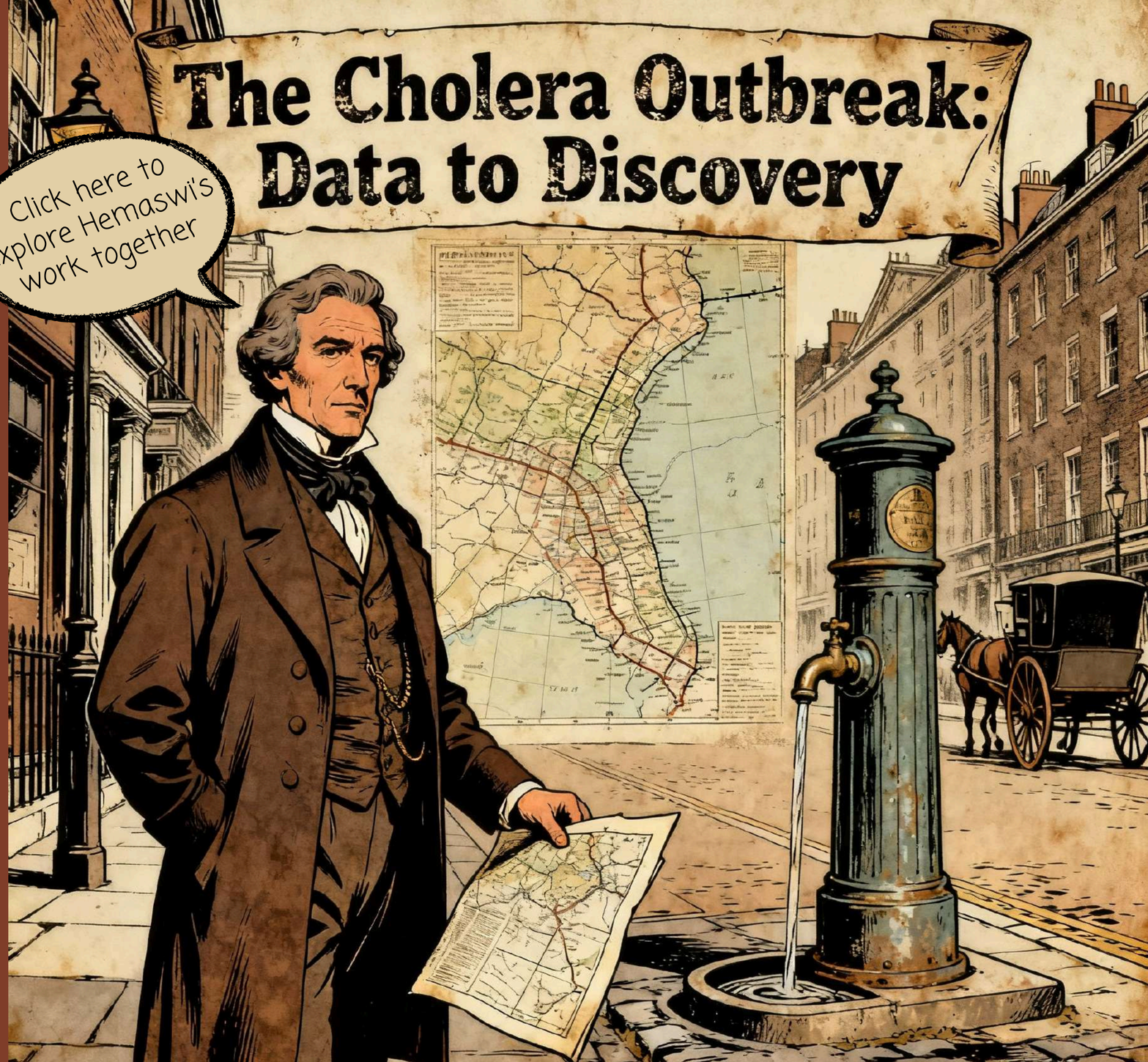
JOHN SNOW'S

CHOLERA MAP

Presented by HEMASWI GORRELA

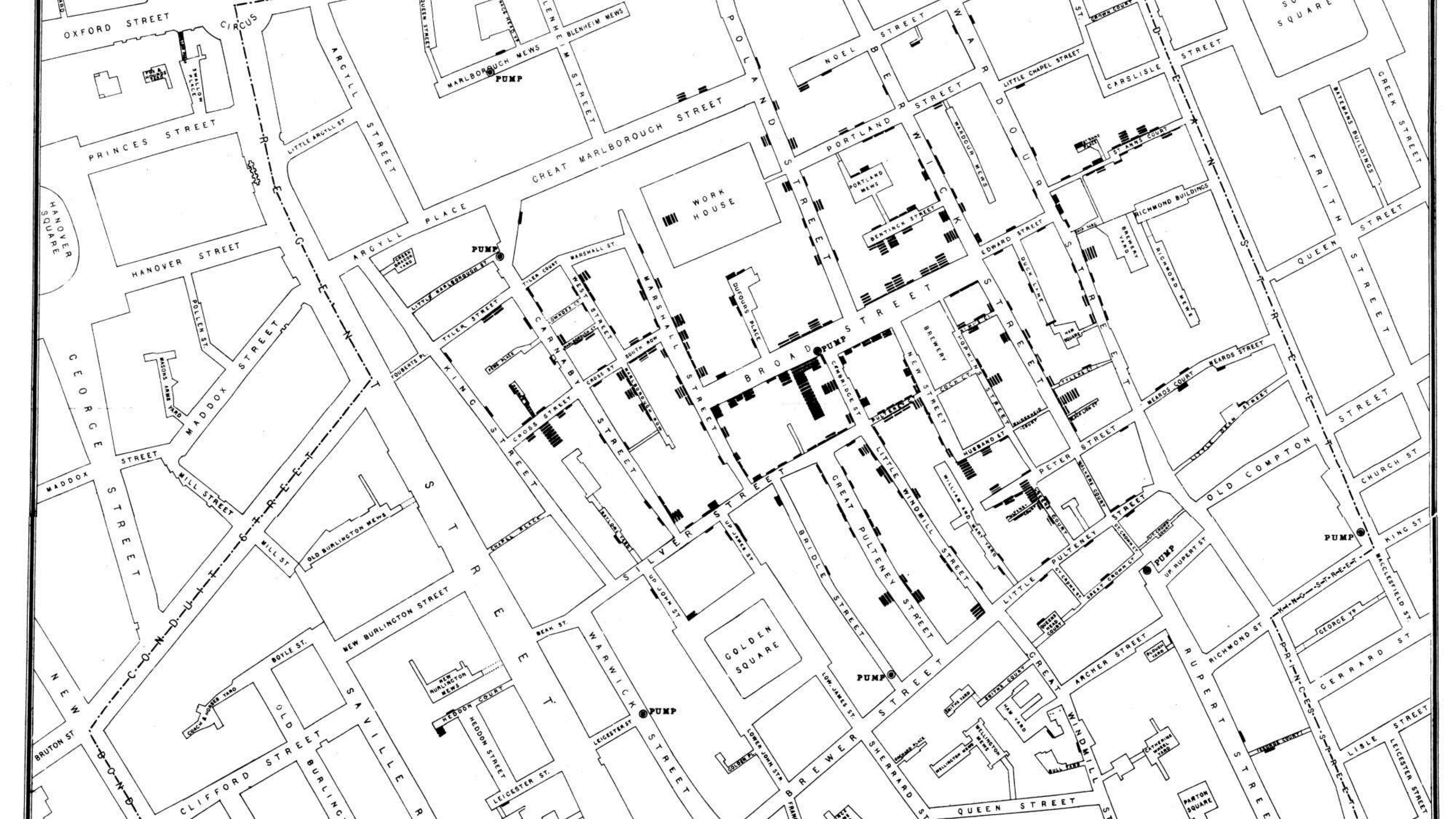


SNOW'S DISCOVERY

Understanding John Snow's investigation

- 1854, Soho: sudden, deadly outbreak
- 616 lives lost, but many more saved
- Dr. Snow - a data detective!
- Mapped deaths & water pumps
- Interviewed neighbors & searched for clues
- He discovered cholera comes from water, but not air
- Data + maps -> new way to fight disease

SNOW'S HISTORIC CHOLERA MAP


OXFORD STREET
CIRCUS
PRINCES STREET
HANOVER SQUARE
HANOVER STREET
GEORGE STREET
MADDOX STREET
MILL STREET
OLD BURLINGTON MEWS
NEW BURLINGTON STREET
BOYLE ST.
CLIFFORD STREET
OLD BURLINGTON STREET
SAVILLE ROW
BRUTON ST
NEW BOND STREET
ARGYLL STREET
LITTLE ARGYLL ST
ARGYLL PLACE
GREAT MARLBOROUGH STREET
MARLBOROUGH MEWS
BLENHEIM MEWS
QUEEN STREET
POLAND STREET
WORK HOUSE
PUMP
LITTLE MARLBOROUGH ST
TYLER COURT
MARSHALL ST.
TYLER STREET
KINGLY STREET
CROSS STREET
FOUBERTS PL
DUFOURS PLACE
BROAD STREET
CAMBRIDGE ST
NEW STREET
BREWERY
HOPKINS STREET
HUSBAND ST
PETER STREET
WARDOUR STREET
PORTLAND MEWS
BENTINCK STREET
WARDOUR MEWS
EDWARD STREET
DUCK LANE
NEW SQUARE
BREWERS YARD
RICHMOND MEWS
RICHMOND BUILDINGS
LITTLE CHAPEL STREET
CARSLISLE STREET
NOEL STREET
ST ANNS COURT
BATEMANS BUILDINGS
GREEK STREET
FRITH STREET
QUEEN STREET
MEARDS COURT
MEARDS STREET
OLD COMPTON STREET
CHURCH ST
KING ST
MACCLESFIELD ST
GEORGE YD
GERRARD ST
LISLE STREET
LEICESTER STREET
PRINCES STREET
RUPERT STREET
RICHMOND ST
LITTLE PULTENEY STREET
GREAT PULTENEY STREET
BRIDLE STREET
GOLDEN SQUARE
LOWER JOHN ST
UP JAMES ST
BEAK ST
WARWICK STREET
LEICESTER ST
HEDDON COURT
HEDDON STREET
NEW BURLINGTON MEWS
COACH & HORSES YARD
MASONS ARMS YARD
POLLEN ST
GREEN DRAGON YARD
SILVER STREET
LITTLE WINDMILL STREET
GREAT WINDMILL STREET
ARCHER STREET
BREWER STREET
SHERARD STREET
QUEEN STREET
WELLINGTON MEWS
WELLINGTON ARMS
ORCHARD PLACE
SMITHS YARD
BRIDLE COURT
HAM YARD
BULL YARD
PLOUGH YARD
CATHERINE WHEEL YARD
LEXINGTON STREET
PARTON STREET
PARTON SQUARE
GOLDEN SQUARE
CROWN COURT
CROWN CT
WILLIAM AND GIRT YARD
WILLIAMS COURT
GREAT CROWN ST
ST CROSS ST
ST CAPERS ST
HOLY ROOD COURT
HOLY ROOD LADDER
UP RUPERT ST
LOW JAMES ST
GOLDEN PL

ITERATION 1 :

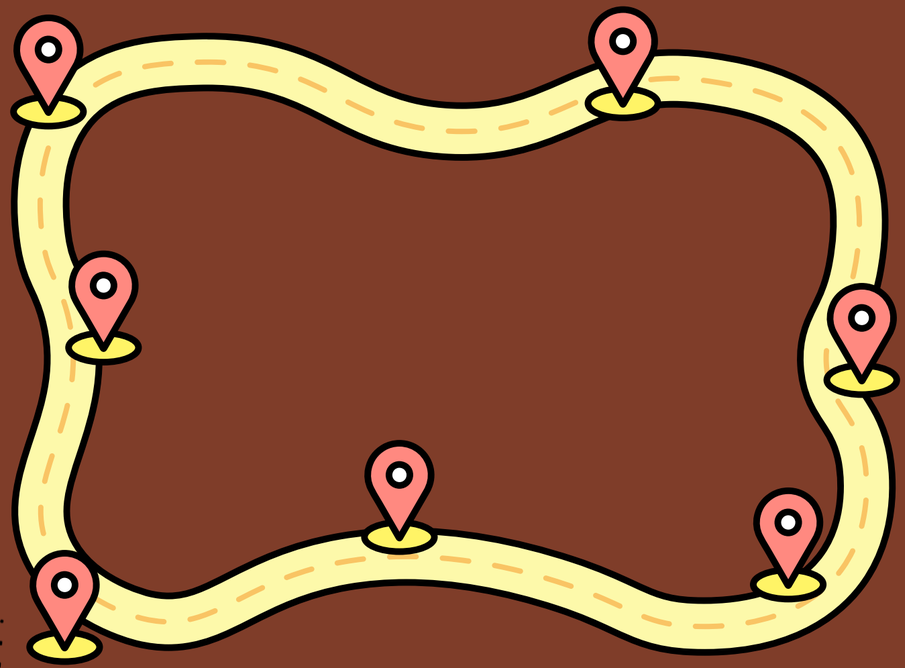
LET'S REMODEL SNOW'S HISTORIC MAP

- Modern visualization tools
- Creative hand sketches
- Interactive techniques
- Coded Maps

MADE THE SNOW'S RESEARCH STAND OUT, NOT JUST THE DATA

Sketched Snow removing the pump handle

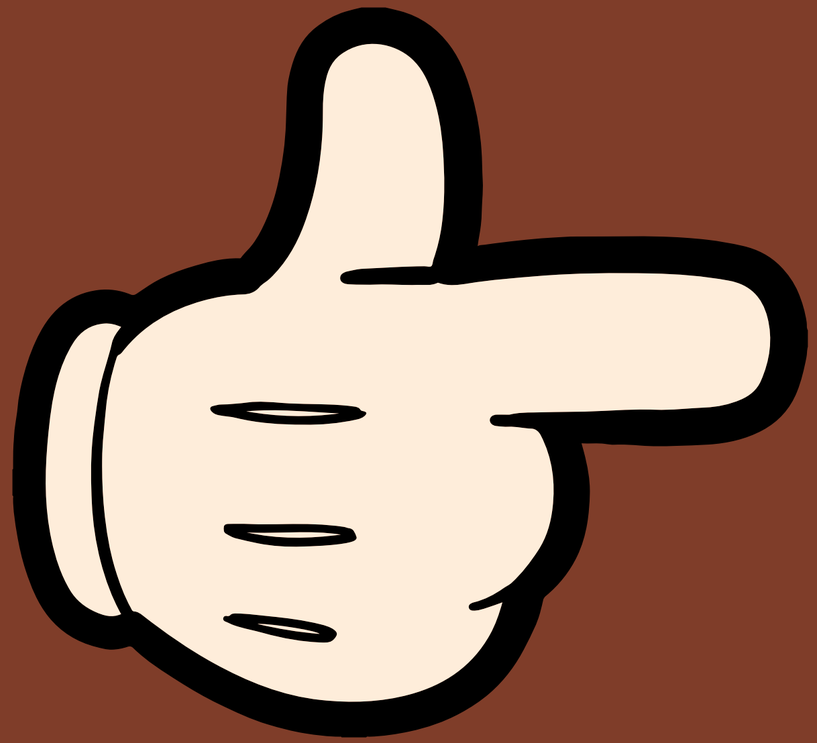
HAND SKETCH OF THE HISTORIC MAP



I drew the Base Map

Highlighted peak outbreak center

- Marked pumps and deaths on the map
- Mapped how deaths dropped farther from the Broad St. pump
- Showed when the handle was removed from the Broad St. pump

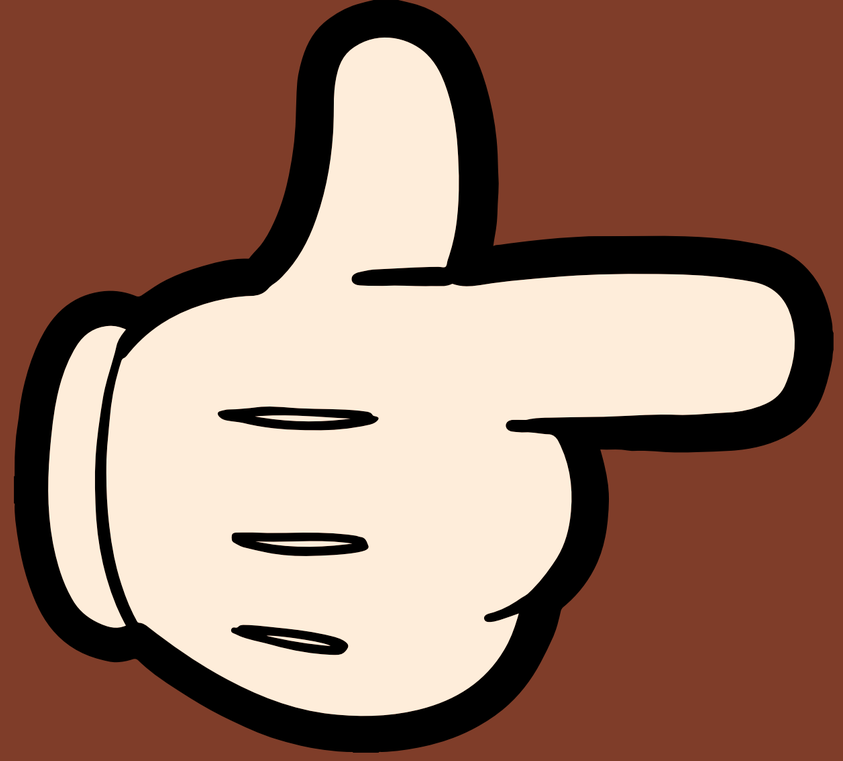


- My map markings help the audience look at Snow's research in the visuals instead of just the data
- Visualizing the story behind

- Deaths (616)
- Broad St. Pump
- Other Pumps
- Peak Cholera Outbreak Area. (Sept 1-7, 1854)
PUMP
MARSHALL ST.
BROAD STREET
BROAD ST PUMP
CAMBRIDGE
NEW STREET
Broad St. Pump handle removed: Sept 8, 1854
PUMP

ITERATION 2:

FIGMA PROTOTYPE OF THE HISTORIC MAP



- Built on insights and markings from my hand sketch
- Used Figma to organize and clean up the map visually
- Color-coded death clusters based on the intensity
- Kept the design simple with a legend and labels
- Made the story clear before coding the interactive digital map

Deaths during the peak outbreak. Sept 1-7, 1854
Deaths before the peak outbreak, when the disease was unknown
Deaths after the Broad Street pump handle has been removed. They decreased significantly
Broad Street Pump. Handle was removed on Sept 8, 1854
Other Pumps
BROAD STREET
PUMP
WORK HOUSE
GREAT MARLBOROUGH STREET
PORTLAND STREET
NOEL STREET
LITTLE CHAPEL STREET
CARSLISLE STREET
ARGYLL STREET
LITTLE ARGYLL ST.
MARLBOROUGH MEWS
PORTLAND MEWS
WARDOUR MEWS
BENTINCK STREET
EDWARD STREET
DUCK LANE
ST ANNS COURT
RICHMOND BUILDINGS
BREWERY YARD
RICHMOND MEWS
GREEK STREET
BATEMANS BUILDINGS
QUEEN STREET
MARSHALL ST.
TYLER COURT
TYLER STREET
LITTLE MARLBOROUGH ST.
LOWNDES CT.
BOROUGH CT.
FIVE MILE
SOUTH ROW
CROSS ST.
CHAPEL PLACE
DUFOURS PLACE
CAMBRIDGE ST.
NEW STREET
BREWERY
HOPKINS STREET
HAUGHWOLD COURT
TYLERS CT.
HUSBAND ST.
MEARDS COURT
MEARDS STREET
PETER STREET
WALKERS COURT
OLD COMPTON STREET
CHURCH ST
KING ST
MACCLESFIELD ST.
PRINCES STREET
RICHMOND ST
GEORGE YD
GERRARD ST
LITTLE PULTENEY STREET
GREAT PULTENEY STREET
BRIDLE STREET
LITTLE WINDMILL STREET
WILLIAM ARD
PULTENEY COURT
ST CROWN CT
GREAT CROWN CT
QUEENS HEAD COURT
ARCHER STREET
PLOUGH YARD
UP. RUPERT ST
UP JAMES ST
UP JOHN ST
BEAK ST.
GOLDEN SQUARE
WARWICK STREET
LOW JAMES ST
NEW BURLINGTON STREET
BOYLE ST.
NEW BURLINGTON MEWS
MILL ST
OLD
REGENT STREET
KINGS STREET
SILVER STREET
CARNABY STREET
MARSHALL STREET
BERWICK STREET
FRITH STREET
DOCK STREET
PUMP
PUMP
PUMP
PUMP

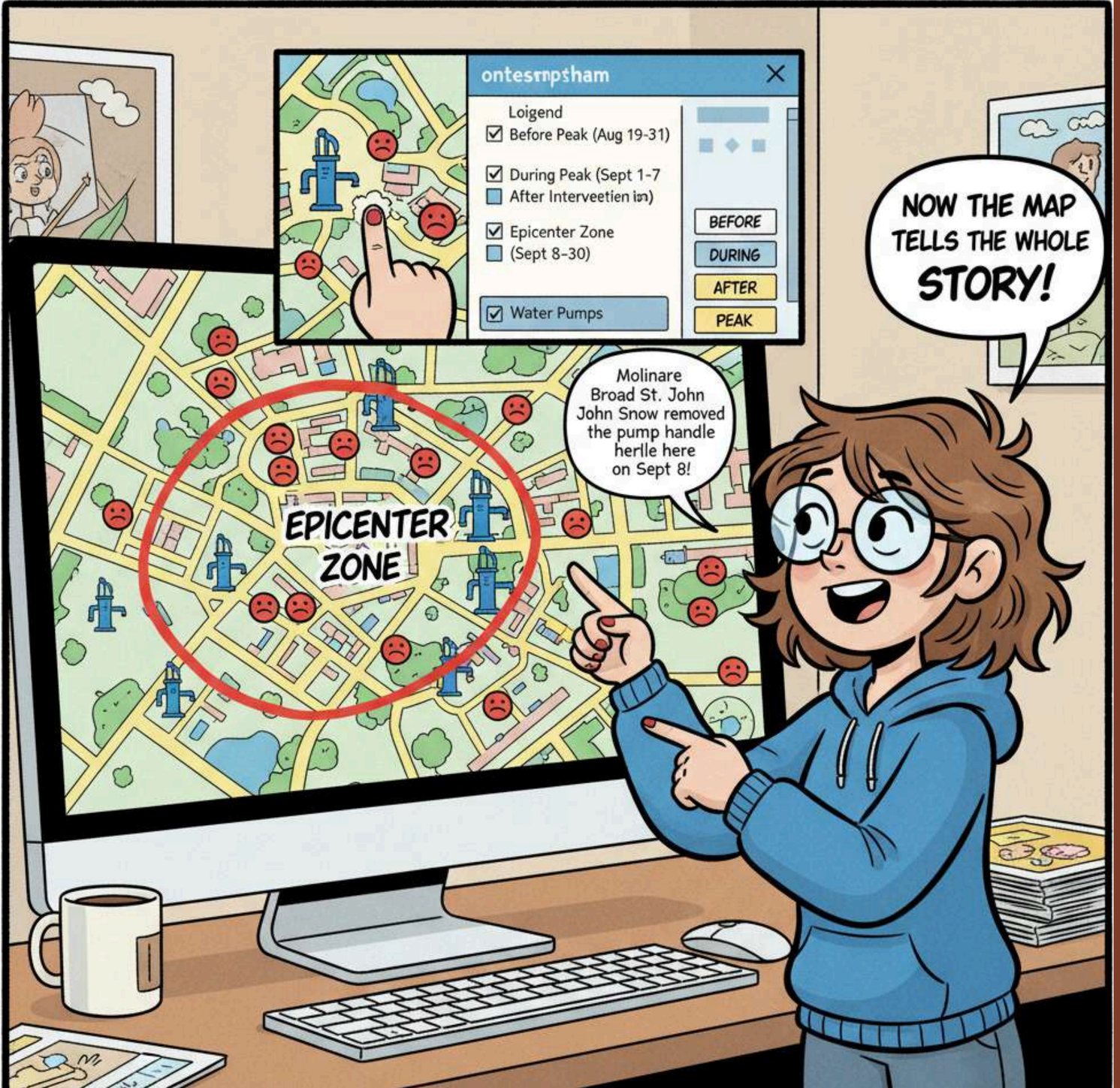
ITERATION 3:

SNOW'S MAP, NOW ALIVE

Created a fully interactive digital map with code

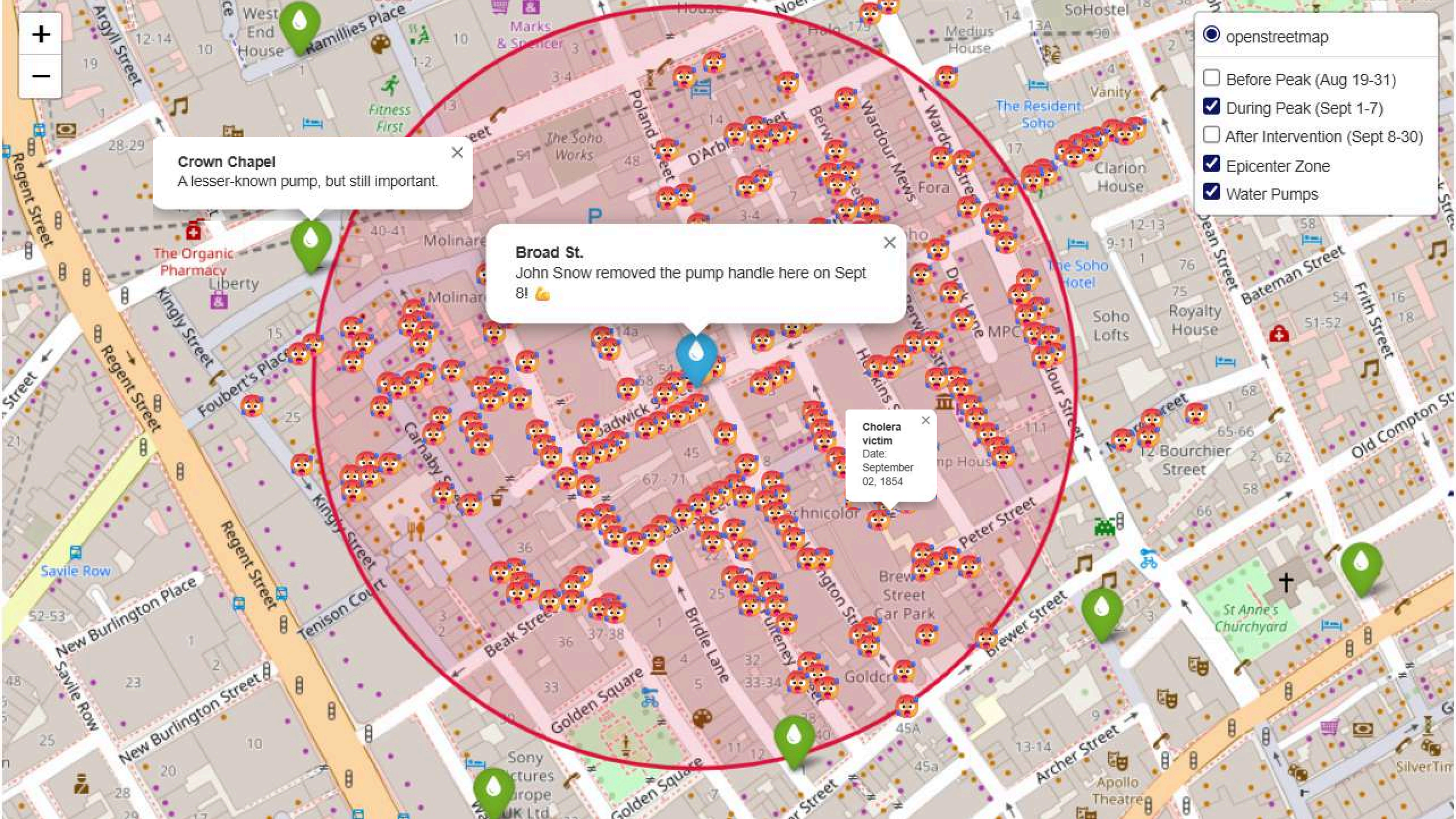
- Added pop-ups that appear when hovering over pumps and deaths
- Made layers that switch views: before, during, and after outbreak peak
- Included a red circle marking the outbreak center, like the hand sketch
- Shows exact death dates when clicking on points for more detail

Helped users explore the outbreak's spread over time visually



CLICK TO RUN IT YOURSELF

Turned Snow's map into a dynamic tool for exploration, & not just proof

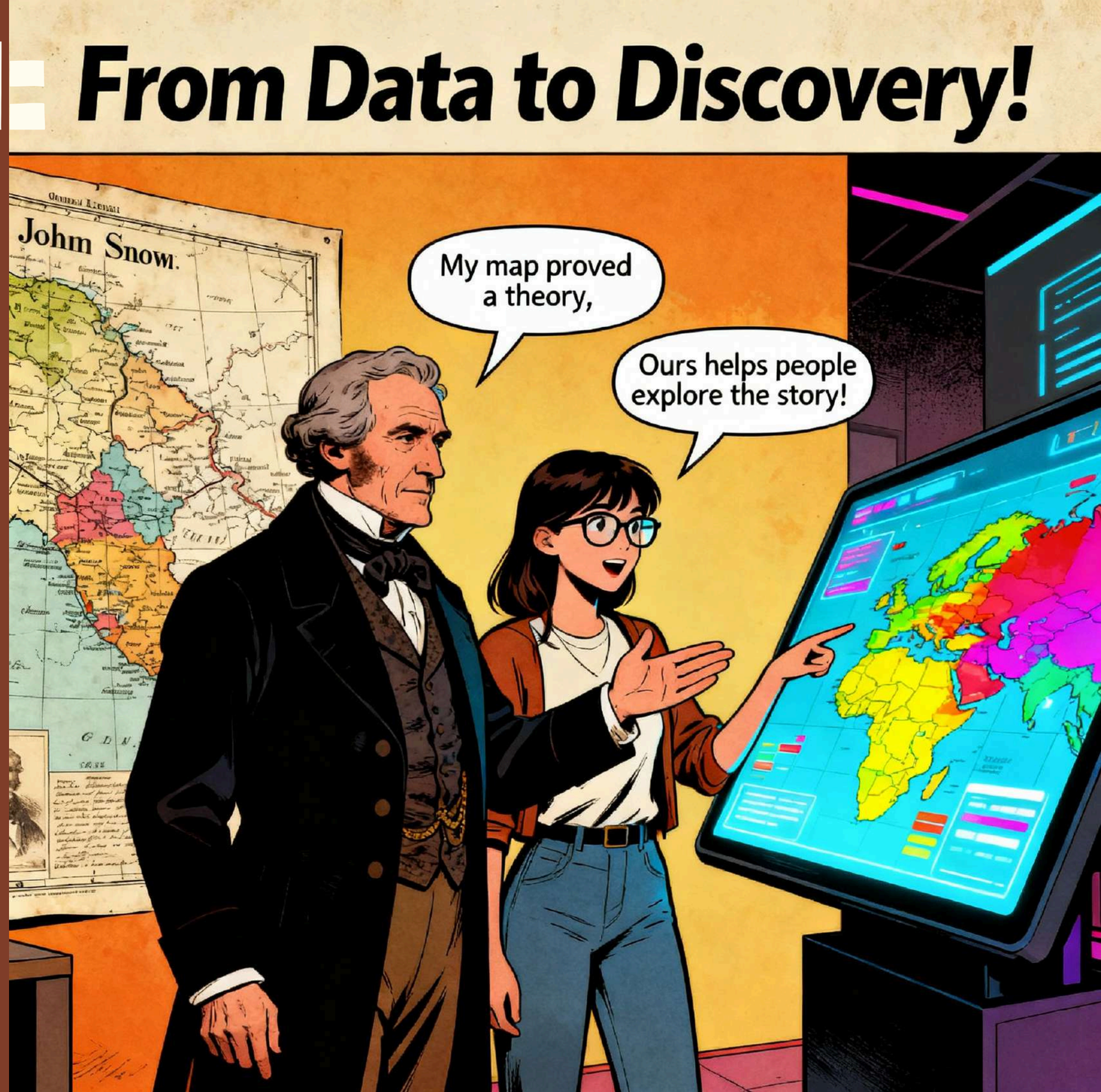


openstreetmap
Before Peak (Aug 19-31)
During Peak (Sept 1-7)
After Intervention (Sept 8-30)
Epicenter Zone
Water Pumps
Crown Chapel
A lesser-known pump, but still important.
Broad St.
John Snow removed the pump handle here on Sept 8! 💪
Cholera victim
Date: September 02, 1854
Regent Street
Kingly Street
Foubert's Place
Carnaby Street
Beak Street
Golden Square
Bridle Lane
Peter Street
Brewer Street
Archer Street
Wardour Mews
Poland Street
Ramillies Place
Argyll Street
Savile Row
New Burlington Place
New Burlington Street
Tenison Court
Bateman Street
Frith Street
Old Compton St
Dean Street
Soho Lofts
Royalty House
Clarion House
The Resident Soho
Soho Hotel
The Soho Works
Fitness First
The Organic Pharmacy
Liberty
Molinare
Brewer Street Car Park
St Anne's Churchyard
Apollo Theatre
Sony Pictures Europe UK Ltd

CONCLUSION:

DATA BROUGHT TO LIFE

- My redesign shows the full story behind Snow's data—how the outbreak spread and changed over time.
- Combining hand sketches, interactive coding, and storytelling makes the data vivid and meaningful.



HISTORY REMAGINED !

This approach helps viewers not just see numbers, but truly understand the human efforts and history

THANK YOU FOR EXPLORING!

The project turns a static map into an engaging, informative journey anyone can explore.