The Slavery to Modern Slavery Pipeline:
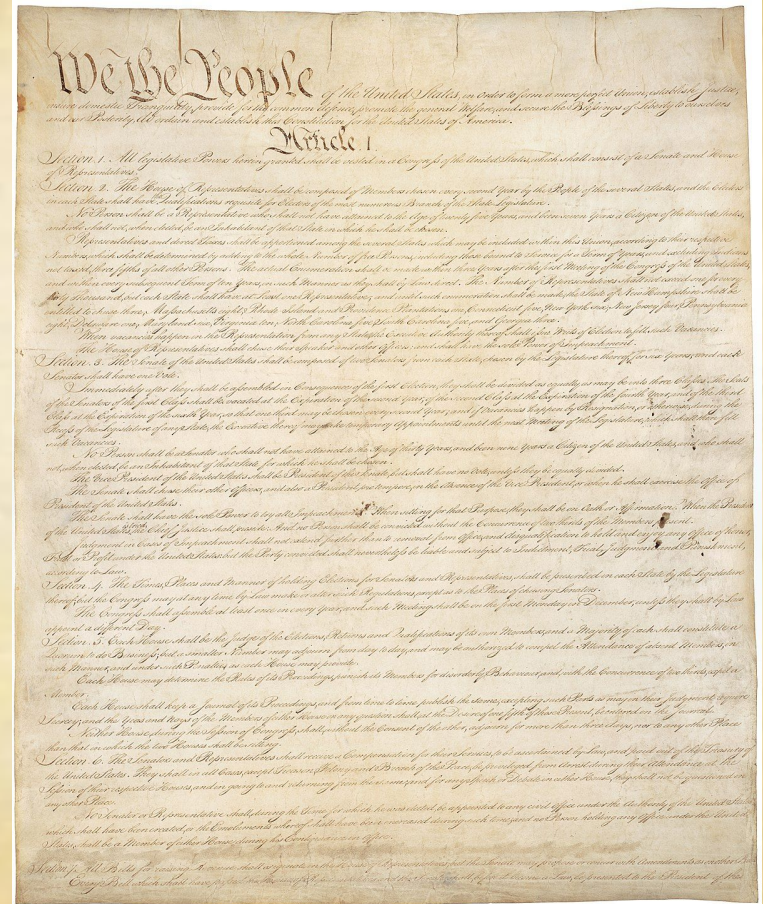
An examination of the development of black men in the United States using the Thirteenth Amendment as a benchmark

American Principles

★ The United States was founded on the principle of freedom

★ While that idea is good in theory, some of the first laws established in this country are a complete contradiction to freedom

★ It is critical that American laws and culture be heavily scrutinized so that the country can adhere to its founding principles

The State of Modern America

★ The sociopolitical climate in the United States is extremely polarized now, making the topic of black development a potentially volatile issue for some

★ To minimize the amount of personal biases and to reduce the influence of personal beliefs in this assessment, a reasonable, simple definition of development is needed

★ Economist Amartya Sen defines development as freedom, which is the definition used to assess black growth in this presentation

The Thirteenth Amendment of the United States declares:

Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction

Data Science Method One: Archival Research before the Thirteenth Amendment

★ **Using archival research of a prior census, Bales (2017) was able to discover that there were 3,950,529 black slaves in the United States in 1860**
  ○ Archival Research - Finding and analyzing data from archives
★ Bales is specifically looking at the 1860 census (temporal) conducted in the United States (spatial)
★ It is a possibility that this census underestimates the number of black slaves present in the United States in this 10-year time span
★ Regardless of the study's reliability, it is clear through archival research that millions of black men were subject to slavery prior to the 13th Amendment
  ○ These millions of black men were enslaved, which clearly demonstrates that they were deprived of their freedom and therefore not experiencing development

Note: This is only an example of an 1860 census, not the one used by Bales

Data Science Method One (cont.): Archival Research after the Thirteenth Amendment

★ Immediately following the 4 year period after the Thirteenth Amendment was enacted, 1355 black people (mostly black men) were imprisoned across Georgia, Louisiana, Mississippi, and South Carolina
  ○ This was 95% of the prison population
  ○ Adamson derived this data from old prison records from 1866-1870
  ○ Thousands of black men were sent to prison, which indicates that they were deprived of their freedom
★ Adamson's study is also an example of spatiotemporal data because it delves into prison records from different states (spatial) across a certain time span (temporal)
★ The calculated number of black male prisoners could be an underestimate of how many black male prisoners there actually were

Data Science Method Two: Survey Data

- ★ Researchers asked subjects for basic demographic information (race, age marriage status, etc ...), then asked them about recent acts of discrimination they have experienced, followed by asking them if they have ever had any serious contact with law enforcement
  - ○ n = 1271 black men in the United States
- ★ The survey data was then processed using Ordinary Least Squares Regression, a statistical method used to determine relationships between variables
- ★ Researchers found that those who reported high levels of everyday discrimination (black men) were also more likely to experience serious contect with the criminal justice system
  - ○ Men who were surveyed that interacted with law enforcement by being sentenced to prison are being deprived of their freedom

$$\hat{\beta} = \min_{\beta} \sum_{i=1}^{n} (y_i - \alpha - \beta x_i)^2 = \min_{\beta} \sum_{i=1}^{n} \varepsilon_i^2$$

Table 2. Percentage Distribution of the Frequency of Different Types of Perceived Everyday Discrimination Among African American Men.

Frequency of Everyday Discrimination	Better Than You	Not Smart	Less Courtesy	Less Respect	Afraid of You	Followed in Stores	Poor Service	Dishonest	Call Names/ Insulted	Threatened or Harassed
Almost everyday	12.54	7.99	4.19	3.61	6.4	5.06	2.14	5.54	2.83	0.65
Once per week	8.04	6.59	5.53	4.63	5.27	2.67	3.06	3.43	2.59	0.99
Few times a month	14.07	9.78	11.78	10.14	9.16	9.14	8.01	7.29	3.85	1.95
Few times per year	25.41	21.86	27.81	26.4	18.37	17.11	29.22	17.51	10.26	7.04
Less than once per year	17.59	27.67	31.01	31.48	26.41	26.04	32.85	29.82	33.1	34.45
Never	22.36	26.11	19.68	23.73	34.38	39.97	24.71	36.41	47.37	54.93
N	1,244	1,250	1,251	1,253	1,249	1,240	1,253	1,251	1,252	1,254

Table 3. Regression Analysis of Criminal Justice Contact on Everyday Discrimination (Better Than You, Not Smart, Less Courtesy, and Less Respect) Among African American Men.

	Better Than You			Not Smart			Less Courtesy			Less Respect		
Predictors	β	B	SE	β	b	SE	β	b	SE	β	b	SE
Age[a]	−.22***	−.02***	.00	−.15***	−.01***	.00	−.11**	−.01**	.00	−.09*	−.01*	.00
Years of education	.00	.00	.02	.06	.03	.02	.09**	.05**	.01	.06*	.03*	.01
Personal income	−.06	.00	.00	−.09**	.00**	.00	−.01	.00	.00	.03	.00	.00
Marital status												
Separated/divorced	.04	.17	.14	.01	.03	.14	.01	.05	.12	.01	.05	.12
Widowed	.00	−.01	.30	.00	.03	.30	.02	.15	.28	.01	.10	.31
Never married	−.01	−.04	.14	−.08	−.25	.16	−.01	−.04	.11	.00	.00	.11
Criminal Justice Contact												
Arrested	.06	.21	.13	.04	.15	.11	.03	.09	.09	.04	.10	.09
Reform school	.02	.25	.40	.08*	.96*	.43	.09	.86	.43	.09*	.90*	.43
Detention	.05	.45	.31	.08*	.71*	.30	.01	.05	.17	.04	.28	.20
Jail	.04	.17	.13	.03	.11	.12	.07*	.23*	.10	.03	.08	.09
Prison	.03	.25	.29	.07*	.58*	.26	.07	.55	.31	.07	.49	.26
Constant	—	3.99***	.40	—	3.01***	.30	—	2.40***	.26	—	2.31***	.20
F	14.54***			4.14***			4.69***			3.18***		
R²	.06			.04			.03			.03		
n		1,143			1,149			1,149			1,152	

Note. β = standardized regression coefficient; b = unstandardized regression coefficient; SE = standard error.

[a]Several independent variables are represented by dummy variables. Marital status, married and cohabit, is the excluded category; Criminal justice contact, never been arrested is the excluded category.

*p < .05. **p < .01. ***p < .001.

Table 4. Regression Analysis of Criminal Justice Contact on Everyday Discrimination (Afraid of You, Followed in Stores, Poor Service) Among African American Men.

	Afraid of You			Followed in Stores			Poor Service		
Predictors	β	b	SE	β	b	SE	β	b	SE
Age[a]	−.22***	−.02***	.00	−.16***	−0.01***	.00	−.13**	−.01**	.00
Years of education	.11**	.07**	.02	.11**	0.06**	.02	.12**	.05**	.02
Personal income	.01	.00	.00	−.03	0.00	.00	.04	.00	.00
Marital status									
Separated/divorced	.08*	.31*	.14	.01	0.04	.11	.06	.19	.10
Widowed	.03	.29	.25	.01	0.10	.37	.03	.20	.27
Never married	−.02	−.08	.12	.02	0.06	.13	.05	.12	.10
Criminal Justice Contact									
Arrested	.05	.18	.10	.06	0.17	.09	.09*	.23*	.10
Reform school	.07	.78	.49	.15**	1.53**	.50	.11	.93	.53
Detention	.11**	.94**	.30	.11*	0.85*	.39	.09*	.61*	.26
Jail	.10**	.38**	.12	.12**	0.42**	.14	.12***	.34***	.09
Prison	.08*	.69*	.31	.06*	0.49*	.21	.07*	.46*	.20
Constant	—	2.28***	.37	—	1.91***	.31	—	1.84***	.27
F	13.57***			10.54***			9.42***		
R²	.08			.08			.06		
n		1,147			1,141			1,151	

Note. β = standardized regression coefficient; b = unstandardized regression coefficient; SE = standard error.

[a]Several independent variables are represented by dummy variables. Marital status, married and cohabit, is the excluded category; Criminal justice contact, never been arrested is the excluded category.

*p < .05. **p < .01. ***p < .001.

Table 5. Regression Analysis of Criminal Justice Contact on Everyday Discrimination (Dishonest, Call Names/Insulted, Threatened or Harassed) Among African American Men.

Predictors	Dishonest			Call Names/Insulted			Threatened or Harassed		
	β	b	SE	β	b	SE	β	b	SE
Age[a]	−.20***	−0.02***	.00	−.11**	−.01**	.00	−.11**	−.01**	.00
Years of education	.02	0.01	.02	.04	.02	.02	.07*	.02*	.01
Personal income	.03	0.00	.00	−.05	.00	.00	−.05	.00	.00
Marital status									
Separated/divorced	.07*	0.27*	.12	.03	.10	.12	.01	.01	.09
Widowed	.05	0.40	.29	.01	.06	.15	−.01	−.04	.13
Never married	.00	0.01	.13	.08*	.20*	.10	.05	.10	.07
Criminal Justice Contact									
Arrested	.06*	0.17*	.08	.01	.03	.10	.00	.00	.07
Reform school	.13**	1.34**	.44	.07	.62	.45	.01	.06	.21
Detention	.10**	0.78**	.28	.03	.20	.20	.07	.36	.22
Jail	.09*	0.31*	.12	.04	.12	.11	.06	.14	.09
Prison	.09*	0.72*	.33	.08*	.54*	.26	.10*	.49*	.19
Constant	—	2.58***	.36	—	1.95***	.26	—	1.55***	.21
F	8.94***			5.88***			11.01***		
R²	.07			.04			.04		
n		1,150			1,151			1,152	

Note. β = standardized regression coefficient; b = unstandardized regression coefficient; SE = standard error.
[a]Several independent variables are represented by dummy variables. Marital status, married and cohabit, is the excluded category; Criminal justice contact, never been arrested is the excluded category.
*p < .05. **p < .01. ***p < .001.

Table 6. Regression Analysis of Criminal Justice Contact on Summary Measures of Everyday Discrimination Among African American Men.

Predictors	Sum of Everyday Discrimination			Sum of Race-Based Everyday Discrimination			Sum of Other Everyday Discrimination		
	β	b	SE	β	b	SE	β	b	SE
Age[a]	−.22***	−0.13***	0.02	−.11*	−0.07*	0.03	−.14***	−0.07***	0.02
Years of education	.09**	0.34**	0.11	.10**	0.41**	0.14	−.05	−0.14	0.10
Personal income	−.03	0.00	0.00	.01	0.00	0.00	−.04	0.00	0.00
Marital status									
Separated/divorced	.05	1.21	0.90	.07*	1.89*	0.86	−.02	−0.36	0.67
Widowed	.02	1.16	2.03	.02	1.52	2.47	.01	0.61	0.93
Never married	.00	0.09	0.89	.01	0.18	0.96	.00	−0.01	0.71
Criminal justice contact									
Arrested	.06	1.26	0.66	.03	0.81	0.65	.04	0.59	0.62
Reform school	.12**	8.27**	2.85	.11*	8.24*	3.91	−.02	−0.83	1.10
Detention	.10**	5.29**	1.91	.06	3.74	2.58	.05	2.04	1.97
Jail	.10**	2.35**	0.65	.08*	2.17*	0.94	.03	0.64	0.65
Prison	.10*	5.28*	1.97	.06	3.85	2.53	.03	1.31	1.85
Constant	—	13.73***	1.92	—	6.12**	2.22	—	7.78***	1.89
F	11.08***			3.98***			7.2***		
R²	.09			.04			.03		
n		1,152			1,120			1,119	

Note. β = standardized regression coefficient; b = unstandardized regression coefficient; SE = standard error.
[a]Several independent variables are represented by dummy variables. Marital status, married and cohabit, is the excluded category; Criminal justice contact, never been arrested is the excluded category.
*p < .05. **p < .01. ***p < .001.

Gaps in Current Literature

What the literature addresses:

- ★ A large number of black men were subject to slavery prior to the Thirteen Amendment (Bales, 2017)
- ★ The southern prison population was mostly (95%) black men immediately following the Thirteenth Amendment (Adamson, 1983)
- ★ Researchers found that those who reported high levels of everyday discrimination (black men) were also more likely to experience serious contect with the criminal justice system (Taylor, Miller, Mouzon, Keith, & Chatters, 2016)

What the research fails to address:

- ★ How can the United States stop the influx of black men into prison (and thus, subject to involuntary prison labor), a sequence reminsicent of the days of slavery
  - ○ This prompts the research question: How can data science be used to dismantle the system that enables this influx?

Constitutional Amendments

★ Constitutional amendments, like the Thirteenth Amendment, can be changed in two ways:
  - ★ ⅔ of states petition for amendment
    - ○ Congress reviews the change at a constitutional convention
      - ■ ¾ of the state legislatures must approve of the amendment
  - ★ Congress proposes the amendment
    - ○ ⅔ of the House approves of the amendment
    - ○ ⅔ of the Senate approves of the amendment
      - ■ ¾ of the state legislatures must approve of the amendment

★ Constitutional amendments have happened before, and it is imperative that a change be made to the Thirteenth Amendment that outlaws involuntary servitude as punishment for a crime
★ Survey data, like the research previously mentioned, could be used to encourage Congress or ⅔ of the state to petition for a constitutional amendment

Using Survey Data to Change History (Research Plan)

★ Archival research is beneficial for examining historical facets in the past, but black men being deprived of their freedom is a present-day issue, and using surveys could help researchers gain insight into their current reality

★ Similar to the previous survey discussed, this survey could consists of questions about basic demographic information, if they have been personally impacted by the conditions of the Thirteenth Amendment, how satisfied they are with the Thirteenth Amendment as it presently exists, and if they would be satisfied with an amendment to the Thirteenth Amendment

  ○ Unlike previous research, OLS is not needed because we are not concerned with a relationship between the variables, but rather the percent distribution of satisfaction with the amendment