CASA0003

CULTURAL CARTOGRAPHIES

GAPS IN CULTURAL INFRASTRUCTURE & DATA: A WEB-ANALYSIS OF LONDON'S CREATIVE NETWORK

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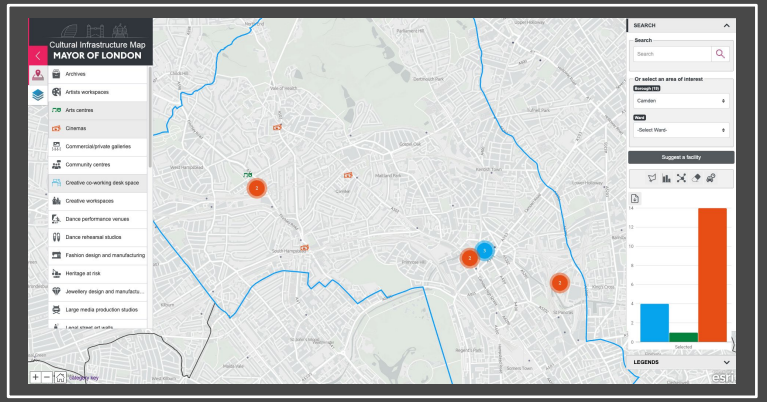
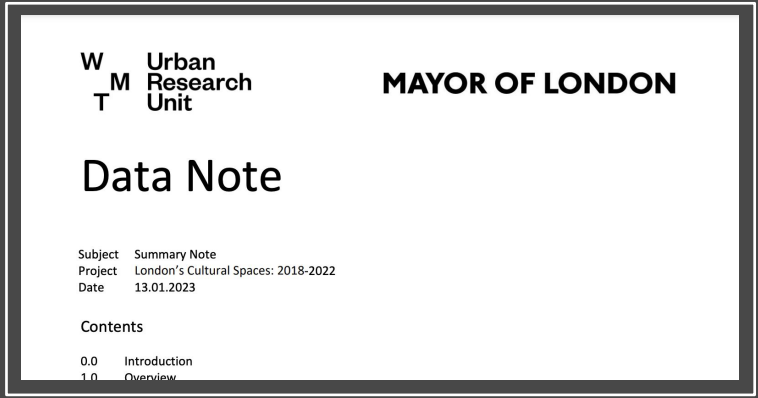
CITY NETWORKS

Arts Council England: Culture and Place Data Explorer Map



Mayor of London Cultural Infrastructure Map


W M T Urban Research Unit

MAYOR OF LONDON

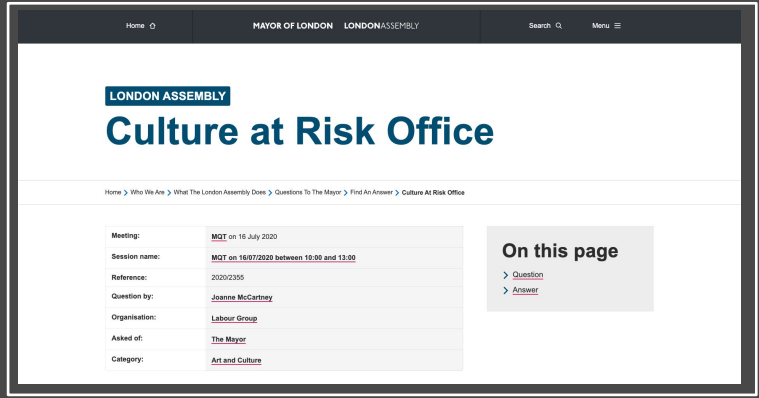
Data Note

Subject Summary Note
Project London's Cultural Spaces: 2018-2022
Date 13.01.2023

Contents

0.0 Introduction
1.0 Overview

We Made That Data Note (2023)



London Assembly: Culture at Risk

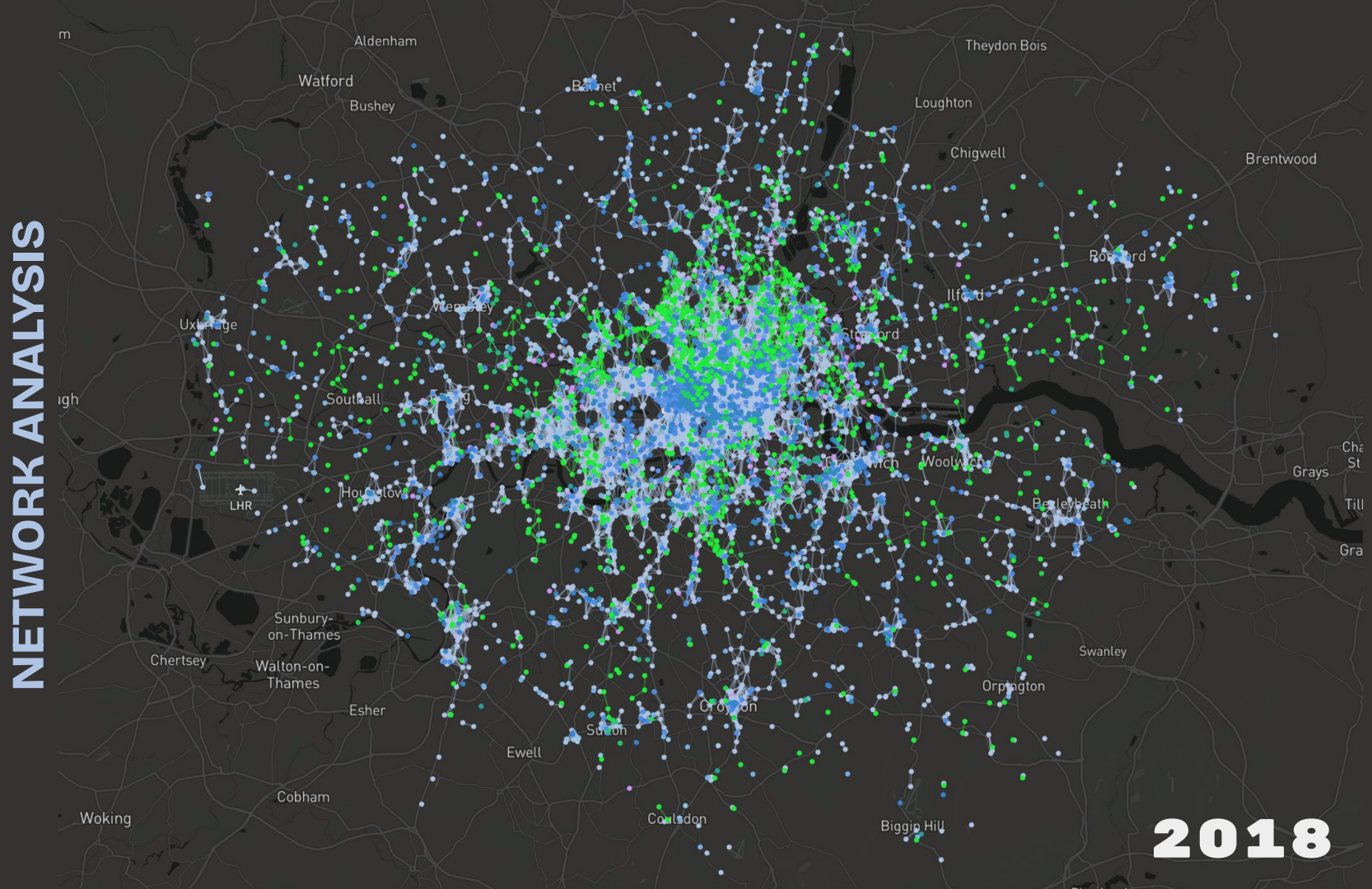
CITY NETWORKS

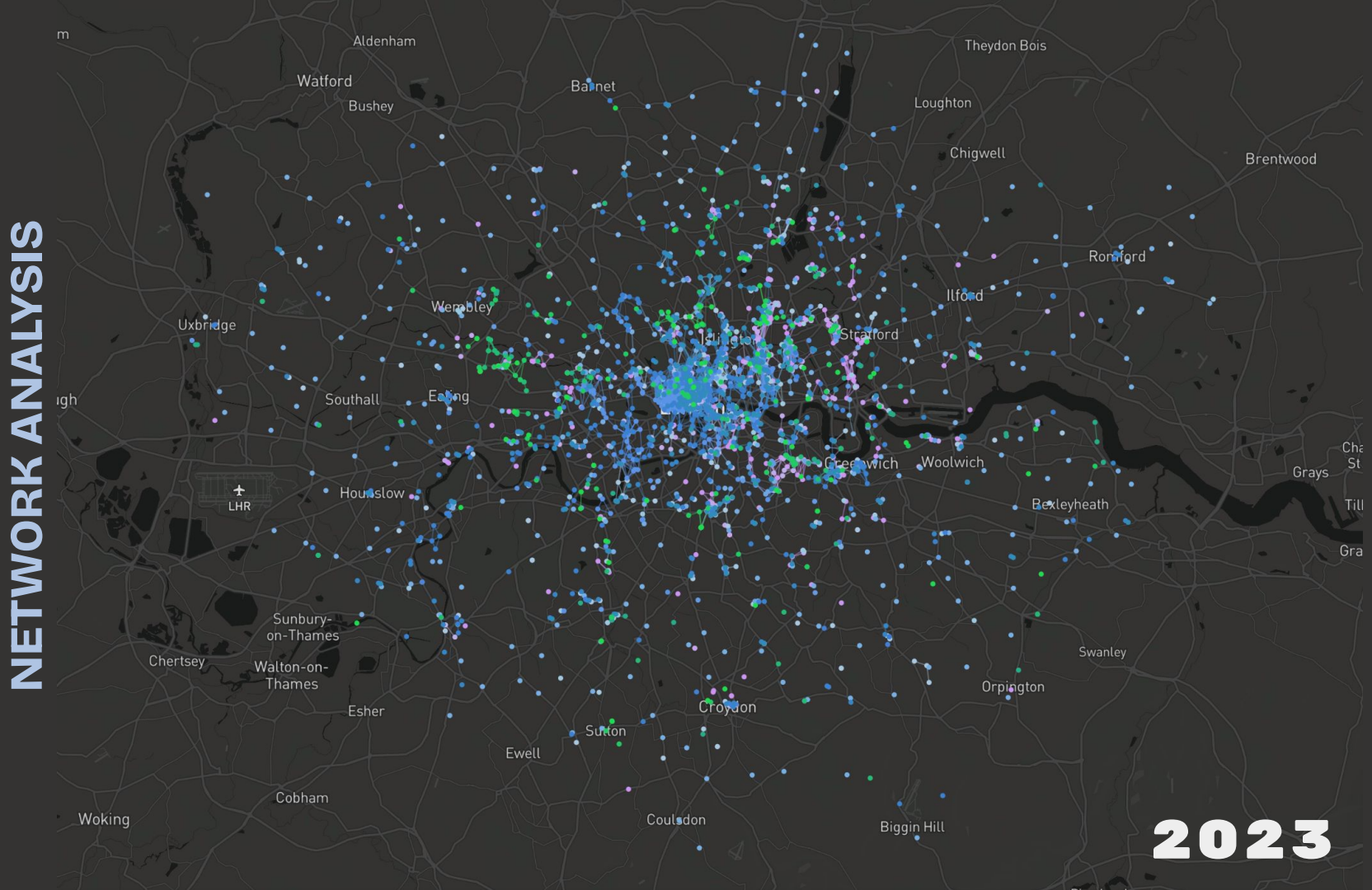
SCRIPT

Good [morning/afternoon], today I'll be presenting our group's project on cultural networks in London, with a specific focus on Cultural Consumption Infrastructure.
At first glance, you might wonder why we chose to map London's cultural network—a subject already visualized extensively, with two prominent examples on the board behind me.
However, what these maps lack is a temporal dimension. They do not capture the shifts in cultural infrastructure before and after the COVID-19 pandemic—a period during which we saw a global and national transformation in the cultural sector due to lockdowns, financial pressures, and shifting priorities.
Our project takes a spatial-temporal approach to mapping London's cultural network, asking: *Is access to cultural consumption spaces in London equitable across time and geography?*
From our dataset, we found that:

- 10% of London's cultural spaces closed between 2018–2019 and the present.
- Although some new spaces opened, the net loss stands at 2%, with 3% relocating.
- Specifically, cultural consumption spaces—where culture is *experienced, exhibited, sold or participated in*—faced a larger net loss of 3%.

These figures shaped our decision to narrow our investigation specifically to Cultural Consumption data, allowing for a more granular, focused analysis of what's happening *on the ground* in London's cultural landscape.


NETWORK ANALYSIS
Aldenham
Watford
Bushey
Theydon Bois
Loughton
Chigwell
Brentwood
Uxbridge
Southall
Hounslow
LHR
Woolwich
Grays
Sunbury-
on-Thames
Chertsey
Walton-on-
Thames
Esher
Swanley
Orpington
Ewell
Cobham
Woking
Coulsdon
Biggin Hill
2018


NETWORK ANALYSIS
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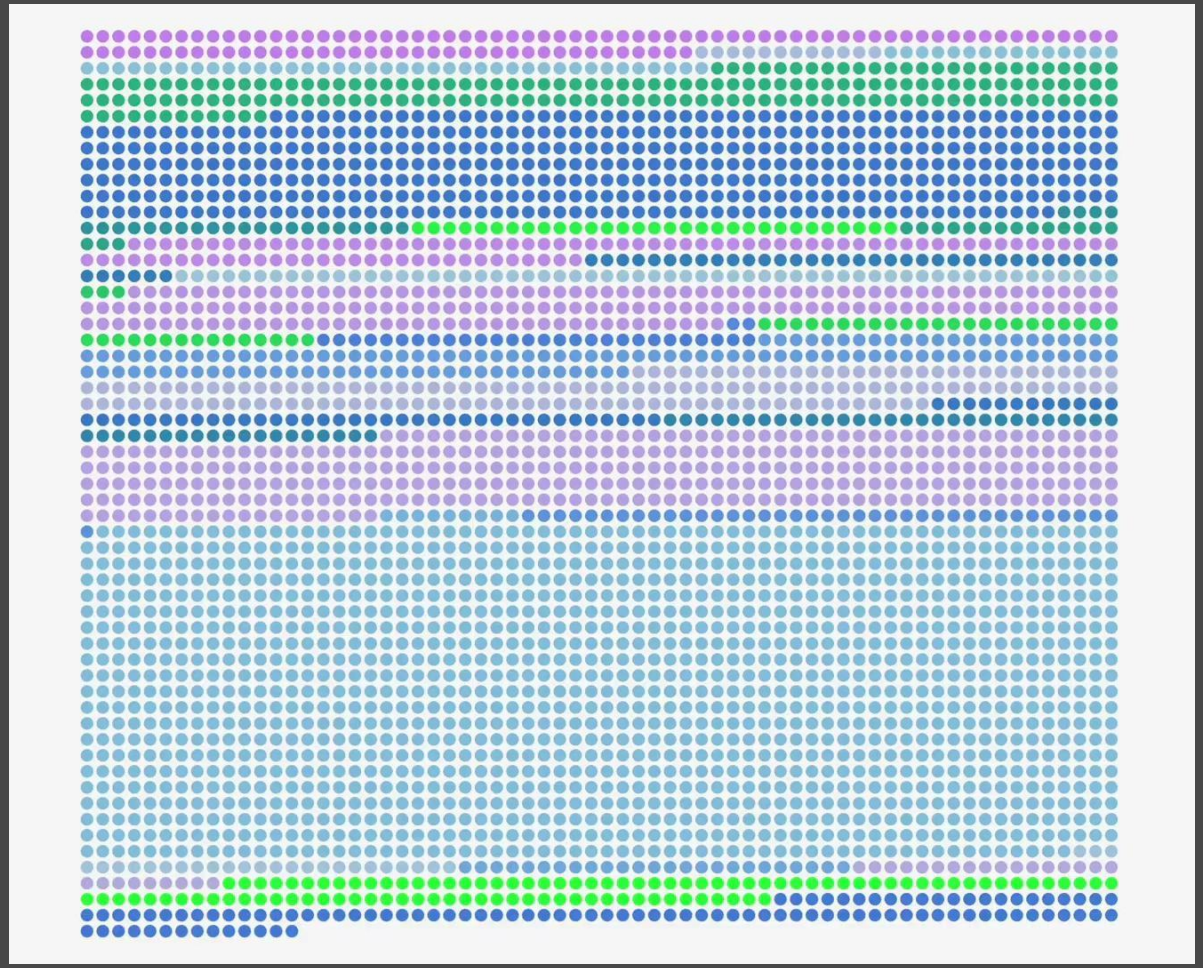
Chertsey
Walton-on-Thames
Swanley
Orpington
Esher
Croydon
Sutton
Ewell
Cobham
Woking
Coulsdon
Biggin Hill
2023

NETWORK ANALYSIS

SCRIPT

On this slide, we're visualizing London's cultural consumption network in two snapshots: one from 2018 and the other from 2023, projected onto the city's geographic layout.
Each circle on the map represents a group of venues, and the links between them are formed when venues belong to the same category and are located within a short geographic distance from one another.
The color coding you see here is based on venue categories, using a gradient that reflects the diversity and clustering patterns across the city.
Comparing these two maps side-by-side allows us to observe the spatial continuity and disruption in the network.
In 2018, we see a relatively dense and interconnected distribution of cultural consumption spaces—especially in central and inner London.
In contrast, by 2023, we can begin to detect subtle shifts: some clusters have shrunk, a few have dispersed, and certain peripheral zones show gaps where cultural venues once existed.
While some venues were added or relocated, what stands out are the disconnected nodes and missing links—indicating areas where the network has weakened post-COVID.
This visual comparison highlights not just the quantity of change, but the way that change is spatially distributed, helping us understand which areas may have become underserved over time.

DATA GAPS: DOT VISUAL

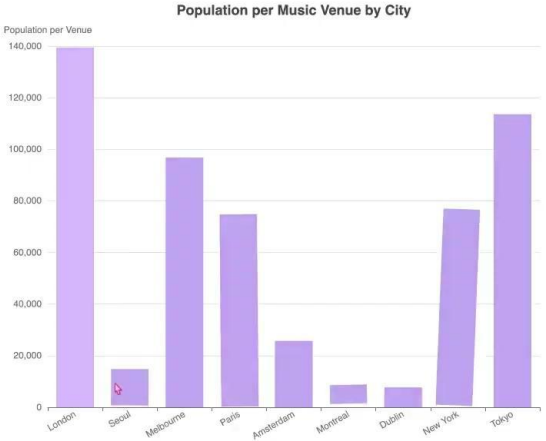


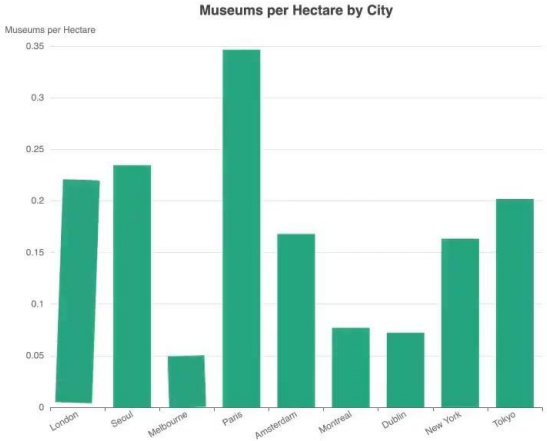
DATA GAPS: DOT VISUAL

SCRIPT

Moving from geographic space to categorical space, this next visualisation shows all cultural consumption venues as individual dots, grouped by their categories.
Each dot represents one or two venues within the same category, and their position in the grid isn't geographic—it's designed purely for clarity and comparison.
What's important here is the color system: every category is assigned a color on a custom gradient scale, helping us track continuity across time.
The grey dots indicate venues from categories that were present in 2018 but not in 2023—what we refer to as discontinued categories.

LONDON: CULTURAL CAPITAL?





LONDON: CULTURAL CAPITAL?

SCRIPT

In exploring the dataset further, we encountered notable gaps—with some of the most at-risk categories underrepresented. A clear example is grassroots music venues, which have historically been more precarious and yet are often the first to be dropped from standardized datasets.
When comparing London to other global cultural capitals, the city appears relatively healthy. However, once we normalize this data against contextual factors like population density and geographic spread, a different and more nuanced picture emerges.
Given this, we decided to focus our visualizations on music venues and museums—both of which are key cultural touchstones.

- Museums and galleries have seen an 8% decline since the last data capture.
- Music venues, though still prominent, are increasingly vulnerable—especially at the grassroots level.

Through this focus, we aim to prompt users and policymakers to widen their lens when interpreting cultural data from the London Datastore, which remains the only verified cultural infrastructure dataset for the city.
Our goal here is not just to visualize but to critique and interrogate how cultural health is measured, and what might be left unseen in the process.

DATA INTERSECTIONALITY

2023 LONDON DATASTORE CULTURAL DATA

2018 LONDON CULTURAL DATASTORE

Spatial Data: Points

> **"Why do data science and visualization need feminism? Because bodies are missing from the data we collect, from the decisions made about their analysis and display, and from the field of data science as a whole."**
>
> *– DATA FEMINISM*

2017 OSM Scraped Data (Overpass Turbo)	2018 OSM Scraped Data (Overpass Turbo)	2019 OSM Scraped Data (Overpass Turbo)
2020 OSM Scraped Data (Overpass Turbo)	2021 OSM Scraped Data (Overpass Turbo)	2022 OSM Scraped Data (Overpass Turbo)
2023 OSM Scraped Data (Overpass Turbo)	2024 OSM Scraped Data (Overpass Turbo)	2025 OSM Scraped Data (Overpass Turbo)

Temporal Data: Rate of Change (%)

2025 INTERVIEWS AND CASE STUDIES

Qualitative Data

2018 INCOME DATA

2018 POPULATION DENSITY

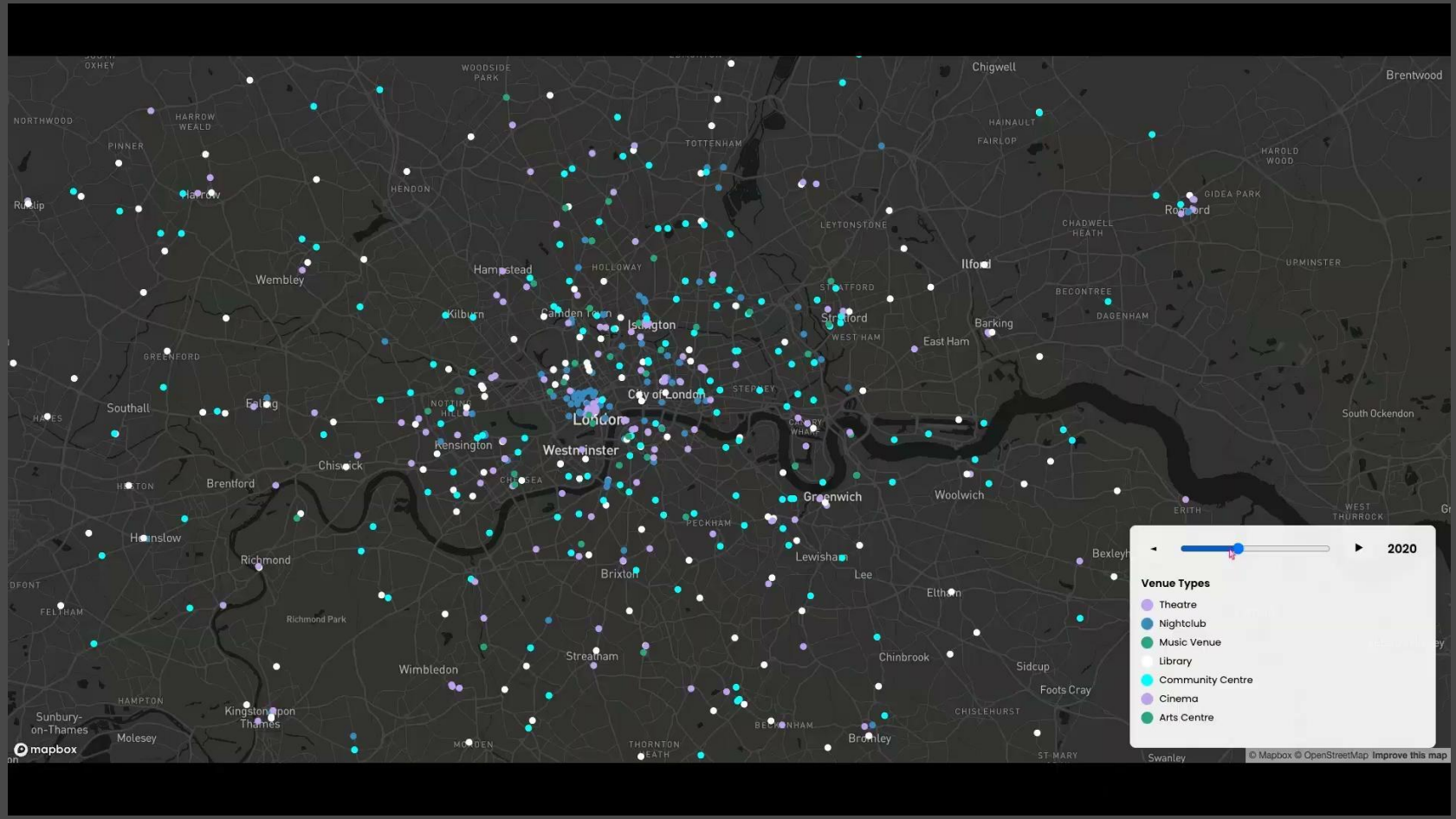
Contextual Data

DATA INTERSECTIONALITY

Speaker of this slide prefers to present without a script - their narrative will be in the final report.

Brief notes:
We knew after this if we want a complete picture of London Cultural Network, past and present, we needed to add alternative information and data to compliment the existing data. This was why we used scraped data (2017-2025) and qualitative data (interviews) – Human touch – data feminism. We know the data is not accurate in it's value but it is the only indicator we have to show comparable change thus we decided to use % of change as the metric for the scraped data so it isn't replacing the original data but complimenting it.

SPATIO-TEMPORAL ANALYSIS

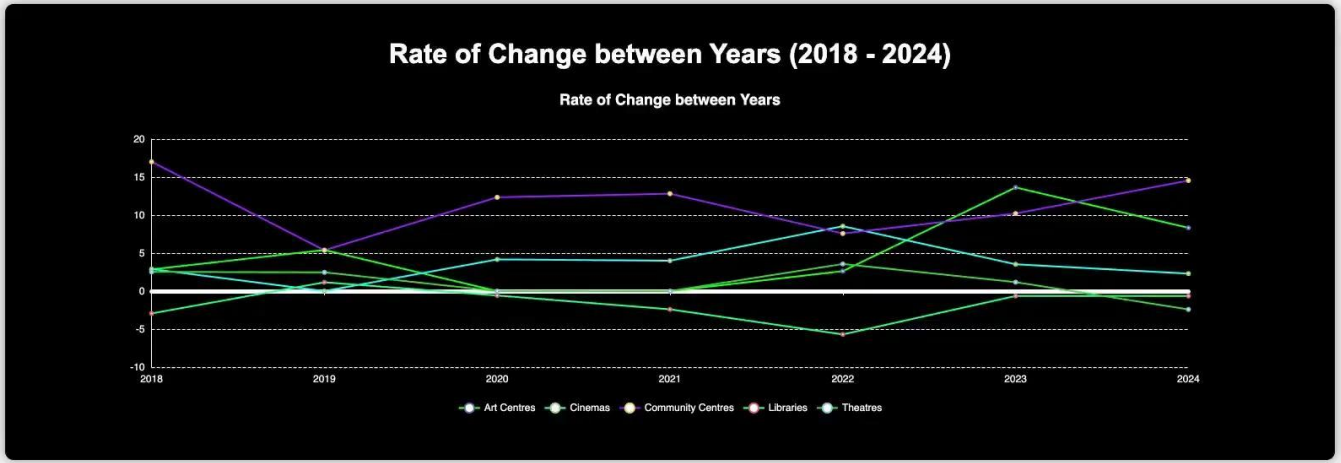


SPATIO-TEMPORAL ANALYSIS

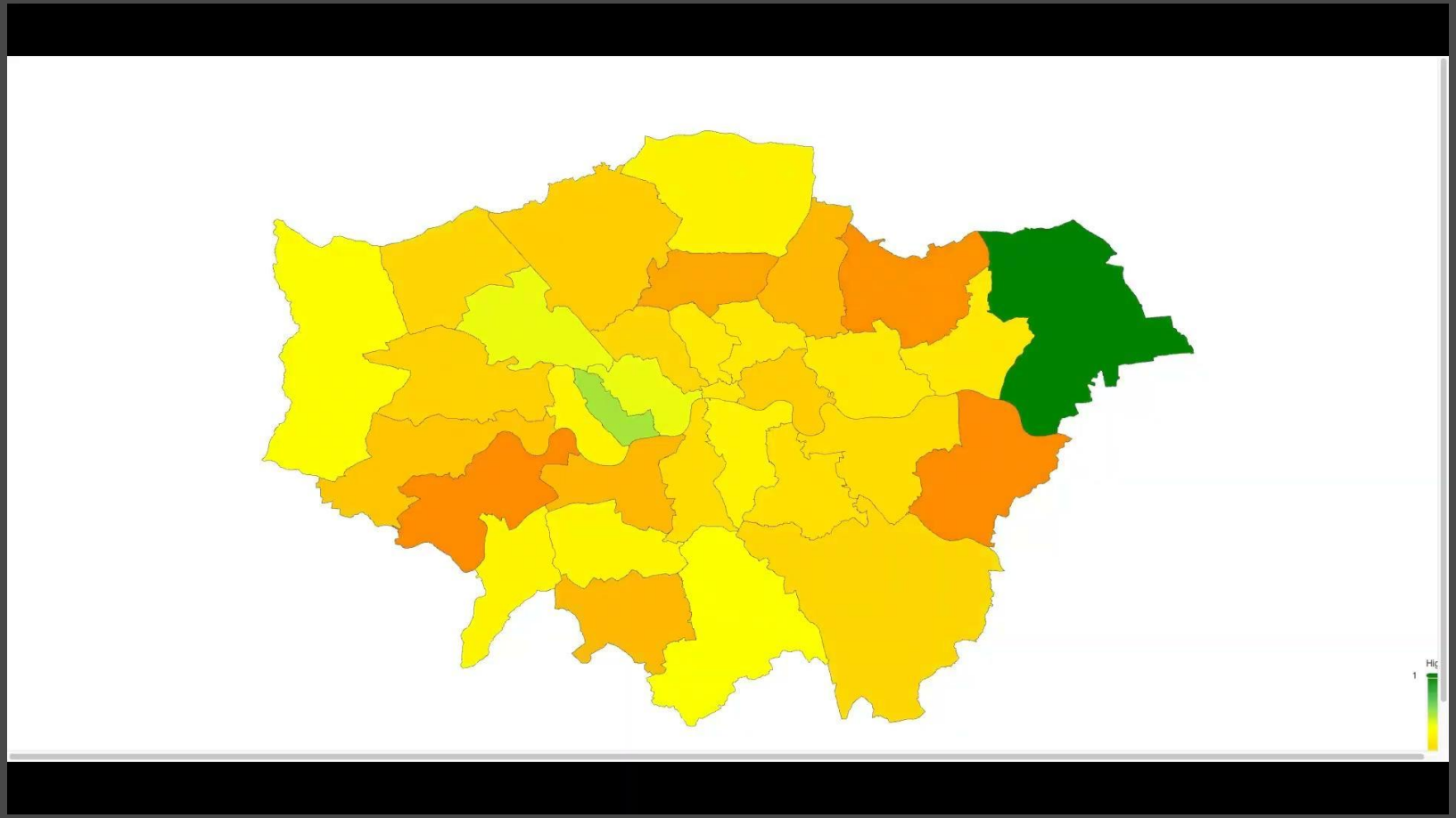
SCRIPT

Our visual investigation begins with a dynamic temporal map. Users can toggle through years from 2017 to 2025 to observe the rise and fall of cultural consumption points over time. While the map provides important spatial cues, many of the changes are subtle or gradual, which led us to develop a supporting line graph to better capture rates of change over time. Rather than showing absolute numbers, our graph focuses on percentage change, allowing for a clearer sense of trends, rather than volume. This was critical for one of our main observations: Not all growth is equitable. Some cultural categories—like libraries—are facing consistent decline, particularly in specific boroughs, while others have remained stable or even grown. Together, the map and graph begin to uncover hidden disparities, challenging the assumption that a net increase in cultural infrastructure automatically equates to improved access.

TEMPORAL ANALYSIS



TEMPORAL ANALYSIS

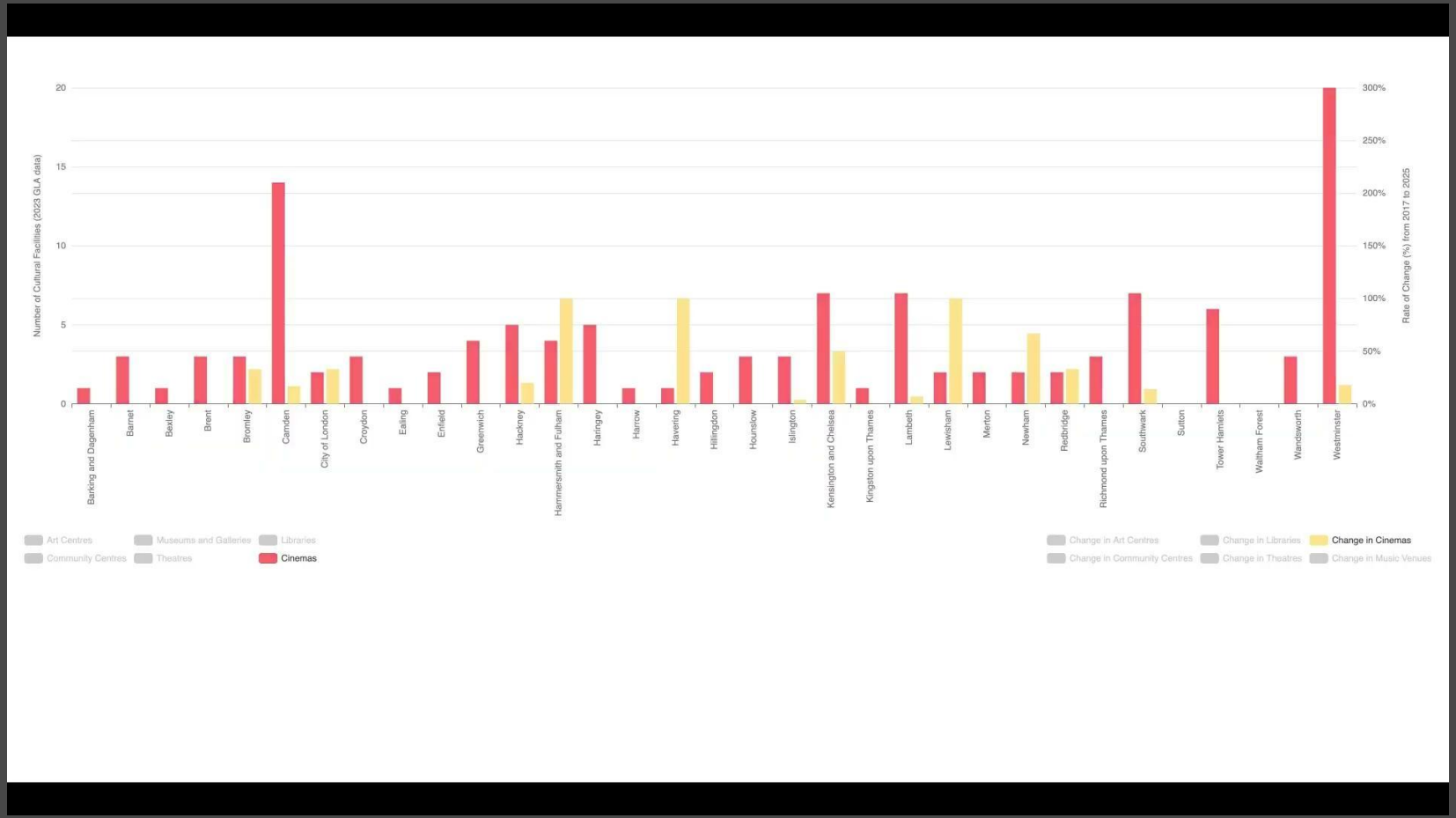


TEMPORAL ANALYSIS

SCRIPT

To deepen our understanding of inequity across London, we moved to a map-graph hybrid typology, breaking down the percentage change in libraries from 2017 to 2025, borough by borough.
Libraries were chosen as a proxy for public cultural infrastructure due to their accessibility and reliance on public funding—making them a bellwether for cultural investment.
This hybrid visualization allows us to:
* Identify which boroughs have suffered the sharpest losses.
* Examine how cultural access is concentrated or dispersed.
* Engage in more targeted spatial critique, highlighting boroughs where culture is most at risk.
This approach bridges the visual storytelling power of maps with the trend clarity of graphs, offering a multidimensional view of London's evolving cultural geography.

BOROUGH BY BOROUGH BREAKDOWN



BOROUGH BY BOROUGH BREAKDOWN

Speaker of this slide prefers to present without a script - their narrative will be in the final report.

Brief notes:
Due to this we broke down our scale to observe differences in cultural infrastructure and access borough by borough.

NEXT STEPS

- Contextualising data against external factors like population density or income.
- Complementing investigation with hyperlocal case studies.
- Making the website layout an active player in showcasing this narrative
- Making a “data transparency section” for the website
- Harmonising the designs

NEXT STEPS

Speaker of this slide prefers to present without a script - their narrative will be in the final report.

Brief notes:
Due to these factors, going forward we plan to contextualise the data against external factors like population density and income and complimenting that with hyperlocal case studies.

USER AND APPLICABILITY

Taxonomies applied from Visualization Analysis and Design (Munzner and Maguire 2015):

User:

- Cultural Researchers (public or private sector)
- Local authorities and cultural institutes at risk pitching for funding in need of an evidence base
- Wider creative community

Scale: London

Data
Data Sources: World Cities Culture Forum, Open Street Map and London Datastore
Data Types: Items, Attributes and Links
Attribute Type: Ordered (qualitative and quantitative) and categorical
Dataset Types: Tables and Geometry
Data Availability: Static
Data Form: Time series data, spatial data, categorial and hierarchical

Tasks
Consure: Present
Produce: Derive
Search: Explore
Query: Compare

London does have a Cultural Infrastructure Taskforce, set up in response to concerns about loss of cultural venues. The Taskforce is part of a broader Culture at Risk initiative, designed to support at-risk cultural spaces across London.

**Slides with our script were added to the presentation submission to provide context as we chose to let the visualizations take centre stage as we talked against the narrative - they are not stylised presentable slides.*