (1990). *Dnevnik Velikogo pereloma* [Diary of the Great Turning Point]. Paris: YMCA Press. 323 s. [in Russian].

- Skubii, I.** (2020). Woman consumption in Ukban Soviet Ukraine in 1920-1930s: between ideology and everyday life. *History of retailing and consumption*, 6(1). 30-44 [in English].
- Specsvodka** № 35 SOU OGPU i INFO OGPU o faktah otricatel'nogo haraktera no prompredprijatijam i rabochim rajonom na 9 avgusta 1930 g. [Special report No. 35 of the SOU OGPU and INFO OGPU on negative facts about industrial enterprises and workers' districts on August 9, 1930]. URL: <https://istmat.org/node/26185> [in Russian].
- Spravochnik po util'syr'ju** [Handbook of Recycling Materials]. (1931). Leningrad: SNAPKLLPGIZ [in Russian].
- Statisticheskaja tablica CSU SSSR** «Priobretenie obuvi i tkanej v sem'jah krest'jan v 1923/24, 1928/29, 1936, 1940, 1950, 1952 gg. i pervom polugodii 1953 g. (po dannym obsledovanija bjudzhetov)» [Statistical table of the Central Statistical Bureau of the USSR "Purchase of footwear and fabrics in peasant families in 1923/24, 1928/29, 1936, 1940, 1950, 1952 and the first half of 1953 (according to budget survey data)". 1953. URL: <https://istmat.org/node/18415> [In Russian].
- Sudrow, A.** (2009). *Der Schuh im Nationalsozialismus. Eine Produktgeschichte in Deutschland im Vergleich zu Großbritannien und den USA (1925 bis 1950)*. Wallstein Verlag. 877 p. [in German].
- Tsentralnyi derzhavnyi arkhiv výshchikh órhaniv vlády ta upravlinnia Ukraïny (TsDAVO Ukraïny)** [The Central State Archive of the Higher Authorities and Administration of Ukraine (TsDAVO of Ukraine)]
- Tverdjukova, E.** (2018). Antiservis: lichnyj avtomobil' i ego tehničeskoe obsluzhivanie v SSSR (1960-e — 1980-e gg.) [Anti-service: the personal car and its maintenance in the USSR (1960s — 1980s)]. *Novejšaja istorija Rossii*, vyp. 8(3). 659-678. [in Russian].
- Ustjuchenkov, V.** (1933). *Kozha iz novyh vidov syr'ja (plenki zheludka, serdechnye sumki, rog skota, shkury sudaka, shkury gusej)* [Leather from new types of raw materials (stomach films, heart bags, cattle horns, pike perch skins, goose skins)]. Izdanie TEHPROPA SEVKAVKOZhTRESTA. Rostov na Donu. [In Russian].
- Vihavainen, T., Bogdanova, E.** (2016). Communism and Consumerism. The Soviet Alternative to Affluent Society. Leiden: Brill. 172 p. [in English].
- Yankivska, O.** (2014). Sotsialno-pobutova sfera zhyttia hromadian URSR yak vidbytok priorytetiv derzhavy vid pochatku povoiennoi vidbudovy do kintsia «vidlyhy» x Everyday life of UkrSSR citizens as a reflection of the priorities of the State from the beginning of post-war reconstruction to the end of the thaw]. *Ukraina XX st.: kultura, ideolohiia, polityka: Zb. st.*, 19. 21-53. [in Ukrainian].
- 1917-1967, Uroven' zhizni, Zdravoohranenie, Naselenie** [1917-1967, Standard of Living, Health Care, Population]. 1967. URL: <https://istmat.org/node/17049> [In Russian].

Надійшла до редакції / Received: 14.10.2024

Схвалено до друку / Accepted: 21.11.2024