



# Potsdamer Platz – Past and Future

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**Berlin is a unique European city, having survived a devastating war and being divided by the Wall. Locals and visitors may overlook the empty spaces between old buildings in the historic centre that looked completely different a century ago. It is not easy to imagine the transformation in real life, unless you look at old photographs. A 3D map can be an illustrative tool to explore the drastic changes in the urban landscape and the remaining heritage of the German capital.**

## IMPRINT

Mapping Project  
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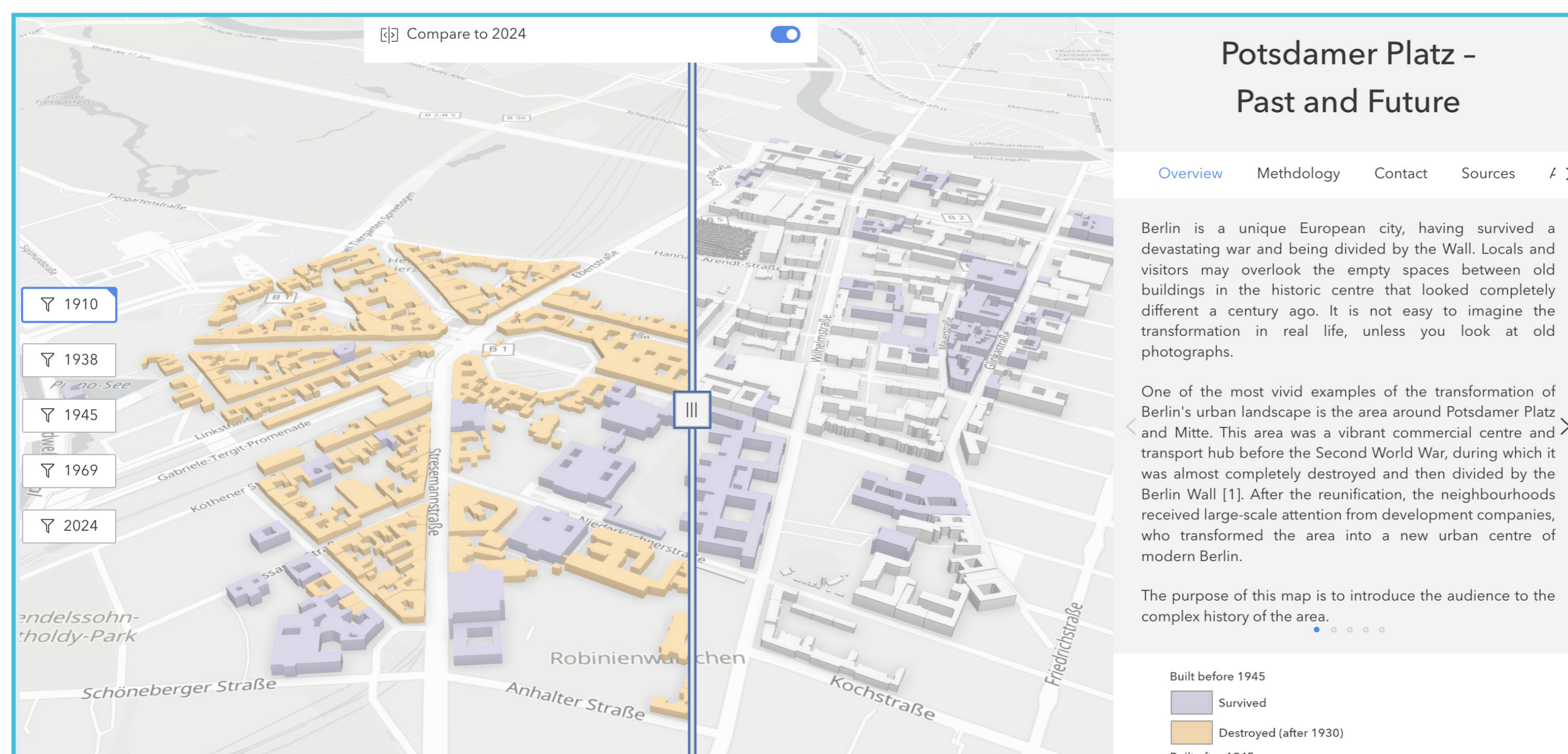
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## KEYWORDS

3D, web map, Berlin, historical map

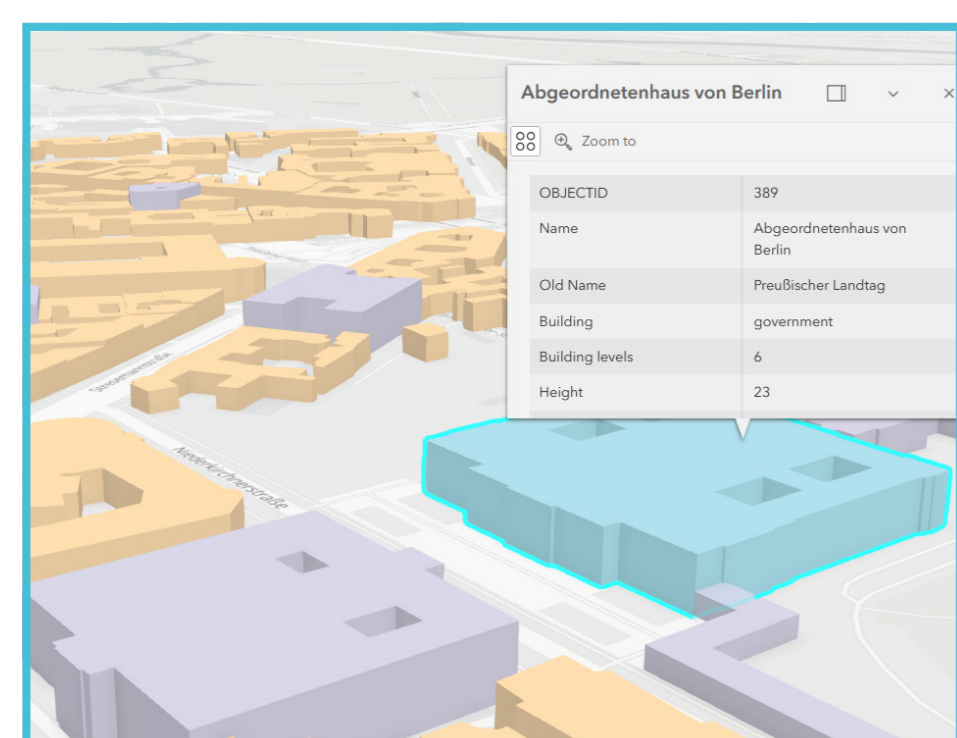
## LINK



There are 4 historical layers, each of which can be compared to the modern landscape.

## CONTEXT

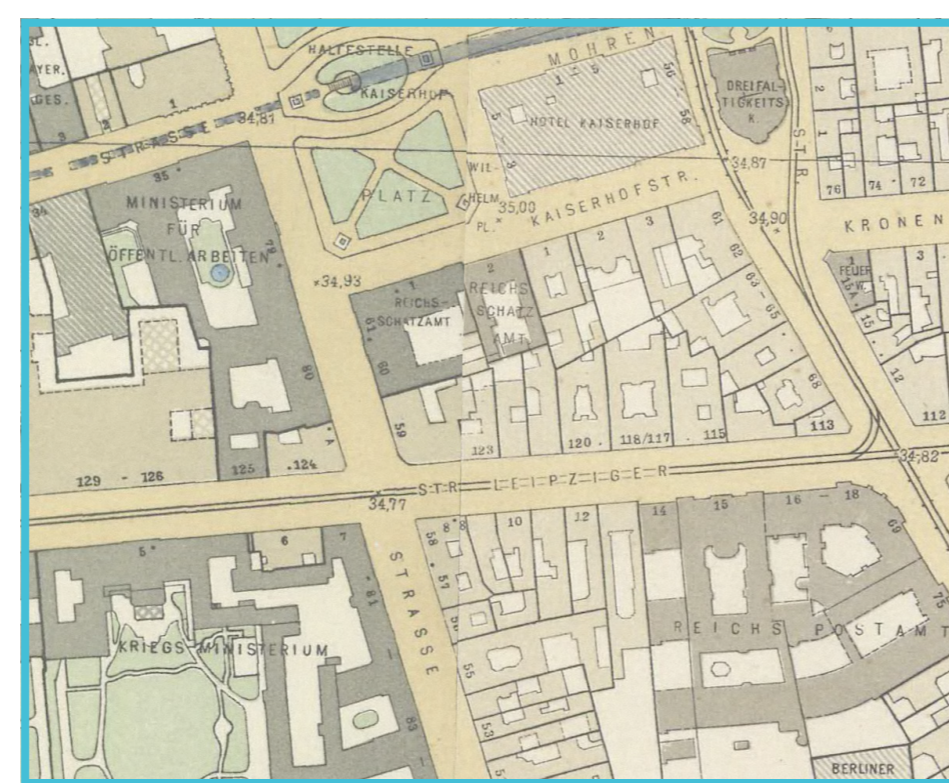
One of the most vivid examples of the transformation of Berlin's urban landscape is the area around Potsdamer Platz and Mitte. This area was a vibrant commercial centre and transport hub before the Second World War, during which it was almost completely destroyed and then divided by the Berlin Wall [1]. After the reunification, the neighbourhoods received large-scale attention from development companies, who transformed the area into a new urban centre of modern Berlin. The purpose of this map is to introduce the audience to the complex history of the area.



All the houses are clickable. In a pop-up window you can learn more about a building. The color shows if the building survived or not.

## METHODOLOGY

The changes in the urban landscape are best observed in a three-dimensional format, so that everyone can easily imagine the typology of the architecture, the width of the streets and the layout of the different eras.



The reference historical map of 1910 [10].

To achieve this goal, we started with the current OSM building footprint data for 2024. From there we manually digitised building footprints for the years 1910 - 1939 - 1945 and 1969. These years were chosen due to the availability and quality of map and imagery data. This was possible using historical city maps and photographs (e.g. [2-7]). We researched the building level heights of the historic buildings, as

well as other information such as roof shape, building name or function - where available. We used ArcGIS Pro for digitisation and 3D modelling. Our final product is a website created using the ArcGIS Pro Experience Builder. In total, we showcase 3,600 buildings, 547 of which we digitised ourselves.

## LIMITATIONS

The main challenge was data availability and interoperability. While OpenStreetMaps provided modern city data, integrating Berlin Senate models into ArcGIS was difficult due to format issues and missing attributes. OSM data, though useful, required cleaning.

For historic reconstruction, finding maps and street photos was challenging. Building heights were estimated from levels using available photos, making the process slow and imprecise. Heights varied between 3-4.5m per level, and for missing data, random estimates were assigned based on nearby structures.

Future steps include adding street names, layouts, trams, post-1992 developments and detailed landmarks.

## REFERENCES

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