Recreating John Snow's Ghost Map

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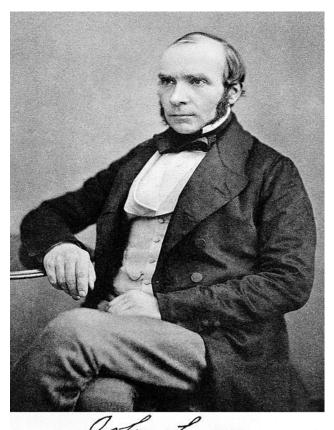
Who is John Snow?

No.. Not this one!



John Snow

Snow was a British Physician and and one of the founders of the Epidemiological Society of London.



John Inow

What did he do?

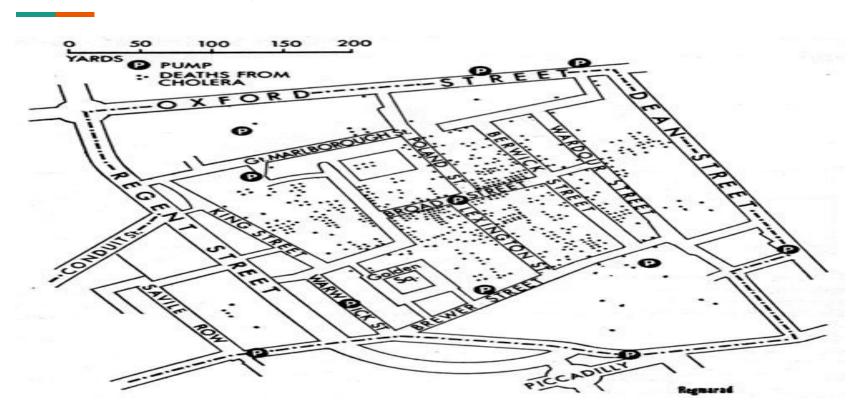
Early 1800's London experienced several cholera outbreaks.

At the time, there was a general belief that this type of disease was spread due to pollution and "bad air" — the miasma theory.

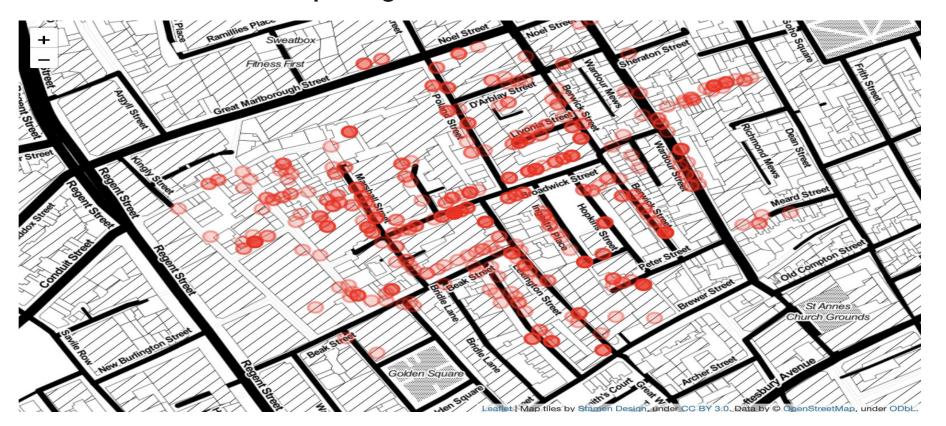
In order to better understand it's source and how the disease was transmitted among Londoners, Snow started by mapping the affected homes.

Through multiple local inquiries, he came to the conclusion that the source of the epidemic was the poor quality of the water.

Original Map by John Snow

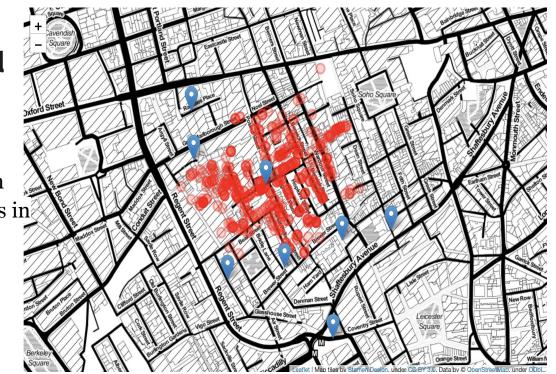


I tried to recreate this map using folium (Deaths from Cholera - red marker)



Same Map - Water Pump location added (blue pins)

Looking at the location of the water pumps in his map, we can see a greater incidence of deaths in their vicinity, compared to neighbourhoods that are not served by them.



Conclusion

- The suggestion to remove the handle, and thus deactivate, the water pump at the epicentre of the outbreak Broad Street lead to a containment of the outbreak and a gradual stagnation of the overall death toll.
- It's remarkable how the work of these pioneers and their contemporaries paved the way for disciplines that we today know as data and information visualization, as well as, the widespread use of infographics.