

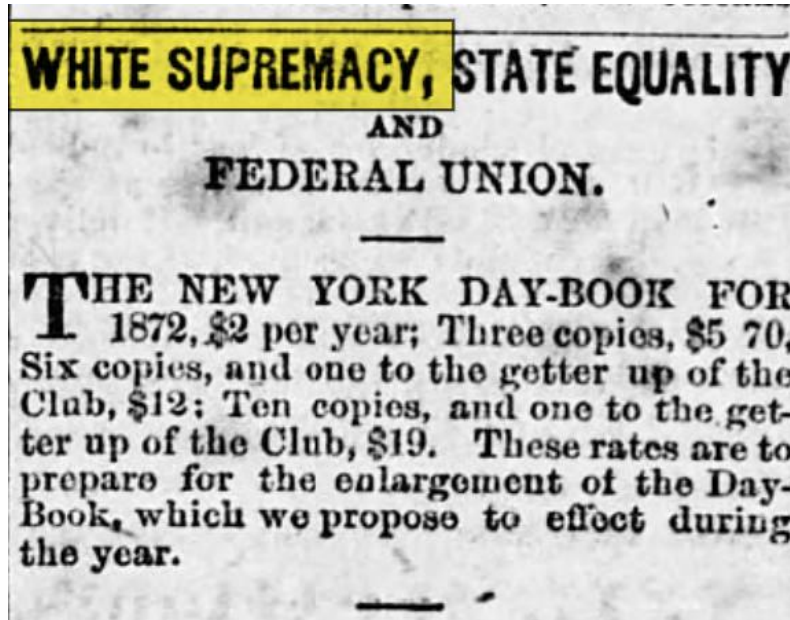
# Appendix

## Content

A. Racial discourse in Newspapers.com database.....	2
B. Constructing the measurement keyword lists.....	5
B1. Seed words.....	6
B2. Expanded Seed Words.....	7
B3. Constructing the Superiority/Inferiority Racism Lexicon .....	9
B4. Obtaining the white superiority/inferiority and Black superiority/inferiority keywords..	10
C. Parallel trends test for the robustness measure of racist narratives.....	14
D. Results using the robust racist narratives measure in the baseline estimation model.....	15
E. Changes in racist narratives after abolition by slave proportion.....	16
F. First-stage regression results of the instrumental variable .....	17
G. Cotton suitability and racial hate crime: south vs non-south .....	18
H. labor costs channel .....	19

## A. Racial discourse in Newspapers.com database

Figure A1 white supremacy discourse in newspapers



Note: The Louisiana Democrat, Mar 06, 1872, Alexandria, Louisiana. Source: newspapers.com.

not apply to us." No man who lives in the South can favor the adoption of any law which is liable to cause an effort to **sustain white supremacy**, or can favor such a radical measure as the "Force Bill," and many republicans down south, in the event of its passage, will do like Mr. Moore, quit the republican party and unite with the democratic party, which in the South stands for white supremacy.

Note: Semi-Weekly News, Fri, Aug 15, 1890, Waco, Texas. Source: newspapers.com.

Figure A2 Racial superiority and inferiority discourse in newspapers

**HABITS OF THE NEGRO**  
The *Philadelphia Press*, in an article on the negro, indulges in some of that vapid philosophizing for which Forney is celebrated. He speaks of the shiftless habits of the negro implanted by ages of servitude. Perhaps Mr. Forney does not know that the negro is shiftless wherever he is found. He brought his shiftless habits with him from Africa, and the period during which he was compelled to work has not yet had the effect of making him an industrious man. Still altogether it has taught him industry. He had to kick up his large development of heel for a while in enjoyment of his new found freedom. He would have gone to

Note: The Tennessean, Tue, Apr 10, 1877 Nashville, Tennessee. Source: newspapers.com.

3. I have also shown you that this new State government is not needed to protect the negro. On the contrary, the existing State government, which you are required to declare illegal, is the very government which established the freedom of the negro and provided laws for his absolute equal protection. This new State government is to debase the intelligent whites by placing them under laws to be framed by the negro, and in which these intelligent whites are not even to have a voice, and from which they are to be excluded only because they had intelligence and virtue enough to be deemed by you worthy of trust.

Note: Georgia Journal and Messenger, Oct 02, 1867, Macon, Georgia. Source: newspapers.com.

## Industrious Negro.

D. A. Williams a hard working and **industrious negro** man has signed contract with C. L. Sanders representing the Building Blocks Company to erect a \$1,700 store building, at once, on a town lot on the west side of Huckabaa's stable facing Fifth avenue. Material is now being placed on the ground for the building which will be 25 x 75 feet.

Williams is a hard worker and saves his money. He is in the employ of the Jackson Lumber Company.

Note The Florala News, Thu, Jul 26, 1906 · Page 1, Florala, Alabama. Source: newspapers.com.

## B. Constructing the measurement keyword lists

This section describes how we construct the four sets of keywords used to measure racist opinions in historical newspapers (white superiority, white inferiority, Black superiority, and Black inferiority). We summarize below the general steps of the procedure, while all details are presented in the following sections. Firstly, based on existing literature (Gilbert, 1951; Karlins et al., 1969; Katz & Braly, 1933; Lee et al., 2024; Zou & Cheryan, 2017), we constructed an initial racial word list. Then, we asked external judges to evaluate and validate their semantic relevance to either racial superiority or inferiority rhetoric. The validated words are referred to as seed words. Secondly, relying on a large and representative data of approximately 60 million newspaper articles published between 1800 and 1910, we trained a word embedding model. Based on embedding model, we identified words that are semantically close to the seed words in the vector space, thereby constructing an expanded seed words list.

Thirdly, we asked external judges to assess the semantic relevance of the expanded seed words list. Based on their evaluations, we selected those words that reflect racial superiority or inferiority. Combined with the previously validated seed words, these words constitute the final lexicon of racism toward Black and white groups. Fourthly, recognizing that racial narratives may vary across historical periods, we divided the corpus from 1800 to 1910 into four distinct periods<sup>1</sup> based on existing literature and trained a separate word embedding model for each. Within each vector space, we calculated the semantic similarity between racial group labels (i.e., white and Black) and the constructed lexicon of racism. For each period, we identified the ten words most semantically associated with the White and Black groups. We took the union of these top ten words across all five periods to construct the final keywords of white superiority, white inferiority, Black superiority, and Black inferiority used in our analysis.

The assessment of the semantic content of extensive word lists by external judges

<sup>1</sup> The Slavery period (year  $\leq 1860$ ), the Civil War period (1861–1865), the Reconstruction period (1866–1877), and the Jim Crow period (year  $\geq 1878$ ) (Hussey, 2015; Rael, 2015; Rhodes, 2012; Stamp, 1967)

constitutes a key component of our procedure. Therefore, we paid particular attention to selecting judges with appropriate attitudes, strong language proficiency, and familiarity with the historical context. The judges were recruited through the MTurk platform. Only candidates meeting the following four criteria were hired: (i) They resided in the United States, a requirement intended to ensure language proficiency and adequate knowledge of U.S. history; (2) They self-identified as either Black or white; (3) They were experienced MTurk workers with a historical approval rate of at least 95%; (4) They successfully passed a practical test evaluating their performance in semantic word analysis. (5) In total, we hired 46 external judges.

## **B1. Seed words**

The initial seed words denoting racial superiority and inferiority were drawn from vocabularies compiled in prior stereotype studies (Gilbert, 1951; Karlins et al., 1969; Katz & Braly, 1933; Lee et al., 2024; Zou & Cheryan, 2017). From these, we selected the words referring specifically to Black and white groups and verified their presence in the word embedding model. In total, we obtained 77 initial seed words.

**Semantic Evaluation by External Judges.** Given that the initial seed words were derived from research on stereotypes and racism, some of words did not explicitly distinguish between notions of superiority and inferiority. We asked external judges to validate their semantic content by assigning each word to one of four categories: Superiority, Inferiority, Other, or Unknown. In the instructions provided, judges were informed that their classifications would be used to construct a historical racism index aimed at tracing the evolution of racism in the United States. The criteria for identifying superiority and inferiority were adapted from Zou and Cheryans (2017) qualitative coding scheme, which is described as follows:

- ***Inferiority:*** *A word should be classified as belonging to the inferior category if it can express or imply that a racial group, its members, or stereotypes/customs associated with that race are perceived to be inferior, low status, or of less worth or value. This includes,*

*for example, words that suggest: Intellectual and mental inferiority (e.g., lazy, stupid, incapable); Cultural inferiority (e.g., violent, undisciplined, criminal); Social inferiority (e.g., ghetto, poor, uneducated, dirty, low status jobs).*

- **Superiority:** *A word should be classified as belonging to the superior category if it can express or imply that a racial group, its members, or stereotypes/customs associated with that race are perceived to be superior, high status, or of greater worth or value. This includes, for example, words that suggest: Intellectual and mental superiority (e.g., intelligent, capable); Moral superiority (e.g., civilized); Social/cultural superiority (e.g., hardworking, respectable, rich).*
- **Other:** *A word that does not express or imply any sense of racial inferiority or superiority.*

Each word was randomly assigned to 20 judges in a blind evaluation process. To ensure representativeness, we followed the population proportions of Black and white Americans and required that each word be evaluated by at least 3 Black judges. Based on the evaluation results, we applied strict selection criteria: (i) We retained only words with a consensus rate of 80% or higher among judges; (ii) Following the majority rule, each retained word was classified as either superiority or inferiority. As shown in the Table B1, this process yielded 32 validated inferiority words and 22 superiority words, which constitute the seed word set on which we build the rest of the procedure.

## **B2. Expanded Seed Words**

In this step, we move beyond the seed words to recover a broader set of words potentially associated with racial superiority and racial inferiority rhetoric. We implement a hands-off approach that identifies words with semantic similarity to the seed words in a large corpus of newspaper articles spanning the 1800–1910 period. Our measure of semantic similarity is based on the cosine similarity score between word vectors in the embedding space.

Table B1. Seed word lists for racial superiority/inferiority

Seed words	
Racial superiority	straightforward, rich, employed, hardworking, privileged, courteous, reliable, civilized, athletic, disciplined, skilled, confident, capable, powerful, intelligent, honest, respectable, ambitious, competent, industrious, educated, law abiding
Racial inferiority	unintelligent, uneducated, dangerous, unskilled, ignorant, incapable, disreputable, violent, criminals, rude, hostile, undisciplined, slovenly, dirty, criminal, stupid, uncivilized, greedy, naive, superstitious, irresponsible, unreliable, powerless, poor, lazy, aggressive, thieves, incompetent, selfish, angry, unemployed, dishonest

**Newspaper Articles from Chronicling America.** We use the Chronicling America archive, which contains nearly 20 million digitized newspaper pages from across the United States spanning 1774 to 1963. Fortunately, the research team led by Melissa Dell applied OCR to these scanned pages and extracted the text at the level of single articles (Dell et al., 2024). We downloaded all available article texts for the period 1800–1910, containing a total of 63,827,501 newspaper articles. We excluded articles in foreign languages by discarding texts with less than 60% of words belonging to an English dictionary. After applying this criterion, we retained 60,494,335 articles for analysis.

**Data Cleaning and Text Processing.** The cleaning procedure comprises several steps: (i) characters were converted into lower case. (ii) expanded all contractions (iii) all punctuation except for those indicating end of sentence were removed (e.g., commas, colons, quotation marks). (iv) all numbers, web addresses, and extra whitespaces were removed. (v) instances of the word “not” and the word that immediately followed it were grouped together with an underscore. (vi) stop words were removed (including names of states, days of the week, and months). (vii) the entire corpus was broken down



into sentences. (viii) the sentences were tokenized into words (do not stem the tokens), and the tokenized words were stored as elements inside lists. Finally, we performed common phrase detection (2-grams) on the entire column of lists containing tokenized words. These common phrases were grouped by underscores.

**Word Embedding Model Selection and Training.** Using the word2vec algorithm – a neural network approach to computing word embeddings (Mikolov et al., 2013). The Skip-gram model of the word2vec architect uses the target word to predict the context words that appear before and after the target word. In the resulting vector space, the cosine similarity between two word vectors reflects the strength of their semantic association. We train our word embedding model on the newspaper corpus using the following hyperparameters: a vector dimensionality of 300, a context window size of 6, negative sampling of 10, a minimum word frequency threshold of 1. The model was trained for 10 epochs.

**Seed Word Expansion Method.** We expand the lists of racial superiority and inferiority seed words using their semantic neighborhoods in the word embedding space. For each seed word, we compute its cosine similarity with all other words in the word embedding space and rank the results in descending order. The top 20 most similar words are retained as the expanded words associated with each seed word.

It is important to note that some historical newspaper scans are of poor quality due to age and print degradation, which can introduce OCR-related noise and result in misspelled words in the corpus. To address this issue, we filter the expanded words using the WordNet lexical database to remove misspelled words. This ensures that the expanded words are both semantically relevant and correctly spelled.

### **B3. Constructing the Superiority/Inferiority Racism Lexicon**

We recruited external judges via the MTurk platform to conduct semantic evaluations of the expanded words. The evaluation procedure closely followed the procedure previously described for the seed words. The only difference lies in the classification criteria: in addition to requiring a consensus rate of at least 80% among

judges and assigning superiority or inferiority labels based on majority rule, we further required that each expanded word share the same part of category as its corresponding seed word. Finally, including the seed words, we obtained 295 words associated with racial superiority and 118 words associated with racial inferiority, which together constitute our racism lexicon.

## **B4. Obtaining the white superiority/inferiority and Black superiority/inferiority keywords**

Due to our study spans a long historical timeframe covering multiple distinct eras in U.S. history, the linguistic expressions of racial narratives are likely to vary across periods. In addition, given the scale of the data, applying the full sets of racial superiority and inferiority words for measurement would require substantial computational resources. For these reasons, we identify and extract a subset of the most representative superiority and inferiority words that are most closely associated with the Black and white groups, respectively. The procedure is as follows:

First, based on the existing literature, we divide the corpus spanning 1800 to 1910 into four historical periods—the Slavery Era, the Civil War Era, the Reconstruction Era, and the Jim Crow Era (Hussey, 2015; Rael, 2015; Rhodes, 2012; Stamp, 1967). For each period, we train a separate word embedding model, following the same procedures and parameter settings as those used for the full-period model (using in the seed-word expansion step).

Second, following the work of Charlesworth et al.(2022) on social group representation, we identify the set of words referring to Black and white population groups. We exclude words that may have dual meanings (i.e. words that can refer to both racial groups and national identities outside the United States), as their usage may reflect attitudes toward other national outgroups rather than racial groups. The selected racial group labels are listed in Table B2.

Table B2 Words for Black and white group labels

Group labels	
Black group	negro, nigger, blacks, niggas, niggers, nigga, negros, negroid, black_people
White group	whites, caucasians, caucasian, white_people, american, americans

Third, drawing on the approach of Charlesworth et al.(2022), we compute a total weighted cosine similarity between each target group and the lists of superiority and inferiority words. Specifically, for a given target word (e.g., hardworking), we calculate its pairwise cosine similarity with all available group labels (e.g., whites–hardworking, Caucasians–hardworking, white\_people–hardworking, etc.). Each similarity score is weighted by the frequency of the corresponding group label in the embedding space, placing greater emphasis on group labels that are more commonly used. Then, we sum the weighted pairwise cosine similarities to obtain the total weighted cosine similarity between the target word and the group, which captures the association strength.

Fourth, we calculate the total weighted cosine similarity between the superiority and inferiority words and the white/Black group words in the 1800–1910 word embedding model as well as in the embedding models of the other four periods. Then, for each period, we rank the total weighted cosine similarities of the superiority and inferiority words from highest to lowest and select the top 20 words, as shown in the Table B3 (due to space constraints on the page, only the top 10 words are listed). We merge and deduplicate the words that most represent the white and Black groups in terms of superiority and inferiority for each period, resulting in the word lists of white superiority, white inferiority, Black superiority, and Black inferiority used in our measurement analysis, as presented in the Table B4.

Table B3: 10 top racial words as most strongly associated with White/Black in separated periods

	1800-1910	1800-1861 (Antebellum)	1861-1865 (Civil War)	1865-1877 (Reconstruction)	1877-1910 (Jim Crow)
White superior words	wealthy, millionaires, skilled, aristocracy, aristocratic, cultured, educated, enterprising, civilized, best	resourceful, dependable, brainy, taxpaying, aristocracy, civilizing, courteously, peaceable, politeness, best	educator, capably, enlightened, taxpaying, civilizing, civilize, civilized, aristocratic, intelligent, aristocracy	best, resourceful, cultured, dependable, intelligent, civilized, enlightened, taxpaying, law abiding, civilizing	best, millionaires, strong, employed, wealthy, skilled, civilized, intelligence, capable, aristocracy
White inferior words	savages, aboriginal, barbarian, hostile, discredited, unskilled, rabble, agitators, ignorant, slums	aggressiveness, incompetents, crudely, aboriginal, untrained, unintelligent, not safe, conscienceless, naive, barbarians	unfriendliness, uncivilized, conscienceless, aggressiveness, lawbreakers, uncultured, aggressively, unintelligent, untidiness, savages	barbarian, unintelligent, savages, uncultured, brutalized, stupid, barbarians, untrained, aboriginal, bandits	aggressively, discredited, savages, uncivilized, hostile, antagonistic, strange, aboriginal, untrained, uneducated
White racial words	wealthy, millionaires, skilled, aristocracy, aristocratic, savages, aboriginal, cultured, barbarian, educated	aggressiveness, resourceful, incompetents, dependable, crudely, aboriginal, brainy, untrained, unintelligent, not safe	unfriendliness, uncivilized, conscienceless, aggressiveness, lawbreakers, educator, capably, enlightened, uncultured, aggressively	barbarian, best, resourceful, cultured, unintelligent, savages, uncultured, dependable, intelligent, brutalized	best, millionaires, strong, aggressively, employed, discredited, wealthy, skilled, savages, uncivilized
Black superior words	educator, law abiding, employed, peaceable, wealthy, hardworking, brainy, educate, respectable, honest	brainy, resourceful, dependable, civilizing, kindhearted, athletic, intelligent, decent, civilize, peaceable	civilize, not poor, civilizing, aristocratic, aristocracy, hardworking, capably, intelligent, educate, cultured	resourceful, peaceable, dominant, levelheaded, educate, law abiding, intelligent, aristocracy, aristocratic, dependable	employed, educator, intelligent, law abiding, hardworking, dominant, peaceable, educate, taxpaying, industrious
Black inferior words	murderers, enraged, robber, thugs, illiterate, crime, vagrants, bandits, vagabond, felonious	conscienceless, vagabond, untrained, thief, murderers, savagery, lawbreakers, thieving, aggressiveness, brutalized	unemployment, lawbreakers, aggressiveness, brutalized, unintelligent, uneducated, poor, ignoramuses, pilfering, shiftless	illiterate, miscreants, thieving, vagabond, scoundrels, unlettered, murderers, vagabonds, uneducated, ignorant	illiterate, uneducated, ignorant, vagrants, crime, enraged, murderers, shiftless, vagabond, robber
Black racial words	murderers, enraged, robber, thugs, illiterate, crime, vagrants, bandits, vagabond, felonious	conscienceless, vagabond, brainy, untrained, thief, murderers, savagery, lawbreakers, thieving, aggressiveness	unemployment, lawbreakers, aggressiveness, brutalized, unintelligent, uneducated, poor, ignoramuses, pilfering, shiftless	illiterate, miscreants, thieving, vagabond, scoundrels, unlettered, murderers, vagabonds, uneducated, resourceful	illiterate, uneducated, ignorant, vagrants, crime, enraged, murderers, shiftless, vagabond, robber

Note: Due to space constraints on the page, only the top 10 words are listed. “Superior words” denote the ten words most strongly associated with White or Black that express hierarchical superiority. “Inferior words” denote the ten words most strongly associated with White or Black that express inferior connotations. “Racial words” denote the ten words most strongly associated with White or Black after combining both superior and inferior word lists and ranking all terms by their strength of association.

Table B4 Word lists of superiority /inferiority for Black and white groups

Word lists	
Black inferiority	unintelligent, enraged, pilfering, ignoramuses, ignorant, untrained, thieving, lawbreakers, aggressiveness, bandits, thief, scoundrels, felonious, savagery, conscienceless, vagabond, robber, vagabonds, unlettered, shiftless, vagrants, brutalized, miscreants, poor, thugs, murderers, illiterate, unemployment, uneducated, crime
Black superiority	resourceful, industrious, decent, respectable, wealthy, capably, aristocratic, aristocracy, levelheaded, educator, intelligent, peaceable, dominant, kindhearted, taxpaying, dependable, cultured, not poor, law abiding, honest, civilize, educate, hardworking, employed, athletic, brainy, civilizing
White inferiority	unintelligent, incompetents, slums, ignorant, untrained, rabble, lawbreakers, aggressiveness, untidiness, bandits, discredited, antagonistic, conscienceless, hostile, naive, agitators, unfriendliness, crudely, savages, stupid, strange, not safe, brutalized, uncivilized, aggressively, barbarian, barbarians, uncultured, unskilled, uneducated, aboriginal
White superiority	resourceful, strong, intelligence, wealthy, capably, aristocratic, enlightened, aristocracy, educator, millionaires, intelligent, capable, politeness, peaceable, courteously, taxpaying, educated, dependable, cultured, law abiding, best, skilled, civilize, civilized, enterprising, employed, brainy, civilizing

### C. Parallel trends test for the robustness measure of racist narratives.

Table C1. The abolition of slavery and robust racist narratives: pretreatment trends

	Robust racist narratives		
	(1)	(2)	(3)
$\ln \text{Slavery Intensity} \times \text{year}$	-0.0010 (0.0810)	0.0090 (0.0803)	0.0726 (0.0943)
Constant	15.6430 (515.4790)	-48.0655 (511.1069)	-452.7019 (599.4413)
County fixed effects (FE)	√	√	√
Year FE	√	√	√
Pre-abolition racist narratives $\times$ year FE		√	√
State $\times$ year FE			√
Number of counties	238	238	237
Observations	3,436	3,436	3,272
R-squared	0.221	0.244	0.334

*Note.* The sample period is from 1800 to 1865. The dependent variable is a robust measure of racist narratives at the county level, constructed using a dictionary approach.  $\ln \text{Slavery Intensity}$  is a continuous variable, representing the natural log of the county-level slave proportions in 1860. Standard errors in parentheses are clustered at the county level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## D. Results using the robust racist narratives measure in the baseline

### estimation model

Table D1. The abolition of slavery and robust racist narratives: baseline estimates

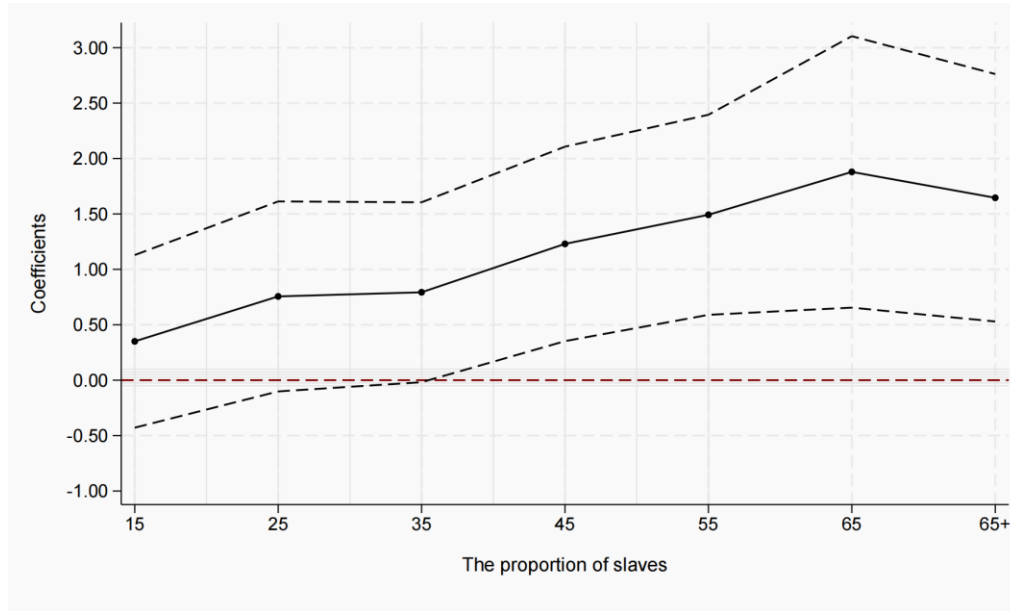
	Robust racist narratives					
	1860 - 1870			1800 - 1920		
	(1)	(2)	(3)	(4)	(5)	(6)
$\ln \text{Slavery Intensity} \times \text{Post}$	4.7809*** (1.4821)	5.1907*** (1.4382)	5.1946*** (1.6622)	1.6776* (0.9076)	1.7504** (0.8349)	1.8624** (0.9355)
Constant	6.1754** (2.4432)	5.4998** (2.3708)	5.4709 (11.0456)	13.0491*** (2.1149)	12.8795*** (1.9454)	15.3885* (8.3289)
County fix effects (FE)	√	√	√	√	√	√
Year FE	√	√	√	√	√	√
Pre-abolition racist narratives $\times$ year FE		√	√		√	√
Controls $\times$ <i>Post</i>			√			√
Observations	1,433	1,433	1,365	19,651	19,651	18,014
Number of counties	226	226	212	569	569	502
R-squared	0.375	0.392	0.391	0.183	0.199	0.201

*Note.* The 1860 - 1870 sample refers to the five-year period before and after the abolition of slavery.

The 1800 - 1920 sample is our total sample. The dependent variable is a robust measure of racist narratives at the county level, constructed using a dictionary approach.  $\ln \text{Slavery Intensity}$  is a continuous variable, representing the natural log of the county-level slave proportions in 1860. *Post* is an indicator that equals one in and after 1865. The control variables include total population, the proportion of free Blacks, water access, rail access, the proportion of farms over 50 acres, per capita manufacturing output, and per capita farm value. Standard errors in parentheses are clustered at the county level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

## E. Changes in racist narratives after abolition by slave proportion

Figure E1. The abolition of slavery and racist narratives: flexible treatment intensity



*Note.* The figure depicts the changes in racist narratives after the abolition by the proportion of slaves impact on the county. The solid lines represent the point estimates, whereas the dashed lines represent the 95% confidence intervals based on standard errors clustered at the county level. The dependent variable is the prevalence of racist narratives at the county level. The independent variable is the natural log of the county-level slave proportions in 1860. The regression considers county fixed effects, year fixed effects, and pretreatment racist narratives  $\times$  year fixed effects. Additionally, we control for the total population, the proportion of free Blacks, water access, rail access, the proportion of farms over 50 acres, per capita manufacturing output, and per capita farm value.



## F. First-stage regression results of the instrumental variable

Table F1. The proportion of slaves and cotton suitability: first-stage estimates

	<i>Dependent variable: Slavery Intensity</i>			
	<b>Racial implicit bias sample</b>		<b>Anti-Black hate crimes sample</b>	
	(1)	(2)	(3)	(4)
<i>Cotton Suitability</i>	0.3110*** (0.0565)	0.2136*** (0.0518)	0.2966*** (0.0392)	0.1771*** (0.0321)
Constant	0.1418*** (0.0276)	-0.2155** (0.1069)	0.1541*** (0.0191)	-0.2786*** (0.0678)
Controls		√		√
First-stage F-statistic	30.2712	17.0023	57.1462	30.3999
Observations	406	404	982	970
R-squared	0.070	0.271	0.055	0.392

*Note.* The dependent variable is *Slavery Intensity*, which represents the county-level slave proportions in 1860. *Cotton Suitability* is an index reflecting the suitability of a county's land and climate for cotton cultivation. The control variables include total population, the proportion of farms over 50 acres, and per capita farm value. Standard errors in parentheses are clustered at the county level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## G. Cotton suitability and racial hate crime: south vs non-south

Table G1. Regression of cotton suitability on racial implicit bias and anti-Black hate crimes in the South and non-South

	<i>Dependent variable</i>			
	<b>Racial implicit bias</b>		<b>Anti-Black hate crimes</b>	
	(1) South	(2) Non-South	(3) South	(4) Non-South
<i>Cotton Suitability</i>	0.0295*** (0.0093)	-0.0060 (0.0090)	0.1785 (0.1131)	-0.1115 (0.1649)
Constant	0.6088*** (0.0298)	0.4951*** (0.0609)	-0.9167** (0.3959)	1.8354* (1.0871)
Controls	√	√	√	√
Observations	485	242	1,340	491
R-squared	0.121	0.161	0.075	0.009

*Note.* For columns 1 and 2, the dependent variable is the racial implicit bias of Whites from 2002 to 2016, where higher values indicate stronger negative implicit bias against Blacks. For columns 3 and 4, the dependent variable is the average annual number of anti-Black hate crimes per 100,000 people in a county from 2000 to 2018. *Cotton Suitability* is an index reflecting the suitability of a county's land and climate for cotton cultivation. The South includes the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia. The non-south includes the following states: Arizona, California, Iowa, Illinois, Indiana, Kansas, Nebraska, New Jersey, New Mexico, New York, Ohio, Pennsylvania, and Utah. We control for geographic location, measured using latitude and longitude. Standard errors in parentheses are clustered at the county level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## H. labor costs channel

Table H1. The abolition of slavery and racist narratives: labor costs channel

	Racist narratives							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>lnSlavery Intensity</i> × <i>Post</i>	0.3578 (0.2785)	0.3738* (0.2267)	0.0549 (0.2008)	0.1872 (0.2937)	-0.0689 (0.1739)	0.2614*** (0.0993)	0.1971** (0.0940)	0.2583* (0.1504)
<i>Plantations</i> × <i>Post</i>	-0.7604 (1.4979)	-0.8123 (1.4540)	0.1643 (1.3736)	0.1876 (1.8495)				
<i>lnSlavery Intensity</i> × <i>Plantations</i> × <i>Post</i>	-0.0766 (0.4697)	0.1513 (0.3977)	0.0764 (0.3642)	-0.0601 (0.5312)				
<i>Cotton</i> × <i>Post</i>					0.0119 (0.0497)	-0.0230 (0.0440)	-0.0647 (0.0417)	-0.0631 (0.0444)
<i>lnSlavery Intensity</i> × <i>Cotton</i> × <i>Post</i>					0.0173 (0.0167)	0.0204 (0.0124)	0.0216* (0.0115)	0.0251* (0.0133)
Constant	0.8523 (0.6141)	0.5112 (0.5812)	0.9108* (0.4965)	-2.8728 (1.8825)	1.3338*** (0.4044)	0.5429** (0.2615)	0.6776*** (0.2446)	-0.4399 (1.5323)
County fixed effects (FE)	√	√	√	√	√	√	√	√

Year FE	√	√	√	√	√	√	√	√
Pre-abolition racist narratives × year FE		√	√	√		√	√	√
Confederation × year FE			√	√			√	√
Controls × <i>Post</i>				√				√
Number of counties	614	614	614	544	613	613	613	544
Observations	20,815	20,815	20,815	18,952	20,784	20,784	20,784	19,119
R-squared	0.158	0.257	0.280	0.381	0.160	0.258	0.280	0.286

*Note.* The dependent variable is the prevalence of racist narratives at the county level. *lnSlavery Intensity* is a continuous variable, representing the natural log of the county-level slave proportions in 1860. *Plantations* refers to the county-level proportion of farms exceeding 50 acres in 1860. *Cotton* represents the natural log of per capita cotton production at the county level in 1859. *Post* is an indicator that equals one in and after 1865. The control variables include total population, the proportion of free Blacks, water access, rail access, the proportion of farms over 50 acres, per capita manufacturing output, and per capita farm value. Standard errors in parentheses are clustered at the county level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

- Charlesworth, T. E. S., Caliskan, A., & Banaji, M. R. (2022). Historical representations of social groups across 200 years of word embeddings from Google Books. *Proceedings of the National Academy of Sciences*, 119(28), e2121798119. <https://doi.org/10.1073/pnas.2121798119>
- Dell, M., Carlson, J., Bryan, T., Silcock, E., Arora, A., Shen, Z., D’Amico-Wong, L., Le, Q., Querubin, P., & Heldring, L. (2024). American stories: A large-scale structured text dataset of historical U.S. newspapers. *Proceedings of the 37th International Conference on Neural Information Processing Systems*, 80744–80772.
- Gilbert, G. M. (1951). Stereotype persistence and change among college students. *The Journal of Abnormal and Social Psychology*, 46(2), 245–254. <https://doi.org/10.1037/h0053696>
- Hussey, M. (2015). *The Rise of the Jim Crow Era*. The Rosen Publishing Group, Inc.
- Karlins, M., Coffman, T. L., & Walters, A. (1969). ON THE FADING OF SOCIAL STEREOTYPES: STUDIES IN THREE GENERATIONS OF COLLEGE STUDENTS : *Journal o/ Personality and Social Psychology*, 13(1), 1–16.
- Katz, D., & Braly, K. (1933). Racial stereotypes of one hundred college students. *The Journal of Abnormal and Social Psychology*, 28(3), 280–290. <https://doi.org/10.1037/h0074049>
- Lee, M. H. J., Montgomery, J. M., & Lai, C. K. (2024). America’s racial framework of superiority and Americanness embedded in natural language. *PNAS Nexus*, 3(1), pgad485. <https://doi.org/10.1093/pnasnexus/pgad485>

- Mikolov, T., Sutskever, I., Chen, K., Corrado, G., & Dean, J. (2013). *Distributed Representations of Words and Phrases and their Compositionality* (No. arXiv:1310.4546). arXiv. <https://doi.org/10.48550/arXiv.1310.4546>
- Rael, P. (2015). *Eighty-Eight Years: The Long Death of Slavery in the United States, 1777-1865*. University of Georgia Press.
- Rhodes, J. F. (2012). *History of the Civil War, 1861-1865*. Courier Corporation.
- Stampp, K. M. (1967). *The Era of Reconstruction: 1865-1877*. Vintage.
- Zou, L. X., & Cheryan, S. (2017). Two axes of subordination: A new model of racial position. *Journal of Personality and Social Psychology*, 112(5), 696–717. <https://doi.org/10.1037/pspa0000080>