REDLINING AND DE FACTO SEGREGATION

A Web-based, Geospatial Visualisation

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Product Requirement Document

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Introduction

Statement of Purpose

There persists in America an embedded network of institutional factors contributing to unequal and unjust social outcomes. Compounding the issue of discursively challenging these structures are broad misconceptions on such implicitly-expressed oppression. When conversations are allowed to focus around only the most explicit instances, it enables all else to be hand-waved away with only vague dismissals; premises are hidden and rhetoric is elevated. In public discourse, then, value can be added through direct, concise, and easily-interpretable representations of this typically oblique content. The particular case of historic redlining represents a distinct candidate for such visual arguments- given its intrinsically geospatial nature, a clear graphical argument can be made on its sustained impact¹.

Audience

The primary discursive problem on this topic is the presence of a certain information gap. I.e., despite a body of literature attesting to the presence of implicit and institutionalised biases and discrimination², public opinion is still split on their existence, particularly along racial and gender lines³. Even among those who accept the persisting effects of racial discrimination will often tend to deflect considerations on their own involvement, intentional or not. This leaves a niche for a particular kind of argument to be provided in public discourse within this domain- a single point, made concisely and repeatedly⁴. The academic support and context is such that effective action can be made in communicating the content of such research with ease of transmission/interpretation and user experience in mind. This directly informs the intended audience of this project; everyone would stand to gain from a fundamental understanding of redlining's direct effects.

PRODUCT DESCRIPTION

Product Perspective

The proposed value added by the project stems, as mentioned, from general ambiguity and misconception in understanding the politics and history of systemic discrimination. A minority of the white population believe systemic racism is a larger issue than personal bias; a majority believe they themselves face discrimination; and only half believe racial discrimination exists, period. This is a problem of motivation, emotion, and belief; areas of rhetoric where graphical arguments have some of the greatest potential to inspire and coerce. It is one issue to show a trend or a correlation- its another to ground it to one's city or neighbourhood, and connect its prevalence to one's own terra firma.

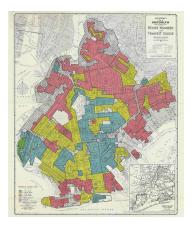
More than half of white Americans say they believe discrimination against white people exists in the U.S. today.



Data Inputs

Redlining Maps

The most concrete data which exists for 20th century redlining are the HOLC neighbourhood mappings, created in the 1930's to provide guidance on mortgage underwriting. These maps have recently been digitised into geoJSON polygons, allowing for convenient, web-based projection.



US Demographics over Time

An obvious overlay to create atop the original maps would be demographic and ethnic data by area, collected at a granular enough level to allow for easy visual comparisons with the redlining polygons. These requirements would appear to be satisfied by U.S. census data from various points over the past century- aggregated and analysed at tract level.

Housing Market Data

In addition to the demographics data, another point of comparison could be drawn to summary statistics on real estate and housing market data, corresponding again to the neighbourhood level. For this case, a seemingly-appropriate option for up-to-date information would be Zillow's public API, which provides support for requests on mortgage statistics, real estate values, neighbourhood delineations, etc.

Visual Outputs

As stated, the intended output for the product will function as a visual introduction to the political history of redlining, and thereby exemplify systemic factors overall. At this preliminary stage, I believe a form of funnel visualisation would best achieve these goals. Such a structure would enable the piece to provide an introduction to the relevant concepts in a typical, "scroll storytelling"/ news piece format, before breaking down into an interactive piece incorporating the above-mentioned dimensions of data.

Of key import here would be the immutability of the redlining polygons. Ideally, giving users the ability to expose or conceal the representations of all other dimensions yet little control over the redline base layer will reinforce the perspective of the practice as embedded, and unavoidably inherited. Beyond this will be an attempt to guide users first to explore the top-level map at their own pace, before leading their attention to engage a series of "micro" views- pre-selected borders of particular note, represented at the base street level. These views would ideally resize to take up the entire viewport, forming a more directed experience with a more prominent HUD, context windows, etc. If the micro views are to be considered the natural end point of the narrative provided by the overall product, it would then make sense to have them form the basis for any prospective looks- i.e., arguments on the efficacy (or lack thereof) of federal regulation and communitarian reinvestment as long term solutions.

In more specific terms, there are certain editorial decisions which must be made before

the fact regarding which actual areas are to be represented. One possible direction is to present areas most likely to be immediately familiar to likely users, which in the case of this product would be the neighbourhoods of NYC. The reasoning here is that, given the product's goal to present emotionally grounded arguments, tying its content to personally relevant information would work to its favour.

Constraints

SPECIFIC REQUIREMENTS

REFERENCES

- $1. \ \, \text{Daniel Aaronson} \,\,, \, \text{Daniel Hartley} \,\,, \, \text{Bhash Mazumder.} \,\, {}^*\text{The Effects of the 1930s HOLC} \,\,$ $\text{Redlining Maps} \,\,.$
- 2. Bradford, Calvin, and Dennis Marino. *Redlining and disinvestment as a discriminatory practice in residential mortgage loans*. Washington, D.C.: Dept. of Housing and Urban Development, Office of Assistant Secretary for Fair Housing and Equal Opportunity, 1977.
- 3. Squires, Gregory D. *From redlining to reinvestment: community responses to urban disinvestment*. Philadelphia: Temple Univ. Press, 1992.
- 4. Immergluck, Daniel. *Credit to the community: community reinvestment and fair lending policy in the United States*. Armonk, NY: Sharpe, 2004.