

# London Underground Map 1933

by Henry Beck

Henry Beck was not a graphic designer by trade when he proposed his redesign for the London Underground map. Instead, he was hired in 1925 to work as a temporary junior draughtsman for the Signal Engineer at London's Underground Railways (Garland 15). In this role, he recognized a problem—decades of railway additions and consolidations had led to an illegible, unhelpful map. Thus, without any official directive, Beck began sketching a solution. His drawings immediately revealed a radical shift in design, straying from the geographic approach of their predecessors and introducing a diagrammatic representation (17). Dubbed by Londoners as the "Diagram," Beck's map was by all measures a success when it was first published in 1933 and remains a key influence on information design with its simplification and organization of London's railways, prioritizing usability over accuracy (Degani 7).

## TOPOGRAPHY TO TOPOLOGY

From Beck's first sketch, it was evident that he would eschew curvy, topographic railway lines in favor of geometric, topological ones. What was lost in accuracy with this approach was gained in both legibility and accessibility. Beck's topological design almost exclusively utilized horizontal, vertical, and diagonal lines (at a sharp 45 degrees), which helped to draw distinct railway lines whose paths were unambiguous. Furthermore, simplifying the line directions made the map more accessible even when viewed briefly. This simplification might ostensibly seem disingenuous or misleading, but in practice the relative positioning between railway stops stayed accurate (Degani 10-11). Beck even went a step further with his reorganization of the railway paths, enlarging the central areas and condensing the outer areas to match how Londoners used the railways (Garland 17). Through topology, Beck had redesigned the map with efficient reading as the first priority.

## FINER DETAILS

The changes Beck introduced in his design go deeper than just the map's overall structure. One area of such changes involved the denoting and labeling of stations. In previous versions of the map, stop names were often not clearly linked to their corresponding circle on the path, an issue that was further exacerbated when different paths came close together (Garland 18). To address this, Beck eliminated the filled circle symbol entirely, as he found it disorienting when trying to distinguish important transfer stations (denoted by unfilled circles). The side effect of this change led to better legibility of titles—instead of filled circles, Beck drew dashes that explicitly pointed to their station titles (Degani 8-9). One area Beck did not simplify though was his addition of the River Thames, which provided a vital landmark enabling maps users to situate their travels and destinations geographically still (Kent 3).

## UTOPIAN LONDON

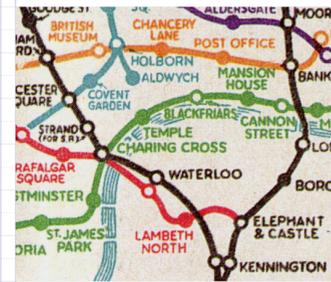
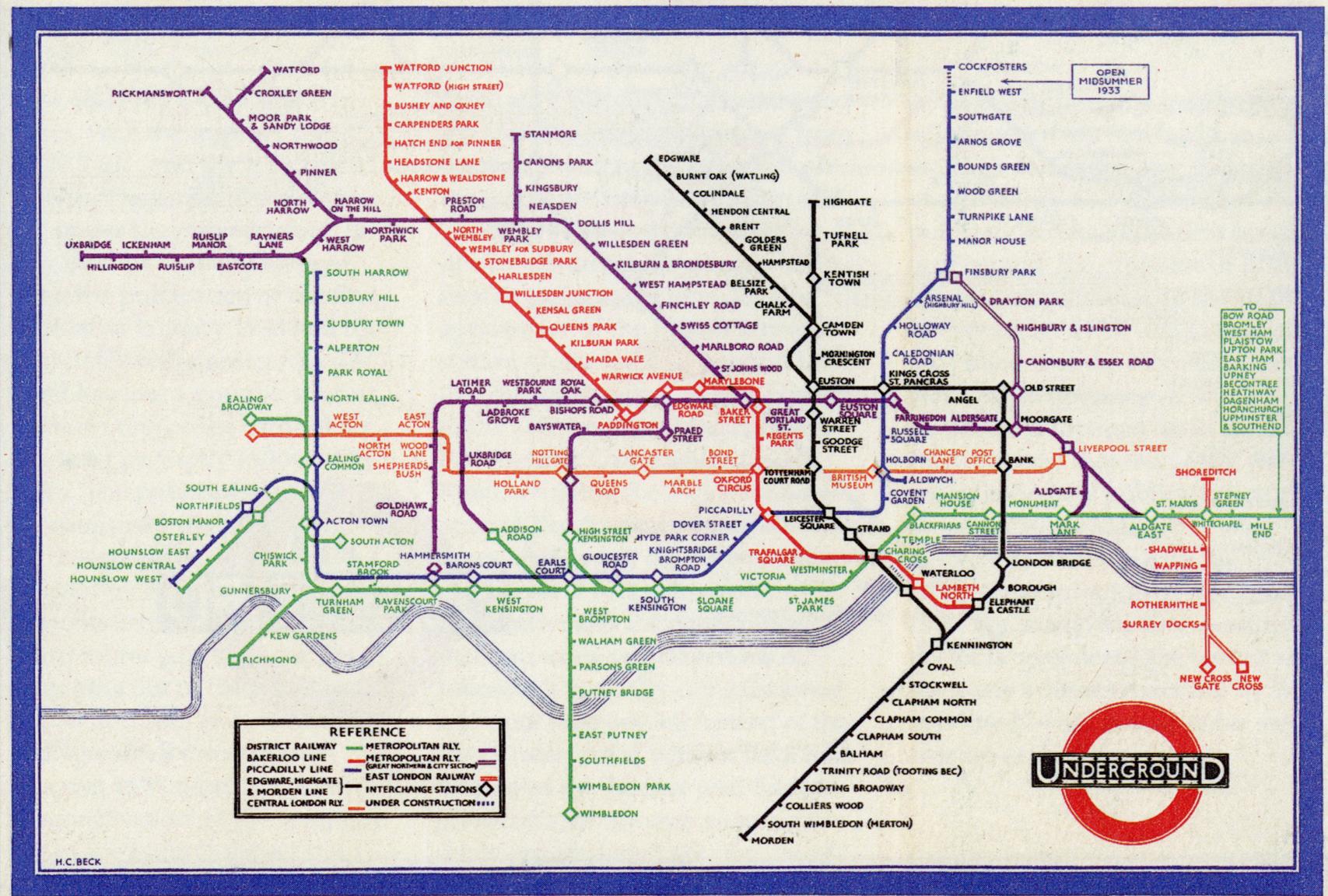
It took two proposals for Beck to get the approval to print his map, but once approved it went out in mass through a print of 750,000 card folder copies. Whatever hesitation London Transport harbored at first immediately vanished, commissioning Beck to a commercial poster printing of his map (Garland 19). Beck did contribute several miscellaneous posters for the London Underground (London Transport Museum), but his main influence on the railway's identity was more utopian. His map reshaped how Londoners thought of their own environment and neighbors—it put them in relation to each other in a way that depicted the London community and geography as one idealized form (Kent 8; Vertesi 25-26). The map's color (derived from decades of use on maps), typography (a typeface by Edward Johnston), and logo were already set (Garland 10; Kent 10). Using his skills as a draughtsman, Beck simply found a way to reorganize these elements to visualize them more effectively for all.

## LASTING LEGACY

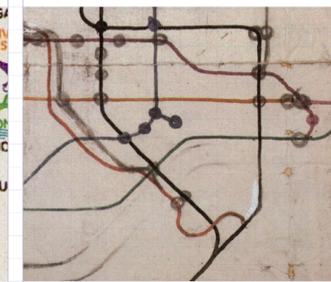
Beck worked on the map for decades building upon its design, only to be abruptly ousted and replaced in 1960. In truth, Beck was merely a freelancer in the eyes of London Transport (Garland 50). The map's core nevertheless remains intact today in its diagrammatic representation of London's railways. This influence spread internationally, too. In 1972, Massimo Vignelli's design for New York City's subway map similarly shunned topography in favor of topology and was similarly again rejected by the transit authorities. Vignelli's design perseveres in any case, just as Beck's design changed perspectives on graphics to this day. ♦

(Right)  
The London Underground map designed by Henry Beck, 1933. Printed in card folder format.

(Far Right)  
Front cover of the original card folder map.



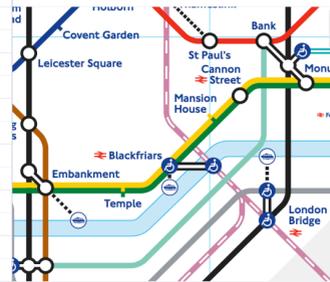
Fred H. Stringemore's map. 1932. This was the last official edition produced before Beck's redesign, published in 1933.



Beck's original sketch for his redesign. 1931. Remnants of Stringemore's design are apparent in the use of curved lines.



Beck's rejected proposal. 1931. Beck revised this version into the published map pictured above.



Modern-day London "Tube" map. Accurate as of Sep. 2021. Much detail has been added, but Beck's influence is prominent.

## BIBLIOGRAPHY

- "A Tale of Two Maps: Analysis of the London Underground 'Diagram'" by Asaf Degani, 2013.
- Mr. Beck's Underground Map by Ken Garland, 1994.
- "When Topology Trumped Topography: Celebrating 90 Years of Beck's Underground Map" by Alexander J. Kent, 2021.
- London Transport Museum, <https://www.ltmuseum.co.uk/>, accessed Sep. 2021.
- "Mind the Gap: The London Underground Map and Users' Representations of Urban Space" by Janet Vertesi, 2008.

Poster text and design by Gabriel Drozdov  
Section Leader: Prof. Doug Scott  
RISD 2021

