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Creating a tourist product using historic trolleybuses in Gdynia

Abstract: Trolleybus transport in Poland remains unique due to its relatively low popularity. Trolleybuses are operated only in four cities, which makes them a particularly interesting mode of public transport to begin with. As in the case of trams, also trolleybuses require unusual infrastructure and are permanently embedded in the history of the city, creating its character. The article discusses attempts to create a tourist product such as historic trolleybuses in Gdynia operated on a special dedicated line. Gdynia has the largest collection of historic trolleybuses in Poland. There are currently four trolleybuses in very good technical and aesthetic condition. Only in Gdynia, a dedicated communication line 326 was established for them, which has been operating from May to October since 2012. Thanks to the efforts of the local government and transport authorities, trolleybuses are now a showcase of the city, and historic trolleybuses are its integral part.

Keywords: public transport, trolleybus, automotive tourism, historical tourism, Gdynia

1. Introduction

Trolleybus transport remains unique in Poland (Połom, 2019). They are used in just three systems serving four cities. Among them there are Gdynia with Sopot, Lublin, and Tychy. Trolleybuses, like trams, are the basic type of electrified transport in cities all over the world. Contemporary climate change has brought back attention to trolleybuses, which have been losing their popularity in recent decades. Trolleybus transport, like tram transport, is experiencing a second youth. In many centres, trolleybuses are developed, and in others, new systems are created from scratch.

The oldest of the existing trolleybus transport systems in Poland is located in Gdynia. Trolleybuses have been operating on the streets of this city continuously since 1943 (Połom, 2019). Underinvested public transport companies, especially in the 1990s, were unable to keep their most valuable vehicles. There was a shortage of funds for day-to-day operations. In such circumstances, possible museum goals are of marginal importance. To the great detriment of the heritage of public transport, it was

not possible to preserve the real monuments of trolleybus transport in Poland, but thanks to the increasingly better economic situation, such collections were created in all three trolleybus systems in Poland. The accession of Poland to the European Union and the possibility of rebuilding the rolling stock thanks to structural funds had a considerable impact on undertaking this type of action (Połom, 2019). Significant financial resources allowed for the modernization of the infrastructure and rolling stock and, consequently, also shifted focus on to the history of trolleybuses.

The study aims to systematize information on the functioning and development of the historic trolleybus park in Gdynia against the background of the situation in Poland and the world. Also, an analysis was made pertaining to the creation and development of the collection of historic trolleybuses and the possibility of their use in passenger transport (as a tourist attraction), and for the promotion of projects organized by the local government and transport authorities. The paper reviews the subject

literature and presents the most important achievements in preserving the heritage of trol-

leybus transport in Gdynia and promoting it as a tourist attraction.

2. Scientific background

Transport museology is not a new issue in the literature on the subject. The creation of a collection of individual vehicles (passenger cars, motorcycles, bicycles) or public transport (buses, trams, trolleybuses, trains) is not a novelty (Ashworth, 1992; Kowalczyk, 2005; Meyer 2009, 2015; Cudny, 2019; Cudny and Jolliffe, 2019;). In Poland, there are both transport museums and collections owned by private or institutional owners. Collections of trams and buses are particularly popular in urban transport. There are relatively many scientific studies dealing with the creation of historic rolling stock parks in tram transport in Poland (Kołodziej, 2007; Korzeniowski, 2005), the operation of special tram lines with historical vehicles (Bużałek, 2008; Chylińska and Kosmala, 2011; Kołodziejczyk, 2011; 2018, 2019, 2020), as well as transforming communication depots into museums (Wyka, 2005; Kołoś, 2006; Pochwała, 2007; Golonka and Pochwała, 2010; Kołodziejczyk, 2016). With regard to trolleybus transport, only a few studies on historic trolleybuses have been published (Goździewicz, 2003; Połom and Bartłomiejczyk, 2012). As in the case of studies on Poland, the literature on the subject in

other countries deals mainly with tram transport (Pearce, 2001, 2010; Gronau and Kagermeier, 2007; Gisterek, 2009).

Both in Poland and other countries, there are numerous examples of using the heritage of public transport as a tourist attraction. The review of professional and popular science literature shows that there is no other example of such a large-scale endeavour in the field of trolleybus heritage as the one taking place in Gdynia. This unique situation prompts us to look at the problem of how the collection of historic trolleybuses was created and how the trolleybus line dedicated to historic trolleybuses works. Apart from Gdynia, Lublin has some experience in using the historic trolleybus on the special "T" line. The ZiU 9 trolleybus is intended for operation on this line, and it has been converted into a special "bar on wheels".

Many trolleybus carriers in the world have active historic vehicles, but in very few cases there are regular trolleybus lines operated by this type of vehicles. These are usually incidental journeys related to the anniversary of the trolleybus transport launch in a given city or the open day of the depot.

3. Gdynia's experience in the use of historic trolleybuses

It is difficult to create a collection of historic trolleybuses in the absence of any preserved vehicles, even in very poor technical condition. The greatest attraction in such a situation is original and suitably old trolleybuses. While Polish cities with tram transport in many cases kept the withdrawn trams with the prospect of their reconstruction as a movable monument, in the case of trolleybus cities such efforts were typically neglected.

The first attempts to preserve characteristic or unique trolleybuses were made by associations of public transport enthusiasts. The Gdynia City Transport Enthusiasts Club "Vetra" took over from Trolleybus Transport

Company in Gdynia (PKT Gdynia) the last articulated trolleybus Ikarus 280.26E, which was decommissioned in 2002. From December 2002 to September 2006, the trolleybus was owned by the society, which, however, did not find adequate external funds for the necessary renovation works. Subsequently the trolleybus was sold to the Lublin Society for Ecological Communication (LTEK), which planned the reconstruction of the trolleybus for the next several years. However, this was not the case here as well. Ultimately, the trolleybus was sold to a scrap plant. The LTEK association made other attempts to preserve trolleybuses. It has two inactive Saurer trolleybuses and one Moser

trailer from Warsaw. Together with Public Transport Company in Lublin (MPK Lublin), the Fiat 418AC trolleybus was also preserved for several years, but it was not possible to rebuild it.

Currently, nine trolleybuses are operating in Poland with the status of a technical monument (Table 1). Six trolleybuses are located in Gdynia, two of them are technical vehicles and will eventually be used to rebuild one monu-

ment. Two trolleybuses are operated in Lublin. One is a “bar on wheels” - trolleybus ZiU, and the other is the Czechoslovak Škoda 9Tr, which is currently in the final stage of renovation. The last of these trolleybuses is the Škoda 14Tr in Tychy, which was purchased from Opava in the Czech Republic. It is a twin vehicle to the trolleybus tested in 1998 in Tychy and is to be a city attraction.

Table 1. List of active historic trolleybuses in Poland (Author’s own study)

City	Mark and type of the historic trolleybus	Year of production	Technical condition	Comments
Gdynia	Saurer 4TIILM	1957	After an average reconstruction in Gdynia (Trobus Company) in 2001–2002. Refreshment in 2011–2012 (PKT Gdynia).	No. 128. Trolleybus purchased from Trobus Company in 2003. Brought to Gdynia from Warsaw in 2001 by Trobus Co.
	Škoda 9Tr20	1975	After a complete reconstruction in Ostrava (Czechia) in 2011.	No. 359. Trolleybus purchased from the society of transport enthusiasts from Lublin in 2009. Previously operated until 1996 in Opava as no. 36.
	ZiU 9W	1984	After a complete reconstruction in Gdynia (PKT Gdynia) in 2015–2016.	No. 12096. In 1984–2015 in operation in Luck as no. 115 (Ukraine), next bought by PKT Gdynia.
	Jelcz 120MTE	1994	After a complete reconstruction in Gdynia (PKT Gdynia) in 2012.	No. 10121. A trolleybus was built and operated in Gdynia in 1994–2010 as no. 10121 and next 3321.
	Mercedes Benz O405NE	1993, 1994	After decommissioning for passengers in Gdynia. Necessary reconstruction.	No. 3064–3065. Two technical trolleybuses, one of which is to be preserved as a historic vehicle. In passenger transport in Gdynia in 2006–2019.
Lublin	Škoda 9TrHT28	1980	After decommissioning for passengers in Rivne (Ukraine). Under major reconstruction in MPK Lublin.	A trolleybus purchased from Public Transport Company in Rivne (no. 135/132) in 2014, is rebuilding as a historic vehicle in 2016–2020.
	ZiU 9W	1983	After decommissioning for passengers in Lublin. After a complete reconstruction in Lublin (MPK Lublin) in 2003–2004.	No. 730. In passenger transport in Lublin in 1984–2003 as no. 725/730. A trolleybus is converted into a cruise bus - it has a bar and tables installed.
Tychy	Škoda 14Tr17/6M	1996	After decommissioning for passengers in Opava (Czechia). Necessary average reconstruction.	No. 024. A trolleybus purchased from Public Transport Company in Opava in 2019, is to be preserved as a historic vehicle.

3.1. Historical vehicle park creation in Gdynia

The creation of a collection of historic trolleybuses in Gdynia began by accident. Along with the liquidation of trolleybus transport in Warsaw, used trolleybuses were sold after a few years. Among them, there were 11 Saurer 4TIILM vehicles, manufactured in 1957 and transferred from Sankt Gallen (Switzerland) in 1991 as part of economic help during the political transformation in Poland (Fig. 1). These unusual and at the same time old trolleybuses were purchased by various associations and organizations collecting vintage vehicles. Three of them along with two trailers went to a Gdynia-based company PNTKM “Trobus”, which dealt with renovation and production of trolleybuses. One of the Saurers was renovated in 2002–2003. Initially, PKT Gdynia was not

interested in buying this vehicle, which was not related to Gdynia’s public transport, but could be an interesting curiosity and be used to promote urban transport (Goździewicz, 2003). In the following years, the trolleybus was used sporadically on the occasion of various annual celebrations, and later also on selected runs on Sundays and holidays on the trolleybus line 21 connecting Gdynia and Sopot. In 2011–2012, PKT Gdynia refreshed the vehicle. It has been given the realistic colours of Sankt Gallen and restored the distinctive emblem and chrome trim on the front of the vehicle. The trolleybus also regained its original rolling stock number from Switzerland – 128, at the same time promoting its operation in Warsaw (special veneering of the side plates on the roof).



Figure 1. The condition of Saurer 4TIILM after refreshment in 2011–2012. The photo was taken in trolleybus depot during the special event “Tradition and Modernity” on 29.06.2012 (photo by Marcin Połom)

Due to the lack of preservation of historical trolleybuses in Gdynia, it was decided to use the opportunity to obtain a Škoda 9Tr from the LTEK (Fig. 2). The association purchased such a vehicle from the Czech Republic in 2000, but due to the lack of adequate resources, they never rebuilt the trolleybus. In 2009, PKT Gdynia purchased a trolleybus, and in 2011, thanks to external subsidies, it completely renovated the vehicle in the Czech Republic, at Ekova Electric (Połom and Bartłomiejczyk, 2012). The trolleybus regained its condition from the begin-

ning of its operation in 1975. Additionally, it was given a typical characterization of the era. The vehicle was labelled with the rolling stock numbers and markings of the Provincial Public Transport Company (WPK). Although the trolleybus is not originally from Gdynia, identical vehicles have been the basis of the rolling stock in Gdynia for many years, therefore it reminds us of the actual fate of public transport.

The only truly historic trolleybus in Gdynia is the Jelcz 120MTE, produced in 1994, which, after the end of the transport with passengers,

was put aside for reconstruction and restoration to the original state of operation (Fig. 3). It is one of the last vehicles of its type to be in relatively good condition and a decision was made to keep it. Reconstruction works were carried out at the PKT Gdynia workshops in 2012, preparing the vehicle for service on the new trolleybus line 326 dedicated to historic vehicles, which was announced to be opened on July 1, 2012.

The fourth historic trolleybus that is used in passenger transport is the Soviet-made ZiU 9W, which was brought to Gdynia from Lutsk in Ukraine. It is a trolleybus produced in 1983 and operated in Łuck until 2015 (Fig. 4). ZiU trolleybuses have permanently entered the history of trolleybus transport in Gdynia and the Municipal Transport Authority in Gdynia (ZKM Gdynia) has repeatedly stated that it would be an excellent showcase of the city, if such a vehicle was introduced into traffic. In 2015–2016, the trolleybus was renovated in

the workshops of PKT Gdynia. Since the 2016 summer season, the trolleybus has been operating on the line with passengers.

Currently, the historic trolleybus park in Gdynia consists of four vehicles, which are in very good technical and aesthetic condition. However, this is not a closed collection. As part of the rolling stock investments carried out in 2018–2019, 30 modern Solaris trolleybuses were purchased, thanks to which most of the used Mercedes trolleybuses were withdrawn. These were vehicles characteristic of Gdynia, as they were converted from diesel buses purchased in Western Europe. The deficit of new low-floor trolleybuses prompted PKT Gdynia to perform such an unusual project, which turned out to be remarkably successful. Therefore, two trolleybuses of this type were left as technical vehicles, one of which is to be preserved in the future as a historic trolleybus and complement the collection.



Figure 2. The condition of the Škoda 9Tr trolleybus after it was brought to Gdynia in January 2010 and after the reconstruction in March 2011 (photos by Marcin Połom)



Figure 3. The condition of the Jelcz 120MTE trolleybus during the reconstruction in 2012 and after the reconstruction in 2018 (left photo by Marcin Połom, right photo by Karol Grzonka)



Figure 4. The condition of the ZiU 9W trolleybus after it was brought to Gdynia in 2015 and after the reconstruction in 2020 (left photo by Karol Grzonka, right photo by Krystian Jacobson)

3.2. Dedicated trolleybus line for historic vehicles

Due to the enlargement of the collection of historic trolleybuses, which owing to their age and incurred financial expenses should not stand idle in the depot, the public transport authorities in cooperation with the authorities of Gdynia created a trolleybus line 326, which is serviced only by historic trolleybuses. The line

was launched on 1 July 2012 and has been operating continuously since then. A route has been designed that resembles the historic route of line 26 from the Grabówek district to Orłowo. Trolleybuses run through the city centre so that they pass by as many tourist attractions as possible in Gdynia (Fig. 5).

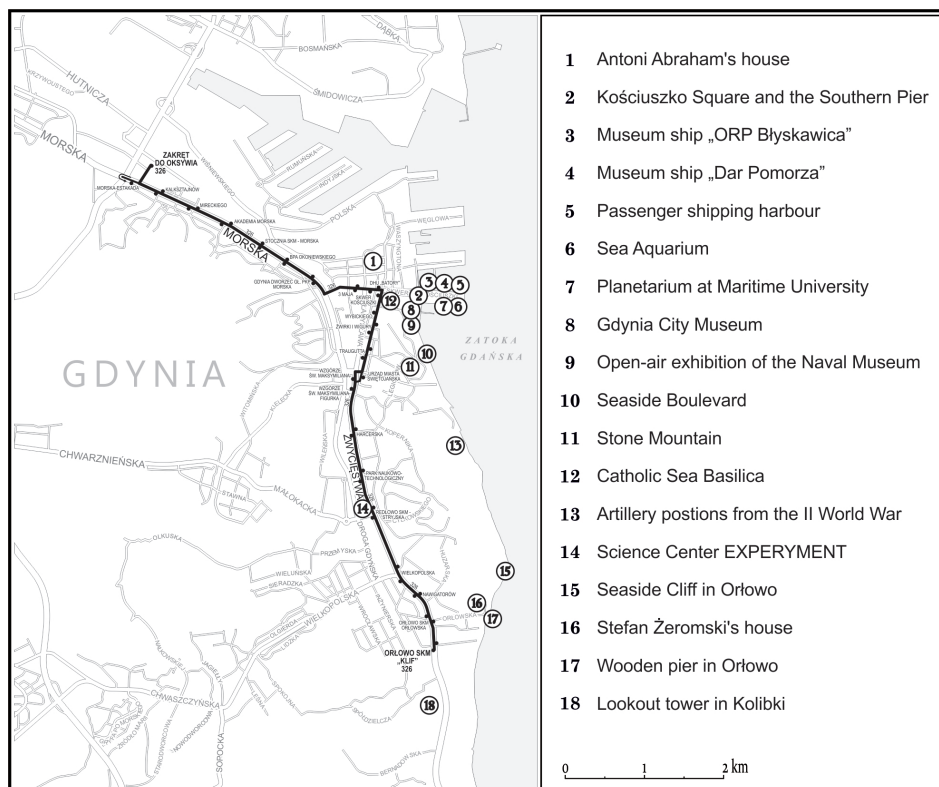


Figure 5. Diagram of a connection operated by historic trolleybuses against the background of the most important tourist destinations in Gdynia (based on the Author's own study)

The number of runs is ten per each loop, and the transports are performed on all Sundays and public holidays from the beginning of May to the end of October (Table 2). Exception-

ally in 2020, due to the coronavirus epidemic, transport on route 326 was limited only to the summer vacation period.

3.3. The use of historic trolleybuses as an element of city promotion

Historic trolleybuses are used on various promotional occasions organized both by the local government and the transport organizer. In addition to the use of historic trolleybuses on the regular line 326, they are also an excellent showcase of the city's promotional activities, especially concerning sustainable transport development. They are used for occasional transport, e.g. in the case of jubilees of public transport routes or anniversaries of the trolleybus traction launch (September 18). An exam-

ple of such a celebration was the journeys by the Škoda 9Tr on July 15, 2020, on line 25 on the occasion of the 70th anniversary of its launch. Another example is the launch of line 326 (with free travel) on the occasion of the European Week of Sustainable Transport on September 22, 2020 (Wyszomirski and Hebel, 2013; Jałoszewski, 2020). In the last few years, historic trolleybuses have also been used during open days at the depot or for example, for special journeys, e.g. for a wedding (Fig. 7).



Figure 7. ZiU 9W trolleybus on a special line 301 in September 2017 (photo by Karol Grzonka)

3.4. Analysis of the opinions of residents and tourists

Historic trolleybuses have become a permanent element of Gdynia's landscape during the eight years of operation of line 326. They are also constantly promoted by both the public transport authorities in Gdynia and the local government. The value and popularity of historic trolleybuses are determined by the

high turnout for line 326 and on other occasional journeys (Kołodziejewski and Wyszomirski, 2017; Zarząd Komunikacji Miejskiej w Gdyni). Moreover, similar conclusions can be drawn from the surveys conducted by the *trojmiasto.pl* website. To the question "Have you ever used a historic trolleybus?" 1 038

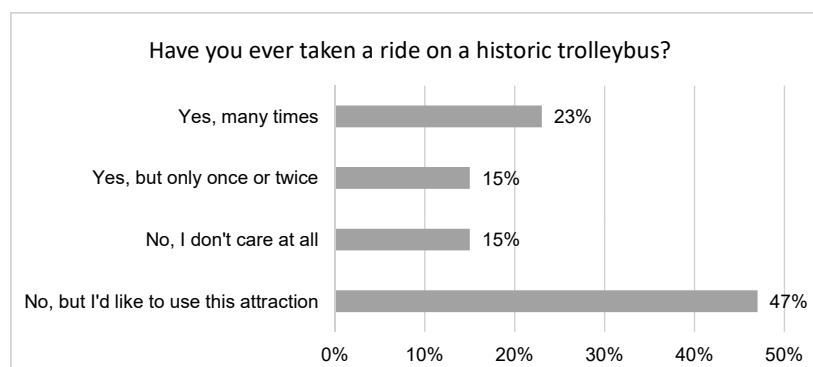


Figure 8. A survey on the popularity of historic trolleybuses (source: prepared based on Borowski, 2019a)

responses were obtained, of which: 23% – yes, many times; 15% yes, once or twice; 15% – I am not interested in this attraction; and as many as 47% expressed interest in using it in the future (Fig. 8). Summing up, 85% of the respondents expressed their interest in transport by historic trolleybuses in Gdynia.

Even more interesting from the point of view of historic trolleybuses as attractions – the city’s flagship – is the question of “Would you like historic vehicles to run every day?”. Among 776 answers, “yes” answers were predominant, constituting 68%. 32% of the respondents answered “no” (Fig. 9).

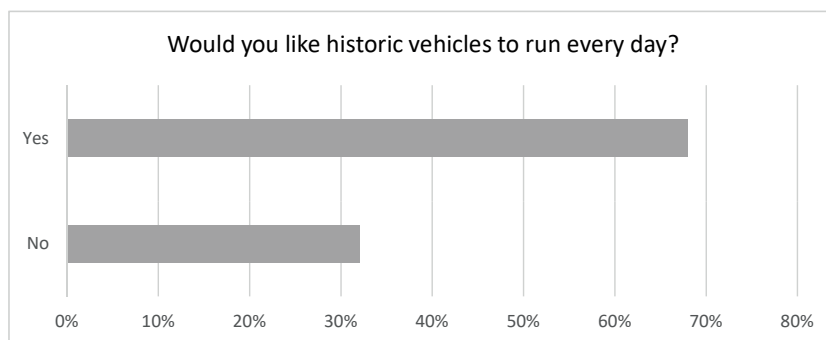


Figure 9. Study on the frequency of historic trolleybuses (source: prepared based on Sielski, 2020)

Interesting results arise from another question related to the possibility of bringing the Jelcz M121 low-floor trolleybus to Gdynia, which was sold in 2015 to Lutsk in Ukraine (Borowski, 2019b). An article was published on the trojmiasto.pl website which presented the problem of the only low-floor Jelcz trolleybus that was operated in Gdynia. The president suggested that the trolleybus should be brought back to Gdynia and restored as a monument complementing the existing collection of historic trolleybuses. On the occasion of the arti-

cle, a question pertaining to this matter was presented to 1 622 respondents. 44% of the answers were negative – such a monument is not needed. 20% of the respondents made such actions dependent on the amount of needed financial resources. 36% of the respondents decided that it was a unique copy and should be brought to Gdynia. The responses to the question indicate that for more than half of the respondents, the development of the collection of historic trolleybuses is justified and necessary (Fig. 10).

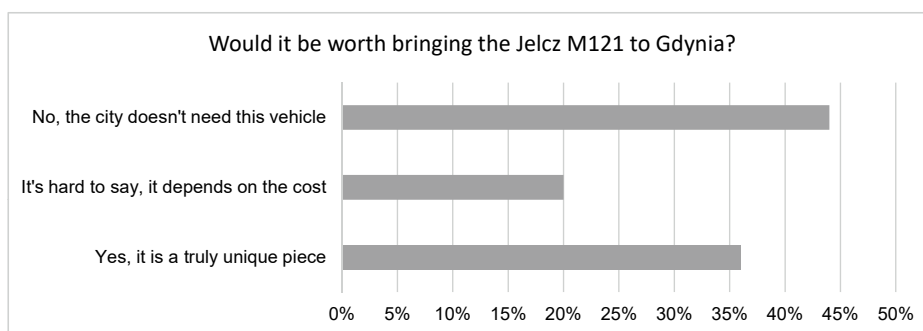


Figure 10. Research on the need to acquire another historic trolleybus (source: prepared based on Borowski, 2019b)

Historic trolleybuses are so important to the citizens of Gdynia that there are voices of concern about their condition or future. At the turn of 2018 and 2019, the trolleybus depot had a problem with capacity because thirty new trolleybuses were purchased. During this period, historic trolleybuses were transported

to the bus depot and instead of being usually stationed under a roof, they were exposed to the weather for a certain period. The residents concerned about this situation wrote letters to local editorial offices, an example of which is an article that appeared in local news services (Borowski, 2019a).

4. Conclusions

Trolleybuses are not a very popular means of public transport in Poland. Due to the use of trolleybuses only in some cities, it allows for the creation of a unique tourist attraction. The Gdynia local government has the greatest experience in this field, and has been developing a collection of historic trolleybuses since 2003, and in 2012 launched a special public transport line dedicated to such vehicles, which operates from May to October each year. In the opinion of residents and tourists, historic trolleybuses are an important attraction of Gdynia, and this is manifested by, for example, positive opinions obtained in online surveys which were quoted in this article. The maintenance of historic trolleybuses generates significant costs related to their reconstruction, maintenance in good

technical and aesthetic condition. In the case of this type of attraction, however, it is difficult for the proceeds from the tickets to compensate for the costs incurred. It is a kind of museology that is always very popular (similarly to vintage cars), yet difficult to appraise through the narrow prism of economic principles. Trolleybuses could also earn money outside the holiday season, throughout the year, if they were used, for example, as chambers of tradition (for photo exhibitions) or, for instance, in the form of a cafe. In recent years, Gdynia has attained the status of a model city in the field of sustainable development of public transport (Wołek, 2013; Połom, 2019), and historic trolleybuses fit into this policy.

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