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Research Paper

Encoded Inequities: A Synthesis of Data Feminism, Race After Technology, and Algorithms of Oppression

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Abstract
This essay critically examines three books: Data Feminismby Catherine D'Ignazio and Lauren F. Klein , Race After Technology by Ruha Benjamin, and Algorithms of Oppression by
Safiya Nobleand suggests how these books have contributed to the current conversation of science and technology studies (STS) in academia. By integrating feminist theory, critical race theory, and science and technology studies (STS), the essay interrogates the myth of algorithmic neutrality, and reveals how racial, gendered, and capitalist logics underpin digital infrastructures. It also examines how data systems, from predictive policing to search engines, reinforce oppression while masking their politics under the guise of objectivity. Drawing from thinkers like Donna Haraway, Simone Browne, and Sandra Harding, the analysis shows how power, knowledge, and design intersect in digital contexts. Moreover, the essay argues for reimagining technology through abolitionist and justice-centered frameworks that prioritize inclusion, equity, and care over efficiency and control. These works collectively illuminate technology as a contested political terrain requiring ethical transformation.

Key Words: *Algorithmic bias, Data feminism, STS, Race and technology, Technological neutrality.*

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With the continuous advancement of science and technology, people have become increasingly fascinated by its impressive features and its transformative role in everyday life. From smartphones and AI tools to advanced medical systems and automated public services, technology has become integral to modern living. Across corporate sectors and government agencies alike, it plays a vital role in daily operations. Its efficiency, effectiveness, and time- saving capabilities have made technology not only indispensable but also ever more in demand intoday'sfast-pacedworld.However,overthepastfewdecades,scholarsfromculturalstudies, humanities and social sciences, and science and technology studies have increasingly begun to interrogate the assumed neutrality of technology. These scholars, through their writings and public discussion forums, have raised concerns that technology is not what it seems from the outside and state that it hides a politics under the guise of its efficiency.

Over time, a group of scholars from various fields has helped evolve the critical debate about the supposed neutrality of technology. Their works have shown that technology is not isolated from the world; rather, it is deeply embedded in existing social, political, and cultural structures. Early thinkers and their works, like Langdon Winner's *The Whale and the Reactor* (1986) and Donna Haraway's "A Cyborg Manifesto" (1985), advanced the discourse by revealing how technologies are shaped by political agendas and dominant ideologies. Later, scholars such as Sandra Harding, Lucy Suchman, and Wendy Hui Kyong Chun contributed to this critique by analyzing how gender, race, and power influence scientific knowledge and designprocesses.Recently,anewgenerationofscholars,includingSafiyaUmojaNoble,Ruha Benjamin, Catherine D'Ignazio, Lauren F. Klein, Virginia Eubanks, Sarah Myers West,

Meredith Broussard, and Simone Browne, has shifted its focus to the digital realm. Their work examines how data-driven technologies, algorithms, and AI systems often reinforce structural inequalities while presenting themselves as objective and neutral. These works collectively reveal how technologies often reinforce existing systems of domination under the guise of neutrality,urgingareconsiderationofhowtechnologicalsystemsaredesigned,whotheybenefit, and whose voices they silence.

To further discuss the ongoing discourse about the myth of technological neutrality, this essay focuses on three contemporary works: *Race After Technology* (2019) by Ruha Benjamin, *Data Feminism* (2020) by Catherine D'Ignazio and Lauren F. Klein, and *Algorithms of Oppression* (2018) by Safiya Umoja Noble. These works have been selected for their contributionstorevealingthestructuralinequalitiesembeddedindigitalsystemsandforoffering interdisciplinaryframeworksthatbridgescienceandtechnologystudieswithcriticalracetheory, feminism, and media studies. Through detailed analysis of these texts, the essay examines how each author or their works interrogate the ideological, racial, and gendered dimensions of algorithmic design and data infrastructure. Rather than treating technology as an impartial or universal tool, these scholars' foreground how power relations shape its development and deployment.Theircollectiveworknotonlychallengesthedominantnarrativesofinnovationand objectivity but also insists on the need to rethink technological systems through the lenses of justice, equity, and accountability.

Race After Technology: Abolitionist Tools for the New Jim Code by Ruha Benjamin is a powerful and accessible critique of how emerging technologies, often assumed to be neutral, objective,andprogressive,canreproduceandreinforceexistingracialinequalitiesofthesociety. The book consists of five chapters, each focusing on a different way technology can perpetuate

systemicracism,evenwhileclaimingtobefairor impartial.Inher introduction,Benjamin introducestheterm"NewJimCode,"whichrefersto"theemploymentofnewtechnologiesthat reflect and reproduce existing inequities but are promoted and perceived as more objective or progressive than the discriminatory systems of a previous era" (5). Chapter 1, "Engineered Inequality," examines how automated systems such as predictive policing and algorithmic sentencingcanworsenracialbiasinlawenforcement.Chapter2,"DefaultDiscrimination," showshowdiscriminatoryassumptionsarebuiltintodesigndefaults,usingexamplesfromfacial recognition technologies that fail to detect darker skin tones accurately. In Chapter 3, "Technological Benevolence," Benjamin critiques "feel-good" technologies like apps designed toaddresssocialproblems,arguingthattheyoftenignorestructuralcausesandreinforceexisting hierarchies. Chapter 4, "Coded Exposure," focuses on surveillance systems and their disproportionate targeting of Black and Brown communities, highlighting examples such as biometric tracking and databases. Chapter 5, "The New Jim Code," ties together all the arguments and calls for abolitionist approaches to technology, tools, and thinking that challenge the root causes of injustice rather than simply reforming biased systems. Throughout the book, Benjamin uses a range of methods, including case studies, critical theory, media analysis, and historical parallels. Her conclusion emphasizes that rather than accepting technological systems asinevitableorneutral,wemustaskwhodesigns them,forwhatpurpose,andwithwhatimpact.

Byemphasizingofteninvisibleforcesshapingtechnology,Benjamincallsonreaders,designers, and policymakers to resist what she calls the seduction of coded fairness and instead imagine abolitionist alternatives that prioritize justice and equity over convenience and profit. In a few words, Benjamin presents a thorough, accessible, and urgent critique of how racism operates

throughtechnologicalsystems,anditoffersbothaframeworkforunderstandingtheseissuesand a call to action for building better futures.

Data Feminism by Catherine D'Ignazio and Lauren F. Klein, a collaborative and deeply thoughtful work that challenges the common understanding of data science as neutral and objective. The authors argue that that data science is deeply shaped by unequal power structures and that these imbalances must be addressed through a feminist perspective. Structured on seven major chapters, along with a separate introduction and conclusion, the book draws on intersectional feminism as a critical framework to reveal how data science reinforces existing forms of oppression, including racism, patriarchy, and colonialism. Central to their argument is the idea that feminist thinking can help reimagine data science by shifting who participates in data work, how power operates within it, and whose voices are heard orsilenced. Through seven chapters, the authors discuss key issues like embracing pluralism, challenging power, rethinking binaries and hierarchies etc. The authors bring diverse case studies and theoretical grounding to demonstratetheseissues.Forexample,theyanalyzetheCountedprojectbyTheGuardian,which documented police violence against Black people in the U.S., showing how grassroots data activism can fill institutional gaps. They highlight Data for Black Lives and the Feminicide Database in Mexico as examples of how community-led data work empowers marginalized groups. The authors also critique mainstream data practices, such as those used in predictive policing and facial recognition technologies, which often reinforce systemic bias. They emphasizethe importanceof bringing back method and understanding thesocial histories behind datasets. The book employs feminist standpoint theory, showing that knowledge is situated and partial, and that those most affected by

injustice have valuable insight into systems ofoppression. Methods used include storytelling, participatory action research, and collaborative data projects that value care, emotion, and the invisible labor often excluded from traditional science. The authors also stress the importance of making labor visible by recognizing the contributions of people who clean data, maintain systems, or do unpaid emotional work in data projects. They advocate for rethinking the binary logics of traditional data science by valuing plurality and ambiguity instead of false neutrality. They call for a shift from the myth of objectivity to a model of data justice rooted in equity and accountability. Their conclusion urges readerstotransformdatascienceintoatoolforliberationratherthanoppression.Theyinsistthat feministvaluesmustguideeverystageofdatawork,fromcollectiontocommunication,andthat the future of data must be shaped by care, inclusivity, and shared power. The book ultimately worksasbothacritiqueofdominantdatapracticesandahopefulmanifestoforchange,showing that data science, when reoriented around justice, can support more equitable futures.

Algorithms of Oppression: How Search Engines Reinforce Racism by Safiya Umoja Noble offers a convincing critique of the widely assumed belief in the objectivity and neutrality of algorithmic systems. Primarily focusing on Google's search engines, the author reveals how these technologies systematically reproduce and reinforce racial and gender biases, though seeminglyitisneutralandunbiased.DrawingonBlackfeministthought,criticalracetheory,and science and technology, Noble comes up with an argument that algorithmic mechanisms are not simply technical constructs, but are designed with the ideologies and motives of designers to servea certainhiddenagendaorpolitics.Her centralclaimisassociated withtheideathatsearch engines are there to reflect and reinforce dominant cultural narratives to harm the marginalized communities. Structured in six chapters, along with a separate introduction and conclusion,

Noblepresentssome casessuggestinghowGooglesearches,suchas"BlackGirls"or "Latina

Girls",gethypersexualized andderogatorycontent. Throughin-depthanalysis, sheexposes how

such results reflect the commodification of racialized bodies and contribute to the systemic erasure of positive and accurate representations of women of color. She also critiques the corporate logic that governs digital platforms, arguing that prioritization of profit over ethical considerationsresultsinalgorithmicdiscrimination.Usingamixedmethodologyconsistingof qualitative content analysis, case studies, interviews, and critical discourse analysis, Noble

examines various episodes where Google's algorithmic recommendations had real-world consequences, including examples of misinformation and harm during events like the 2015 Charleston church shooting. The book brings striking examples, such as Google search results for "Black girls" and autocomplete suggestions linked to racial slurs. She presents these not as isolated incidents, but as systemic failures rooted in data capitalism and the profit-driven logic that underlies algorithmic design. Her critical perspectives build on scholars like Patricia Hill Collins, Kimberlé Crenshaw, and Lisa Nakamura, integrating sociotechnical systems analysis with a deep commitment to social justice. She explores how traditional institutions like libraries once served as curators of knowledge, contrasting them with today's algorithm-driven platforms that lack accountability, editorial responsibility, orpublicoversight. Noble also engages with the role of advertising revenue and keyword auctions in shaping search outputs, showing how companies like Google monetize stereotypes through their algorithms. By revealing how commercial imperatives override democratic values, Noble makes a case for stronger public policy, regulatory frameworks, and alternative technological infrastructures that prioritizeequity and human rights. She concludes that in a world increasingly governed by opaque technologies, criticalinformationliteracyandalgorithmicaccountabilityareessentialto resistthereproduction of systemic inequalities. Her work seems as both a diagnostic tool and a call to action, urging scholars, technologists, and policymakers to interrogate the ethical implications of algorithmic

decision-making and to demand transparency and justice in digital systems. In a few words, Noble's book repositions algorithmic design as a political and cultural act, underscoring the urgentneedtounderstandhowtechnicalsystemscanentrenchexistingsocialhierarchiesand contribute to further marginalization of already oppressed groups.

Each of these three books, *Algorithms of Oppression* by Safiya Umoja Noble, *Data Feminism* by Catherine D'Ignazio and Lauren F. Kleise, and *Race After Technology* by Ruha Benjamin, provides a strong and compelling critique of the systems of knowledge, politics, and society that shape contemporary digital technologies. Although these books differ in method, scope,andideologicalemphasis,theyallchallengethecommonbeliefthattechnologyisneutral, progressive, and helpful to everyone. While comparing these three books, it is not only that they focus on the shared belief that algorithms can cause harm, but also collectively advocate for a radical reframing of technology as a site of

struggle over meaning, power, and justice. To fully grasp what the authors focus on in these books, it's important to excavate their methodological foundations, and the degree to which they imagine viable alternatives to the status quo.

Astrong aspectofallthreebooksis theircorecritiqueofthemyth of algorithmic objectivityorneutrality.Nobel's*AlgorithmsofOppression*particularlystandsstronginthis regard. Drawing from Black feminist thought and information science, Noble argues that "algorithmic operation is not just a glitch in the system but, rather, is fundamental to the operating system of the web" (9). According to her, the impact on user is sever. Further, she underscores the convergence of racial capitalism and information infrastructures by centering corporatelogicsandcapitalistmotivations.Hercritiqueismosteffectivewhenshehistoricizes digital media within a longer lineage of oppressive knowledge systems, such as library classification schemes and academic canons that marginalized Black and Brown voices.

Similarly,D'IgnazioandKlein's*DataFeminism*alsomakesaparallelintervention,thoughit does so through a more explicitly epistemological approach, focusing on how knowledge is shaped and whose voices are centered. Their core aspect of their argument is that the data scienceisneverneutral,whichissupportedbyathoughtfuluseoffeministstandpointtheory, especially the ideas of Sandra Harding and Donna Haraway. Haraway's idea of 'situated knowledges', which challenges the illusion of neutral, all-knowing objectivity, is a key influence inthiswork.Theauthorsreanimatethisideatolifebycallingforakindofdatasciencethatpays attention to context and values people's lived experiences, feelings, and knowledge from communities. In so doing, they extend Haraway's challenge to masculinist epistemologies into the realm of algorithmic design. In addition, Ruha Benjamin's *Race After Technology* also challengestheliberalideaofneutralityby introducingtheterm'NewJimCode'—aconceptthat combines Michelle Alexander's 'New Jim Crow' with the influence of algorithms on social control.Benjamin'sargumentstatesthatcodedinequalityiseasiertopresentasprogressbecause it is hidden behind complex technology and the appearance of good intentions. Her analysis of facial recognition systems, predictive policing, and healthcare algorithms demonstrates thatracial harm is often masked by the rhetoric of efficiency and fairness. In this way, three authors are focused on showing that digital systems are not neutral. They work to reveal how these systems reflect certain beliefs and power structures, and how they shape what we think of as truth or knowledge.

Whilethebookssharesimilarargumentsaboutthepoliticsbehindthetechnology,they use different methods, and these differences help bring out new and valuable ideas. Noble employsaqualitative,criticalcasestudyapproachgroundedinmediaandinformationstudies. Her method involves close readings of search engine outputs contextualized within larger sociopoliticalstructures.Thisallowshertoilluminatehowplatformslike Google reproduce dominant ideologies under the guise of algorithmic curation. However, one limitation of Noble's approachisitsrelativelynarrowempiricalfocus;byconcentratingheavilyonsearchengines,she sometimes underplays how other algorithmic systems (e.g., social media algorithms, biometric data processing) function in different modalities of harm. In contrast, *Data Feminism* adopts a broader methodological toolkit that is both interdisciplinary and praxis-oriented. D'Ignazio and Klein blend feminist theory, participatory design, and data visualization with a commitment to community-based knowledge production. Their use of "design justice" frameworks, as explained by Sasha Costanza-Chock, makes their critique more practical, especially in areas like civic tech and public data projects. Costanza-Chock argues that design justice "explicitly rethinks design processes to center marginalized communities" and challenges the assumption that technology is inherentlyneutral(6).Thisperspectivemakes*DataFeminism*moreusefulforreal-worldchange, but the book is sometimes a bit too hopeful. It suggests that small reforms within current data science systems might be enough to fix deeper problems. However, this view can overlook how hard it really is to change the system at its core, a challenge the authors recognize, but don't completely address. On the other hand, Benjamin's style seems more sort of synthetic. She applies the combination ofhistorical analysis, critical racetheory, and ethnographic observations to show how "technological benevolence" often hides harmful effects that are deeply rooted in race. The strongest part of Benjamin is her clear and creative way of explaining complex ideas.

Termslike"theNewJimCode,""techno-benevolence,"and"discriminatorydesign"helpher explore the influence of algorithms without relying too much on technical language. Her abolitionistperspectivekeepsherdifferentfromtheothers.WhileNobleandD'Ignazioand Kleinpushforreformandaccountability,Benjamincallsfortearingdownprison-likesystems, both digital and non-

digital, and building new, freeing alternatives.

Thebookscollectivelychallengethenotionthattechnologicalinequitiescanberesolved simply by refining algorithms or diversifying design teams. Ruha Benjamin is particularly incisive in critiquing this belief, arguing that placing marginalized individuals within fundamentally racist systems does little to address their underlying structures. As she notes, "many diversity initiatives offer little more than cosmetic change," concealing systemic injustices rather than dismantling them (67). Drawing on Simone Browne's *Dark Matters*, Benjamin stresses how technologies of surveillance were not just deployed in racist ways but were conceived with anti-Blackness at their core, from slave patrols to modern predictive policing. This historical continuity reveals that racism is not an accidental byproduct of

technological systems but a foundational element. Accordingly, Benjamin's abolitionist frameworkrejectsreformiststrategiessuchasdiversityquotasorminoralgorithmictweaks. Instead, shecalls fora radical reimagining oftechnology, one that confronts and uproots its embedded racial hierarchies rather than merely diversifying its operation.

D'Ignazio and Klein take a more mixed or uncertain position. While they push to challengetraditionalwaysofdoingdatascience,theyalsoengagedeeplywithinstitutionalactors and academic communities. This shows a struggle between criticizing the system and still being part of it. Can you change unfair tools without keeping the unfair system? D'Ignazio and Klein

see"datafeminism"asbothawaytoquestionpowerandamethodforchange.Theybelievein slow, step-by-step progress and working together with others. While this approach is practical and realistic, it may not go as far as the bold changes that scholars like Ruha Benjamin and Simone Browne call for.

Ontheotherhand,SafiyaUmojaNoblefocuseshercritiqueonthecorporatelogics driving what she calls the "algorithmic oppression" of marginalized groups. Drawing on ShoshanaZuboff's conceptof"surveillancecapitalism,"Noblearguesthat search engines,

especiallyGoogle,donotoperateasneutraltoolsbutasprofit-drivensystemsthatreinforce existingracialandgenderhierarchies.Sherevealshowsearchesfortermslike"Blackgirls"

produce dehumanizing and hypersexualized results, stating, "Algorithms are not objective, and they are not just technical—they are loaded with power" (Noble 5). She exposes how digital platforms commodify identity, turning women of color into clickable content while masking systemic bias behind claims of algorithmic neutrality. Although she proposes public policy interventionsandgreateroversightaspossibleresponses,herfocusoninstitutionalsolutionsmay not go far enough. As she notes, "Corporate-controlled information platforms are shaping

knowledge in ways that are neither democratic nor accountable" (27). While such reforms are necessary,theyriskoverlookingthedeeperpoliticalandsocialstructuresthatenablealgorithmic harm. Compared to the more radical calls for abolition and systemic redesign advanced by

thinkerslikeRuhaBenjaminoreventhecriticalinterventionsbyD'IgnazioandKlein,Noble's solutions may appear cautious or limited in scope.

Although they take different approaches, Noble, D'Ignazio and Klein, and Benjamin all seektoenvisionwhatfairandjusttechnologicalsystemscouldlooklike.Nobleadvocatesforthe creation of public-interest platforms that serve democratic values instead of corporate profit, arguing that technology should be governed by principles of equity and accountability.

D'Ignazio and Klein propose a framework of data feminism grounded in participation, transparency, and community control, aiming to shift power within data science toward those mostaffectedbyitsoutcomes.Meanwhile,Benjaminpushesbeyondreformistsolutions,arguing

thattruejusticerequiresanabolitionistapproach—onethatdismantlesoppressivetechnological systems entirely and nurtures new forms of social life based on care, collective responsibility, and mutual aid. Together, their visions offer overlapping yet distinct pathways toward reimaginingtechnologyasatoolforjusticerather thanoppression.However,whileeachauthor offers powerful ethical and conceptual frameworks, they stop short of fully theorizing the material conditions required for transformation. What types of labor, institutions, and global political movements are needed to sustain such justice-driven tech practices? How do these frameworks respond to global asymmetries, especially those affecting the Global South? These unresolved questions suggest the need for broader interdisciplinary engagement across political economy, development studies, and global STS.

Each of these books makes significant contribution to a range of interdisciplinary academic fields, including Science and Technology Studies (STS), Feminist Theory, Critical Race Studies, and Critical Data Studies. Despite they have distinct approaches, they, together, stress a shared belief: digital technologies are not neutral, and they deeply embedded socio- technical systems shaped by human desires or intentions, institutional settings, and social and historical factors. Their arguments challenge the myth associated with the technology about its neutrality and objectivity, drawing attention to how systems of power and oppression are built into the very

codes and structures of digital tools. To fully understand the importance of their contributions, it is important to position these three books within the larger academic conversations they interact with, conversations they not only engage but also challenge and broaden.Thesediscussionsincreasinglyemphasizethattechnologymustbeviewednotjustasa technical tool but as apolitical and ethical project shaped by social values, power dynamics, and historical contexts.

In one way to another, the three books follow the STS tradition as their foundational context to argue that technology is socially constructed and carries the same social biases to reinforce the existing social discrimination through the digital tools. As Langdon Winner, a politicaltheoristfocusedonsocialandpoliticalissuesofmoderntechnologiesarenotneutral tools but political artifacts that embed and reinforce power structures, "technical things have
political qualities… they can embody specific forms of power and authority (121). These critical frameworksalignstronglywithNobel's*AlgorithmofOppression,*whichcritiquessearchengines areracializedtoolsthatreproducediscrimination.NobleseemstoexpandonWinner'sargument, showing how digital infrastructures "encode and reinforce dominant ideologies" (Noble 85), particularly through the political economy of algorithms. By showing how technologies perpetuate existing power structures, these works emphasize STS's main concern that technological development is never neutral, but is always shaped by, and entangled with, preexisting systems of power and oppression.
BuildingontheSTStraditionthatviewstechnologyassociallyconstructed,Ruha Benjamin extends this perspective by focusing on its intersection with racial justice. She
introduces the concept of the "New Jim Code" to illustrate how modern technologies do not merelyreflectexistingsocialbiasesbutactivelyreproduceanddeepenracialinequalitiesthrough digital systems. To critically analyze this phenomenon, Benjamin combines insights from STS and Critical Race Theory in what she calls "race critical code studies." This interdisciplinary framework exposes how racism influences both access to technology and the underlying logicsof its design and implementation. As Benjamin explains, this approach enables us to "open the Black box ofcoded inequity,"adapting the STS metaphorof the "Black box"to reveal theoften- invisible mechanisms through which race and power are encoded into technological systems

(36).ThisalignswithSimoneBrowne'sconcernsofsurveillancetechnologiesthathavelong
been used to define, regulate, and policeBlack life. Brownewritesthat "surveillanceis nothing new to Black folks. It is the fact of antiblackness," linking today's algorithmic monitoring to historical practices like slave patrols, biometric tracking, and stop-and-frisk policing (Browne 10).ThisshowsBenjaminactivelycontributesandexpandstheongoingdialoguebetweenSTS, Critical Race Theory, and other social justice frameworks concerned with the politics of technological design and use.
Data Feminism, in particular, draws extensively from feminist theory to question and reframedominantepistemologiesindatascience.CatherineD'IgnazioandLaurenKleinanchor their work in feminist standpoint theory, drawing contributions from scholars like Donna
Haraway. Harding'sconcept of "strong objectivity"iscentral to their argument. Shedescribes it asamethodologicalapproachthat"drawsonfeministstandpointepistemologytoprovideakind of logic of discovery for maximizing our ability to block 'might makes right' in the sciences" (Harding 331). This concept emphasizes that all knowledge is partial and that marginalized perspectivesarecrucialformorerigorousandequitableknowledgeproduction.Buildingonthis, D'Ignazio and Klein argue that data science must actively engage with questions of power, privilege, and context. Similarly, Haraway's notion of "situated knowledges" plays akey rolein their framework. By asserting that "the only way to find a larger vision is to be somewhere in
particular," Haraway challenges the idea of universal objectivity and emphasizes the importance ofacknowledgingthepositionalityoftheknower(590).D'Ignazioand Kleinadoptthisstanceto advocate for the inclusion of emotional, embodied, and lived experiences in data work, thus promotingamoreinclusiveandsociallyresponsibleapproachtoknowledge-making.Inaddition, it continues a legacy of feminist activism that connects theory with practice, drawing on Kimberlé Crenshaw's theory of intersectionality to show that data injustice must be understood throughoverlappingsystemsofoppression,includingrace,gender,andclass.Theyalsobuildon Patricia Hill Collins's idea of the "matrix of domination" to reveal how power functions within
systemsthatappearneutral.Ratherthansimplycriticizingcurrentdatapractices,D'Ignazioand Klein offer new, justice-centered ways of thinking about and using data.
Thebooksmakeimportantcontributionstothegrowingfieldofcriticaldatastudies,
whichexaminesthesocial,cultural,andpolitical areasofdatafication.Scholarsinthisfield reject the common belief that data brings better results. Shoshana Zuboff's analysis of
surveillancecapitalismemphasizesthiscritiquestating"unilateralclaimingofprivatehuman experience as free raw

material", in which corporate entities not only monitor but also shape behavious (94). Nobel's analysisof Googlesalgorithmsreinforcesthisperspective: "When a company can determine what knowledge is legitimate and what is not, it exerts enormous
influenceoverculture,politics,andeconomics"(Noble32).Similarly,BenjaminandD'Ignazio and Klein state similar perspectives about the danger of algorithmic governance. While Noble critiques search engines as sites ofracial and gender bias, *Data Feminism* expands this analysis to examine how data is collected, interpreted, and used across various systems. In parallel, Benjamin investigates the role of technologies like biometric surveillance, predictive policing, and risk assessment tools, revealing how these systems reinforce and amplify structural inequalities.
These three texts reveal how algorithmic systems have increasingly stepped into public lifewithnotransparency ordemocraticcontrol.Theychallengemainstream techethicsthatoften reducebiastoatechnicalflaw.Instead,theyarguethatbiasisbuiltintosystemsshapedbyracist, sexist, and capitalist logics. Wendy Hui Kyong Chun's *Discriminating Data* adds depth to this critiquebyquestioningdominantnotionsoffairness.Shenotes,"Whatcountsasdiscrimination and what doesn't often depend on who gets to define fairness" (Chun 145), a claim that aligns withBenjamin'swarningabout"techno-benevolence",superficial effortstofixAIbiasthatfail to challenge structural inequalities. These works advocate for a more justice-centered approach to understanding data systems and the significant power they hold.
One of the strongest aspects of the books is their interdisciplinary nature. They bridge computerscience,socialscience,mediastudies,andpoliticaltheory,contributingtoagrowing conversation on how digital technologies are studied and taught. Their accessible writing and activist orientation have also made them influential beyond academia, impacting policy,
journalism, and grassrootsorganizing. For example, D'Ignazio and Klein's work hasinformed data justice initiatives at the local and municipal levels, while Noble's analysis has shaped debatessurroundingsearchengineregulationandcontentmoderation.Similarly,Benjaminhas influenced abolitionist tech movements and education on race and digital literacy. The books also engage with global discussions about data colonialism and digital inequality. While their case studies primarily focus on the United States, the issues they address—algorithmic bias, surveillance,andsystemicinjustice—havefar-reachingglobalimplications.ScholarslikeLilly Irani have highlighted the exploitative labor practices underpinning global AI supply chains,
particularlyintheGlobal South,pointingouthowtechcompanies "outsourcethedirty workof labelingdatatoprecariousworkers"whilemaskingtheirlaborbehindnarrativesofautomation (Irani 15). D'Ignazio and Klein's call for feminist data practices acknowledges these global concerns,thoughmoreworkisneededtofullyincorporatetransnationalperspectivesintothese frameworks.

In conclusion, these three books challenge our common understanding that technology is a neutral force that simply makes life better. Through a close examination of the emerging technology and its functions, the authors powerfully contribute to the growing discourse on the hidden politics embedded within digital systems. Through different convincing case studies and the everyday experiences of marginalized communities, they reveal how technologies subtly perpetuate historical and sociopolitical inequalities. Despite their differing methods, each work urges a fundamental rethinking of how we design, implement, and govern technological infrastructures. Central to their collective argument is a call to shift our critical gaze from focusing solely on algorithmic outcomes to interrogating the deeper ideological, institutional, andepistemologicalstructuresthatshapethesesystems.Forinstance,SafiyaNobleexposeshow
searchenginesLikeGoogleperpetuatehypersexualizedanddehumanizingnarrativesaboutBlack girls, illustrating the racial and profit-driven foundations of information infrastructures.
Similarly, Catherine D'Ignazio and Lauren Klein critique mainstream data science for erasing emotion, labor, and context, and advocate for inclusive, participatory methods grounded in lived experience. Ruha Benjamin builds on historical analysis and critical race theory to demonstrate howdigitaltoolsoftenreinforceracialhierarchieswhileappearingneutralorbenevolent;hercall
forabolition,notmerereform,pushestheboundariesofcurrentdebates,demandingentirelynew
systemsrootedinjusticeandcare.Moreover, allthreetextsdrawuponfoundationalscholarslike Donna Haraway, Sandra Harding, and Simone Browne to broaden our understanding of critique in the digital age. Rather than simply documenting harms, they offer transformative frameworks, suchasdatajustice, abolitionistdesign,andparticipatoryepistemologies,thatenvisionliberatory alternatives. They challenge readers, designers, and policymakers to move beyond superficial notionsoffairnessandengageinsustained,intersectionalcritiqueofhowpower,knowledge,and infrastructure intersect. Lastly, they remind us that we cannot create fair technologies on top of unfair systems. Building a more just future requires more than technical fixes—it also needs strongethics,sharedvision,anddeepchangesinourinstitutions.Theirmessageisnotjustabout pointing out what's

wrong, but also about inspiring us to take action and create better systems from the ground up.

Works-cited

[1]. Benjamin,Ruha.*RaceAfterTechnology:AbolitionistToolsfortheNewJimCode*.Polity Press, 2019.
[2]. Browne,Simone.*DarkMatters:OntheSurveillanceofBlackness*.DukeUniversityPress, 2015.
[3]. Chun,WendyHuiKyong.*DiscriminatingData:Correlation,Neighborhoods,andtheNew Politics of Recognition*. MIT Press, 2021.
[4]. Costanza-Chock,Sasha.*DesignJustice:Community-LedPracticestoBuildtheWorldsWe Need*. MIT Press, 2020.
[5]. D'Ignazio, Catherine, and Lauren F. Klein. *Data Feminism*. MIT Press, 2020. Haraway,Donna."SituatedKnowledges:TheScienceQuestioninFeminismandthe PrivilegeofPartial Perspective."*Feminist Studies*,vol.14, no.3, 1988,pp. 575–599.
[6]. Harding,Sandra."'StrongObjectivity':AResponsetotheNewObjectivity Question." *Synthese*, vol. 104, no. 3, Sept. 1995, pp. 331–349.
[7]. *JSTOR*,www.jstor.org/stable/20117437.
[8]. Irani,Lilly.*ChasingInnovation:MakingEntrepreneurialCitizensinModernIndia*.PrincetonUniversityPress,2019.
[9]. Noble,SafiyaUmoja.*Algorithms ofOppression: HowSearch EnginesReinforce Racism*.NewYork UniversityPress,2018.
[10]. Thapa, Mahendra Bahadur. "Colonial Echoes in Gothic Shadows: Examining James's The Turn of the Screw." *THE ACADEMIA*, vol. 5, no. 1, 2025, pp. 102-113.
[11]. Thapa, Mahendra Bahadur. "Unveiling Displacement: Examining Refugee Suffering in Dave Eggers' *What is the What*". *Praxis International Journal of Social Science and Literature,* vol.7, no.11, 2024, pp.10-17
[12]. Winner,Langdon.*TheWhaleandtheReactor:ASearchforLimitsinanAgeofHigh Technology*. University of Chicago Press, 1986.
[13]. Zuboff,Shoshana.*TheAgeofSurveillanceCapitalism:TheFightforaHumanFutureat the New Frontier of Power*. PublicAffairs, 2019.