Linguistic Discrimination

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On Peoria, Anishinabewaki, Potawatomi land

Linguistic Discrimination

On Deck Today

- Phonetics
- Background
  - US Housing
  - Dialect Discrimination
- Preliminary work and Results
- Questions

A Crash Course in Phonetics!

Speech

- Is magic.

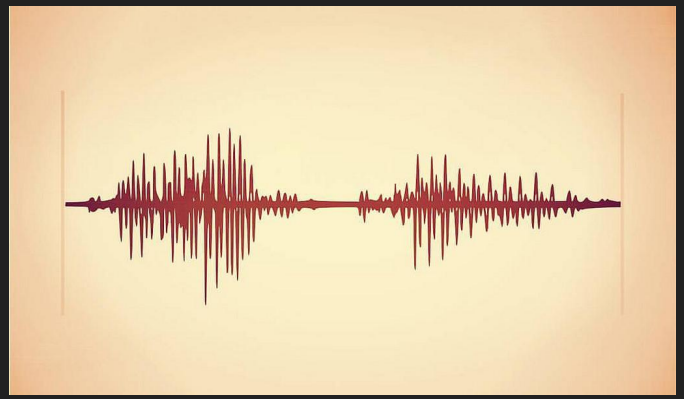
Speech

Is magic.

Thought > Meat > Air >Thought

- Production
  - Speech is flapping bits of meat around in your head and throat while you expel air.
- Perception
  - Speech perception is turning the resulting vibrations in the air back into language, into meaning.

Waves → Meaning



- The Human is a discerning individual.
- Parsing
  - When we're familiar with the categories in a language, that affects our perception strongly
  - Categorical perception (ask me about it later!)

Speech Perception

- Listeners perceive speech categories on a continuum
  - Language specific
  - Individual Experience

Ladefoged & Broadbent, 1957; Nygaard & Pisoni, 1998; Niedzielski, 1999; Hay & Drager 2006; Scharinger et al. 2011; Sumner, Kim, King, and McGowan, 2013; McGowan, 2015; Beddor, Coetzee, Styler, McGowan, Boland 2018

Speech Perception

- Listeners perceive speech categories on a continuum
  - Language specific
  - Individual Experience
- Variation in speech is useful to listeners
  - We use our knowledge of the categories to make decisions about which sounds are which.
  - Organize newly encountered variants with talker-specific information

Voices are Socially Informative

Scharinger et al. (2016)

- Age & Gender, then Race
- Early (“Hello”)
- Without Attention

Voice Matters

- We use our voices to convey a wealth of information about our intentions.

Discrimination

In every sense.

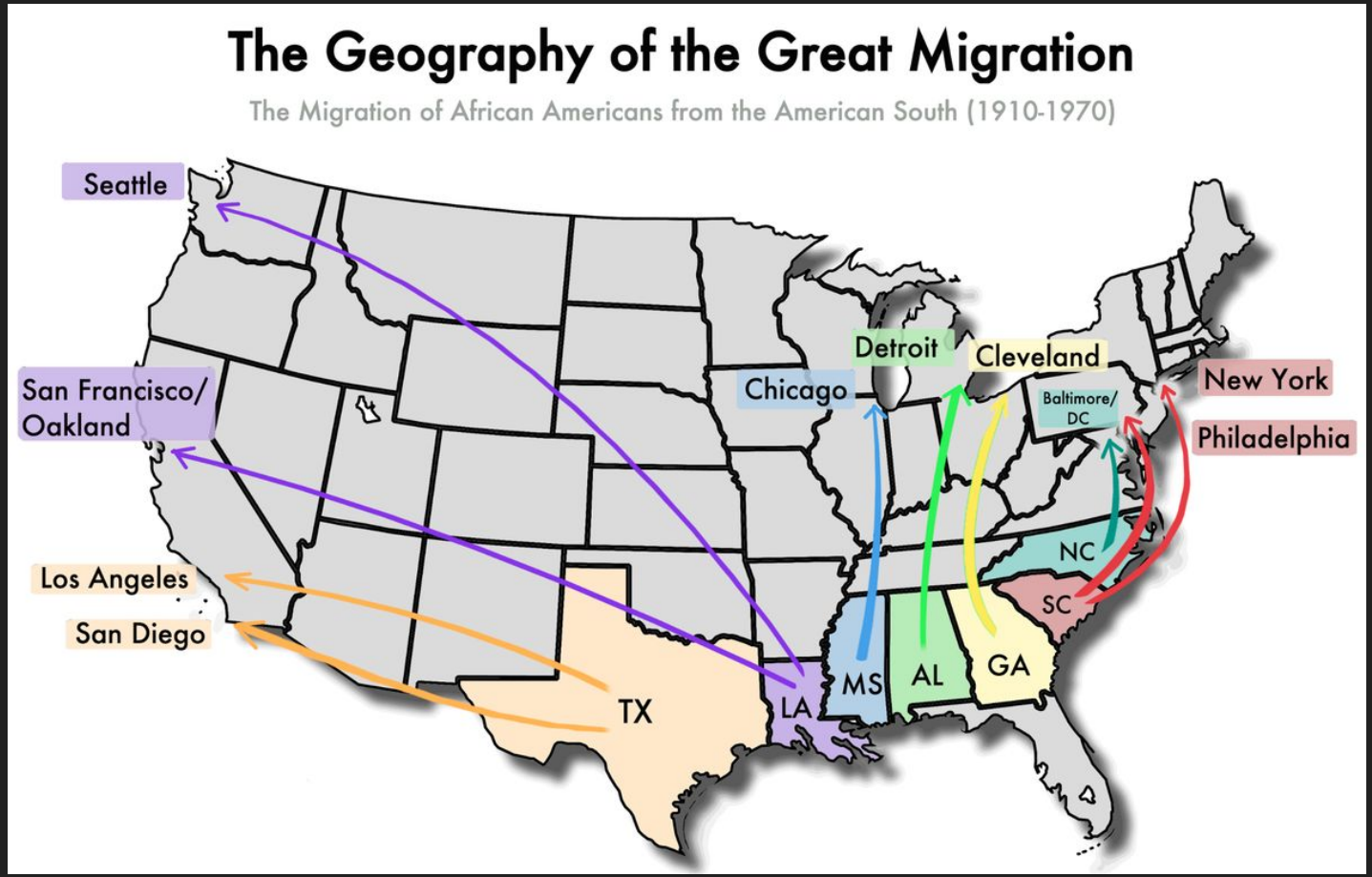
- Picking out two different things
  (here we care about sounds)
- Treating someone differently based on social knowledge you have about them

US Housing

- Always been separated along color and class lines

Overt Segregation

Great Migration



Covert Segregation

(ask me later about Suburbs, Redlining, Blockbusting, White Flight Gentrification and Redistricting, and the Racialization of Media)

- Highway Project

Eisenhower's Highway Project

Projects

Suburbs

Fair Housing Act

Fast forward!

- Race, National Origin, Color, Religion (1968)
- Sex (1974)
- Disability and Familial Status (1998)

ZERO cases

Dialect Discrimination

- Discrimination is, legally, an act that can occur only in physical proximity.

When you open your mouth to speak, you reveal your identity, not merely your ideas.

Dialect Discrimination is insidious

- Dialect identification happens in a moment
- Happens outside the space of canonical, legal discrimination

Landmark Study Purnell, Idsardi, & Baugh (1999)

“Given that discrimination according to race or national origin is illegal under the Fair Housing Act and the Civil Rights Act of 1968 as amended, we seek to demonstrate that the identity of race (or national origin) is reflected, not only visually but also auditorily in an individual’s speech. In addition, we endeavor to establish that listeners hear and positively identify a speaker’s dialect with great accuracy. The following experiments reveal the possibility of auditory discrimination and the probability of social discrimination by auditory identification of dialects. Auditory cues thus comprise a significant factor in establishing evidence in effecting a prima facie case where the Fair Housing and Civil Rights Acts are involved.”

Convincing pattern of appointment by guise by neighborhood demographic

Table 1

Confirmed Appointments to View Apartments Advertised for Rent in Different Greater San Francisco Geographic Areas (in percentages)

	Geographic Area				
Dialect Guise	East Palo Alto	Oakland	San Francisco	Palo Alto	Woodside
AAVE	79.3	72.0	63.5	48.3	28.7
ChE	61.9	58.3	53.2	31.9	21.8
SAE	57.6	68.7	71.9	63.1	70.1
Total number of calls for each locale	118	211	310	263	87

Note. AAVE = African American Vernacular English; ChE = Chicano English; SAE = Standard American English.

Table 2

Population in Different Greater San Francisco Geographic Areas by Race and Ethnicity (in percentages)

	Geographic Area				
Population	East Palo Alto	Oakland	San Francisco	Palo Alto	Woodside
African American	42.9	43.9	10.9	2.9	0.3
Hispanic	36.4	13.9	13.9	5.0	3.8
White	31.7	32.5	53.6	84.9	94.7

Source. U.S. Census Bureau (1990).

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Dialect Discrimination

Exists.

- Possible!
- Works in both directions
  - Us versus Them

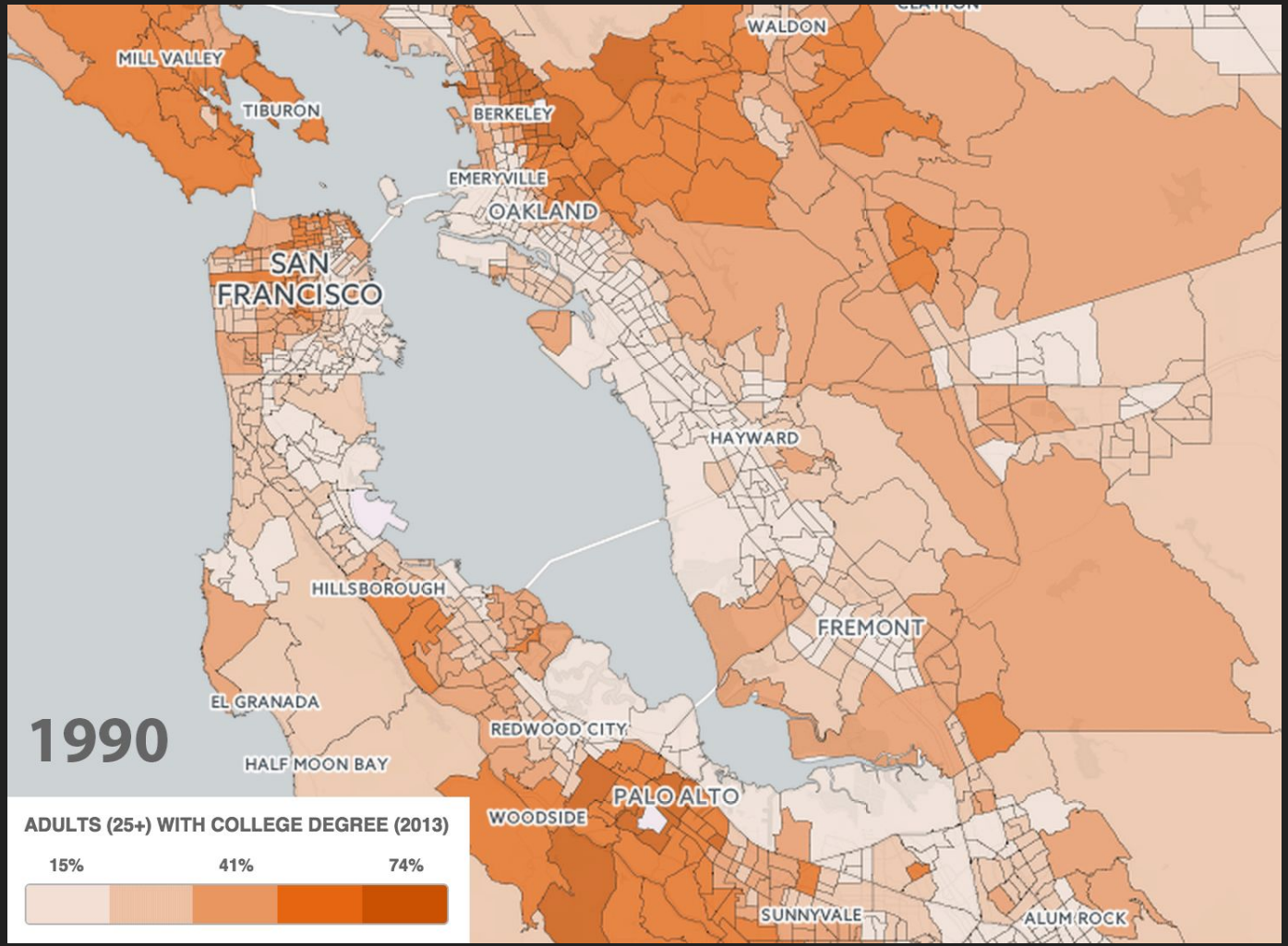
Current Study

- Purnell et al (1999) Replication
- Preliminary work and Results
- Welcome questions

Replication

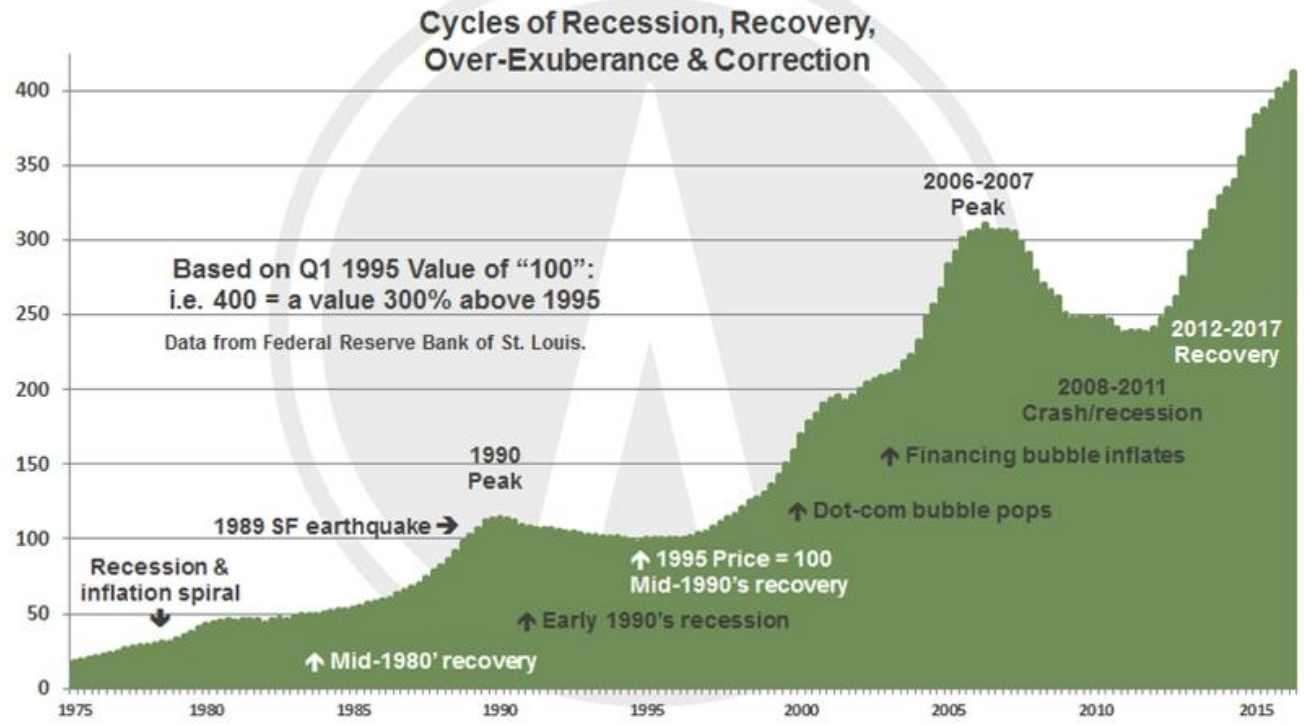
Replicain’tion

- 20 years and Silicon Valley
  - (ask me about Yelp!)


WALDON
MILL VALLEY
TIBURON
BERKELEY
EMERYVILLE
OAKLAND
SAN FRANCISCO
HAYWARD
HILLSBOROUGH
FREMONT
EL GRANADA
REDWOOD CITY
HALF MOON BAY
PALO ALTO
WOODSIDE
SUNNYVALE
ALUM ROCK
1990
ADULTS (25+) WITH COLLEGE DEGREE (2013)
15%
41%
74%

Federal Housing Finance Agency (FHFA) House Price Index

San Francisco & San Mateo Counties, Appreciation Trends since 1975



FHFA all transactions house price index, not seasonally adjusted. The HPI is a weighted, repeat-sales index, based on repeat mortgage transactions on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac.

PARAGON
REAL ESTATE GROUP

year-round autumn
THE CITY
THE TOWN
hella ghetto but awesome fun
gunshots
sideshows
most beautiful city in the world
Alamurda
HYPHY FOOLS
ghetto /'getō/ n.
— here.
The Dro
Pimp-Ass School
diversity
always foggy
Little Manila
graves
county jails
sewage
Bay
Lost Here
510, yo
top 40 R&B
tract housing
Haystack
Heart of Da Bay
City of Real Boss Niggaz
Trenchtown
Pathetica
wild parties
drug abuse
cold beaches
SFO
Asian Burlingame
preppy teens
B-Game
white
yuppie enclave
sheltered suburbs
high blazing population
not known for anything
Mateo
kids think they're ghetto
Deadwood City
best weather
STAY AWAY
Great Divide
stoners
HMB
artists
billionaires
humble rich
tech zillions
near-billionaires
Palm-Lined Elegance That Is Stanford
half the people here have their name registered as a domain
Google
Yahoo
Let's go surfing!
Let's get baked!
awesome weather
woodsy
SILICON VALLEY
HP
Intel
Apple
ooda
working class
Silicon Valley engineers
FREAKMONT
filled to the TOP with Asians
extremely diverse
gangs
poor immigrants
junkyards
Asia
cultural melting pot
machinery
expensive
Kick-Ass College
THE SAN JO
inferiority complex
one of safest US cities
laid-back, fun-looking, weed-seeking individuals
nobody will judge you here
antiques
DTLG
[literally nothing]
ghetto wannabes
Big SR
bored teens
bored police
nothing
typical well-off suburbs
Dubtown
bad air
kids acting gangsta
nothing besides bowling
downtown is hella sick now
pretty darn pleasant...
P-Town
...eerily pleasant
great hiking
ghetto and violent side
unknown parts
gangs
ny po-po
about some green?
hood of all hoods

Speech Perception

Can listeners hear social class membership?

- National Survey of Rental Professionals
  - Basic Demographics and Language Experience
  - Rootedness (h/t Paul Reed)
  - Professional Preferences
- N=68

What are some qualities you find appealing in a potential tenant?

‘"Appealing" isn't really part of the process. All qualified applicants are accepted if units are available.’

“I don't expect people to come dressed for a job interview, but that is essentially the first step.”

“Be well spoken and considerate on the phone”

My Three Native Dialects

- African American (AAL)
  - Who I Am
- Standard American (MUSE)
  - What I Do
- Southern American (SA)
  - Where I Am From

Dialect ID Stimuli

Normed Samples available at **https://bit.ly/2GUcabT**

- African American
- Southern American
- Standard American

Results

MUSE Sample	**AAL Sample**	**SA Sample**
Raced at 89% White	Raced as 89% Black	Raced as 97% White
Region Rating	**Region Rating**	**Region Rating**
14% Northeast 17% West Coast 17% East Coast	29% South 22% East Coast	71% South 2% Alabama, Texas, Georgia, Arkansas, respectively.

How many voices? 97% identified three distinct speakers

Initial Attitude Impression

- How do you feel about the person behind the voice you heard?

Southern American English

Pleasant	Feminine	Educated	Attractive	Poor
72.09	89.11	52.46	62.71	37.26
Masculine	Confident	Trustworthy	Rich	Difficult
7.69	65.74	69.23	46.69	26.4

Red boxes represent positive extremes (meaning that the voice possesses characteristics which invoke this impression) and Yellow boxes represent negative extremes (meaning that the voice does not possess such characteristics).

Mainstream US English

Pleasant	Feminine	Educated	Attractive	Poor
74.06	81.11	80.74	69.66	16.4
Masculine	Confident	Trustworthy	Rich	Difficult
17.11	77.46	71.43	64.54	32.91

Red boxes represent positive extremes (meaning that the voice possesses characteristics which invoke this impression) and Yellow boxes represent negative extremes (meaning that the voice does not possess such characteristics).

African American Language

Pleasant	Feminine	Educated	Attractive	Poor
54.11	76.97	38.29	48.54	54.47
Masculine	Confident	Trustworthy	Rich	Difficult
18.03	58.8	51.6	24.43	47.37

Red boxes represent positive extremes (meaning that the voice possesses characteristics which invoke this impression) and Yellow boxes represent negative extremes (meaning that the voice does not possess such characteristics). **NOTE: the AAL voice conveys extremes only!**

Taken Together

Preliminary Results

- Listeners heard three distinct speakers
  - Dialects and races distributed as expected
- Listeners heard three different people

This Matters.

- 190 years of racialized housing discrimination
- People accurately hear social information
- People make judgements based on voice alone
- Property owners care about how you sound

This Matters.

"Accent is the first point of gatekeeping."

-Rosina Lippi-Green

- Hispanic English-learners
  - More likely to work in high risk professions
  - Deaths and injuries rose 86% from 1992-2006
- Two women detained at the MN border for speaking Spanish

Anytime you have to open your mouth to accomplish a task, linguistic discrimination is at play.

We need to become more aware that
Sounding Non-Standard
is not about ignorance or laziness.

Thanks!

All Y'all!!

Professor Sanz-Sánchez

Tom Purnell
Bill Idsardi
John Baugh

Patrice Speeter Beddor
Robin Queen
The University of Michigan

Kevin McGowan
The University of Kentucky

Savithry Namboodiripad
Will Styler

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kellywri@umich.edu

Slides available at
https://bit.ly/2tgewZE

National Housing Act

- Part of the New Deal (1934)
  - Home Owners Loan Corporation
  - “Low risk,” suburban areas

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- Explicitly mentions non-white races as reasons for risk
  - “Inharmonious racial or nationality groups”
  - “Multiple family homes”
  - “Smoke, odors, and fog.

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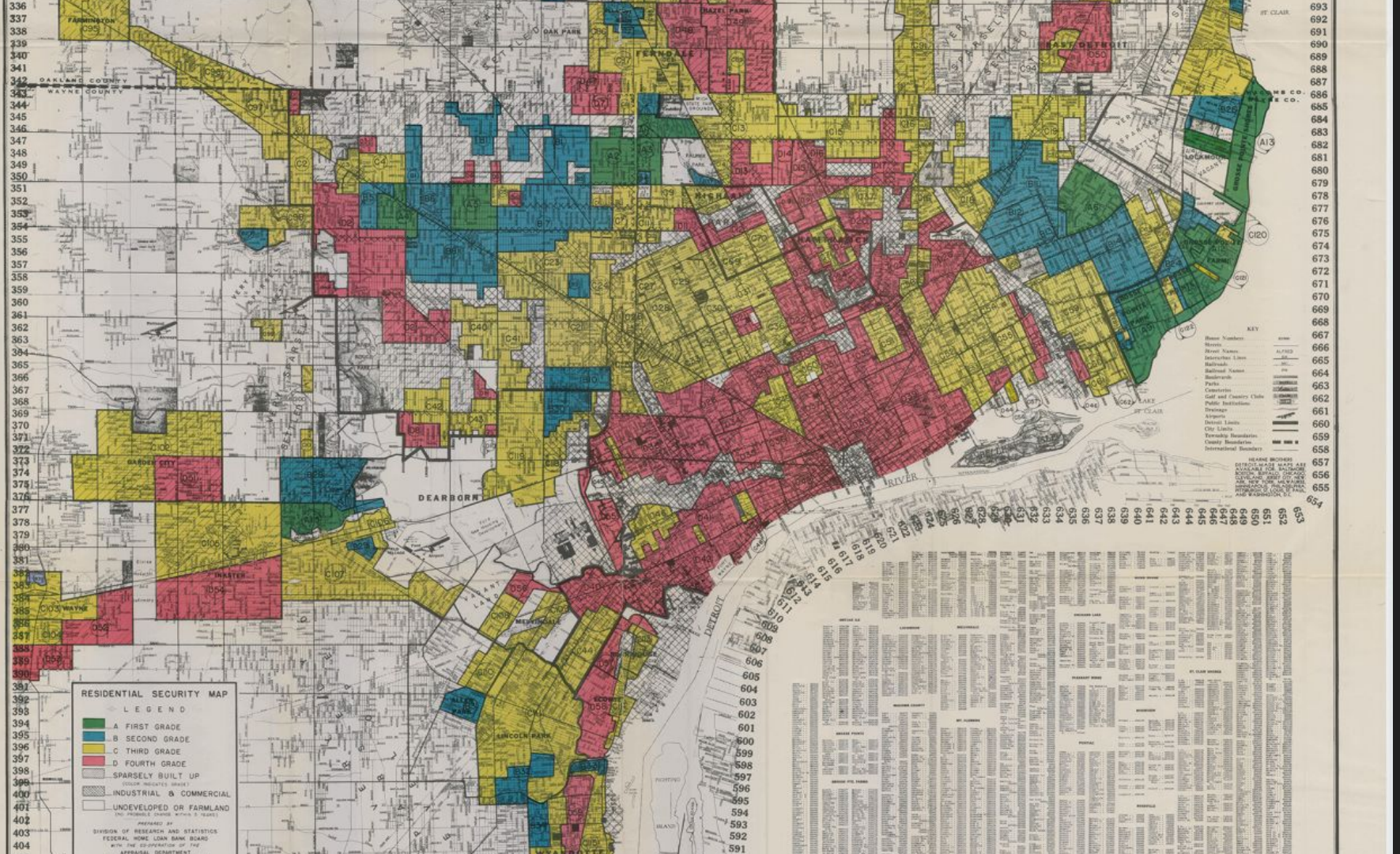
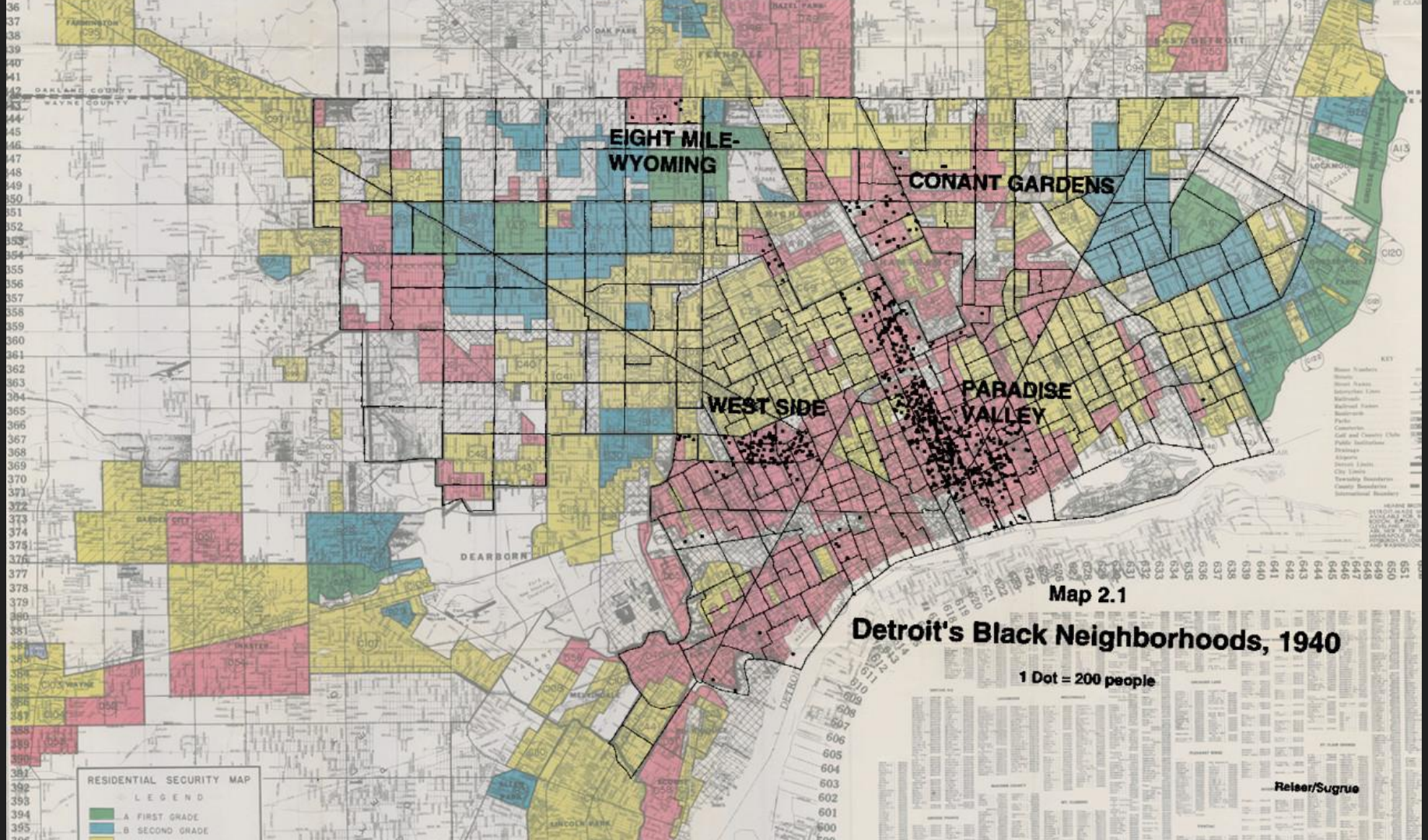
  - “Low risk,” suburban areas
- Explicitly mentions non-white races as reasons for risk
  - “Inharmonious racial or nationality groups”
  - “Multiple family homes”
  - “Smoke, odors, and fog.
- Redlining
  - Federal risk assessors


RESIDENTIAL SECURITY MAP
LEGEND
A FIRST GRADE
B SECOND GRADE
C THIRD GRADE
D FOURTH GRADE
SPARSELY BUILT UP
INDUSTRIAL & COMMERCIAL
UNDEVELOPED OR FARMLAND
PREPARED BY
DIVISION OF RESEARCH AND STATISTICS
FEDERAL HOME LOAN BANK BOARD
WITH THE CO-OPERATION OF THE
APPRAISAL DEPARTMENT
KEY
DEARBORN
DETROIT
OAK PARK
FERNDALE
HIGHLAND PARK
HAMTRAMCK
EAST DETROIT
GROSSE POINTE FARMS
GARDEN CITY
INKSTER
WAYNE
LINCOLN PARK
MELVINDALE
OAKLAND COUNTY
WAYNE COUNTY

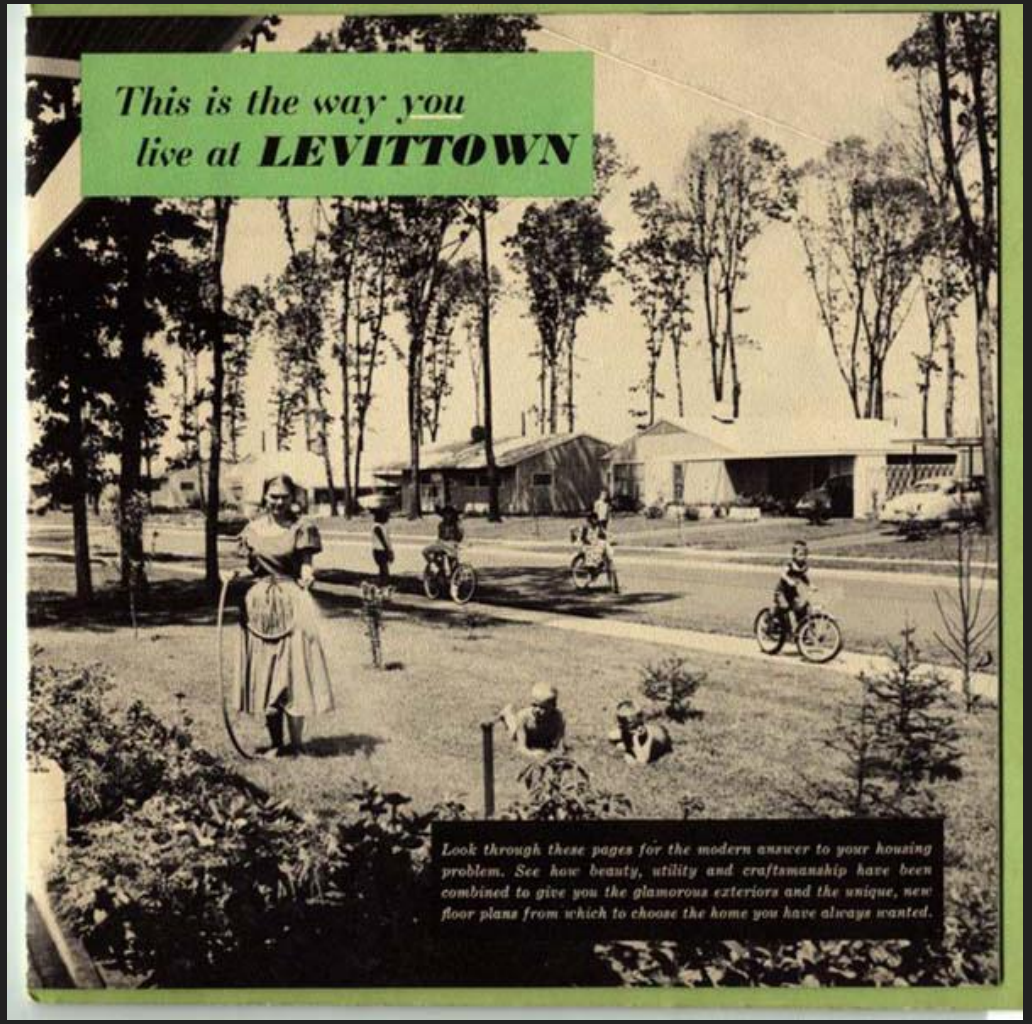


Map 2.1

Detroit's Black Neighborhoods, 1940

1 Dot = 200 people

Reiser/Sugrue


This is the way you
live at LEVITTOWN
Look through these pages for the modern answer to your housing problem. See how beauty, utility and craftsmanship have been combined to give you the glamorous exteriors and the unique, new floor plans from which to choose the home you have always wanted.

Suburbs

Supported by the HOLC

- Levittown
  - Racial Covenants
  - Keep out Jews and Blacks

Suburbs

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- Shelley v Kraemer 1948
  - 10 Blocks away!
  - Thurgood Marshall
  - Enforcement of Covenants violates 14th Amendment

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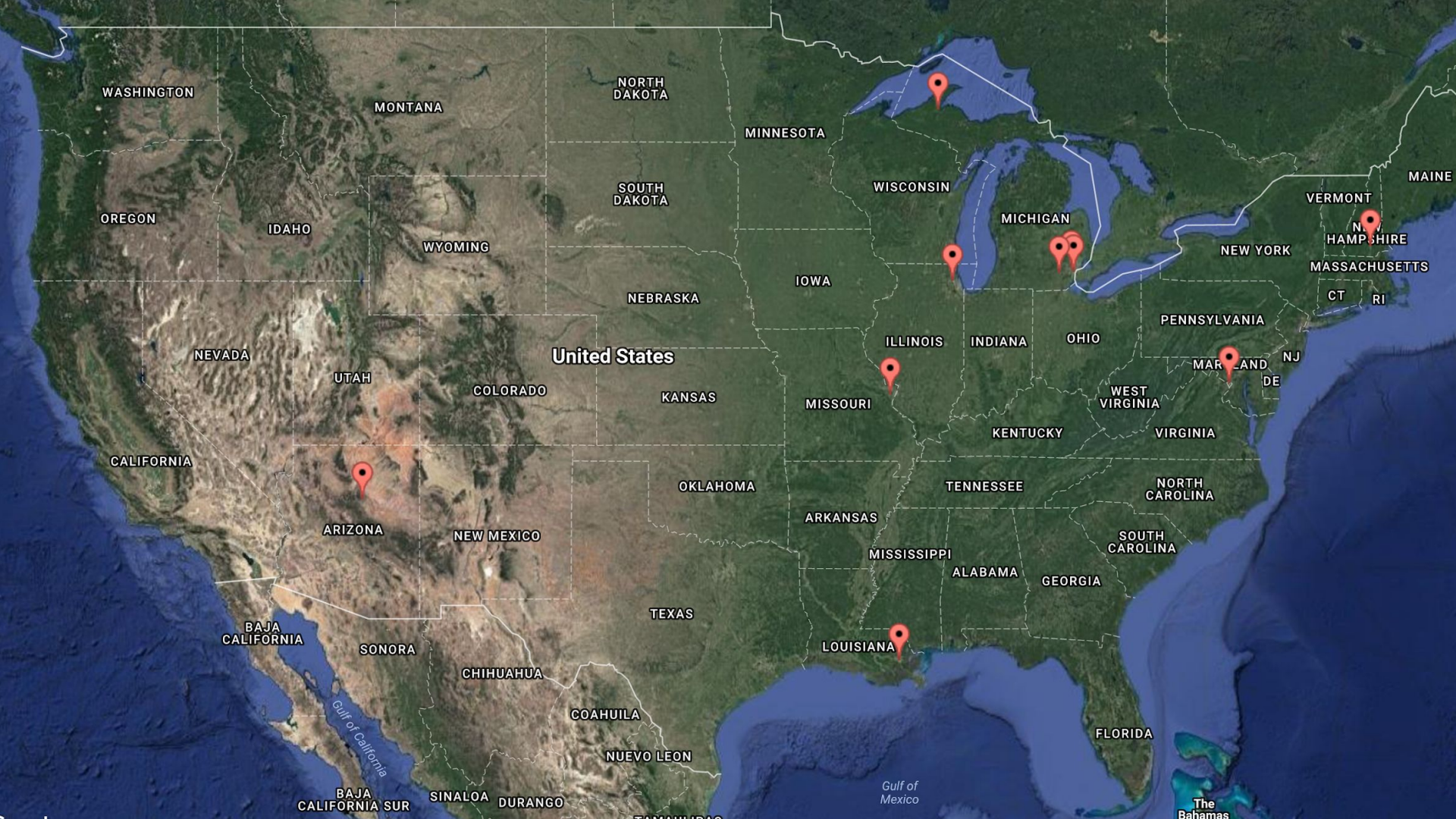
  - Enforcement of Covenants violates 14th Amendment
- Equity and Access
  - State and Federal jurisdictions
  - Professional vs Personal freedom
  - Social vs Political equality


WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
ARIZONA
COLORADO
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
MINNESOTA
IOWA
MISSOURI
ARKANSAS
LOUISIANA
WISCONSIN
ILLINOIS
MICHIGAN
INDIANA
OHIO
KENTUCKY
TENNESSEE
MISSISSIPPI
ALABAMA
GEORGIA
FLORIDA
SOUTH CAROLINA
NORTH CAROLINA
VIRGINIA
WEST VIRGINIA
PENNSYLVANIA
NEW YORK
MAINE
VERMONT
MASSACHUSETTS
CT
RI
NJ
DE
United States
BAJA CALIFORNIA
BAJA CALIFORNIA SUR
SONORA
CHIHUAHUA
COAHUILA
NUEVO LEON
SINALOA
DURANGO
Gulf of California
Gulf of Mexico
The Bahamas