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A PASTOR, A FIRE AND A NEW BEGINNING: DATING EVIDENCE FROM 5 TÄHTVERE STREET, TARTU

INTRODUCTION

The residents of 5 Tähtvere Street have always thought that the house is older than the rest of Supilinn. The walls of a mantel chimney dated to the 18th century still survive in what is now the cellar, suggesting that at least part of the foundation dates to this period as well. The earliest records of a house and surrounding land where number 5 now stands date back to the last quarter of the 18th century, when a large plot of land between Herne, Kroonuaia, Marja and Tähtvere Streets came into the possession of Theodore Oldekop, a pastor from Jaani Church in Tartu.¹ A plan of Supilinn drawn up by Conrad Martin Sengbusch in 1837 shows that a house on this spot was then owned by another pastor by the name of Gehewe.² A large part of the house's current interior dates to the turn of the 19th century, which would coincide with the time of pastor Gehewe's

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1 National Archives of Estonia [Rahvusarhiiv, RA], EAA.2381.2.861. fol. 4–5, Tähtvere 7. Land registry file No 184, documents certifying ownership rights, 1781; RA, EAA.995.1.21860, fol. 248–253. Transactions concerning the plot of land behind Jakobi Gate belonging to Pastor Oldekop on 29 May 1781.

2 RA, EAA.2623.1.2049, fol. 44. Charte der Kaiserlichen Stadt Dorpat, 1837.

ownership, whilst the current exterior was created much later, during the 20th century.

What is quite obvious is that the street in front of the house is at a completely different height today than it used to be (Fig. 1A). The resurfacing of Tähtvere street, layer by layer, over many decades has gradually buried the front of it so that to gain entrance from the doorway you now walk down stairs, whereas when it was originally built you would have walked up, as is normal. In the street side rooms, people now sit a little below the ground and watch the feet of passers-by from their windows. One local recalled that when they opened the song festival field in the early 1990s, a new layer of asphalt was put down to make it beautiful and straight. When the asphalt arrived at his house, they discovered that the doors could no longer be opened (opening outwards) as they were now below street level. To solve this, a part of the new street surface was removed so that he could enter the house once more (unfortunately along with the rainwater from the pavement).

Five Tähtvere Street has seen many changes over the last century. For example, it was damaged by a Soviet bombing raid in 1944 (Fig. 1B) when famous Estonian poet Karl Eduard Sööt lived there. In addition, in the 1960s the floors were raised to compensate for the rising street and to reduce the 'cellar' feeling. At least now number 5 is recognised as being culturally important and has heritage protection³.

In the summer of 2025, the latest renovation of Tähtvere Street took place. This time thorough consideration was given to the work before any construction was carried out. Every metre was discussed in multiple ways before the machines arrived and no one was trapped inside their house by asphalt. Lowering the street to its original level was found to be impractical, although at least the surface outside number 5 wasn't raised again.

The lower parts of the log walls of the house had been left under the rising street for a long time and were no longer in a safe condition. Therefore, about a metre of the soil was temporarily removed so that repairs could take place (Fig. 2A). After consulting the architects, the decayed logs were replaced with stone and the rest of this old house was insulated and isolated from soil moisture. During this repair work some sections of wood from the decayed logs were collected in

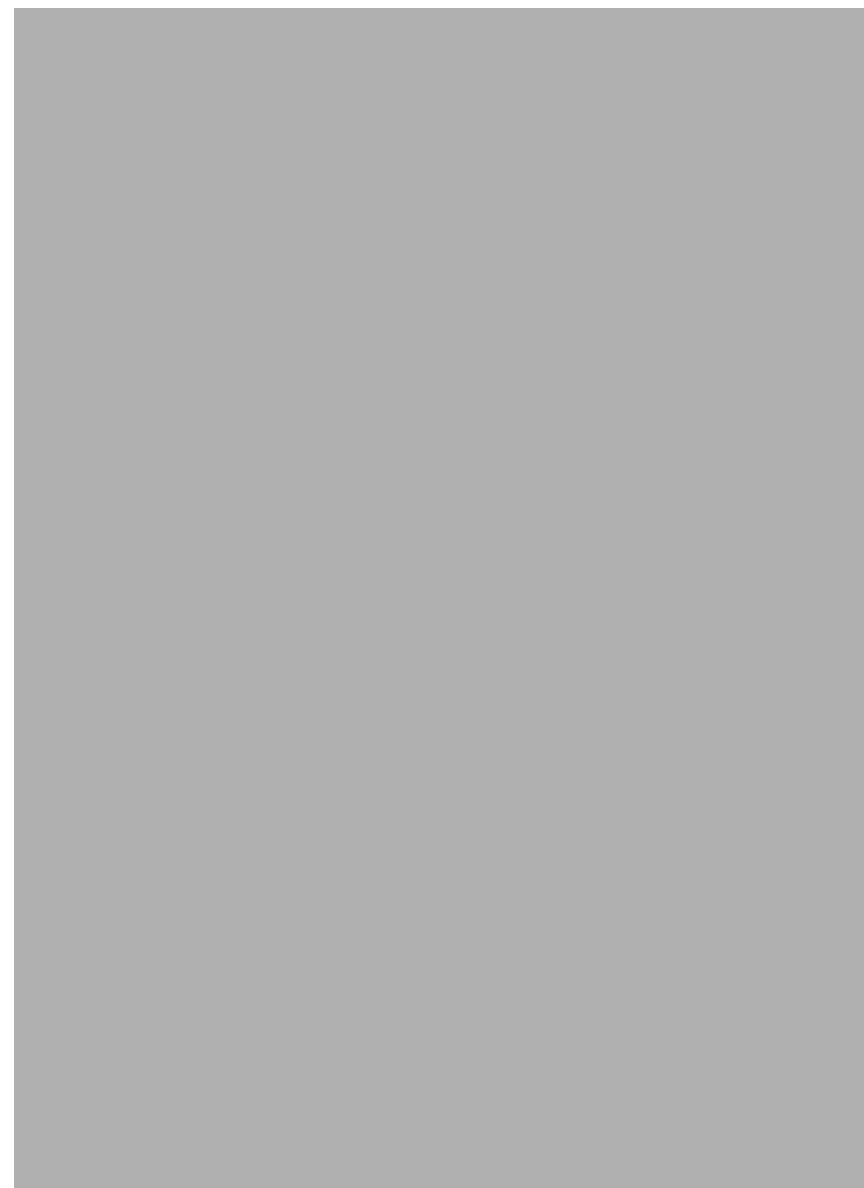


FIG. 1. A) THE FRONT OF 5 TÄHTVERE STREET IN 2022 SHOWING RAISED STREET LEVEL. PHOTO: MARCUS A. ROXBURGH. B) KARL EDUARD SÖÖT STANDING OUTSIDE THE BOMB-DAMAGED ENTRANCE IN 1944. PHOTO: IMAGE ARCHIVE FOTO MARBURG.

3 Historic Monument registration number 4369.



FIG. 2. A) THE FRONT WALL AT 5 TÄHTVERE STREET DURING LOG REPLACEMENT. B) LOG SECTIONS 1–3 WERE POSITIONED IN THE WALL FROM TOP (1) TO BOTTOM (3). PHOTOS: MARCUS A. ROXBURGH, TÕNU RUNNEL.

the hope of dating them (Fig. 2B)⁴. Three sections were recovered for sampling (more would have been preferred but the others were in too poor a condition or were inaccessible). Our wish was to address the lack of knowledge of the building's construction date. The aim therefore was to study the early history of the building (from archive and written sources) with the addition of new dendrochronological research, then to compare the results. How close in date would this wall be to the dates suggested for the mantel chimney or the 19th century interior? Could it be contemporary to the ownership of either of the pastors, or is there evidence of later repair or remodelling?

The Dendrochronology Laboratory at the University of Tartu's Geography Department was subsequently contacted to help resolve these questions.⁵ Dendrochronology is a very accurate technique

4 Repair workers retained three sections from the middle of the house when they were disposing of the decayed wood. These were subsequently handed over to the first author for research.

5 Associate Professor emeritus Alar Läänelaid and Research Fellow Kristina Sohar, the head of the Laboratory, were delighted to help as their interests include the dating of wood from historic buildings, addressing questions regarding wood provenance, and the historical timber trade.

that is used to date ancient wood.⁶ It is a well-established method that measures tree ring widths, as a tree forms one growth ring per year. The last ring corresponds to the tree's final growth year prior to felling. The three sections of wood collected from the lower section of the wall were subsequently submitted to the Laboratory for dating.

HISTORICAL CONTEXT

Supilinn was part of Tartu city as early as the 17th century, according to surviving maps.⁷ When this small area began to be called Supilinn (Soup Town) by the locals is unclear. This name does not appear in written sources. The reason is probably related to the large gardens located in the area and the street names such as Oa (Bean), Herne (Pea), Kartuli (Potato), Meloni (Melon) and Marja (Berry).

In 1786, after the border between the district and the city was regulated, the auditor, Otto Gustav Dreyer, compiled a plan showing all the plots in the city.⁸ A copy of the plan made by Conrad Martin Sengbusch in 1792 has survived (Fig. 3A). Comparing data from various sources such as the audits of 1734 and 1757, reports of real estate transactions submitted to the town hall, chamber court minutes, land records, the 1787 (1792) plan and the description book shows that the entries depicted on the Dreyer/Sengbusch plan were located on top of earlier garden plots. There is information about individual plots from the end of the 16th century, but the creation and ownership of most of them can be traced more consistently from the middle of the 18th century. The earliest known source on the land in Tartu and its owners is the so-called Wybers revision

6 Alar Läänelaid, Kristina Sohar, "Mida dendrokronoloogid Eestis teevad?", *Eesti Loodus*, 12 (2020), 24–29; Alar Läänelaid, Juhan Kilumets, Andres Uueni, Paul Borghaerts, "Investigating the age of the door of the King's Chapel in Tallinn Dome", *Dendrochronologia*, 95 (2026), DOI: 10.1016/j.dendro.2025.126462; Aivar Kriiska, Raido Roog, Kaur Alttoa, Andreas Allik, Alar Läänelaid, Rivo Bernotas, Martin Malve, "The medieval and modern period building complex at 2 Lutsu Street in Tartu. Results of the archaeological, architectural historical, dendrochronological and osteoarchaeological research", *Ajalooline Ajakiri = The Estonian Historical Journal*, 1 (135) (2011), 3–40.

7 Except for the Piiri and Kauna streets. See Mart Hiob, "Planeeringuline kujunemine. Supilinn 17.–21. sajandi linnakaartidel ja plaanidel [Development of Supilinn's street and plot structure – Supilinn on maps and plans between the 17th and 21st centuries]", *Acta architecturae naturalis*, 2: Supilinn (Tallinn, 2012), 51–77.

8 RA, EAA.995.1.6851, fol. 3. Geometrische Charte von der Kreis-Stadt Dorpat.



FIG. 3. A) THE 1792 PLAN (TOP) SHOWING PLOTS 184 AND 185 OWNED BY PASTOR OLDEKOP. B) THE PLAN OF TARTU DRAWN IN 1837 (BOTTOM). IT SHOWS A HOUSE EXISTING ON TÄHTVERE STREET OWNED BY PASTOR GEHEWE (GEHÖWE).

book which contains data on the city's plots from 1582 to 1658.⁹ In addition, the Wybers revision also notes the gardens that belonged to them, including those that were located in the suburbs outside the city wall. Descriptions of locations such as "in front of" and "behind Jakobi Gate", and "behind Vene (Russian) Gate"¹⁰ suggest that they describe locations between the city and Tähtvere Manor, some of which must have been within the boundaries of modern day Supilinn. Unfortunately, it is difficult to specify more precise locations based on Wybers and the next revision, which took place between 1681 and 1686; neither provides the exact locations of the garden plots in the area.¹¹ More detailed descriptions, including information on owners and ownership relationships, can be found in the land survey conducted between 1734 and 1742. This was conducted to clarify ownership relationships after the Northern War and to obtain an overview of the houses and plots in the city.¹² Based on data from this survey we can say that a few dozen plots were used as gardens in Supilinn. Most of them were privately owned, some belonged to the Jaani Church congregation, and a few to the city. These were mainly located along the current Oa, Emajõe, Kroonuaia and Tähtvere streets.

The next revision took place in 1757–1758,¹³ with the number of plots being more or less the same, only a few merged or were added. About half the plots had buildings on. The data provided can be related to the previous revision, which allows us to follow the dynamics of ownership relations. Most of them belonged to wealthy citizens, clergymen and nobles, who generally rented them for use by ordinary people. The plots that belonged to the city were mainly used and inhabited by non-Germans (*unteutsche*), who included Estonians (Illacko Johann, Johsti Johann, etc.) and Russians (carter Tarass, gardener Peter, merchant Grigori Kitchigin, etc.) in roughly equal

9 Named after Bartholomeus Wybers, one of the compilers. RA, EAA.995.1.21865. Revisionsbuch aller Gründe und Plätze (Wybers), 1582–1656.

10 Niina Raid, "Tartu elanike aiakruntidest XVI–XVIII sajandil [Garden Plots of Tartu Residents in the 16th–18th Centuries]", *Kleio*, 5/6 (1992), 8–10.

11 RA, EAA.995.1.21841, fol.16r-16v, fol. 31v-35v. Protokolle der Revision der Gärten und Plätze in der Vorstadt am Steindamm, 22/10/1681–09/10/1686.

12 RA, EAA.995.1.21842. Protokolle der Revision der Haus- und Gartenplätze. The plot descriptions of Supilinn begin on fol. 103v.

13 RA, EAA.995.1.21843, Protokolle der Revision der Gründe und Plätze, 1757–1758.

numbers. The words garden plot or paddock appear multiple times in the sale contracts of the time.

In 1763, a city development plan was prepared for the restoration of Tartu as a fortified city. The fortification zone was to include Toomemäe and extend to Ülejõe Avenue. In order to carry out the work, the Engineering Command needed to straighten the existing streets and demolish the buildings in front of the fortifications. Some of these buildings were in the Supilinn area. The demolition list included the houses belonging to Estonian Illacko Michkel, chimney sweep Walther and churchwarden Kusiko Pedo along with their vegetable gardens. The houses of Kordi Andres and the widow Flach, plus those of curate Ignatius, Sussiko Jüri and a man named Sander were also demolished. The gardens belonging to pastor Oldekop (formerly Flach's garden), and secretary Bischof are also recorded as being lost.¹⁴

After the great fire of 1775, the city's plots were re-measured, and a new revision was carried out. A new division of the city districts came into effect, and Supilinn, which had previously been part of the Jakob suburb, remained part of the first city district. On the 20th of June 1786 the buildings and plots in the city were numbered by order of Mayor Adam Johan Klein. Each house or plot owner received a numbered sign from master painter Peter Gottlieb Vogel for 14 kopecks. It had to be attached to the house or, in the case of an undeveloped plot, to the gate.¹⁵

By the last quarter of the 18th century, a large part of the area between Herne, Kroonuaia, Marja and Tähtvere Streets (plots 184 and 185) had come into the possession of Theodor Oldekop, pastor of the Estonian congregation of Jaani Church in Tartu. He bought one of them, and one came into his possession thanks to family connections. Widow Flach sold the garden plot behind Jacobi Gate to the pastor for 700 rubles in 1761, according to her heirs. The heirs of pharmacist Samuel Linck confirmed that his garden plot behind Jacobi Gate was inherited by pastor Oldekop.¹⁶ Linck was the pastor's father-in-law.

14 RA, EAA.2381.1.1763, fol. 26. List of buildings that had to be demolished during the construction of the fortifications, 22/04/1764.

15 RA, EAA.995.1.6731, fol. 518–519. Announcement from the Tartu magistrate, 20/06/1786.

16 RA, EAA.2381.2.861, fol. 4–5. Land register file No. 184, documents certifying ownership, 1781; RA, EAA.995.1.21860, fol. 248–253. Transactions concerning the plot of land behind Jakob's Gate, which belonged to Pastor Oldekop, 29/05/1781.

Theodor Oldekop, was born on November 3, 1724, in the Estonian parish of Väike-Maarja, to the family of pastor Johann Bernhard Oldekop (1696–1745).¹⁷ From 1728, the family lived in Tartu because Johann Bernhard Oldekop began serving the German congregation of Jaani Church, which he did until his death in 1745. His son Theodor studied at the Tallinn Gymnasium and in 1744 began studying at the University of Halle, Germany (he matriculated on June 26, 1744). On the 15th of April, 1752, he was ordained as a pastor in Riga, Latvia.¹⁸

In 1750, Carl Gustav von Staden, former pastor of the Estonian congregation of Jaani Church, died. In 1752, the council sent an invitation to Theodor Oldekop to take his place, who accepted it with gratitude. On the 26th of May, he asked the council for three horses to bring his belongings from Tallinn.¹⁹ His mother, widow Anna Helena Oldekop, also lived in Tartu. As the new pastor, Oldekop was promised an annual salary of 96 state thalers and 80 kopecks, including rent.²⁰ On the 24th of August, 1752, he was elected assessor of the Tartu city consistory.²¹

On the 21st of September, 1753, Theodor Oldekop was married to Maria Christiana Linck, daughter of mayor Samuel Linck.²² By 1763, the family had three daughters, and Theodor's niece also lived with them. Three servants and four maids also helped to keep the household in order.²³ On the 20th of October, 1771, Theodor Oldekop's first wife, Christiana, died at the age of 38.²⁴ The pastor remarried

17 Some sources also mention Tartu as his birthplace, see Johann Friedrich von Recke, Karl Eduard Napiersky, *Allgemeines Schriftsteller- und Gelehrten-Lexicon der Provinzen Livland, Ehstland und Kurland*, III Bd (Mitau: J. F. Steffenhagen und Sohn 1827–1832), 348; "Oldekop, Theodor", *Baltisches Biografisches Lexikon digital* <https://bbld.de/GND137585446> [accessed 26/02/2026].

18 Martin Ottow, Wilhelm Lenz, *Die evangelischen Prediger Livlands bis 1918* (Köln; Wien: Böhlau, 1977), 363: Theodor Oldekop (Nr 1340).

19 RA, EAA.995.1.323, fol. 63, 65, 99. Protocols of Tartu magistrate from 11/03/1752, 17/03/1752 and 26/05/1752.

20 RA, EAA.995.1.6693, pages unpaginated. Draft invitation sent to Theodor Oldekop (No. 19), 11/03/1752.

21 RA, EAA.3765.1.2, fol. 180v. Decision of the Tartu town Consistory on the appointment of Theodor Oldekop as assessor, 20/08/1752.

22 RA, EAA.1253.3.2, fol. 125. Marriage record of Theodor Oldekop and Anna Christiana Linck, 21/09/1753.

23 RA, EAA.995.1.1471, fol. 45. The Family of Pastor Oldekop, 1763.

24 RA, EAA.1253.3.2, fol. 777. Death record of Anna Christiana Oldekop 20/10/1771.

on the 5th of January, 1772, his chosen bride being Charlotte Luise von der Osten-Sacken.²⁵

The pastor's family lived in a house on the corner of Kompanii and Suurturg Streets, which the pastor bought from the heirs of Matthias Peucker for 2,175 rubles at an auction held on the 13th of July, 1759.²⁶ Apparently, according to the 1758 audit, Pastor Oldekop owned a partly wooden, partly stone house on the left side of Kompanii Street and four hardware shops that were next to it and facing the market square. Their house had one room, two chambers and a further room and one chamber in the wing called the outbuilding. There was also a stable and a carriage shed on the plot. In addition to the house on Kompanii Street, the pastor had a garden house located between the Saksa (German) and Jakobi Gate that had one room, two bedrooms and two side rooms.²⁷ In 1771, his real estate on Kompanii Street was valued at 1,200 rubles, and the garden plot and the house on it at 200 rubles. Madis, a blacksmith, lived in the garden house.²⁸

A major fire broke out in the city on the 25th of June 1775, destroying many of the wooden houses within the city walls. The pastor's house on Kompanii Street was destroyed, along with the stone shop rented to nail smith Stein. The pastor's losses were estimated at 2,500 rubles for the building and 1,500 rubles for his library and other household belongings.²⁹ He subsequently started to rebuild the house on Kompanii Street but abandoned the idea and on the 13th of July 1777 sold the plot, along with the masonry on it, to Baron Reinhold Johan von Igelström for 1,650 rubles.³⁰ The great fire of Tartu, as it became known, destroyed 290 houses in the city, an estimated two-

25 RA, EAA.1253.3.2, fol. 775. Marriage record of Theodor Oldekop and Charlotte Luise von der Osten-Sacken 05/01/1782.

26 RA, EAA.995.1.21866, fol., 36v. Information about the Kompanii Street plot and residential building, 1758; RA, EAA.995.1.21859. Erb- und Auftragsbuch, fol. 198–200. Pastor Oldekop's announcement regarding the purchase of Kompanii Street and the plot of land, 31/10/1777.

27 RA, EAA.995.1.24742. Quartier-Rolle (Verzeichnisse der Strassen, Häuser und Bewohner), fol. 10, Description of Pastor Oldekop's House on Kompanii Street, fol.19. Description of Pastor Oldekop's suburban Garden house, 1769.

28 RA, EAA.3828.1.8, fol. 50 and 69v. Protocol on the taxation of buildings in the town and suburbs 04/04/1771 and 20/04/1771.

29 RA, EAA.995.1.5903, fol. 349v. Information about Pastor Oldekop's destroyed property, 03/07/1775.

30 RA, EAA.995.1.21859, fol. 317–323. Notice regarding the sale of the building on Kompanii Street, 05/12/1777.

thirds of the buildings, as well as two bridges, most shops, and the wooden town hall.³¹

As a result of the fire, the provincial government ordered Tartu's garrison battalion, artillery and engineering command to be moved out of the city and placed in the nearest manors. The council was tasked with preparing an overview of the consequences of the disaster for the Governor General of Livonia, George Browne, and with submitting proposals for measures necessary to help the city. The Governor General then submitted the report to Empress Catherine II. On the 25th of November, 1775, the Empress approved the city's reconstruction and fortification plan. The plan provided for wider and straighter streets, and new houses were to be built according to a new, specific, layout. The Engineering Command established a new street layout in Tartu's Riia (Riga) and Peterburi (St. Petersburg) suburbs. The plots behind Jacobi Gate were also levelled. On the 4th of June, 1776, the Livonian Governor General approved a new building regulation for Tartu. This determined that stone houses had to be built within the city with wooden houses allowed in the suburbs. The tasks of the chamber court were then assigned and buildings in the city were only allowed in accordance with the valid city plan. From now on, no master builder was allowed to carry out construction work without a decision from the chamber court.³²

To rebuild the city, the government allocated a construction loan of 100,000 rubles, interest-free, for ten years. The interest-free loan was subsequently extended for another ten years after the deadline (but could not be fully repaid by that time either). The decision on the distribution of this loan was made by the reconstruction board formed on the 19th of January, 1776. It was headed by the city's syndicate member Johann Giese Schultz; other members included the mayor Carl Ulrich Ehlerz, representatives of the large guild Reinhold Johan Cantzler and Johann Lange, and a representative of the small guild Johann Joachim Bruhns. On the 23rd of January, 1776, residents were informed that those who had suffered from the fire and wished to receive a loan for the construction of a new dwelling had to notify the reconstruction board within four weeks.

31 RA, EAA.995.1.28275, fol. 2-3. Description of the Great fire by Johann Gottlieb Thiel, teacher at the girls' school, 1781; RA, EAA.995.1.5903, fol. 53–60. List of burned buildings, 02/07/1775.

32 RA, EAA.3828.1.1. Bauordnung für das Kämmerergericht der Stadt Dorpat, 1776.

On the 20th of February, the notification deadline was extended to the 16th of March. When applying for this loan, a construction budget and a construction plan had to be submitted. Builders of stone houses were preferred as borrowers, but builders of wooden buildings in the suburbs were not excluded. Those who intended to build without a loan were also asked to notify the committee. Sellers of building materials were urged to hurry up with supplying the necessary building materials so that those who wished could start construction in the spring. Loan applications were lively.³³ In February 1777, out of a loan of 100,000, 65,400 rubles had been allocated for the construction of stone houses and 7,200 rubles for wooden houses, a total of 72,600 rubles.³⁴ In April 1779, the fund still had 7,864 rubles and 88 kopecks available.³⁵

On the 2nd of March, 1776, Theodor Oldekop also turned to the city reconstruction board with a request for a loan, wishing to build a wooden house on his garden plot behind Jakobi Gate. The house was to be 14 fadens (fathoms) long and seven fathoms wide. This is broadly the same size as the house at 5 Tähtvere Street today, which measures 32m long by 12.25m wide. The width of the building exactly matches seven fadens at 1.75m per faden. However, according to this measurement the modern house is four fadens longer than originally planned, suggesting that the house was extended upon construction or during a later renovation.³⁶ The applicant estimated the total cost of the construction at 1,200 rubles and requested a loan of 600, with the same plot of land as collateral. At the committee meeting on March 9, Schultz, the head of the syndicate, reported that Oldekop had submitted a drawing of the house to be built and repeated his request for a loan of 600 rubles. On April 27, the board decided to allocate 400 rubles to him.³⁷ But on April 26, 1777, the board received a new application from Oldekop. He claimed that he had almost

33 RA, EAA.995.1.25491, fol.1–6. Announcements from Magistrate 23/01/1776 and 20/02/1776.

34 RA, EAA.995.1.25484, fol. 5–6. Protocol of Reconstruction Committee 06/02/1777.

35 RA, EAA.995.1.25495, unpaginated. Protocol of Reconstruction Committee, 08/04/1779.

36 Historically there were varying lengths for the faden ranging from 1.75m to over 2m in local contexts.

37 RA, EAA.995.1.25482, fol. 38, 45, 52v. Theodor Oldekop's requests for a loan and the decision to allocate 400 rubles; RA EAA.995.1.25493, fol. 2, list of loan recipients who built wooden houses, 1776.

completed the construction work but owed 300 rubles for materials and to the builders. He asked the reconstruction board to allocate another 100 rubles to him to complete the construction, because he could not afford to pay for everything from his own pocket. The board subsequently granted the request.³⁸ In 1781, the pastor also bought a plot of land on the corner of Kraamipoodnike and Küttri streets. To build a house there, he applied for a loan of 2,500 rubles, using the house under construction and the wooden house built behind Jakobi Gate as collateral.³⁹ The money was allocated to him, and in 1783 a stone house with two wings and stone outbuildings were completed. According to the 1805 valuation of buildings and plots (some 30 years after Oldekop applied for his reconstruction loan), there was a 12-room dwelling on the pastor's plot of land on Tähtvere Street.⁴⁰

Theodor Oldekop died on March 23, 1806, and his widow Louise on March 28, 1833.⁴¹ In 1834, their heirs sold the property along with the other buildings to Pastor Theodor Heinrich Gehewe. According to the 1855 tax assessment, the buildings had been built during Pastor Oldekop's time. There was a house with an attic on the plot, in addition to a gardener's house and a coachman's apartment. Outbuildings included a stable, a carriage house, an ice cellar and a laundry room. Water was supplied by a well on the property. The main part of the plot was used as a profitable garden, and the garden and the gardener's house were rented out. All buildings were covered with shingle roofs. The house had 11 rooms, three of them on the attic floor, a kitchen, two cellars, an attic and a conservatory. There were eight stoves for heating. Of the 19 windows, seven opened onto the street and 12 opened onto the courtyard. The house was used by the pastor and his family.⁴² A visual overview of Supilinn in the late 1830s is provided by the plan drawn up in

38 RA, EAA.995.1.25495, unpaginated. Theodor Oldekop's appeal to the Reconstruction Committee, 26/04/1777; RA EAA.995.1.25484, fol. 22. Protocol of Reconstruction Committee 26/04/1777.

39 RA, EAA.995.1.25488, fol. 6. Protocol of the Reconstruction Committee, 02/02/1781.

40 RA, EAA.995.1.26215. Taxationsprotokolle der Häuser und Plätze des I Stadtteils, fol. 129v–130. Pastor Oldekop's property No 184/185, 1805.

41 RA, EAA.1253.3.5, fol. 53v. Death record of Louise Oldekop, 28/03/1833.

42 RA, EAA.995.1.26424. Akte betreffend die Taxation der an der Techelferschen Strasse (Tähtvere tn) unter Polizeinummer 174 auf Grundnummer 184 und 185 belegenen Gebäude des Pastors Gehewe, 1855.

1837. Houses and other buildings are drawn within the plots. The house belonging to pastor Gehewe (Gehöwe on the plan), i.e. the house formerly belonging to the Oldekop family, is depicted as larger than the others (Fig. 3B).⁴³

Pastor Gehewe died in 1856. His heirs divided the property into lots and sold them off. As a result, new buildings sprang up in the area between the previously sparsely populated Kroonuaia, Tähtvere, Herne and Marja streets. The house also found a new owner, and despite the subdivision into lots, it retained a large garden.

As has been outlined above, the house at 5 Tähtvere Street was associated with Pastor Oldekop and is probably one of the oldest in Supilinn. Dendrochronological analysis confirmed what was recorded in the written sources, i.e. that as far as can be determined, it really is the oldest residential building in this area.

DENDROCHRONOLOGY

A visual inspection of the three log sections took place at the University of Tartu's Dendrochronology Laboratory. It revealed that they were all pine (all showed distinct darker heartwood) and hewn on the sides, probably with an axe, to shape the logs before use in construction. A V-shaped groove was cut into the lower side so that the logs could be set securely on top of each other. This V-shaped groove was found to be filled with sphagnum moss which was used as insulation during construction. This is part of a very old building technique where gaps between the logs were stuffed with moss to provide insulation, wind and waterproofing. There are small plaster lath nails on the inner surfaces, some of which are hand forged suggesting that they were probably made before the emergence of machine-made nails at the end of the 18th century. Lath nails were used to fix horizontal laths (strips of wood) onto the inside of the log walls. Lime and horsehair plaster would then be applied to these laths to create the interior walls. Finally, there were black burn marks on the outer surfaces of the logs where they were probably exposed to accidental fire damage at some point during the life of the house.

Sample preparation and subsequent dating analysis was then carried out. Core samples were first drilled from the wood beneath



FIG. 4. LOG SECTIONS 1–3 (FROM LEFT TO RIGHT) WITH DRILL HOLES. LOGS 1 AND 2 WERE DRILLED FROM THE WANNEY EDGE SURFACE. THE SURFACE OF LOG 3 WAS DRILLED FROM THE PARTIALLY HEWN SURFACE. PHOTO: ALAR LÄÄNELAID.



FIG. 5. A) KRISTINA SOHAR MEASURING TREE-RING WIDTHS USING THE LINTAB MEASURING DEVICE. B) CORE SAMPLES. THE CROSS SECTIONS OF THE CORES HAVE BEEN SMOOTHED AND TREATED WITH CHALK. THE BARK-SIDE ENDS ARE AT THE BOTTOM. PHOTOS: ALAR LÄÄNELAID.

the bark using a cordless drill and a hollow auger (Fig. 4).⁴⁴ The transverse surfaces of the samples were smoothed with razor blades, and the annual ring widths were measured to 0.01 mm accuracy using the TSAP-Win software with a Leica S4E microscope and a Lintab (Rinntech) measuring device (Fig. 5A). In sample 1 we measured 160 rings; in sample 2, 157 rings; and in sample 3, 122 rings (Fig. 5B).

The ring-width series were compared with ca. 270 pine reference chronologies from Estonia and other parts of Europe using TSAP-

43 RA, EAA.2623.1.2049, fol. 44. Charte der Kaiserlichen Stadt Dorpat, 1837.

44 “Drywood Borer”, *ICT International*, <https://www.ictinternational.com/Production/product/drywood-borer/> [accessed 26/02/2026].

Win.⁴⁵ The program shifts the sample series against the reference series in one-year steps and calculates statistical similarity indicators for each position. For similarity assessment, we primarily relied on Student's t-value according to Baillie and Pilcher (t_{BP}), the percentage of same direction changes (Glk, *Gleichläufigkeit*) with confidence level (* = 95%, ** = 99% or *** = 99.9%), and the cross-dating index (CDI). The position with the highest similarity indicates the most probable alignment of the sample series on the time scale, where the last ring corresponds to the tree's final growth year prior to felling. The initial dating results were different for each sample, so the log sections were redrilled to verify accuracy. Log 2 required multiple drillings because decayed wood caused the cores to break apart. Repeat measurements confirmed the initial results, indicating no measurement or dating errors.

RESULTS

Log 1 dated to 1773. This series of ring widths best matched the pine chronology of the house at 37 Jakobi Street in Tartu. The last ring in the core sample is the waney edge (Fig. 5B). Both initial and repeat samples confirmed the date of 1773 (Fig. 6A).

Log 2 dated to 1774. Its series matched best with the Estonian pine chronology 3epestcr. The last ring is the waney edge (Fig. 5B). Both initial and repeat samples confirmed the date of 1774 (Fig. 6B).

Log 3 first core dated to 1761 (Fig. 6C), the repeat core to 1762 against the Tartu pine chronology from 20 Jaani Street. The log's surface is hewn, which explains the outermost missing rings and the discrepancy between the core dates.

45 "TSAP-Win", *Rinntech*, <https://rinntech.info/products/tsap-win/> [accessed 26/02/2026].; Alar Läänelaid, "Dendrokronoloogia uurimisseis Eestis [Summary: The Situation of Dating by Means of Dendrochronology in Estonia]", *Ajalooline Ajakiri*, 3/4 (1999), 141–152; Alar Läänelaid, Dieter Eckstein, "Development of a Tree-ring Chronology of Scots Pine (*Pinus sylvestris* L.) for Estonia as a Dating Tool and Climate Proxy", *Baltic Forestry*, 9 (2) (2003), 76–82; Alar Läänelaid, "Ehitised aastarõngaste kaudu", *Tartu Ülikooli Lõuna-Eesti keele- ja kultuuriuuringute keskuse aastaraamat* (Tartu: Tartu Ülikool, 2011), 105–123.

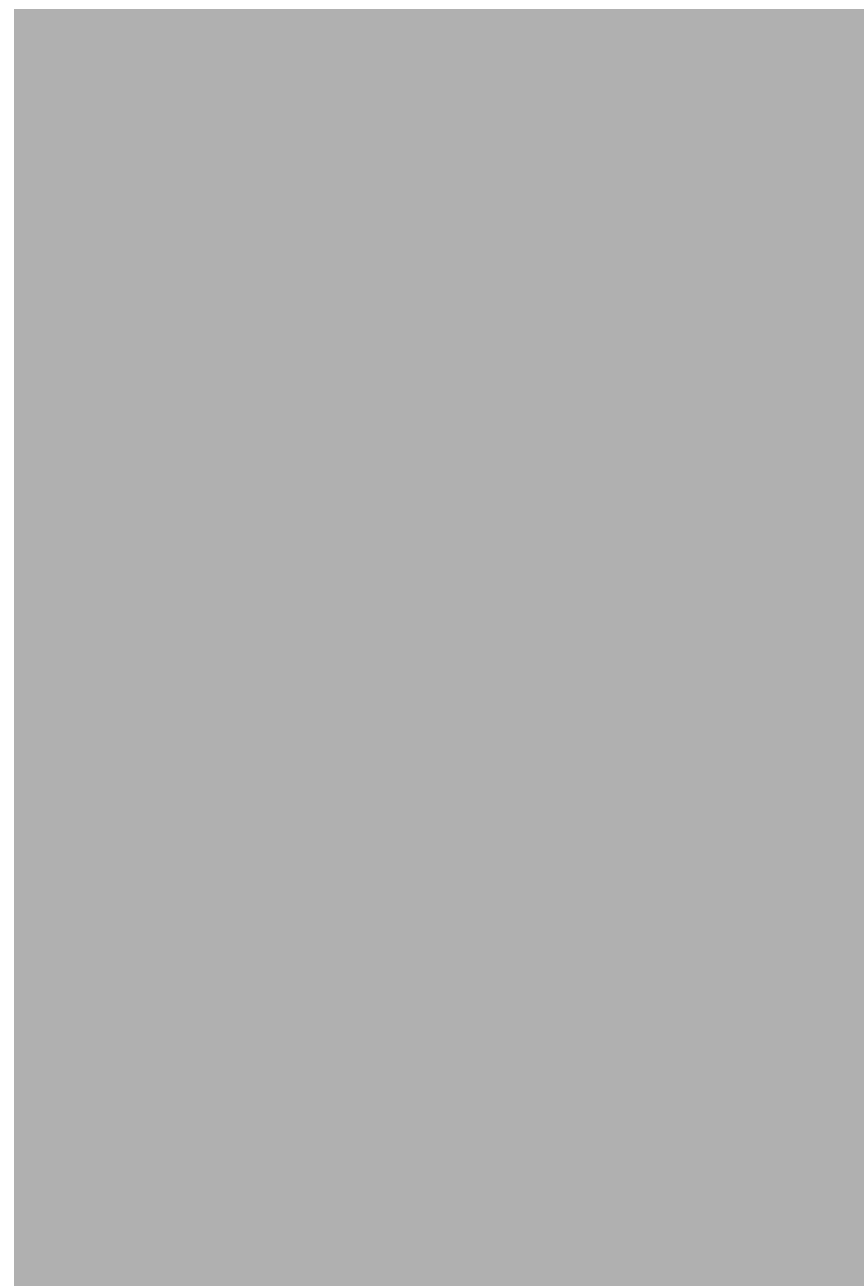


FIG. 6. A–C) RING WIDTH SERIES OF CORE SAMPLES FROM LOGS 1–3 FROM 5 TÄHTVERE STREET (BLUE, RED AND PURPLE RESPECTIVELY) IN SYNCHRONOUS POSITION WITH THE BEST REFERENCE CHRONOLOGIES (GREY). D) RING WIDTH SERIES OF THE THREE LOGS FROM 5 TÄHTVERE STREET SHOW LOW SIMILARITY TO EACH OTHER.

DISCUSSION

When the dendrochronological date includes the waney edge ring, it represents the tree's last growth year before felling. The two logs with waney edges (1 and 2) differ by one year, i.e. 1773 and 1774. This indicates that they were felled in different years. The date of log 3 (1762) should be interpreted as *terminus post quem* because its surface is missing some of the outermost rings. An estimate based on the remaining ring widths suggests that 11–12 rings were removed by hewing (about 7 mm of wood). This means log 3 was also felled sometime around 1773–1774. Construction timber was usually felled in winter and used fresh in the following warm season. Based on the dendrochronology dates, the bottom logs of the front wall at 5 Tähtvere Street were cut after the 1773 and 1774 growing seasons. Assuming the use of fresh wood, the building should have been erected in 1775. But pastor Oldekop only turned to the city reconstruction board for the loan to build his house on his garden plot in March 1776. Construction would probably have started in May at the earliest after the reconstruction board approved the loan. Furthermore, a year later in April 1777, pastor Oldekop claims that he had almost completed the construction work but owed money for materials and to the builders. Another point of interest is that the ring width series of the three logs are dissimilar to each other (Fig. 6D), and each cross-dates to a different reference chronology. This suggests that the construction logs originated from different felling sites as there were also differences between individual trees. Typically, buildings are dated using averages from multiple samples, as single samples can yield uncertain results. In this case, only three log samples were available, and so the difference in felling sites for logs felled in different years is of interest.

The black burn marks noted on the outer surfaces of the logs could have been evidence of a deliberate protective treatment making them more resistant to insects, decay and fire. Or the logs could simply have been exposed to accidental fire damage in their long history at 5 Tähtvere Street, perhaps even because of surviving the bomb that wrecked Karl Eduard Sööt's home in 1944. However, the combination of different felling dates and different sources could fit with the notion of a sudden demand for timber. Sellers of building materials were urged by the reconstruction board to be quick supplying the

necessary materials so that those who wished could start construction in the spring of 1776 could do so. With a high demand for construction timber, logs from different felling dates and sources could well have been mixed when sold as merchants coped with the demand.

Finally, a mixture of handmade and machine-made nails found in the log sections suggests a refurbishment took place, in which older nails from earlier construction were reused in the replacement of worn out laths. There is record of a nail smith called Stein renting property from pastor Oldekop at the time of the great fire in 1775. It is tempting to think that the handmade nails came from this smithy, perhaps in the initial construction of the house. Machine-made nails would only have been in circulation by the turn of the 19th century, which would suggest a refurbishment took place in the latter years of pastor Oldekop's life, or perhaps was carried out by his widow Louise. Or it could have happened after pastor Gehewe took up residence, perhaps during an update to the interior of his new home.

CONCLUSION

In the summer of 2025, the latest renovation of Tähtvere Street in Supilinn took place. The lower part of the log walls of 5 Tähtvere Street had been under the rising street for a long time and were no longer in a safe condition necessitating repair. During this repair work sections of wood from the decayed logs were collected for dating. The aim was to study the early history of the building (from archive and written resources), add new dendrochronological research and compare the results. Analysis showed that the log walls were contemporary to the initial construction by pastor Oldekop and broadly match the date of the mantel chimney hidden in what is now the cellar. The analysis identified that the three logs, which from the front wall, came from pine felled in at least two different years (1773 and 1774). The historical records relating to pastor Oldekop's application for a loan to build a house indicates that its construction most likely started in the spring of 1776. Under more normal circumstances freshly cut logs were used the following summer, which in this case would have been 1775 not 1776. But the urgent demand for construction timber after the great fire could have seen wood arriving in Tartu from many differing sources, felled in different years and in different forests. This discrepancy in the dates could be evidence

of a disruption to the regular wood supply caused by this sudden demand. The combination of hand and machine-made lath nails and the longer length of the modern house when compared to the originally planned dimensions provide evidence for past alterations during the building's long 250-year lifespan.

Finally, the pastor's original house on Kompanii Street was destroyed in the great fire, along with many other buildings. This disaster included the loss of his library and other household belongings. His response was to relocate his home to his garden plot outside the city, which is where 5 Tähtvere Street stands today. A fire and a new beginning for pastor Oldekop could be seen as important milestones in the development of Supilinn.

MARCUS A. ROXBURGH, LEA TEEDEMA, ALAR LÄÄNELAID, KRISTINA SOHAR: A PASTOR, A FIRE AND A NEW BEGINNING: DATING EVIDENCE FROM 5 TÄHTVERE STREET, TARTU
KEYWORDS: DENDROCHRONOLOGY; TREE-RING DATING; THE GREAT FIRE OF TARTU; SUPILINN

SUMMARY

The earliest records of a house and surrounding land where 5 Tähtvere Street now stands date back to the last quarter of the 18th century, when a large plot of land between Herne, Kroonuaia, Marja and Tähtvere Streets came into the possession of pastor of Jaani Church Theodore Oldekop. In the last century 5 Tähtvere Street has seen many changes. The street is now at a different height than it used to be (Fig. 1A) due to resurfacing over many decades, and it was damaged by a Soviet bomb in 1944 (Fig. 1B). Today number 5 is recognised as culturally important and has heritage protection. In the summer of 2025, the latest renovation of Tähtvere Street took place. The lower part of the front log wall had been under the rising street for a long time and was no longer safe, so repairs needed to take place (Fig. 2A). During these repairs we collected samples of wood from the decayed logs in the hope of dating them (Fig. 2B). This was so that we could address the lack of knowledge of the building's

construction date. The aim was to study the early history of the building (from archive and written sources) with the addition of new dendrochronological research and to compare the results. Theodor Oldekop became a pastor at Jaani Church in 1752 and lived with his family in a house on the corner of Kompanii and Suurturg Streets. A major fire broke out in the city on the 25th June, 1775, destroying most of the wooden houses within the city walls, the pastor's house among them. His losses were estimated at 4,000 rubles for his house, his library and other household belongings. In March 1776, Oldekop requested a reconstruction loan and in April the board decided to allocate 400 rubles to him. But in April 1777, the board received a new application. He claimed that he had almost completed the construction work on the wooden house on his garden plot outside Jakobi Gate but needed another 100 rubles. Theodor Oldekop died in 1806, and his widow in 1833. Their heirs sold the property along with other buildings to pastor Theodor Heinrich Gehewe. A visual overview of Supilinn in the late 1830s is provided by the plan drawn up in 1837. Houses and other buildings are drawn within the garden plots. The house belonging to pastor Gehewe (Gehöwe on the plan) is depicted as larger than the others (Fig. 3B). The Dendrochronology Laboratory at the University of Tartu's Geography Department was contacted to help resolve the dating question. Dendrochronology is a very accurate technique that is used to date ancient wood and so the samples collected from the wall were submitted to the Laboratory for analysis. A visual inspection of the log samples revealed that they were all pine and hewn on the sides. A V-shaped groove was cut into the lower side so that they could be set securely together. This groove was filled with sphagnum moss. There were lath nails on the inner surfaces, some of which were hand forged. Finally, there were black burn marks on the outer surfaces of the logs suggesting they had been exposed to accidental fire damage. Sample preparation and subsequent dating analysis took place at the Laboratory. Core samples were drilled from the under-bark wood surfaces (Fig. 4) and the annual ring widths were measured (Fig. 5A). The ring width series were compared with ca. 270 pine reference chronologies from Estonia and other parts of Europe. The results showed that log 1 dated to 1773 and best matched the pine chronology of the house at 37 Jakobi Street, Tartu. Log 2 dated to 1774 and best matched the Estonian pine chronology 3epestcr. The date of log 3 was interpreted

as *terminus post quem* because its surface was missing some of the outermost rings. An estimate puts it as also being felled sometime around 1773–1774. Construction timber was usually felled in winter and used fresh in the following warm season; therefore, assuming the use of fresh wood, the building would have been erected in 1775. However, pastor Oldekop only applied for the loan to build this house in March 1776. Construction probably began in May 1776 at the earliest. In addition, the ring width series of the logs are dissimilar (Fig. 6D) with each cross-dating to a different reference chronology. This suggests that the logs originated from different forests. Logs from different felling dates and sources could have been mixed when sold as merchants coped with demand after the great fire. Finally, the mixture of handmade and machine-made nails found in the samples suggests a refurbishment took place during which older nails from previous construction were reused in the replacement of worn out laths. A nail smith rented property from pastor Oldekop at the time of the great fire and it is possible that the handmade nails came from this smithy, perhaps in the initial construction of the house, although the use of these nails could also have occurred after pastor Gehewe took up residence. Pastor Oldekop's original home on Kompanii Street was destroyed in the fire along with many other buildings. His response was to relocate his home to his garden plot outside the city, i.e. today's 5 Tähtvere Street. A fire and a new beginning for pastor Oldekop could be seen as important milestones in the development of Supilinn.

CV

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Miscellanea

