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## TRAM SERVICE AS A FACTOR OF EVERYDAY LIFE IN THE SOVIET CITY OF MAGNITOGORSK

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*The tram service in Magnitogorsk is one of the main means of transportation. This study substantiated the cause-and-effect relationships of the tram service development, the industrial progress and the culture level of Soviet citizens. The authors determined the choice of Magnitogorsk as a case study by the fact that it was a pilot project of a socialist city during the period of industrialization under Stalin. Due to the retrospective analysis of the transport infrastructure development the authors singled out the tram service as a significant factor in the cultural formation of an industrial society. The scientific novelty lies in the fact that the authors analyzed the tram as a communicative space used by the authorities to shape the culture of citizens. By means of an abstract-logical method, based on factual historical evidence, the authors established that the authorities actively used trams to form the culture of citizens, to influence the nature of their social behavior. The authors elicited the set of propaganda, control and punitive methods. The authors provided the periodization of the evolutionary change in people's behavior under the influence of the authorities when using trams to develop a positive attitude towards the industrialization of society. The deviations in passenger behaviour demonstrate that urban everyday life in the USSR was far from the idealistic propaganda image of the socialist city. The obtained results can be useful for the municipal authorities of Magnitogorsk to reassess the importance of tram service for modern society as well as for the specialists in Soviet studies.*

*Key words: transport, tram services, transport infrastructure, industrialization, Soviet society*

### INTRODUCTION

Urban daily life consists of many elements, and public transport is one of these. The culture of public transport use is a set of formal rules and informal practices regulating the interaction of passengers, representatives of the transport service, and the state that reflect the values and socio-cultural attitudes of citizens in a particular historical period. One of the oldest forms of urban transport is the tram. The tram is a type of street - rail public transport used to carry passengers along predetermined routes in cities (usually using electric power). Currently, trams can be found in 63 Russian cities with a population from 8,000 to over 12 million inhabitants [1]. The heyday of the tram in Russian cities fell from the 1930s to the early 1980s. In the late 1980s–1990s many tram routes in various Russian cities were closed as they were unprofitable. At the present we can see a revival of public electric transport as the most environmentally friendly, safe, and socially-oriented.

The study of the positive and negative historical experience of public transport increases the theoretical understanding of the historical dynamics of socio-cultural relations in the city mediated by transport. The relevance of the study is also determined by the need to improve transport services as an element of urban policy, which requires knowledge of its history.

The ideal object for the study was the tram system of Magnitogorsk, a large industrial center of Russia, founded as a factory city in 1929 during the time of socialist

industrialization. Throughout the Soviet period, the Magnitogorsk tram was a departmental enterprise owned by Magnitogorsk Iron and Steel Works. The city stretched along the banks of the river Ural, and this was a specific feature of its layout. Magnitogorsk has no pre-revolutionary historical past. Thus, the transport culture of its inhabitants was formed under the influence of a number of factors (a varied socio-cultural composition of the population, different cultural and educational levels of the inhabitants, difficulties in city planning, and economic problems caused by global historical processes).

The tram was and remains the main means of transportation in Magnitogorsk. This explains the choice of the subject matter—the tram public transport as a socio-cultural phenomenon of the urban environment. The scope of this study is the patterns and features of the development of daily transport practices as a phenomenon representing an integral part of the urban cultural life of Magnitogorsk in the mid-1930s and mid-1980s. The chronological framework is determined by the beginning of socialist industrialization and the founding of Magnitogorsk; the final date falls on the last years of the existence of the Union of Soviet Socialist Republics (hereinafter abbreviated as the USSR). The case of Magnitogorsk is relevant as it provides a pure example of a socialist city: which was built from scratch in the Uralian steppe. During the Second World War the city played an important role in the armor steel production. In the postwar years, Magnitogorsk was more than once an experimental site for various housing projects of the

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Soviet government. The tram system had to adapt to the growing city and tram stops became a kind of landmarks for the citizens.

## LITERATURE REVIEW

Papers of Russian historians on the research problem can be divided into two main stages: the Soviet and the post-Soviet. At the first stage, the authors mainly studied the issues of passenger transportation management in the republics of the Soviet Union. Nowadays researchers examine public transport as a socio-cultural phenomenon, also exploring the comfort, accessibility and inclusion of city transport. It is worth mentioning the study of A. Ryzhkov [2], who considers the evolution of relations between public transport authorities and operators globally. Statistical information on public transport was collected and systematized in an encyclopedic guide published in 2007 [3]. The historical aspects of transport development were determined by I. V. Shpakova [4], P. A. Andreev [5], and V. R. Matveeva [6]. International researchers focus on global aspects of the development of the transport network [7], studying entire regions [8]. They raise the question about how trams have changed the aesthetic image of city streets and transformed the urban environment. Historian J. McKay [9] observed the evolution in the attitude of European cities to trams: from opposition to this technical innovation, rejection of its carriages, rails, and wires in historic city centers, to adapting to it and turning the tram into an element of urban everyday life. Magnitogorsk had no such public dissatisfaction with the tram, as this was simply impossible. S. Kotkin [10], who studied Stalinism in the example of Magnitogorsk, analyzes how the launch of the tram changed the life of the city under construction: the areas that ran along the tram line immediately turned into the city center, and other blocks became inaccessible outskirts. New trams circulating around the city were seen as a symbol of a new, modern era. However, most districts remained isolated from the center and from each other. Due to these numerous outskirts, Magnitogorsk of the 1930s did not look like a city, as S. Kotkin concludes [10].

M. Crouch [11], a British researcher of the Soviet public transport, notes that throughout its whole lifespan, the USSR had specific conditions favoring the development of public transport: 1) a limited number of cars; 2) high population density in cities caused by forced industrialization; 3) centralized street planning over long distances; 4) the absence of traffic jams. Along with the focus of the Soviet state on collective forms of life, all this determined the demand for public transport and created great potential for its development.

At present researchers are actively exploring the potential of big data and analytics for collecting information and improving transport systems, which can be achieved by studying various forms of data obtained from traffic monitoring systems, connected vehicles, crowd-sourcing, and social networks [12]. An interesting and promising

direction in the research on transport is a historical and geographical approach applied to the study of changing social practices among young people. This study was carried out, for example, in New Zealand [1]. Also, one could mention studying a person's everyday life according to the availability of various means of transportation from a sociological perspective [13-15]. A popular area in international research is the analysis of an inclusive environment [16-18]. A wide range of methodological approaches and objectives of the research on transport and its development allowed us to analyze the everyday culture of passengers and the social experience of transport mobility on the example of the Magnitogorsk tram in the mid-1930s and early 1980s.

## METHODOLOGY

The research goal was achieved by using a set of historical sources obtained from the municipal archives of Magnitogorsk and various organizations, as well as citizens' private archives. A great deal of information was provided by periodicals reflecting daily life of the city connected with the operation of the tram. Definitely, publications in Soviet periodicals have some specifics. Their content cannot be considered fully reliable due to the subjectivity of journalists, censorship, and the demand of the public. However, even taking into account the fact that the Soviet print media were excessively ideological, politicized, and subjective, they nevertheless remained a significant source of reliable facts about the work of the tram, public opinion, and official policies. In addition, the authors used interviews of eyewitnesses to the development of the Magnitogorsk tram and historical photos. The research was based on an integrated approach combining the study of "large" historical stages and microanalysis. The application of general scientific methods of analysis and synthesis in combination with specific historical methods of the "evidence paradigm," as well as the principles of scientific integrity and objectivity, allowed us to accomplish the objectives set.

The scientific novelty of the article has two facets. First, the research is based on new historical sources. Second, the tram is analyzed as a communicative space used by the authorities to shape the culture of citizens.

The practical significance of the study is that it gives the possibility to assess the potential of the tram communication space and use it effectively in modern conditions. The research materials are beneficial for museums and in excursion work within the city of Magnitogorsk as well.

## DISCUSSION

The building of Magnitogorsk began in 1929. Initially, it was a worker's settlement at the constructed metallurgical plant. Therefore, the transport infrastructure of the city was not adapted for the daily movement of workers to the industrial site. Public transport in Magnitogorsk consisted of horse-drawn carts and cars [19, 20]. In early 1931, the city received the first buses for passenger

transportation, but the problem was not solved as the city's population was growing rapidly. Poor provision of residents with transport slowed down the growth in housing development and meant greater likelihood of failures in the work of industrial enterprises. The first builders recall their journey to work as follows: "every day we had to make a five-kilometer journey one way, and it was not surprising that many of us were often late" [21]. Considering the huge pendulum flows of the population, the city administration faced the need to launch a fundamentally new means of transportation. It was supposed to operate in adverse climatic conditions, hilly terrain, and with a poorly developed road network. The city authorities realized that the construction of the tram depot and the launch of the tram were vital for Magnitogorsk [22].

The first tram was launched in Magnitogorsk in 1935. The specific location of the city determined the trajectory of the constructed tram lines. Until 1939, the plant and the residential area had been located solely on the left bank of the river Ural. In the postwar period, the construction began on the right bank. By 1945, the population of that part of the city amounted to 25,000 people. However, there was no transport infrastructure, and workers had to get to the plant on foot. The tram line connecting the left and right banks of the river was put into operation in 1948.

The development of the tram lines led to an increase in the number of tram routes. Over twenty years, there was a more than threefold increase in the number of tram routes in Magnitogorsk, and this figure continued to grow until 1954. The growth of the tram system work in the post-war city shown in Figure 1.

However, in subsequent years, the emphasis shifted towards a qualitative improvement in transport services for the population. Long waiting for a tram at the stop, with virtually no other ways to move around the city, leads to the fact that the tram turns into a means of transportation people use to get from home to work and return back. To reduce the interval of between trams on the routes in the post-war years, the number of carriages per line was

steadily increased. The route network was continuously altered to improve the quality of transport services and to adapt it to the needs of the people. Priority was given to the routes operating in densely populated areas of the city.

The tram is not only a means of transportation, but also a communicative space that reflects life and culture of the whole city. Magnitogorsk, the construction of which began in 1929, had neither history nor formed mentality. Most inhabitants—former peasants—had a low educational and cultural level and patriarchal mindset, which influenced their daily practices. This also affected public transport. In the 1950-1980s only few people owned a car, as a result of which the average inhabitant of Magnitogorsk spent up to two hours in public transport a day [26, 36].

The first what a passenger had to do when getting on a tram was to pay a fare. This problem was solved differently at different stages of the Magnitogorsk tram development. Initially, the fare depended on the distance traveled. The established tariffs ranged from 10 to 30 kopecks per trip. Later, the fare was unified, and after the 1961 monetary reform it amounted to 3 kopecks.

The specifics of Magnitogorsk as a mono-industrial city with a large city-forming enterprise manifested itself in public transport. The Magnitogorsk Iron and Steel Works compensated workers for the cost of public transport for each day worked. The indicated sum was granted upon the payment of wages and was estimated depending on the number of the days worked. For those who were supposed to come to work earlier than the set time, special passes were issued to board trams without a queue [39]. Preferential categories of the population were exempted from paying the fare: children under five years old, representatives of the party and governing establishment, police officers on duty, and people awarded USSR orders [23, 24]. Later this list was expanded with deputies of the Supreme Soviet of the USSR, deputies of the Supreme Council of the Union Republics, Heroes of the Soviet Union and Heroes of Socialist Labor, and persons receiving a merit pension [25]. The workers of the tram depot had a staff pass and paid no fare.

Even under Stalin, the real city of Magnitogorsk was far from the idealistic image of a socialist city. The problem of stowaways was relevant for the Magnitogorsk tram. Nobody was surprised or disapproved the unwillingness to pay for a tram ride. Tram tickets were regularly checked by controllers. Stowaways were to pay a fine, the amount of which was periodically reviewed. Initially, the fine was 3 rubles, in the postwar period—10 rubles. Persons who refused to pay the fine on the spot were detained by law enforcement authorities and fined three times or punished with community service for up to 30 days. The police were to enforce this decision [25]. A specific feature of the Soviet system was the application of moral forms of influence on the offender in addition to the material ones. So, stowaways were reported to

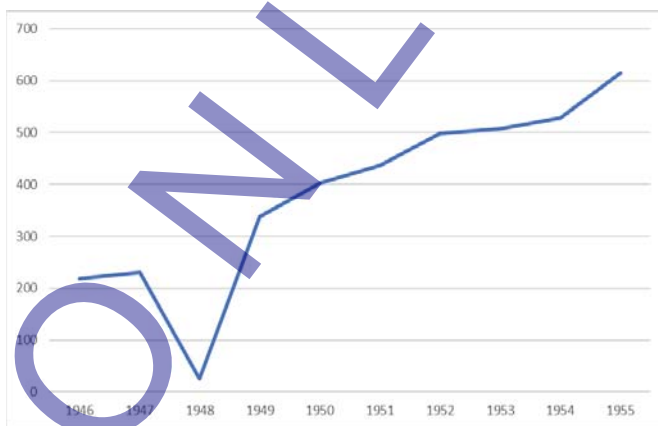


Figure 1: The volume of transport work performed by the city tram system in 1946 - 1955 (hours in operation) [26]

their workplace, their names were published in the local press, and their photographs were posted on trams.

The collection of fares depends on a conductor, so bonuses were introduced as a stimulating measure. However, there were objective and subjective difficulties: it was almost impossible to control that all passengers paid the fare in a crowded carriage, especially if the tram consisted of two cars. One of the problems was the lack of change. A particularly acute shortage of change was observed in the city during the Second World War. Instead of change, passengers were sometimes given "travel passes for the Magnitogorsk tram, pencils and other small items" [26]. The City Council banned the sale of travel passes in trams and took measures to organize their sale at special ticket offices [26]. In the summer of 1943, the material on the heads of the tram department was sent to the prosecutor's office to bring the perpetrators to justice [26].

Over the years, the forms of fare payment improved and became more convenient for passengers. For instance, since 1955, like in major cities, Magnitogorsk introduced a season ticket. The massive sale of tram tickets in Magnitogorsk evened the loading of carriages since many people with a season ticket got the opportunity to choose a less busy route changing trams to avoid crowded carriages.

In August 1957, the public works department of Magnitogorsk Iron and Steel Works increased the cost of monthly tickets. Instead of 18, a ticket cost 36 rubles. Then, as the owner, the management prepared a list of 75 of its employees who could use the tram free of charge [27].

In 1962 the tram department of Magnitogorsk Iron and Steel Works began selling monthly tram tickets to bearer. With this ticket, any passenger could have any number of rides. The ticket cost 2 rubles 50 kopecks [28].

Against the background of propaganda about building communism and the consciousness of a new Soviet man, in the early 1960s, public transport introduced trains without a conductor. However, the attempt to reduce costs by eliminating conductors was not successful in Magnitogorsk. For example, in 1962, the monthly revenue plan for carriages without a conductor was fulfilled on average by 86%. In 1969 this figure dropped to 77%. Meanwhile, in carriages with a conductor, the fare collection increased from 101 to 122% [29]. Every day, at the end of the shift, various pieces of iron, buttons, and similar rubbish were removed from the cash desks along with coins. During only one raid on December 29, 1967 supervisors and police officers arrested 72 stowaways. Over 11 months of 1966 the losses of the tram depot amounted to more than 160,000 rubles [30]. In addition to the conscious refusal of the passengers to pay the fare, there were objective reasons: the lack of change, overcrowded carriages, etc.

By the early 1970s, the solution to this problem had been found. Following other USSR cities, Magnitogorsk began

to sell single tickets. Composters were installed at the cash registers. It should be mentioned that new carriages were supplied with pre-installed composters. Season tickets and travel passes could be purchased almost at any retail outlet, post offices, savings banks, "Soyuzpechat" kiosks, etc.

Addressing the problem of the tram as a communicative space, it should be noted that it was the only public place where people were every day. On the move, the tram carriage became a communicative space for passengers and staff. The quiet in carriages ended with the beginning of the rush hour. It got very crowded, someone could not get on the tram, and some people could not get off, especially when the tram driver did not call the next stop in advance. The situation was aggravated by the lack of equipped tram stops, signs with their names, and radio communications in the carriages [23, 24]. People were hanging on the footboard, jumping off while the train was moving [31]. The situation was somewhat improved with the installation of the radio on the trams which began in 1961. This meant that provided that the tram driver was doing his work conscientiously, passengers were informed about the stops and the route of the tram.

In the early years of the tram operation, conflicts between tram personnel and passengers occurred quite often [32]. Such incorrect and impolite behavior was due to a large passenger flow, which the conductor could not handle, sharp braking of the car, inadequacy of some passengers (for example, alcohol intoxication), etc.

The culture of behavior in public transport was instilled by various methods: the official introduction of behavioral norms, the use of coercive measures against violators, and the formation of public opinion through the mass media. The behavior of the passenger on the tram was regulated by special rules. The first Tram Rules for Magnitogorsk citizens were drawn up and approved in February 1935, shortly after the first launch of the tram. The front door was to be used only by passengers with infants, pregnant women, employees who could travel free of charge, as well as people with a permit from the tram depot.

According to the Tram Rules, it was forbidden to stand on the footboard, cling to hand rails or other external parts while the tram was moving. Tram conductors were to prevent passengers from traveling on the footboard. It was necessary to delay the departure of the tram until the persons were removed from the indicated places and transferred to the police. The police officers were obliged to prosecute not only the passengers with alcohol intoxication on a tram, but also tram workers who did not take measures to immediately remove such people from the trains [25]. The front two benches were to be cleared at the request of the passengers who had the right to enter through the front door. It was also forbidden to smoke inside the carriage, let children stand on the seat, carry animals, pollute the carriage, spit on the floor, use the rings, signals and other devices, or take the place of the

conductor. The offenders were to be immediately disembarked. The tram driver was to know the traffic rules, the signaling system and to carry a personal number, which was shown at the request of the police and passengers. During the movement, the tram driver could not talk, remove his hands from the operating lever and the air brake, or eat.

Over time, the rules were improved and extended, as experience was accumulated [25]: boarding a tram was allowed only according to the queue (it was especially relevant to reduce the time of boarding and disembarking when the annual passenger flow exceeded one million people). Passengers were forbidden to hang out of the carriage windows on the move (this rule was introduced after collecting statistics on the injuries of passengers leaning out of the windows against a contact-line mast). It was forbidden to enter a carriage with soft seats in dirty work wear (in early 1936). Besides, the passenger could take another tram following in the same direction in the event of a tram failure.

Changes regarding the use of the front platform of a motor car were introduced in January 1943. It was permitted to enter through the front platform of a motor car for "Heroes of the Soviet Union and persons awarded orders of the USSR and Union Republics, deputies of the Supreme Council of the USSR and Union Republics, deputies of the regional and city councils, preschool children accompanied by an adult, schoolchildren through the third grade after showing school tickets, pregnant women upon showing a medical note from a maternity welfare centre, people injured in the Patriotic War with obvious signs of disability, the elderly, and the blind with a guide" [33].

The rules for using the tram were prominently displayed in all trams of the city. The offenders were fined on the spot in the amount of five rubles. In case the offenders refused to pay the fine, they were detained by law en-

forcement agencies. At the same time, the fine could be increased threefold. Obviously, these rules improved the operation of the tram and its social environment; however, they were frequently violated by the staff and passengers.

One of the most important characteristics of public transport is passenger safety. Trams sometimes caused technical problems and traffic accidents [34, 35]. For example, over 1981 the tram depot lost 3,500 carriage hours due to operational failures. Carriages were withdrawn from operation due to technical reasons in 906 cases [26].

Among many objective and subjective causes of accidents, one should mention the following: poor maintenance and pre-journey inspection, as well as a lack of qualified personnel in the carriage repair depot, and shortage or untimely supply of spare parts. The dynamics of failures in the tram traffic schedule in the first twenty years of the tram operation in Magnitogorsk is shown in Figure 2.

Another group of reasons is of subjective nature. Over just 10 months of 1972 there were 35 accidents caused by tram drivers, with 39 people injured and six killed [34]. The violations of the rules included the movement of the carriage with open doors, as a result of which a passenger dropped out of the carriage; stopping an unbraked tram, which led to a collision with people, etc.

Drivers who seriously broke traffic and technical operation rules were suspended from driving trains and transferred to lower-paid jobs. In case of criminal acts, the perpetrators were prosecuted. Some traffic accidents were caused by pedestrians running out onto the road. In the 1930s-1950s, there were quite many the so-called "kids-hangers" who clang to a carriage outside on the move. They could, if falling off, get under the carriage and be injured. Most often, this behavior was character-

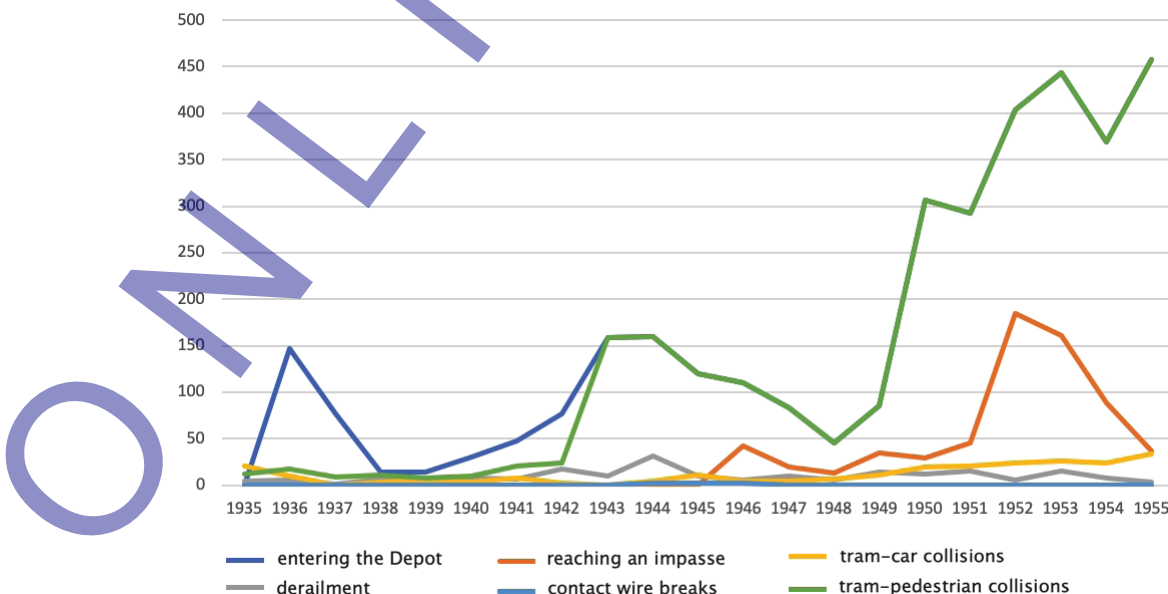


Figure 2: Dynamics of failures in the tram traffic schedule in 1935-1955 (cases per year) [26]

istic of children and adolescents, who thereby demonstrated their "courage" or simply tried to get to the right place without a ticket. Some passengers opened their doors and jumped out of a moving carriage. The actions of such hooligans led to the failure of door pulls, reducing the lifespan of trams. Former tram driver Babintseva recalls that there were even cases of carjacking a tram by intoxicated passengers [36].

One of the tools to restore order and ensure the safety of passengers was the city police, which were to maintain order at tram boarding during the rush hour [25].

The level of passengers' culture manifested itself in their treatment of tram carriages and stops. Even with installed litter bins, cigarette butts, used tickets, and other rubbish were thrown around it. Another problem was vandalism. Some passengers cut and broke seats in carriages or broke windows [37, 38]. For instance, after the first day of operation, two windows were squeezed out in a crowded carriage. In the absence of spare parts, shards were installed in the broken windows. In addition to this, carriages were not cleaned regularly or washed on time [39].

Safety and comfort of a ride are determined not only by compliance with traffic rules, convenient and clean tram stops and carriages, but also by passengers' behavior. Since people were returning from work and in different seasons, they could be wearing dirty overalls, which might affect other passengers, especially during rush hours in a crowded carriage. These issues were discussed in local periodicals now and again. Sick people (from which one could catch a disease) or drunk passengers made a ride less comfortable. Gradually, the situation changed for the better. The culture of passenger service, as an important constituent element in the work of the tram driver and the conductor, emerged [36].

The policy of the authorities had a rather strong influence on the social behaviour of the citizens, and it was the tram that was one of the communication channels widely used by the city authorities. Thus, tram carriages were not only a place for small talk, but also an advertising and information space. The tram carriage was used to inform people about the decisions of the city authorities. Any normative legal act of that time had the first paragraph of the following content: "To oblige the Head of the Tram Department Comrade... within ten days to publish in prominent places in all carriages ..." [37, 38].

In Soviet times, the information posted on the outside and inside of tram carriages was of ideological nature and aimed at educating Soviet citizens. For example, in 1937, on the 20th anniversary of the October Revolution, five tram trains were decorated according to such themes as "The Stalin's Route," "The Right to Education," and "The Civil War". Until the collapse of the Soviet Union, it was compulsory to place Soviet symbols on carriages.

The desire of the city authorities to get away from meaningless names of the "big construction" period, as well as

the ideological principles of the party and the leadership of the country were reflected in the names of the tram stops. On March 28, 1951, the Magnitogorsk Council of Workers' Deputies made a decision to rename the following tram stops: "Shchitovaya" ("Shield") to Frunze (after a Bolshevik leader), "11 uchastok" ("11th section") to "Tsentralnyy rynok" ("The Central Market"), "13 uchastok" ("13th section") to "Profsoyuznaya" ("The Trade Union"), and "5 uchastok" ("5th section") to "Lugovaya" ("Meadow"). There were also stops with such ideological names as "Ordzhonikidze," "Sverdlov Square," "Gorky Cinema," and "Stalingradskaya" [39].

## CONCLUSIONS

From the mid-1930s to the mid-1980s, trams were the main and most important type of public transport in Magnitogorsk. In the mono-industrial city divided into industrial and residential areas by a wide river and distances of several kilometers, the arteries of the tram lines were vital for the functioning of the urban body. The new residential development was carried out mainly within a narrow strip along the right bank of the river to the south. This also enhanced the importance of public transport. The scale of transportation is demonstrated by the data: 154.5 million people were transported in 1981. The tram management received 51 new tram cars, with their total number estimating 342 units [26].

The tram as a type of public urban transport delivers a city resident from one point to another. Initially the main function of the tram in Magnitogorsk was transportation of workers from home to their work place and back, then the number of routes increased and the intensity of tram traffic went up. The tram improved the quality of citizens' life as people could get to shops, parks, cinemas, and other recreational facilities, exploring the urban space.

Traditionally, in Magnitogorsk the tram acts as a service provided by the social state. It is used by the most vulnerable social groups who can move around the city for free or at a reduced fare. The history of the Magnitogorsk tram shows that benefits were not always provided according to the principle of social justice. Nevertheless, their provision itself was a positive fact.

Various social flows intersect inside the tram creating a communicative space. Therefore, the level of communication culture in the public transport reflects the cultural level of the city population in general. The city planning specifics of Magnitogorsk demonstrates the great role of the developed moral values and established rules of behavior in public transport. Propaganda, punitive, organizational, and control methods were used to form the cultural mentality of the townspeople.

In modern Russia, the tram is still often regarded as an obsolete means of transportation, and many of its parts are destroyed or are stagnating. However, the tram as a type of public transport, in our opinion, has great development prospects due to such characteristics as being environmentally friendly, safe, socially-oriented,

and convenient. Such complex problems as urban development, city economy, and social support of citizens should be solved taking into account transport systems. The state of public transport can either facilitate the city development or lead to the degradation of the urban territory it covers.

As a research perspective within the framework of this topic, the authors, first of all, see the problem of the place of public transport in the space of a modern city in the conditions of an information society.

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