Analyzing and Visualizing Big Cultural Data

"shaping tools & tools that shape us"

Richard Marciano

Fifth International Symposium We Shape our Tools and our Tools Shape Us

Feb. 6, 2013

<u>http://salt.unc.edu</u> <u>http://digitalinnovation.unc.edu</u>

"Size Matters: Big Data, New Vistas in the Humanities and Social Sciences":

DataEdge, UC Berkeley May 31, 2012

Geoffrey Nunberg Panel:



"Something seems to happen, people feel, when you get to that 13th zero, or 15th zero, or 18th zero, or 21st zero, wherever it is, and bingo it's the petabyte age, **it's the age of big data.**

It's like combing your hair, you just comb, and comb, and all of a sudden **it's like big hair**."

"The question is whether the advent of big data changes the way we do social science and also what role social scientists will play..."

12/31/2012 Forbes article by Edd Dumbill: "Big Data, Big Hype: Big Deal" "Big data is an imprecise term. As such it's a huge boon to marketers... not everyone is pleased with the "bigger is better" argument. "Big data" really means "smart use of data".



Big Data is a Big Deal

White House announcement:

http://www.whitehouse.gov/blog/2012/03/29/big-data-big-deal

Big Data Across the Federal Government:

http://www.whitehouse.gov/sites/default/files/microsites/ostp/big_data_fact_sheet_final_1.pdf

More then \$200M in new commitments (NSF, HHS/NIH, DOE, DOD, DARPA, USGS)

Goal: "improve the ability to extract knowledge and insights from large and complex collections of digital data".

DataNet

- Long-term preservation and access of data
- **Software Infrastructure for Sustained Innovation** (SI²)
- * Digging Into Data Challenge (NSF/NEH/IMLS & JISC)
 - Computational Humanities
- * Cyber-Enabled Discovery and Innovation (CDI)
 - Data enabled science and engineering
- Core Techniques and Technologies for Advancing Big Data Science & Engineering (BIGDATA)
- * Data Infrastructure Building Blocks (DIBBs)
- DataWay
 - National Infrastructure for Heterogeneous Data



"The Unintended Consequences"* of Big Data

Allistair Croll: "Big Data is our Generation's civil rights issue, an we don't know it."

1. "Personalization" is another word for discrimination. We're not discriminating if we tailor things to you based on what we know about you — right? That's just better service.



2. HOLC & Fair Housing. When bank managers tried to restrict loans to residents of certain areas (known as redlining) Congress stepped in to stop it (with the Fair Housing Act of 1968). They were able to legislate against discrimination, making it illegal to change loan policy based on someone's race.

Home Owners' Loan Corporation (HOLC) map showing redlining of "hazardous" districts in 1936. see: next slide

3. Music selection and sharing with friends could allow to guess a person's racial background and deny a loan.

4. Publicly available last name information can be used to generate racial boundary maps.

From the Mapping London project

* See Barbara Endicott-Popovsky's talk



The "Unknown Intended Consequences" of Redlining in Seattle in 1936



INDUS

Research areas

- Per IEEE BigData 2013, research topics include:
- •Big data science and foundations (models, standards, data and info quality, ...)
- •Big data infrastructure (clouds, grids, Hadoop, software, ...)
- •Big data management (data preservation, data provenance, crowdsourcing, ...)
- •Big data search and mining (visualization analytics, algorithms, ...)
- •Big data security & privacy (intrusion detection, threat detection, privacy threats, ...)
- •Big data applications (analytics, services, ...)

My research areas:

- •records in the cloud,
- •access to big heterogeneous data,
- •federated grid/cloud storage,
- •visual interfaces to large collections,
- •policy-based frameworks to automate content management,
- •distributed cyberinfrastructure to enable data sharing,
- •big cultural data.

Records in the Cloud



Delegating to cloud providers the responsibility for security, accessibility, disposition and preservation.

Kickoff meeting last Tuesday:

Collaborators from:

- across 4 countries
- iSchools, Law Schools, Business Schools, ulletInformation Technology and Media Dept.



Principal Investigator Professor, School of Library, Archival and Information Studies (SLAIS), UBC





Co-investigator



Ron Cenfetell Co-investigator Associate Professor, Sauder School of Business, UBC

Co-investigator Assistant Professor, School of Library, Archival and Information Studies (SLAIS), UBC



Collaborator





Erik Borglund Assistant Professor Department of Information Technology and Media, Mid-Sweden University

Professor and Director, Center for Information Assurance and

Collaborator Cybersecurity, University of Washington



Basma Makhlouf Shabou Collaborator Professor, School of Business Administration, University of Applied Sciences Western Switzerland



Yale Li Collaborator Research Director, Cloud Security Alliance, Seattle Chapter

Professor, Faculty of Law, UBC

Richard Marciano Collaborato Professor, School of

Information and Library Science, University of North Carolina at Chapel Hil

Big Cultural Data ?

\$5M / 5 year Mellon Foundation &UNC Digital Humanities Initiative (Jul. 2012)

- Funding of a Digital Innovation Laboratory (DIL)
- Targeted hiring of three tenure-track faculty members;
- Joint faculty fellowships with the Digital Innovation Lab and the Institute for the Arts and Humanities
- Graduate and postdoctoral fellowships;
- Grants for developing new courses;
- Workshops for faculty and graduate students;
- A graduate certificate for Ph.D. students;
- Exploration of an undergraduate minor in big data studies.

Big Cultural Data ?

What is it and why should archivists care?

1.Cyber-Infrastructure for Billions of Electronic Records (CI-BER)

NATIONAL ARCHIVES & RECORDS ADMINISTRATION (NARA)

A joint agency sponsored testbed notable for its application of a multi-agency sponsored cyber infrastructure and the National Archives' diverse 87+ million file collection of digital records and information now active at the Renaissance Computing Institute. **This testbed will evaluate technologies and approaches to support sustainable access to ultra-large data collections.**

2.1940 Census Data

- 3. Historical City Directories Data
- 4. Historical Residential Segregation Data

1. CI-BER Project

- Large Data Analysis and Visualization
 symposium (co-located with VisWeek 2011) in Providence, RI, Sep. 23-25
 - <u>slideshare.net</u>: "A System for scalable visualization of geographic records", Jeff Heard & Richard Marciano
 - Indexing & visually browsing archival records
 - Large archives of geographic records: 100M+
 - CI-BER: CyberInfrastructure for Billions of E-Records
 - Funded by the National Archives / Applied Research through NSF/OCI
 - See: http://ci-ber.blogspot.com/

The CI-BER Project

Purpose: To build and test prototypes for next generation information systems scaling to billions of archival records. These tools should be both applicable within NARA and across agencies.

The CI-BER testbed foundation consists of:

- **AI TB test collection** includes **7**^N million files spread over 133 Record Groups from the US National Archives.

- A centralized **iRODS** data store optimized for retrieval performance which contains all the test collection.

 RENCI's Geoanalytics framework for processing, visualizing, and sharing geographic Big Data. rods://marciano@ciber.renci.org:1249/ciberZone/home/ciberAdmin/maconrad

YouTube - Vi...Beck's abs! YouTube - R...oken Glass YouTube - A...ese Banana DAAC Data Pool Apple Yahoo! Google Maps

0

m

>>

marciano@ciber.renci.org:1249 | Sign Out

ew 🗸 🥥 Delete 🔻 🔕 Upload 🗸 More 🔻 Search By Name 🔎 🗸
Resource Size Date Modified
lediation Board December 10, 2010, 3:42
nt of Veterans Affairs December 10, 2010, 3:46
he Secretary of Agriculture December 10, 2010, 3:48
of the United States December 10, 2010, 3:51
nd Wildlife Service December 10, 2010, 4:17
Naval Personnel December 10, 2010, 4:23
abor Relations Board December 10, 2010, 4:32
Guard December 10, 2010, 4:39
Census December 13, 2010, 7:11
eposit Insurance Corporation December 15, 2010, 3:59
he Chief of Naval Operations December 14, 2010, 4:56
e December 14, 2010, 6:08
urity Administration December 14, 2010, 6:11
Land Management December 14, 2010, 6:11
Apagement and Budget December 14, 2010, 6:12
the Public Debt December 14, 2010, 6:13
December 14, 2010, 6:16
sizel Summu
December 14, 2010, 6:18
December 14, 2010, 0.18
epartment of State December 15, 2010, 6:17
epartment of Justice December 14, 2010, 6:26
Nee I Maner I Martine I Liu I Liu Liu I Liu Liu Liu Liu Liu Liu Liu Liu Liu Liu



2. 1940 Census Data



http://digitalinnovation.unc.edu/2012/03/16/the-1940-census-as-digital-data/

3. Historical City Directories

\varTheta 🔿 🔿 🔿) 🔿 🔿 karlotte, North Carolina city directory [serial] : Piedmont Directory Co : Free Download & Streaming : Internet Archive										
+	✓ ► + m http://www.archive.org/details/charlottenorthca1911pied C Qr charlotte city direc										
ю Ш 🛄	https://au	ytimes.com/ I	DAAC Data Pool	Apple Yahoo!	YouTube	Google Maps	News (538) *	Popular *			
	Web	Moving Images	Texts Aud	io Software	Patron Info	About IA	Projects	INTERNET	ARCHIVE		
Home	Americ Biodive	an Libraries Can ersity Heritage Lib	adian Libraries rary Additional (Universal Library Collections	Community	/ Texts Projec	t Gutenberg C	Children's Library			
	Search:		Americ	an Libraries	•	GO! Advanced	Anonymous	User	Upload		
	Search						(login or join us)		opioud		

Ebook and Texts Archive > American Libraries > ncdir > Charlotte, North Carolina city directory [serial]

View the book	Charlotte, No	rth Carolina city directory [serial] (1911)							
Read Online PDF (~578 pg) (39.6 M)	Author: <u>Piedmont</u> Volume: 1911 Subject: <u>Charlotte</u> Publisher: <u>Ashev</u> Possible copyrig Language: <u>Englis</u> Call number: b32 Digitizing spons Book contributor Collection: <u>ncdir</u> ; Scanfactors: 30	Directory Co; Miller, Ernest H e (N.C.) – Directories ille, N.C. : Piedmont Directory Co. ht status: NOT_IN_COPYRIGHT h 46815 or: University of North Carolina at Chapel Hill : University Library, University of North Carolina at Chapel Hill unclibraries; americana							
EPUB (~578 pg) Kindle (~578 pg) Daisy (~578 pg) Full Text (1.4 M) Differ (24.2 M)	Reviews	Be the first to write a review Downloaded 2,126 times							
<u>DIVU</u> (24.2 M)	Selected metadata								
All Files: HTTP	Scanningcenter:	chapelhill							
Help reading texts	Mediatype:	texts							
	Identifier:	charlottenorthca1911pied							
Resources	Ppi:	400							
Bookmark	Camera:	Canon 5D							
	Operator:	gardner@							
	Scanner:	scribe1.chapelhill.archive.org							
	Scandate: 20080702162519								
	Imagecount: 578								
	Identifier-access	: http://www.archive.org/details/charlottenorthca1911pied							
	Identifier-ark:	ark:/13960/t81j9j58z							





City Directory Historical Attributes

From COVER page			From INDE	X page	From SUPP. page	From ABBREVS page					From DIRECTORY pages 1 & 2					
				Directory	Street											
City	Publisher	Year	Price	Pos.	Dir.			Abb	reviations			Race	Married	Num. of Columns	Header Sep.	Other
1								1	Ĭ	(Street)	I					
										&						
							Jobs	Given Names	Special	Suburb	Firm					
Charlotte	Piedmont Directory Co.	1911	\$6	1	Yes		X					*		1	DIRECTORY	
Charlotte	Piedmont Directory Co.	1916	\$7		Yes		X				ļ	*		1	DIRECTORY	
												Dir. of white people				
Concord	The Interstate Directory Co.	1902	\$3	1			X				ļ	Dir. of colored people		1	DIRECTORY	Name cont. w
Concord	Piedmont Directory Co.	1908	\$4	1	Yes		X					•		1	DIRECTORY	
Concord	Piedmont Directory Co.	1913-1914	\$4	1	Yes		X				ļ	*		1	DIRECTORY	
Concord	Piedmont Directory Co.	1916-1917	\$5	1	Yes		X					*		1	DIRECTORY	
Concord	Piedmont Directory Co.	1920-1921	\$6	1	Yes		X				ļ	*		1	DIRECTORY	
Dunn	Chas. S. Gardiner	1918-1919		1	No		X					•		1	DIRECTORY	
		1 1										Dir. of white people				
Durham	N.A. Ramsey, Publisher	1892		1	No		X					Dir. of colored people			DIRECTORY	
		1 1														
		1 1										4 Dirs. of white people				
Greater Durham	Samuel L. Adams	1902	\$5	1	No		X				ļ	4 Dirs. of colored people		1		Name cont. w
Gastonia	Piedmont Directory Co.	1910-11	\$4	1	Yes		X					•		1	DIRECTORY	
Gastonia	Piedmont Directory Co.	1913-14	\$4	1	Yes		X				ļ	*		1	DIRECTORY	
Gastonia	Piedmont Directory Co.	1918-1919	\$5	1	Yes		X					*		1	DIRECTORY	
Gastonia	Piedmont Directory Co.	1921-1922	\$6	1	Yes		X				ļ	*		1	DIRECTORY	
Gastonia	Piedmont Directory Co.	1923-1924	\$7	1	Yes		X					*		1	DIRECTORY	
Gastonia	Hill Directory Co., Inc.	1947	\$16.50	1	Yes		X	X	X		ļ			1	Ad. Box	Name cont. w
		1 1													even pages: HILL DIRECTORY COMPANY'S	
Greensboro	Hill Directory Co., Inc.	1925	\$10	1	Yes		X					©		2	odd pages: GREENSBORO CITY DIRECTORY	
		1 1													even pages: HILL DIRECTORY COMPANY'S	
Greensboro	Hill Directory Co., Inc.	1926	\$11	1	Yes		X				ļ	*		2	odd pages: GREENSBORO CITY DIRECTORY	
		1 1													even pages: HILL DIRECTORY COMPANY'S	
Greensboro	Hill Directory Co., Inc.	1927	\$14	1	Yes		X	X			ļ	C		2	odd pages: GREENSBORO CITY DIRECTORY	
		1 1													even pages: HILL DIRECTORY COMPANY'S	
Greensboro	Hill Directory Co., Inc.	1928	\$14	1	Yes		X	X			ļ	C		2	odd pages: GREENSBORO CITY DIRECTORY	
		1 1													even pages: HILL DIRECTORY CO.'S odd	
Greensboro	Hill Directory Co., Inc.	1929	\$14	1	Yes		X	X			ļ	C		2	pages: GREENSBORO CITY DIRECTORY	
Greensboro	Hill Directory Co., Inc.	1931	\$15	1	Yes		X	X	X			C		2	Ad. Box	
Greensboro	Hill Directory Co., Inc.	1934	\$15	1	Yes		X	X	X			C		2	Ad. Box	
Greensboro	Hill Directory Co., Inc.	1936	\$15	1	Yes		X	X	X			۵		2	Ad. Box	
Greensboro	Hill Directory Co., Inc.	1937	\$15	1	Yes		X	X	X			۵		2	Ad. Box	
Greensboro	Hill Directory Co., Inc.	1938	\$15	1	Yes		X	X	X			C		2	Ad. Box	
Greensboro	Hill Directory Co., Inc.	1941	\$15	1	Yes		X	X	X	X	X	۵		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1942	\$15	1	Yes		X	X	X	X	X	C		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1943	\$20	1	Yes		X	X	X	X	X	©		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1945	\$20	1	Yes		X	X	X	X	X	C		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1947-48	\$25	1	Yes		X	X	X		1	©		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1949	\$25	1	Yes		X	X	X			C		2	Ad. Box	Name cont. w. "
Greensboro	Hill Directory Co., Inc.	1954	\$40	1	No		X	X	X					2	Ad. Box	Name cont. w
Greensboro	Hill Directory Co., Inc.	1958	\$45	1	No		X	X	X					2	Ad. Box	Name cont. w

4. Historical Residential Segregation Data

"Between 1932 and 1964, FHA and VA (through the GI Bill) financed over \$120 billion of new housing, and less than 2% of this real estate was available to nonwhite families, mostly in segregated areas."

"The Home Owners' Loan Corp. (HOLC) created in June 1933, introduced the longterm mortgage in practice today. HOLC systematized appraisal methods across the nation and initiated the practice of redlining."

ALL QUOTES HERE FROM: "<u>The</u> <u>Possessive Investment in</u> <u>Whiteness – How White People</u> <u>Profit from Identity Politics</u>", George Lipsitz, Temple University Press, June 1998.



Through their appraisal and redlining practices, HOLC and FHA institutionalized exclusion and contributed to the fragmentation of communities

Big Heterogeneous Data (with Duke)



Mapping historical residential segregation in the US

Researching the cyberinfrastructure implications of supporting large scale content based indexing of highly heterogeneous digital collections potentially embodying non-uniform or sparse metadata architectures...

Intellectual Merit:

Demonstrating the creation of national collections through automation and citizenscientist crowdsourcing efforts is the focus of this task.

Broader Impacts:

This case-study will bring heterogeneous content from a variety of sources: census, economic, historic, planning, insurance, financial, and scientific.

Outcomes:

Worfklows & Visual prototype





NS 8-:	FORM-8 26-37
1.	NAME OF CITY Asheville, N. C. SECURITY GRADE D AREA NO. 1
2.	DESCRIPTION OF TERRAIN. Rolling to mountainous on Western side and Eastern side.
3.	FAVORABLE INFLUENCES. Schools - churches in area - all city conveniences - Adequate transportation.
4.	DETRIMENTAL INFLUENCES. Industrial plants along railroad tracks on western side of area. Cheap construction, also filling stations and some cheap stores on Biltmore Road, Also many business places in the part nearest main business district.
5.	INHABITANTS: Mechanics - factory workers- a. Type <u>Common laborers</u> ; b. Estimated annual family income \$300 - 1500
	c. Foreign-born <u>None</u> ; %; d. Negro Yes ; 75 %; (Nationality) (Negro Yes ; 75 %;
	e. Infiltration of <u>Negro gradually</u> ; f. Relief families <u>Many</u> ;
	g. Population is increasing; decreasing; static. yes

AREA DESCRIPTION Security Map of LOS ANGELES COUNTY 1. POPULATION: a. Increasing Slowly Decreasing Static b. Class and Occupation Jewish professional & business men, Mexican laborers, WPA workers, etc. Income \$700 to \$2000 and up c. Foreign Families 50 % Nationalities Russian, Polish & Armenian Jews, d. Negro 1 % Slavs, Greeks, American Mexicans, Japanese and Italians e. Shifting or Infiltration Subversive racial elements increasing. PREDOMINATING 40 % 2. BUILDINGS: OTHER TYPE 4.5 & 6 rooms 2, 3 and 4 room shacks 30% a. Type and Size Apts. & other multib. Construction Frame and stucco family Old 7 rooms and up 10% c. Average Age 20 years d. Repair Poor to fair e. Occupancy 97% f. Owner-occubied 20% g. 1935 Price Bracket \$2000-3250 % change % change h. 1937 Price Bracket \$2250-3500 \$ 1 i 1939 Price Bracket \$2250-3500 B Sales Demand Poor k. Predicted Price Trend Static (next 6-12 months) l. 1935 Rent Bracket \$22.50-35.00 %change % change \$25.00-40.00 m. 1937 Rent Bracket n. 1939 Rent Bracket \$25.00-40.00 % o. Rental Demand Fair p. Predicted Rent Trend Static (next 6-12 months) \$4000-\$5500 3. NEW CONSTRUCTION (past yr.) No. 25 Type & Price 5 and 6 rooms How Selling Owner built 4. OVERHANG OF HOME PROPERTIES: a. HOLC. <u>3</u> b. Institutions. Many 5. SALE OF HOME PROPERTIES (3 yr.) a. HOLC. 33 b. Institutions Few 6. MORTGAGE FUNDS: Limited 7. TOTAL TAX RATE PER \$1000 (193) \$ 52.80

8. DESCRIPTION AND CHARACTERISTICS OF AREA: Terrain: Level to hillside with generally favorable grades and comparatively few construction hazerds. Land improved 90%. This is a "melting pot" area and is literally honeycombed with divorse and subversive racial elements. It is seriously doubted whether there is a single block in the area which does not contain detrimental racial elements, and there are very few districts which are not hopelessly heterogeneous in type of improvement and quality of maintenance. Schools, churches, trading centors, recructional areas and transportation are all conveniently available. Many of the thoroughfares are arterial in character and constitute traffic hazards. This area is wholly in the City of Los Angeles. It is hazardous residential territory and is accorded a general medial red grade, although in meny parts slum conditions provail. The Federal Covernment, in conjunction with the city government are undertaking a slum clearance project covering 41 erees in the extrome northeast part of the area.

 LOCATION Boyle Heights SECURITY GRADE 4th AREA NO. D-53 DATE4-19-39 CAUTION: This area is currently affected in whole or in part by an Ad valorem Tax District. Individual properties should be checked for this hazard. 401 Neighborhood description for: Boyle Heights * Area D-53 * "Red" area

"Boyle Heights remained one of the most heterogeneous neighborhoods in the city for decades and it was a center of Jewish, Mexican and Japanese immigrant life in the early 20th century, and also hosted large Yugoslav and Russian populations."

Wikipedia, 6/17/2011

AREA DESCRIPTION

Security Map of LOS ANGELES COUNTY

1.	POPULATION: a.	Increasing Slowly	Decreasing	Static
	b. Class and Occupati	on Jewish professional &	& business men, Mexican	laborers, WPA
	c. Foreign Families	Workers, etc. Income 0 % Nationalities Russian, Slavs. Greeks. Ar	e 3700 to \$2000 and up , Polish & Armenian Jews merican Mexicans Japanes	e and Italians

e. Shifting or Infiltration Subversive racial elements increasing.

8. DESCRIPTION AND CHARACTERISTICS OF AREA:

Terrain: Level to hillside with generally favorable grades and comparatively few construction hazards. Land improved 90%. This is a "melting pot" area and is literally honeycombed with diverse and subversive racial elements. It is seriously doubted whether there is a single block in the area which does not contain detrimental racial elements, and there are very few districts which are not hopelessly heterogeneous in type of improvement and quality of maintenance. Schools, churches, trading centers, recreational areas and transportation are all conveniently available. Many of the thoroughfares are arterial in character and constitute traffic hazards. This area is wholly in the City of Los Angeles. It is hazardous residential territory and is accorded a general medial red grade, although in many parts slum conditions prevail. The Federal Government, in conjunction with the city government are undertaking a slum clearance project covering 41 areas in the extreme northeast part of the area.

9. LOCATION Boyle Heights

SECURITY GRADE 4th AREA NO. D-53 DATE4-19-39

OCR Technical Details

Fixed Text

	AREA DESCRIPTION								
Security	Map of LOS ANGELES CO	DUNTY							
1. POPULATION: a. Increasing	Slowly Decreasing	Static							
b. Class and Occupation Jewish professional & business men, Mexican laborers, WPA									
c. Foreign Families 50 S Nationalitie Russian, Polish & Arnenian Jows, d. Nationalitie Russian, Polish & Arnenian Jows, d. Nationalitie Russian, Polish & Arnenian Jows, d. Nationalities Russian, Japanese and Italians									
e. Shifting or Infiltration	Subversive racial elements	increasing.							
2. BUILDINGS:	PREDOMINATING 40 5	OTHER TYPE							
a. Type and Size	4.5 & 6 rooms	2, 3 and 4 room shacks 30%							
b. Construction	Frame and stucco	family 20%							
c. Average Age	20 years								
d. Repair	Poor to fair								
e. Occupancy	.97%	Malarity Million and a second s							
f. Owner-occubied	.20%								
g, 1935 Price Bracket	\$2000-3250 % change	\$ % change							
h. 1937 Price Bracket	\$2250-3500 %	\$ 5							
i. <u>1939</u> Price Bracket	\$2250-3500 %	\$ %							
j. Sales Demand	Poor								
k. Predicted Price Trend	Static								
i. 1935 Kent Bracket	\$22.50-35.00 % change	\$\$							
m. 1937 Rent Bracket	\$25.00-40.00 %	\$Ę							
n. 1939	\$25.00-40.00 %	\$							
o. Rental Demand	Fair								
p. Predicted Rent Trend	Static								
3. NEW CONSTRUCTION (pase)	n.) No 25 Type & Price 5 and 6	rooms How Selling Owner built							
4. OVERHANG OF HOME PROP	PERTIES: a. HOLC. 3	b. Institutions, Many							
5. SALE OF HOME PROPERTIES	(<u>3</u> yr.) <u>a HOLC. 33</u>	h. Institutions Few							
6. MORTGAGE FUNDS Limi	ted 7. TOTAL TAX RATE P	1937-8 52.80							
8. DESCRIPTION AND CHARAC	TERISTICS OF AREA								
Terrain: Level to hillsi construction hazards. La	de with generally favorable (and improved 90%. This is a '	melting pot" area and is							
literally honeycombed wit	h diverse and subversive raci is a single block in the area	al elements. It is serious- which does not contain							
detrimental racial elemen	nts, and there are very few di	stricts which are not hope-							
churches, trading centers	, recreational areas and trans	sportation are all con-							
veniently available. Man	by of the thoroughfares are an	rterial in character and							
is hazardous residential	territory and is accorded a g	general medial red grade, al-							
though in many parts slum tion with the city govern	n conditions prevail. The Fed ment are undertaking a slum o	leral Government, in conjunc- clearance project covering							
41 areas in the extreme r	ortheast part of the area.								
	N N N								
9. LOCATION Boyle Heights	SECURITY GRADE 4th	AREA NO D-53 DATE 4-19-39							
CAUTION: This abea is cur Tax District. I	rently affected in whole or individual properties should be	n part by an Ad valorem be checked for this hazard.							
	Hou	401							











Process repeated for all 420 neighborhood descriptions of L.A. County:

		Area No	9. Location	Security Map of	1. Population a. Increasing	Decreasing	Stati c	b. Class and Occupation	c. Foreign Families	Nationalities	d. Negro %	e. Shifting of Infiltration	
		A-1	Encino	Los Angeles County	Rapidly			Motion picture stars,	0%		0%	None apparent	
A	· · · · · · · · · · · · · · · · · · ·												
		A-60	South Palos Verdes	Los Angeles County	Rapidly			Professional	0%	-	0%	None apparent	
	P_	B-1	San Fermando	Los Angeles County	Rapidly			Local merchants	Few	None subversive	0%	None apparent	
B													
		B-122	San Pedro	Los Angeles County	Moderately			Professional	0%	-	0%	None apparent	
	TP	C-1	Canoga Park	Los Angeles County	Slowly			Agricultural workers	Few	None subversive	0%	Mexicans 	
\mathbb{C}													
		C-167	Mar Vista	Los Angeles County	Rapidly			Skilled artisans	0%	-	0%	None apparent	
		D-1	San Fernando	Los Angeles County			Yes	Agricultural, Cannery	80%	Mexican predominating	0%	None apparent	
D		D-53	Boyle Heights	Los Angeles County	Slowly			Jewish	50%	Russian, Polish & Armenian Jews,	1%	Subversive racial	
		•••											
		D-71	Wilmingto B	Los Angeles County			Yes	Small tradesmen,	25%	Japs and Mexicans	2%	Subversive racial	

National Redlining Collection project

Digital Scholarship Lab @ U. of Richmond (Rob Nelson) and Digital Innovation Lab @ UNC





Boxes (129) & location of city files @ NARA II in College Park, MD

Using remote sensing methodologies: "OCR for images"

* Paper to Digital Maps:



* Map Processing at Scale:

2000 · · · ·

1832 631 -678 638 Meterr



100 0 H 4

177

284.464 -1398.796 Meters

.

000 0 H K

* Map Processing at Scale:



* Other Approaches:

- Multivariate Supervised Classification (remote sensing):
 - Image classification (ArcGIS 10 / ERDAS Imagine 2011)

Developing research interfaces that allow the asking of new questions:







Questions? Please email SALT at UNC dot EDU





Google Earth

🔲 🛠 🖉 😻 🐼 🛎 🔍 📗 🖂 🖪

11-53

11-53								
Enumeration District	11-53							
1940 population	3117							
1st set of schedules	http://bit.ly/HSB3zV							
# of pages	50							
2nd set of schedules	http://bit.ly/lgAESo							
# of pages	30							

N

🖧 1940 CEN	NSUS												Pownload t	to Print Bookm	ark 🖪 Shari	e This I Repor	t Problem
Close No	rth Carolina » Bu	incombe County												Image 1 of 50	Next J	Jump to:	Go
		Zo	00m +/- 2	14% Bi	ightness +/-	0%	Contrast	+/-	0%				Colors:				
i kati												N	lormal Inv	reted		_	
seens 7/3 county A	nth Carolina Suncombe	Incorporated place	admitter,	Ward of city	Unincorporated place interest Institution	Sale	10500010.70.1000 Egy	DEPENDENT DEP SIXTEE	ARTMEN NTH C POF	T OF COMMERCENSUS OF T PULATION	HE UNITI	THE CE	1997 - 19	R. D. No. 11 R. D. No. 11 Roumerstel by me on Mar. Saca	antes quel s	+534 m 5m2 10m1 2.1010 1	No.
torat	ATAG GIGERSTON NATA	SARE	BELATION	PERSONAL RDG	CA JON PLACE OF BEAT		BERTDENCE, IN WEAT PLACE MD THE I	APRIL 1, 1955 PERMIS STATE OF APRIL		and 1922 Manageme	and in second little	PERSONS 14	TEAMS OLD AND OVE			1 30000 JB 100	Π
ten in. Anne dente best, es.	Manual Annual An other and Annual Annua	Name of each person whose even of residence was April 1, 1990, w the household. It was to include the state was proved a latent from A with "All" due latent from A person a challen was proved by the state of all the act latent person for latent fails have a been prove for latent fails have a been prove for latent		An and the first of the first o	Parside Unit and Safety of the	COT TAN MAN	Lingun de L Lingun de Lingun de Ling	Statistics of the second se		ALL RADA			For a permit or well work of the section of the sec			Particle of source and source and the source of the source	tar ta
2	1 8 15	Trepler, Ed.	t. Head The stand	10 11 11 13 10 54 74 7/a 2 2/ 50 71 7/a 2 2/ 50 71 7/a 2 30 5 71 2 3/ 50 5 71 2 3/ 50 5 71 2 3/ 50 5 71 2 3/ 50 5 71	7 7 Cartana	11 24 24 24 24 24 24 24 24 24 24 24 24 24		30	20 D	11 12 12 740 740 740 710 7 740	1 3 10 H 5 1 4 1 4	18 17 6 18 18	Bontuctor	And and a	702 N7 11 913 N7 11 913 N7 17	11 11 11 11 52 3000 Me 0 0 0 00 24 1800 Me 19 14 21 Me	1 1
5 6 7 8		- , anthe - Carthe - , Rock	ar don to don to g Dampta	20370 24201653 24201653 2411532 2411352	9 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ルルル				The Na Tra The Na Tha Ta The Ha Ha	3 le S & Ka S &	53	the states	Sa ciff	110771 110771	12 681 Ne 16 160 Ne 0 0 Xe	3 6 7 8
n n n	2 R 15 =	Jones, ann Collins, Wym Nellins, Wym	a south	2 2/ 1/ 5 2 2 2/ 1/ 5 2 2 2/ 2/ 5 7/ 3/ 3/ M 7/ 2 2/ 28 7M 7/ 2 2/ 28 7M 7/	4 4 Zandina 3 Zandina 7 7 Zanajan 7 7 Zanajan 7 7 Zanajan		will	Tatt	The YOV	ne na na		-# 24	Sim and the	Mice dant P	1996 2817 132-1971	52 614 No 53 2276 No 40 760 No	9 10 11 12
a a a t	3 R 5	Juder, San Juder, San Rial	R Nead 0	# 20/ 10 S 70 m 20/ 24 m/ Ne F 70/ 3/ 70 Me m 70/ 4/ S Me		The and	willi willi		Aa XoVe Na XoVe Na XoVe	74	20 H 2	G	en ser	Estimory	9 420 73 1	44 (160 %) 0 0 % 0 0 %	14 1 15 16 17
18 19 20	4 0 8000 ¥	Me Call, Mar 	le Aread	7 74 59 74 74 74 72/19 8 94 7 74 52 74 74 7 72/63 14/76	as 10 Zardina as 10 Zardina As 10 Zardina Hy 20 Homedia	1	HH			The	14 S U 1 2 74 H S	20	1 mail +	Proster of	520 BB (1	0 0 70 1 0 0 Ka 52 3164 Ma	18 19 20
Anigette n n	6 R 7	Duntres Jan Nichola, Jan Nichola, Bad Duntan, Rad	the adapted	7 11. 52 21 1 14 14 7 1. 15 3 72 14 7 1. 15 3 72 14 7 1. 15 3 72 7 7 1. 15 3 72	2 Rotting	74 74 74				Na Mer - No Na Na I	654	60	Sewing	Jenny soon B	x rma 1.16 12	EI (91 %)	
Professioner 201	718	Petty, Rut	the mead of	7 Ber 41 No 110	27 Singis	78 3	Trac	-		74		2	in the	Privet hant	E10 164	1 4 70	26

Tip: Clicking and dragging the image will allow you to view more of it! More useful tips.



SOUTHSIDE



CHURCHES

- 1. Bethel 7th Day Adventist Church 51 Adams St.
- 2. Beulah Chapel Holiness Church 111 Black St.
- 3. Church of God in Christ 292 Southside Ave. 4. New Bethel Baptist Church - 508 S. French
- Broad Ave 5. New Mount Olive Baptist Church - 148 Livingston St.
- 6. St. John's Church of God 100 Southside Ave.
- 7. St. Luke's AME Zion Church 40 Bartlett St.
- 8. Tabernacle Missionary Baptist Church ---Corner of Livingston and Congress Streets
- 9. Worldwide Baptist Tabernacle Church ---85 Choctaw St.

SCHOOLS

- 10. Asheland Ave. School (Closed 1949) -190 Asheland Ave. Phyllis Wheatley YWCA moved here
- 11. Livingston St. Elementary School 133 Livingston St.
- 12. School of St. Anthony of Padua 56 Walton St.
- 13. Stewart's School of Beauty Culture 55 Bartlett St.
- 14. South French Broad High School 197 S. French Broad Ave

- 15. YWCA 195 S. French Broad Ave. 16 Fiks Club - 382 S. French Broad Ave.
- 17. Asheville Colored Hospital 185 Biltmore Ave. 18. W.C. Reid Community Center - 133 Livingston St.

- 19. The Southern News 121 Southside Ave. 20. James-Keys Hotel - 409 Southside Ave. 21. Allen-Birchette Funeral Home - 350 Southside Ave. 22. Conley's Barber Shop - 187 Southside Ave. 23. Fair Grocery - 452 S. French Broad Ave. 24. Sportsman Club - 105 Southside Ave. 25. Walton St. Park and Pool - End of Depot St. 26. McMorris Amoco Service - 71 McDowell St. 27. Rabbit's Tourist Court & Restaurant ---110 McDowell St.
- 28. Jesse Ray Funeral Home 185 Biltmore Ave. 29. Southland Drive-In - 127 McDowell St. 30. Mae McCorkle's Beauty Shop - 87 Blanton St.

Map by Betsy Murray, Archivist, Pack Memorial Public Library. Based on a 1950 map of Asheville. Locations are approximate.

10 • NORTH CAROLINA HUMANITIES COUNCIL

Southside/East Riverside: Lost — In the Name of Progress Priscilla Ndiave, Former Resident and Researcher of Southside Neighborhood

BY THE TIME of urban renewal, Southside was the city's premier black business district, surrounded by a large residential neighborhood. At over four hundred acres, the urban renewal project here was the largest in the southeastern United States. The scale of the devastation here was unmatched.

"In the East Riverside area," said the [late] Reverend Wesley Grant, "we have lost more than 1,100 homes, six beauty parlors, five barber shops, five filling stations, fourteen grocery stores, three laundromats, eight apartment houses, seven churches, three shoe shops, two cabinet shops, two auto body shops, one hotel, five funeral homes, one hospital, and

three doctor's offices." The Reverend Grant's church still stands on Choctaw Street.

Multiple perspectives, lack of knowledge, much confusion, and discouraged and bitter individuals are all entwined



Priscilla Ndiave, Photo courtesy Story Point Media. One perspective on this transformation sees families uprooted, relocated, and scattered; a community destroyed; a vibrant entrepreneurial business world shut down; and history fragmented, altered, and lost. A very different perspective sees economic benefits for the whole city and better living conditions for neighborhood residents.

Asheville's formal history was being made while Asheville's African American history was lost - in the name of progress. In 2008, for the first time an effort was made to collect this history through discussions and interviews [funded] by the YMI [Cultural Center] and the "Twilight of a Neighborhood"

project.



Dewitt Street c. 1960. (L) Louvenia Booker. Center-Conaria Booker. Courtesy North Carolina Collection, Pack Memorial Public Library.

The L-A-N-D

Robert Hardy, Southside Neighborhood Association

nity breakdown: the loss of businesses, neighbors, continuity, sanguinity, customs, culture, social norms, and family displacement.

Can one truthfully say there were no benefits? No! However, the benefits received when contrasted are a disproportionate negative to that which was gained!

For the most part, the landowners were either elderly and/or sick; more times than not the gains and homes were obscured and/or lost due to the eroded economic base and failing subsequent infrastructure. Purchased at a give-away price, these properties were resold for sums unattainable by the descendants of the original owners.



Southside c. 1968. Photo by Andrea Clark. Courtesy Andrea Clark Collection, Pack Memorial Public Library.

The resulting "fiasco" which we are now living is perpetual poverty for the descendants and gentrification of their land.

CROSSROADS . Summer/Fall 2010 . 11



as spiders in a web: any way you touch it, it trembles.

Oh - But the Land - But the L-A-N-D! The commu-

"Public Scholarship"

Kathy Woodward, UW Simpson Center for the Humanities



From Crowdsourcing to Citizen-led Sourcing

- University of North Carolina Asheville (UNCA): staff (provost, head librarian, head of special collections, library staff, departments of computer science / history / political science), centers (National Environmental Modeling and Analysis Center / Center for Diversity Education), and students
- Community-based development organizations (Green Opportunities Corps, Asheville Design Center)
- Neighborhood community group leaders and residents (Southside, Burton Street, East End)
- City of Asheville officials (Housing Authority of the City of Asheville, Planning & Development Department, West Asheville Public Library, Chamber of Commerce)
- County (head of Buncombe County Register of Deeds, Land-Of-Sky Regional Council)
- Other groups including the North Carolina Humanities Council, Mountain Housing Opportunities Inc.
- **"Twilight of a Neighborhood**: Asheville's East End, 1970" project. This project examined the process and aftermath of urban renewal and collected voices of residents, after the 2007 transfer of records to UNC Asheville. We have secured support and commitment from the community groups relevant to tackling this project.
- Asheville's African-American Community Historical Bus Tour, June 19, 2012 (35 people)

UNCA & Asheville Partners:

- Dwight Mullen, UNCA Political Science
- Priscilla Ndiaye, chair of Asheville's Southside Advisory Committee



ANTHONY REDMOND	
ATTORNEY AT LAW	
жылаккоскаканаларынын Р. О. Вох 7205	
ASHEVILLE, N. C.	Project No. N. C. R-48 Parcel No. 1-2
REPORT ON TITLE FOR	198 & 198 1/2 Hilliard Avenue, Asheville, N. C.
REDEVELOPMENT COMMISSION OF THE CITY OF ASHEVILLE	Parcel Address
Percente al Barcombe Counter N.C.	Name of OwnerBessle Kalogerakis
N. C. R-48	Address of Owner c/o Amelia Candler, 70 Rumbough Place, Asheville, N. C.
Block 1, Parcel 2	
TITLE VESTED IN America K. Candler, Eva K. Clederas, and 198 & 1985 Hilliard Steve Kalogerakis	
By the following instrument:	FOR LAST TRANSFER
Bessie S. Kalogerakis Type: Will	Date September 26, 1947 Deed Book 646 Page 417
	Consideration: Deed \$ 10.00 Documentary Stamp \$ 8.80
Dated :	
70	Actual Consideration, Terms, etc.
Amelia K. Candler, Registered:	Manual Control Cont
Eva K. Clederas, Steve Kalogerakis	PHOTOGRAPHS and DRAVING
	hara er tool
Book BBBB Page 45	hadde of a coord
LEGAL DESCRIPTION OF PROPERTY: In the City of Asheville	SECOND SECOND AT
BEGINNING at a stake in the Southern margin of Hilliard Avenue, said Beginning	
said Southern margin of Hilliard Avenue with the Eastern margin of JUN	65 AVE.
Avenue; runs thence with the said Southern margin of Hilliard Aven 84 deg. 25 min. East 55.94 feet to a stake in same; thence South 1	
West 23 feet to a locust hub, the Southeast corner of a tract conv	
E. Clark and wife to W. S. Harrison and wife by deed dated August	
Buncombe County, N. C.; thence with the Southern line of the said	
tract, North 89 deg. 12 min. West 55.98 feet to a stake opposite t	
Eastern margin of Ashland Avenue; thence North 1 deg. 47 min. East	
the center line of said party wall, 27.66 feet to a stake, the pla	
the first part in and to the sidewalk on Hilliard Avenue which sid	
adjoins the above described property on the North. Being the East	· • •
Clark to W. S. Harrison and wife, Beulah L. Harrison dated August 3	
recorded in Book 590, page 301 in the Office of the Register of De	Commercial
	i Best Use 10 which Property is Adaptable
	ION:
A To Desires, Respires, Espires, Pringles, Linkers, Gardian,	ertify to the Redevelopment Commission of Asheville that I
	ully inspected the property herein described; that to the
	correct; that I have no personal interest, present or pros-
	a the property referred to; that I have applied accepted
TAXES LISTED IN THE NAME OF: Lucas & Bessle Kalogerakis	resent market value of the property to be:
Ward	LAND: \$ 2800
340g Personal	4200
ABOVE PROPERTY IS SUBJECT TO:	IMPS. \$
a. Taxes and Assessments: Ad Valorem taxes for the years 1949 and 1963 through 1968	TOTAL:\$
due and payable.	This appraisal is based upon the following condition: I have accepted
b. Mortgages, Deeds of Trust, Vendors Liens: None of record	the legal description furnished by you as correct.
	Date July 31, 1968 Appraiser: Alan Buttenwarth
	W. T. Duckworth Company

Sustainable Archives & Leveraging Technologies (SALT)

The discipline of digital preservation can be described as the practice of managing content, in the context of infrastructure, dealing with governance issues, and managing policies.

