**Algorithms of oppression**

-“This book is about the power of algorithms in the age of neoliberalism and the ways those digital decisions reinforce oppressive social relationships and enact new modes of racial profiling, which I have termed *technological redlining.*” (page 1)

**Technological Redlining**

* the tendency of decisions making by automation is enforcing discrimination
* people of colour are more likely to have to pay higher permiums on loans etc.

we are only beginning to understand how automation creates and enforces discrimination

-(this remainds me of many of the observations that were made in the early 20th centuty linking blacks in America with shorter life spans, and poverty and the analisers thinksing that there must be a link between color and these things. The algorithms do not realise that there is a difference between coralation and causation. They are not smart they are ‘stupid fast’.)

this book will look at the consequences of automated decision making

this is not just stupd algorithms but people that make them being racesed or sexist as well

* the google employe who sent out a letter caliming wolmen to be inferior
* (remainds me of analisis paralisis – software enginers are good at developing things and analising algorithms but not at making judgment calls

will look at google in particular and how these types of algorithms are problems at large in the abstract

will also claim that google and other big tech giants need to be broken up and regulated

* the consolidation of power and influence are a threat to our democracy

racism is the API of the internet

* racist comments are the norm
* (due to the privilege of the wight communities and how they were able to get into internet/computers first?)

These algorimic opretions are the result of either grosse neglagens or dissioons on profit margens(they made profit on the sexism/raceism)

Three is a problem of many on the internet and in porfesinal copacity claiming that these algorithms are perfect and “objective”

In cases that this algorithmic oppretion made heaedlines (“n house, black people facial recognition) **google has said that it is not responsible for its algorithm** and that it will fix the issue

* (I don’t know that that is what they are saying so much as it is possible that the algorithm can produce unexpected results)

Chapter 1: corporate control over public information, and the historical and social signifigants of information returned from search results.

Chapter 2: how google search reinforces stariotypes, the process of googles PageRank and how google profits from advertising and racism and sexism, especially in the midst of a media spectical

Chapter 3: the importants of a noncomersial search engine, how google can radicalize individuals by providing inaccurate information and “news sources”. How information online is a sort of record this can be harmful, there should be a right to be forgotten.

Chapter 4: critique of the field of information studies and how library classification systems are the precurssers to search engines like Google and the problems in the search engines are not new

Chapter 5: the future of knowledge in the public. The importants of the work of library and information sicience, and the development of an equitibal classification system.

Chapter 6: public policy and the need for regulation on information environments, especially when they are increasingly controlled by corperations

Conclusion:beyond google, how changes in public policy and the rise of things like yelp (“colour blined”) are impacting peoples livlyhood. A call to recognize how algorithms are changing our social structures.

Goal: to eliminate social injustice and enact change, for there to be interdisciplinary studies between information science and information studies and libraries

**Chapter 1**

2013 there was a complain highlighting the sexist search engine results

* The take away was that there is still a lot of sexist atitueds in the world still
* Not that there was a problem with the algorithm

These search engens are becoming/ have becom the primary source of information inlue of libarians and libraries. They influence how people see the world.

Google is not a impartial entity hey have there own intrestes in premoting there own companies and there major advertisers

* So there search results are a combination of ad revenue and clicks that keep the traditional sexist views alive

We have seen that there is a tendency for vanrable minorities to be misrepresented in our information systems(library orginisation), and media

People believe that these search engens will return credible and accurate information

People should know how search engines work but that would require a high degree of computer science literancy

* (I do not agree it is enough to know the abstract concepts we do not need to know how things work in spesifics only the general way )
* She is focusing a lot on the algorithms and the importants of understanding what they are. (I think it is more important to understand what they do, anyone can judge an algorithm by the result, is it doing what we want it to do)
* Women and people of color have much to gain by becoming programers

Alorithms are made by people and those people’s pregodis influences the algorithms

* I think this is not just in what we do but what we don’t do.
* It is easy to see prejidus when someone deliberately puts code in that would harm some, it is hard to see when people do not think how a peace of code could harm others.

Who is responsible of AI and algorithms

She will look at search results at particulat moments in history and see how they might be interpreted historicly in the U.S. to show data bias and raceism in the search results

She is looking at this from a black feminist perspective

* This is different from other prestpective
* We need to be able to look at thinks from a varity of different perspectives

The importance of a search engine is like that of a librarian in that it helps navigate the web

Google does not make it obvious what are ads and what are “genuine” results. Most people trust these results.

Googles search results can make it seem as though sexism and racism are the norem when that is not the case. We think that the search results are a reflection of what is “popular” or “objective”

Google search is based on linkage and much of this linkage is from paid advertisement so these tent to be the top results

Results that are not ads are still affected by ads. Esentualy you can pay to be the top search result

* The more that they advertise the more likely to be clicked and this increases PageRank
* This is based of the idea of citation in papers, this gives it the aperance of legitimacy

There is no vetting of the links like what a scholarly author would do to a paper.

* And there is pier review

Googles response to the “Jew” incident will not take responsibility

Google **can** filter out objectionable content if it wishes

* This highlights that the searches are not “objective”

Much has been made of the power of the internet to premot democracy by giving a voice to alternative political ideas, but we must remember that google is a comerssial entity not a public one.

* The influence of welthy elites on googles search results make it hard for minorities that do not have these resources

There has been a shift from public information sources (Libraries) to private information sources (Search Engine)

**A cornerstone to modern democracy is the representation and defence of minorities. This requires that information is redaly avalabel**

There is a sort of global amaricanisation of the internet, where u.s. values are pushed including ideas of racism and sexism.

Companies make decisions on which racest contnent to host based on profit,

* “many tech platforms are interested in attracting the interests and attentions of the majority in the United States, not the racialized minorities.” Page 58

Thechnology is seen as a tool for progress

* Progress of whom? Who benefits?

There were a lot of ideas about the early internet that it would be a cyber utopia where people would not be judged on the sex, race or political views

* Internet was to be the grate equalizer
* This is demonstrably not true

**Even if the search results were a repersentaion of what is most popular it is not a representation of what is true**.

**Chapter 2: Searching for Black Girls**

There is a myth that the lack of women and people of colour in the hech industry is simply a matter of a lack of kids being encouraged to enter tech.

Google sees the problems of race and views them as a problem for tomorrow not today

There is the idea that black people are not technical

Silicon valy desines things without though to what effect those things might on people

There is a lack of people who have knowledge on how racist and sexist ideas will affect people

* People with backgrounds in ethics, gender studies

*Still talking about the goals of the book*

* *Context is important but there is a dager of putting off the reader*
* *I know that many computer profecinals might not have the patsions for this*

Whiteness is seen as normal in US

Racism is a social heiarcy of power relations

* These same relations can be seen replicated online

When racest thems pop up in google searches that seem to downplay their responsibility or say it is an error, but then they are able to tweek the algorithm

-this seems to show that they are responsible

Part of the power relations of race are how information is presented

Search engins are a huge part of how we orginise information, they are in websites but also libraries etc.

Google being the monopoly on search engins as nutralised and naturalized their searches

Google needs to be broken up and there needs to be public search engines

Porn sites know how to game the system they spen a lot of time and money so that they can be on the top of the search list, this has affected the search results

* Porn sites are also predominantly American so these American stereotypes are dominating the search results

-*how do we stop a monopoly from growing, even if we broke up google there would probably emerge a dominant search engine of choice in the new marketplace.*

“Intent is not particularly important. Outcomes and the results are important.”(page 90)

We bring in our pregedusis to the internet even if we are unaware of it

The invasion of capitalism into the internet has made the commodification of information and identity a thing,

* Information capitalism
* New capitalism

There has been a failure of the prominate search engines to provide information on how black women have been traditionly oppresses, and sexualized

* There is a continued propagation of the stariotypes that dominate the media

This neo capitalism commodification of black women has been led by porn industry and they have shaped the identity of black women on the internet

Addvertisments are a form of media and like all media has the potential to shape our opinions and beliefs

Men have used their dominance over the thechnology to shape its influence over our society and whether they mean to or not against women and people of colour

**Chapter 3**

2015 Dylann “Storm” Roof attacked an African American Church, he was radicalized online and acording to his manifesto this begainn by searching “black on white crime” in google.

* It sounds as if he was farly radicalized before searching, but it certainly reinforced it
* Google acting on his confermation bias

Using the search returns many white supremist websites and articles. There are no official articles.

* This is no longer the case, interesting how this is more history and what roll did the book play in the changes in google
* The changes might be seen as propaganda a by many

There is a danger in using a commercial search engine to gain knowledge

The important thing is that google not contribute to the problem, if these racist propaganda sites are the first

**Chapter 4: searching for protections from search engines**

Women are often the target of revenge porn/ affected by there past activity in the pornographic industry

The internet never forgets

* “What does it mean that one’s past is always determining one’s future because the Internet never forgets?” (page 121)

In 2014 Europian court ruled against google spain, that people have the right to request remove of links to personal information, especially if that information would be damaging

* Google has debated and pushed back against this
* This highlights the problemes with

**“At the center of the calls for greater transparency over the kinds of information that people are requesting removal from the Internet is a struggle over power, rights and the notion of what constitutes freedom, social good and human rights to privacy and the right to futures unencumbered by the past.” (page 121)**

Theres laws only apply to the EU regions outside the EU can still arcive and share links about EU citizens without restriction

* There is also the issue that this only relates to search results and not the information google shares with there private partners (information capitalism)

This is about protection of both individual and group identity

If google is the go-to source of information instead of teachers, librarians, or experts then there needs to be the same regulation on google as there are public information resources

There is also the issue of mug shots, and arrest information being made public through websites

* Black people are disprotanaly arrested (overarrested)
* They need not be convicted in cort just arrested

There is a tremendous amount of data collection on individuals now

* Edward Snowden (2014)
* Companies like Verizon and Google are collecting massive amounts of data on people around the world for the US government

**“These rights to become anonymous include our rights to become who we want to be, with a sense of future, rather than be locked into the traces and totalizing effect of personal history that dictates, through the record, a matter of truth about who we are and potentially can become.” (page 126)**

Google argues that there should be no right to be forgotten in that it allows us to not be held accountable.

* But most of these requests come from private individuals not public figures
* The information is private in nature

There is much information that is being digitized from before the internet is what it is today

* eg pronagraphy that was ment for a specific community is now opent to scrutiny by the public and this is effecting the lives of people that took part in it
* we live in a homophobic, sex negative society

she is calling for grater regulations on the algorithms (machine learning, and AI) and a better indexing system for the internet that is more transparent rather than the opaque commercial search engines

**Chapter 5: the future of knowledge in the public**

There was a struggle to change the trem ‘Iligal Alien’ to undocumented or unauthorized

The term illegal alien is a way of describing a group of people as a problem

* similar to the “jewish question”

the library of congress’ budget was thretend by republicans in a reaction to the change in terminology

there is a similar struggle for identity in web indexing/ search engines

the same sort of steps to limit bias in library index can be applied to search engines (pg 136)

* admit that any index system will have bias
* recognize that the adherence to a policy of neutrality will not overcome bias
* listen to the feelings thoughts and belifes of the useers of a particular racialy defined group of people

classification systems have a historical presedent of being being adventagus to the powerful

* there is a lack of representation of the marginalized communities

these bias in information systems affects the people using them informing there own bias

* we treat them as authorities of information

the classification systems reflect the bias of the culture that produced them, and even after these biases have been corrected to be more representative of the minority communities there is still bias in the culture that had been informed by the former classification

how minority peoples are represented play a huge role in social justice

google and other corporate search engines portray there indexing as a matter of free speech rather than public information for the common good

* it is possible that google themselves did not know what they were creating and the impact it would have and were slow to realize

libraries have started using google like discovery tools that simplify the look up of information, but these tools have the same problems of bias as google

the representation of search results is a representation of reality, a reality of a history of raceism, and sexism found in mainstream culture.

Google is attempting to use computer science as a replacement for library and information science practices

* the information science practices are expensive and slow compared to googles computer science algorithm driven search engine

the search engens desines makes certain knowledge available and suppresses others

in response to the outcry against googles search results there have been alternative search engines that better represent black and minorities

* these arise from people trying to be represented on the web
* these work against the proposed values of the web, that of neutrality

the internet shapes us and our interactions with it shape the internet forming now social bons and shaping existing social bonds

**Chapter 6: The Future of Information Culture**

In 2010 the FCC put forward a plan for the futer of high speen internet recognizing its importance as the primary method of communication for information etc. did not recognize the importance of portals like google that are the primary gateway to that information.

There is an increasingly de-/unregulated information industry

* this includes online news organization that are funded by ads and who are more interested in clicks than quality reporting.

A resalt of the comersalisation of information on the internet is that we can no loger simply share news/information we find we must ask ourselves where did this come frome and is it reliable

* before we could trust jurnolists to vet there information.

The FCC decision on net neutrality was championed by companies such as google b/c it kept the internet traffic to there sights unhindered.

No one has more of a monopoly on information on the internet than google

Google has not taken responsibility for the content that is provided by their search engine, and it seems like the corts will not hold them accountable

* a big part of the reason that google has not taken more sesponsability for there content is that they are afraid of being heald liable?

There were comments made in cort hearing that it would be difficult to show that google seach results have resulted in harm to anyone

* This uses a narrow concept of harm, there is harm to people of marginalized communities if thos communities are associated with porn on a major source of information

Ther is much talk of the digital divide. Mostly this is around the lack of acess to technology, or the lack of knowledge and skills in tech. but the digital divide is deeper than this, there are social and political forces that discriminate against minorities and women. Existing power relations

There has been a call for more black participation as prosumers (producers as well as consumers) this is esentualy creating free content (free labor)

* Allows google to index and distribut there content and get meta data from them
* We are products that google sells to advertisers

There is need for mor diversity of education on isues of race and gender in the silicon valy work force. Computer enginers are not equipped to deal with the challenges of race and gender discrimination

Learning to code is not enough to change the tide of races, sexist power relations that exist, not just in the us but the world

**Some of the ideas about power relations when dealing with media gose beyond what I understand, and I feel like it would go beyond what many tech minded enginers would understand.**

There are a massive amount of social and political pressures that are against marginalized communities

There is a tendency towards ‘colorblindness’ but this is just denieng that there is an issue and the idea that we can treat everything as objective decisions

* There is the idea that we can use alogrithms as objective decision makers but they do not take into account how racism and sexism has influenced the data that they are working from and how races or sexist ideas might influence how that data is interpreted.

**Conclusion**

She calls the line of inquiry of this book **“black feminist technology studies (BFTS)”**

* Epistelogical approach to deling with gendered and racialized identities in digital and analog media

The state of the internet is often defended with “freedom of speech” or “freedom of expression” or that URL’s are “property”

* But in the current environment any one can own anything even personal and group identities (neo-nazis owning martinlutherking.org)

Look at yelp as another example of lack of identity control

Kandis is an example of an inability to control how she and her bisness was potrade on the site

* She was a black hairdresser, servesing the unique needs of a black comunitiy but yelp refues to let her identify her bisness as such
* Is the result of a ‘colorblind’ algorithm

We need a way od devorcing advertising and corporate interests from finding high-quality information

We need to imagine new ways of searching for and accessing information so that it is more transparent

* She gives the example of a search engine that is color coded for different types of content (pornography, entertainment, commercial or advertising suported, non-commercial)
* How do we come to these categories? Would people be interested in using them?

The landscape of google has changed searching for black girls no longer results in pornographic content.

* What influence did she have on this through the pblishing of articles
* This shows that we can make improvements on our algorithms and not taking responsibility for them is not good enough