



Faculty of Design

2021

Designing Against Oppression: A conceptual framework for an anti-oppressive design praxis

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Suggested citation:

Jacobs, Jessica and Carey, Hillary (2021) Designing Against Oppression: A conceptual framework for an anti-oppressive design praxis. In: Proceedings of Relating Systems Thinking and Design (RSD10) 2021 Symposium, 2-6 Nov 2021, Delft, The Netherlands. Available at <http://openresearch.ocadu.ca/id/eprint/3846/>

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Designing against oppression



A conceptual framework for an anti-oppressive design praxis

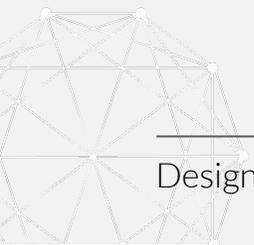
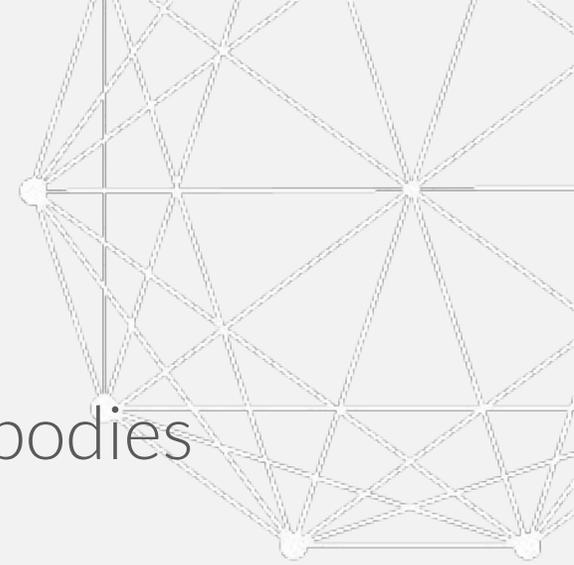
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Associate Professor of Design Management, Columbia College Chicago
Co-Director of Academic Diversity, Equity, and Inclusion, Columbia College Chicago
jjacobs11@id.iit.edu / jessicajmeharry@gmail.com / www.jessicameharry.com

Hillary Carey, PhD candidate, Carnegie Mellon University, USA
hac@andrew.cmu.edu / hillarydesres@gmail.com / www.hillarywinnow.medium.com

Land acknowledgement

Even though we are meeting in virtual space today, our bodies occupy traditional and unceded lands of native peoples.

We are on the ancestral, traditional, and contemporary Lands of the Anishinaabeg—Three Fires Confederacy of the Ojibwe, Odawa, and Potawatomi, as well as the Miami, Menominee, Ho-Chunk, Illinois, Sac and Fox nations.



My research

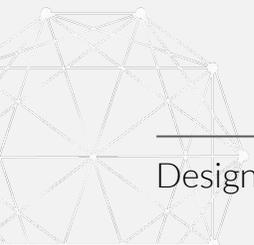
My research focuses on the ways in which design activities can function as mediators in the processes of designing for equitable outcomes and economies.

More specifically, I am looking at the design and development of information and communication technologies (ICTs).

How do I apply this to my work as a professional designer?

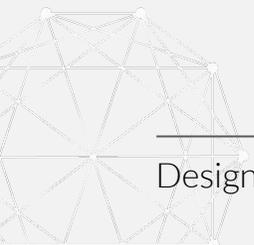
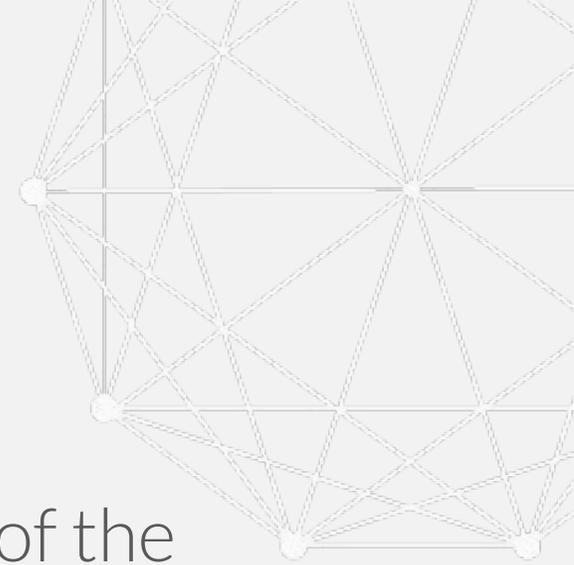
Anti-oppressive design praxis

a conceptual model intended to connect critical theories to professional practice in order to support designers taking action towards equitable outcomes in their daily design work



Positionality

“Positionality refers to the stance or positioning of the researcher in relation to the social and political context of the study—the community, the organization or the participant group” (Rowe, 2014).



Context

asymmetries of power

inequities of justice

biased outcomes

'Disastrous' lack of diversity in AI industry perpetuates bias, study finds

Report says an overwhelmingly white and male field has reached 'a moment of reckoning' over discriminatory systems

Racial bias in a medical algorithm favors white patients over sicker black patients

Google Mistakenly Tags Black People as 'Gorillas,' Showing Limits of Algorithms

MIT Researcher Exposing Bias in Facial Recognition Tech Triggers Amazon's Wrath

amazon go



NYC



RECENT

TRENDING !

GROUP HARASSING ELDERLY MAN AT TRAIN STATION

180 Canal St 100 ft

The group took the man's cane and are threatening to hit him.

GO LIVE

RITE AID ROBBERY WITH WEAPON

437 Herkimer St 100 ft

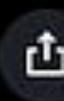
The robber threatened the store manager with a box cutter.



DETAILS

FIRE AT HISTORIC CATHEDRAL

180 Canal St 100 ft



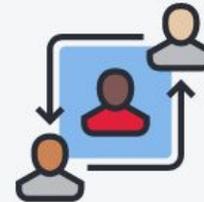
Identify needs



Interview at scale



Qualify candidates



Hire your star



How our video interview software works

THE FACEBOOK PAPERS

Facebook Wrestles With the Features It Used to Define Social Networking

Likes and shares made the social media site what it is. Now, company documents show, it's struggling to deal with their effects.



Illustration by Mel Haasch; Photography by Tom Brenner/The New York Times

“We also have compelling evidence that our core product mechanics, such as virality, recommendations, and optimizing for engagement, are a significant part of why these types of speech flourish on the platform.”

“If integrity takes a hands-off stance for these problems, whether for technical (precision) or philosophical reasons, then the net result is that Facebook, taken as a whole, will be actively (if not necessarily consciously) promoting these types of activities. The mechanics of our platform are not neutral.”

“When people were asked to recall an experience that induced negative social comparison on Instagram, they were likely to attribute that negative feeling to Like counts.”



<https://www.nytimes.com/2021/10/25/technology/facebook-like-share-buttons.html?searchResultPosition=1>



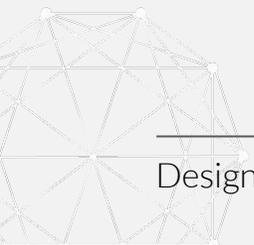
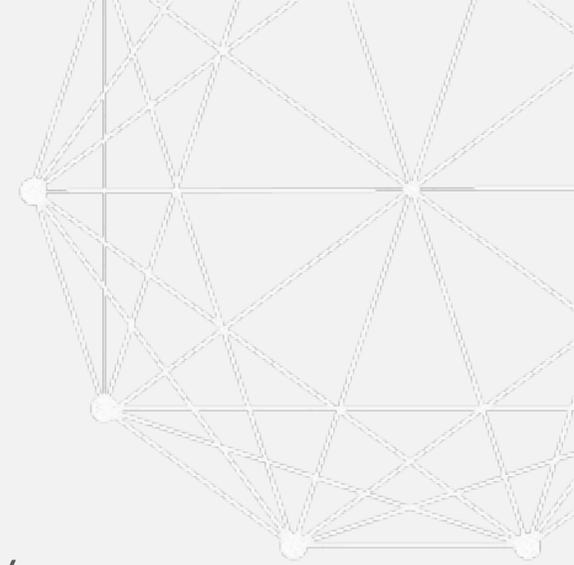
461



Asymmetries of power

Technological innovations in information and communication technologies (ICTs) are driven by algorithmic solutionism generate **asymmetries of knowledge and information**.

These **asymmetries of power** drive increasingly inequitable socioeconomic change.



Oppression

The systematic subjugation of one social group by a more powerful social group for the social, economic, and political benefit of the more powerful social group.

Racial Equity Tools. "Glossary • Racial Equity Tools," 2018. <https://www.racialequitytools.org/glossary>.

Justice

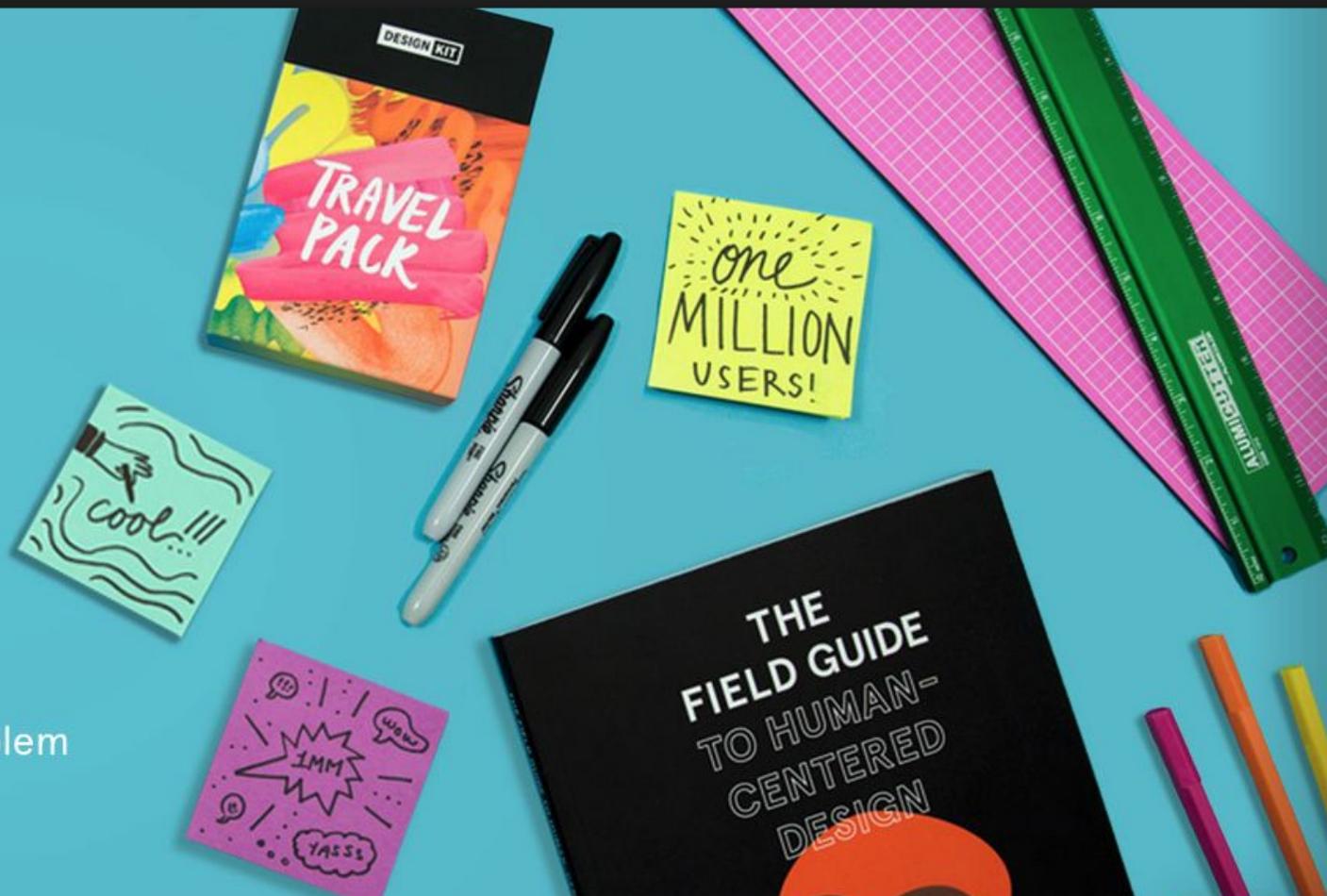
“Justice should refer not only to distribution, but also to the institutional conditions necessary for the development and exercise of individual capacities and collective communication and cooperation. Under this conception of justice, **injustice refers primarily to two forms of disabling constraints, oppression and domination.**”

Young, I. M. (2013). Five faces of oppression. In *The community development reader* (pp. 346–355). Routledge.

So what does this have to do with design?

1 Million Stories of Impact

Design Kit has reached over 1 million creative problem solvers around the world. Share your story of #DesignKitinAction



Humanity-Centered Design

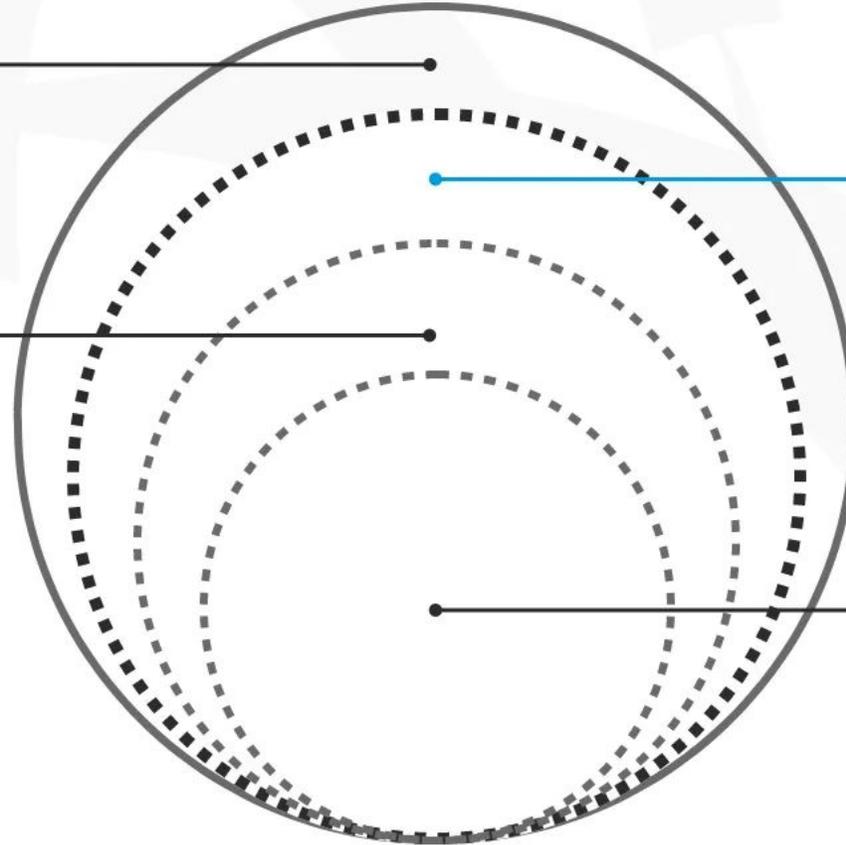


21st Century Design

Human-Centered Design

Humanity-Centered Design

People-Centered Design



The methodologies and methods of professional design practice fail to account for systemic oppression.

**neutral focus
on the user**

**material-
agnostic**

**passive
engagement**

The methodologies and methods of professional design practice fail to account for systemic oppression.

**neutral focus
on the user**

**systemic
context and
power relations**

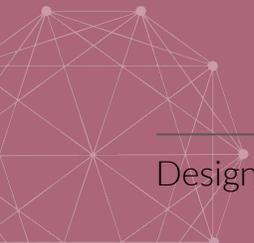
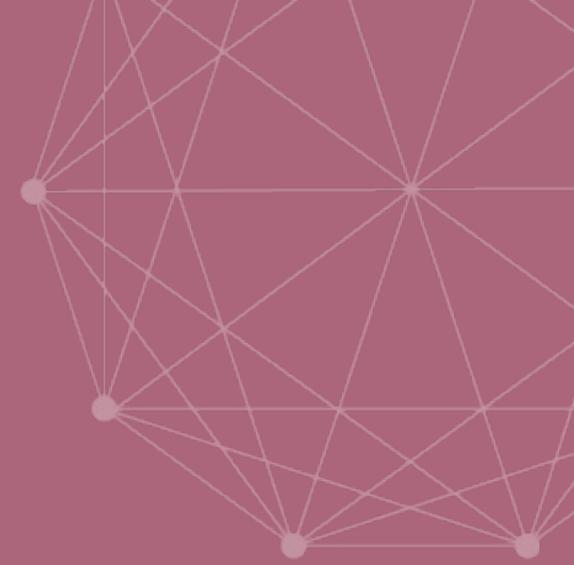
**material-
agnostic**

**algorithmic
materiality**

**passive
engagement**

**explicit
engagement
with oppression**

Theory for new directions



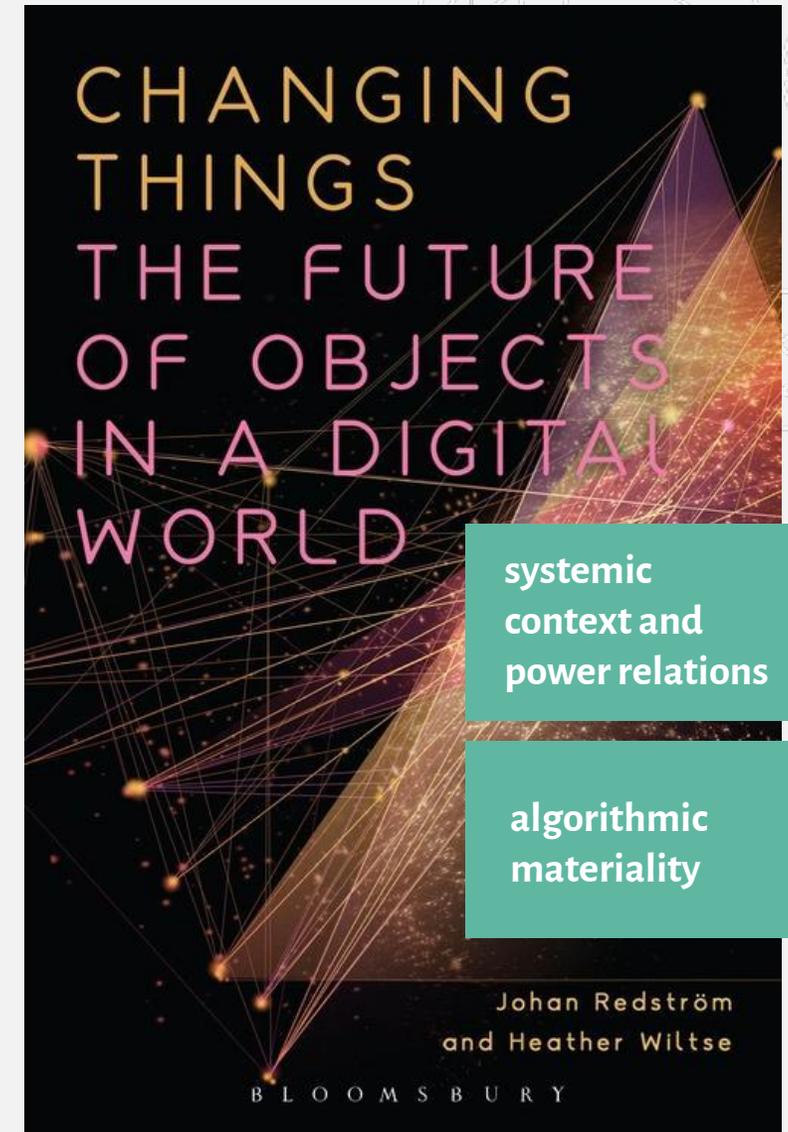
Sociotechnical assemblage

Experiential: How the human experiences the technology

Technical: Functions and features

Societal: Technology in context

Redström, Johan, and Heather Wiltse. *Changing Things: The Future of Objects in a Digital World*. Bloomsbury, 2019.



Affordance and disaffordance

Mechanisms

Request

Demand

Refuse

Allow

Encourage

Discourage

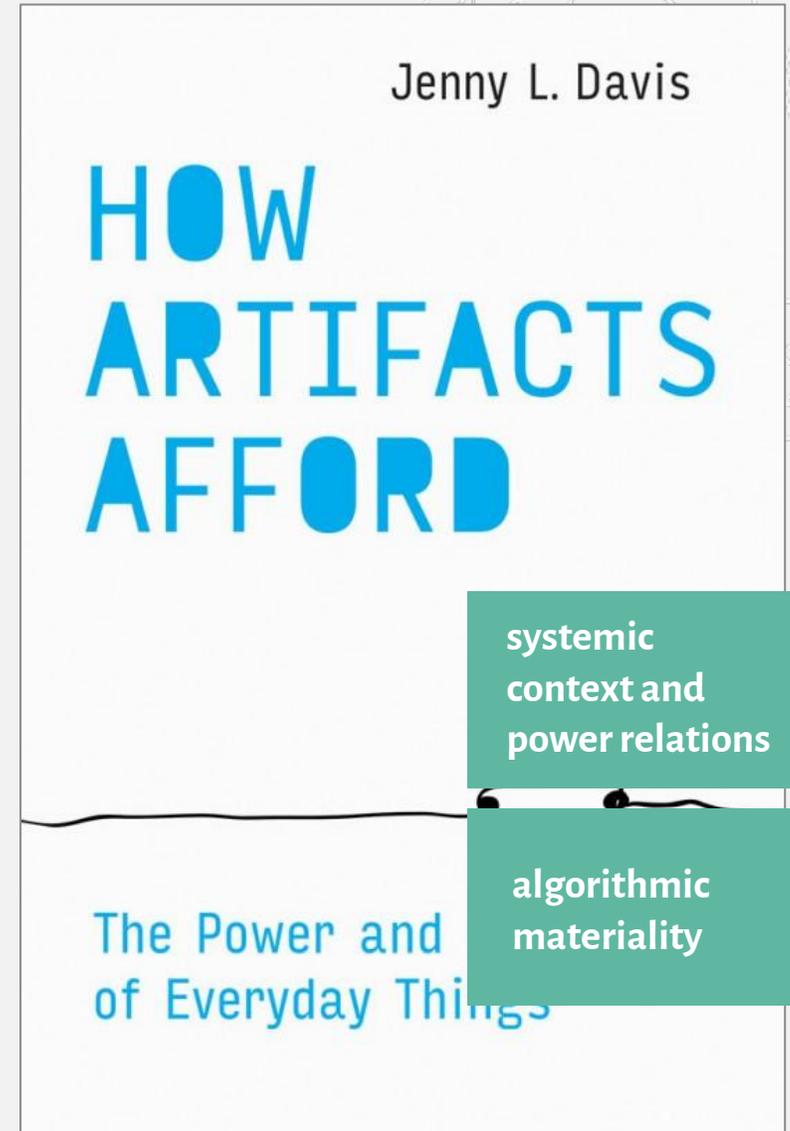
Conditions

Perception

Dexterity

Legitimacy

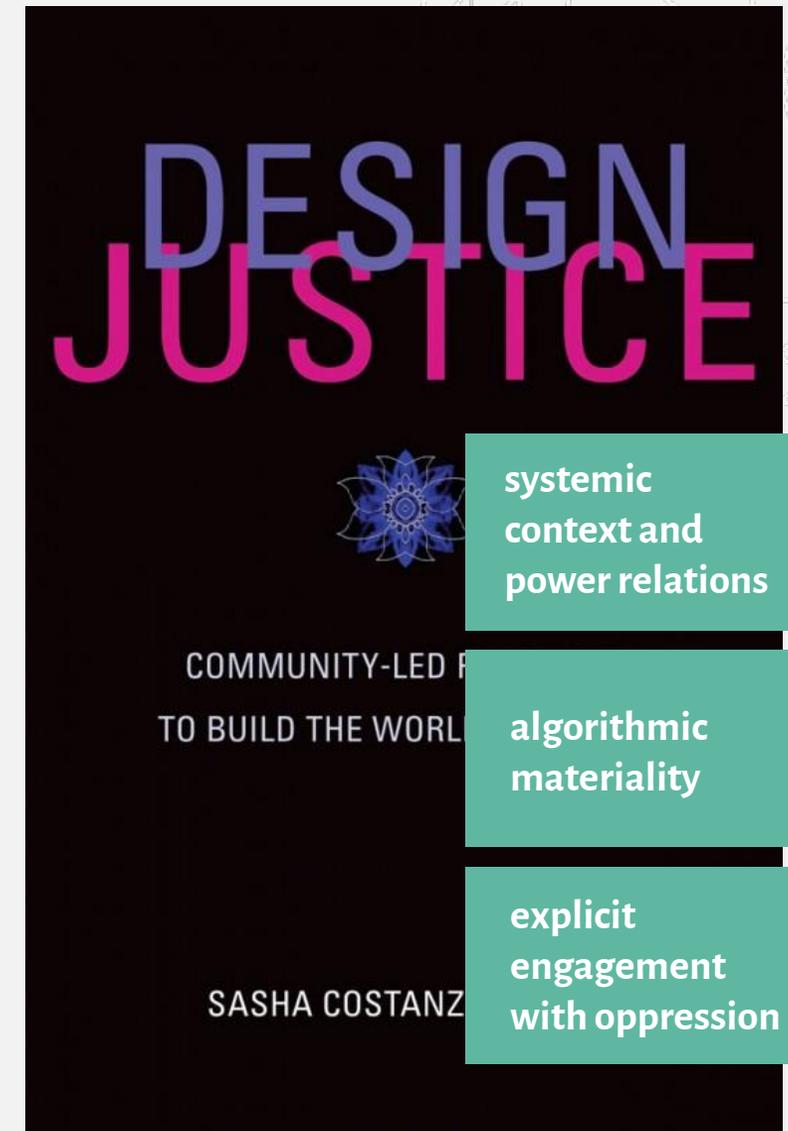
Davis, Jenny L. *How Artifacts Afford: The Power and Politics of Everyday Things*. MIT Press. 2020.



Design justice

“Design justice rethinks design processes, centers people who are normally marginalized by design, and uses collaborative, creative practices to address the deepest challenges our communities face.”

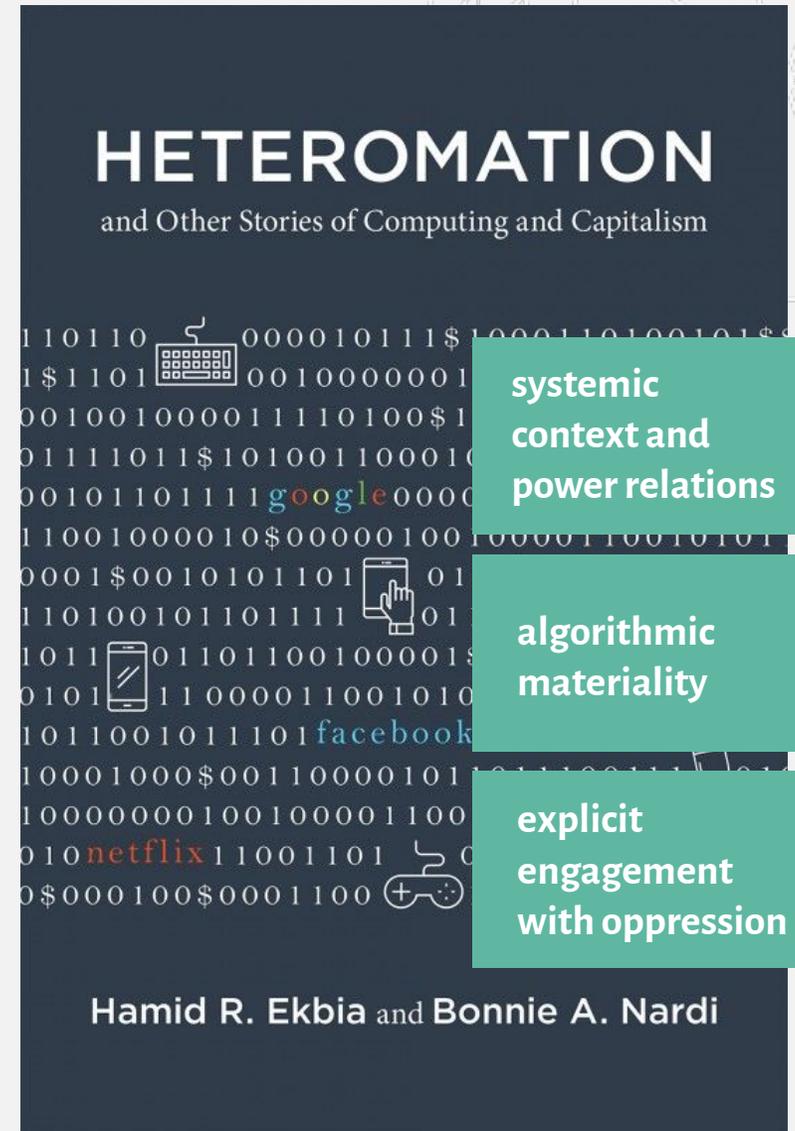
Costanza-Chock, Sasha. *Design Justice: Community-led Practices to Build the Worlds We Need*. MIT Press, 2020.



Political economy

“the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources”

Ekbia, Hamid R., and Bonnie A. Nardi. *Heteromation, and Other Stories of Computing and Capitalism*. MIT Press, 2017





How do these qualities, approaches, and principles get translated into methods and frameworks?

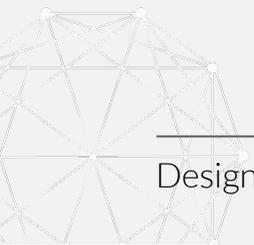
Research questions



How might we use a justice lens to expand existing design methods to include systemic oppression?

How might this expansion lead to more consideration of ethics and bias in design methodologies (and eventually more equitable outcomes of design processes and practices)?

What would happen if, rather than needs and desires, we focus on: control, agency, and power (as a means to understand social justice issues of transparency, autonomy, accessibility, etc.)?



Hypothesis

Transforming existing contextually-rich methods and tools to increase the salience of systemic oppression will assist designers in identifying potential for bias and making design decisions that lead to more equitable outcomes for users.

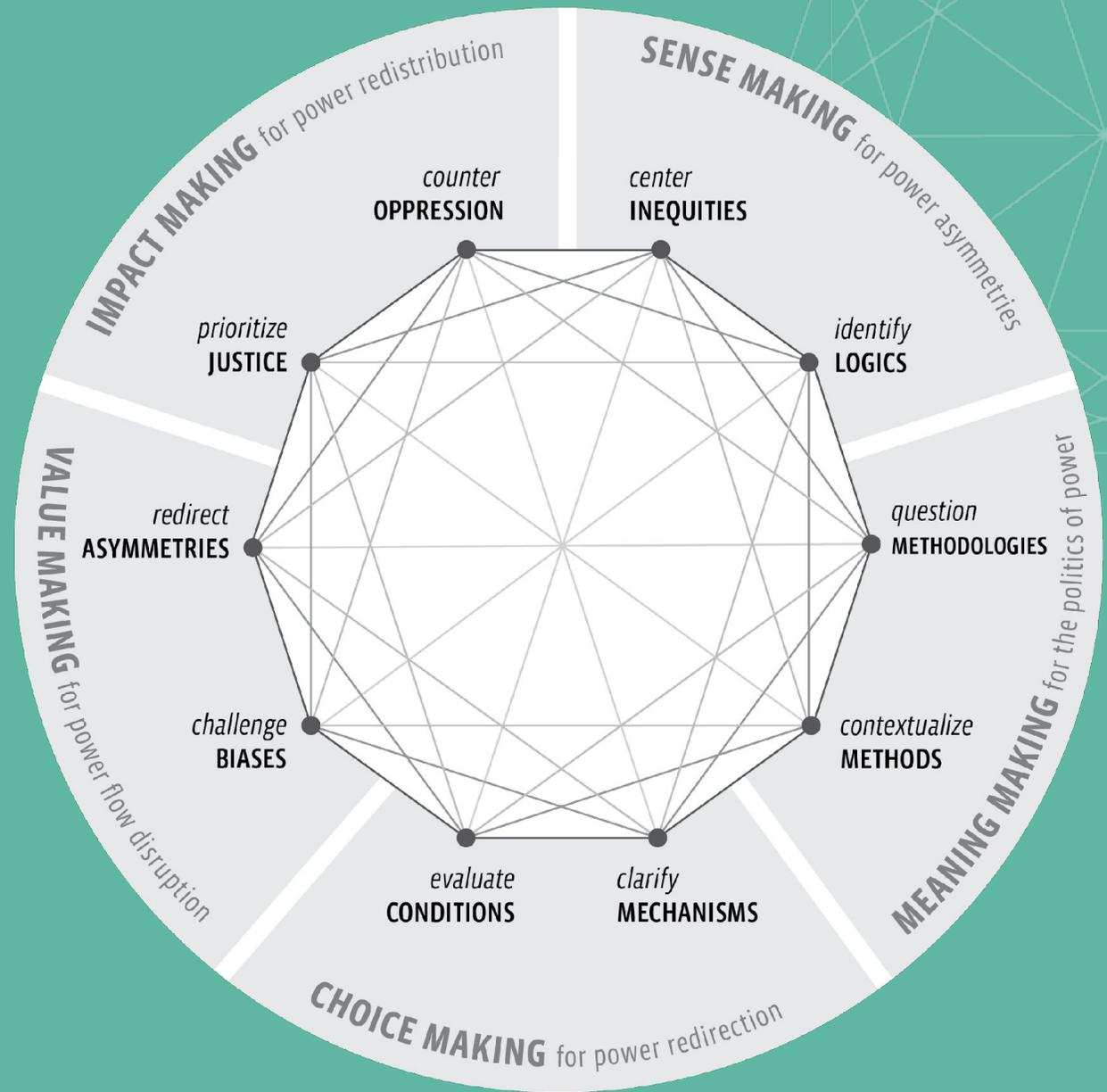
Praxis

translating theory to practice

“reflection and action directed at the structures to be transformed” (Freire)

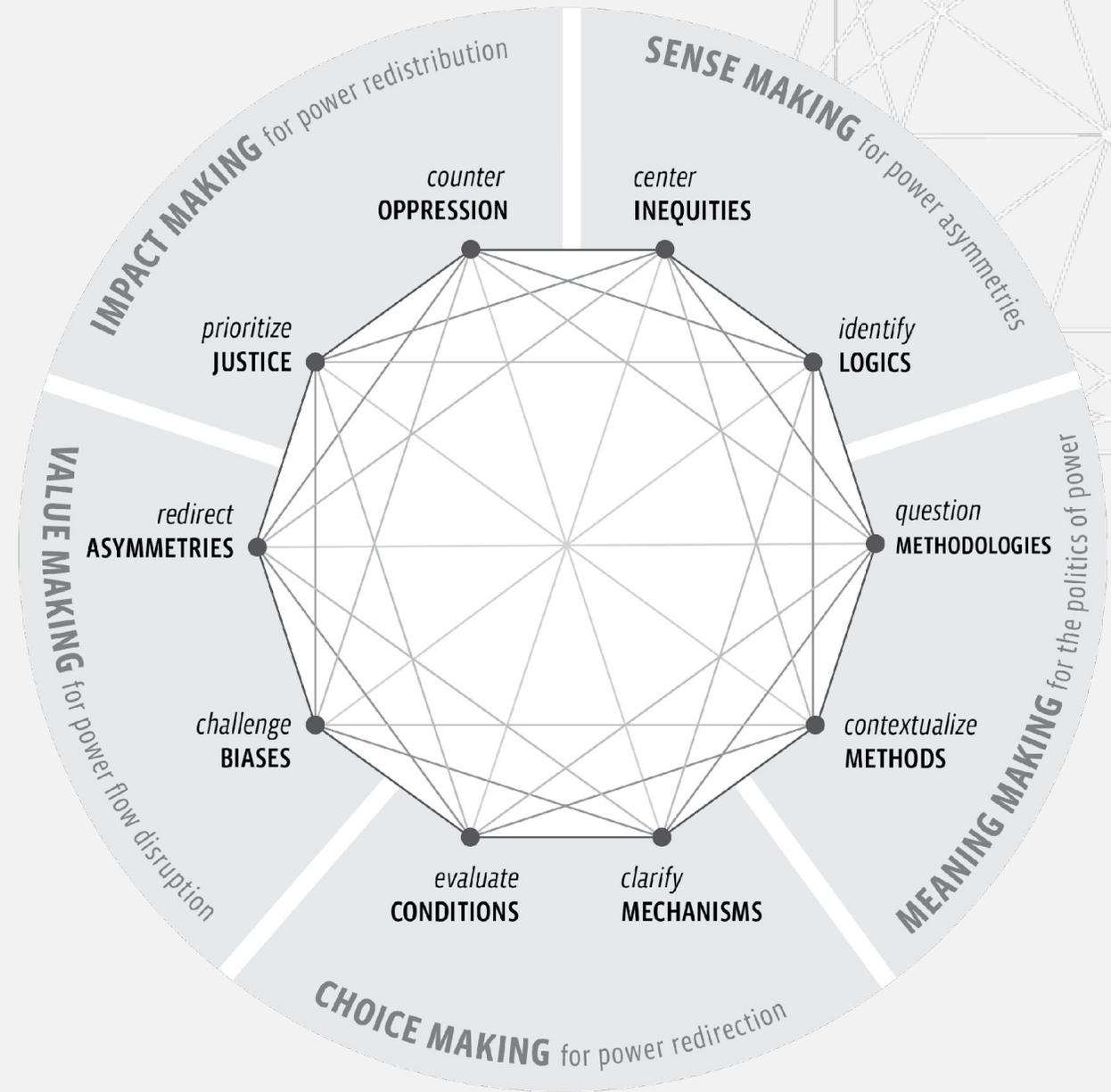
Anti-oppressive design framework

Constellating anti-oppressive design activities



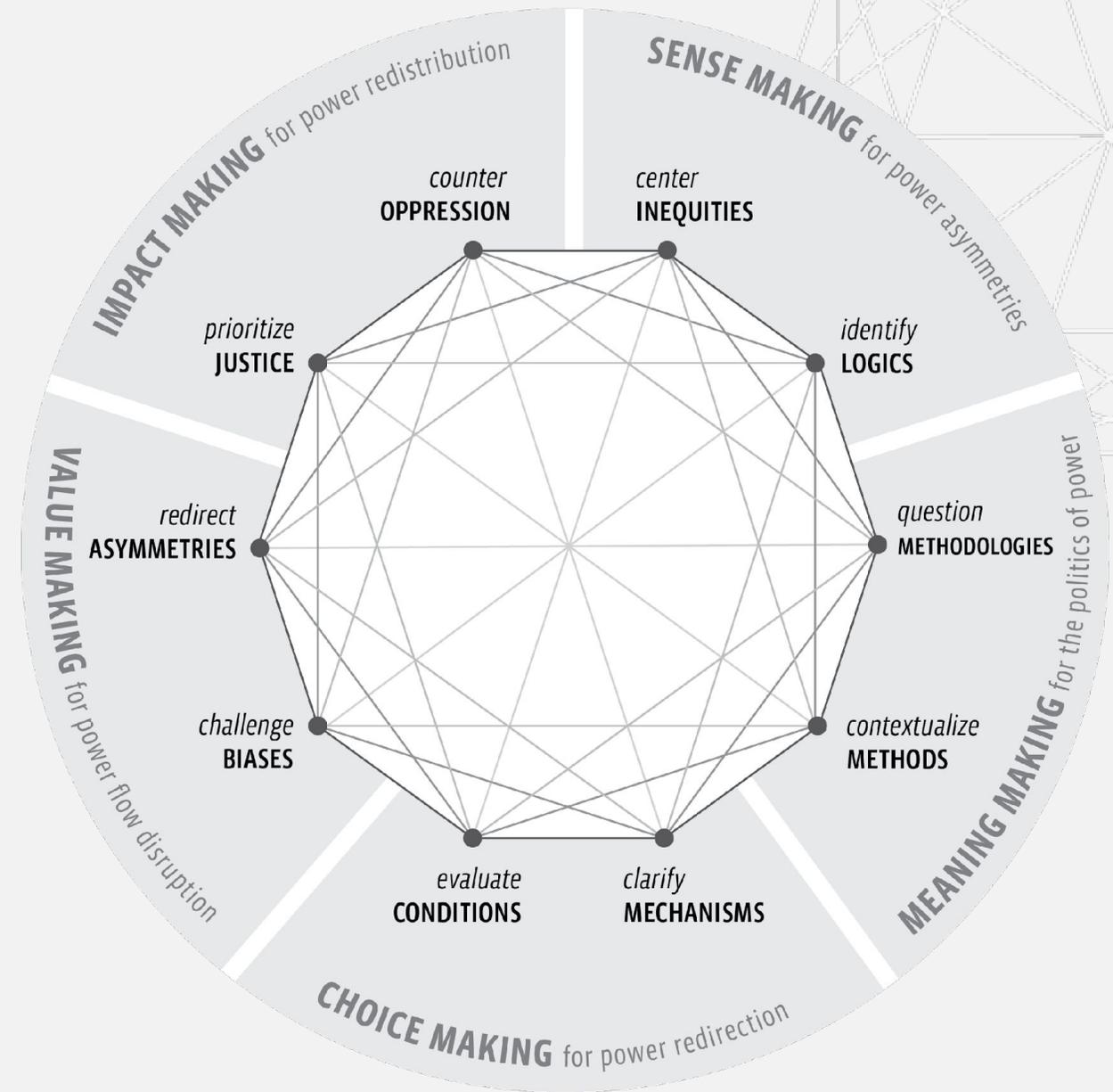
Criteria for the model

Relevant
Tangible
Adaptable
Non-hierarchical



Nodes of activity

SENSE making
MEANING making
CHOICE making
VALUE making
IMPACT making

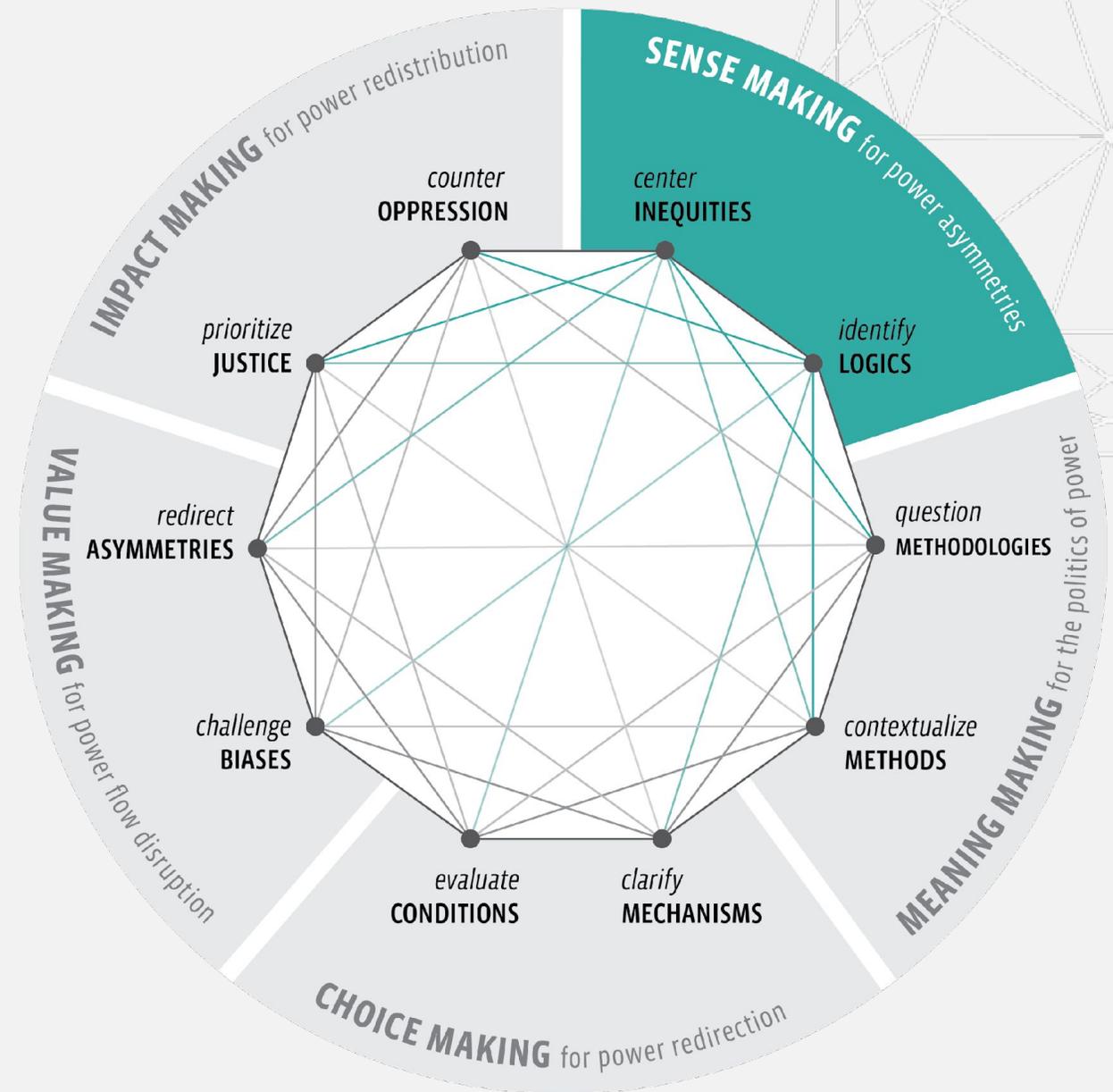


SENSE making

Develop an orientation
toward power
asymmetries

center INEQUITIES

identify LOGICS



SYSTEMIC INEQUITIES

knowledge of reasons to seek care

income inequality

access to healthy food

previous discriminatory treatment

lack of employment

access to transportation

Lack of healthcare provider time

housing conditions

access to childcare

Consistency of healthcare provider

occupational conditions

caregiving responsibilities

Lack of quality of care

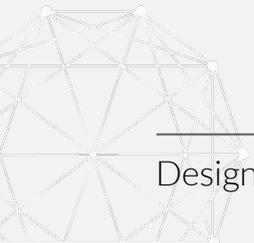
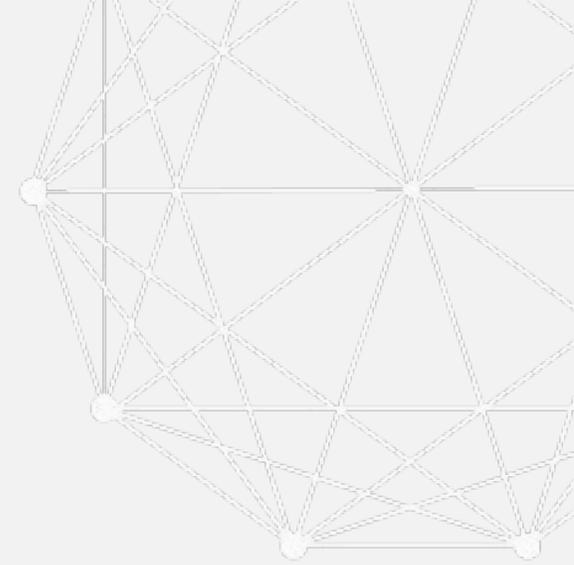
pollution exposure

lack of support network

lack of insurance

long-term stress

education differences



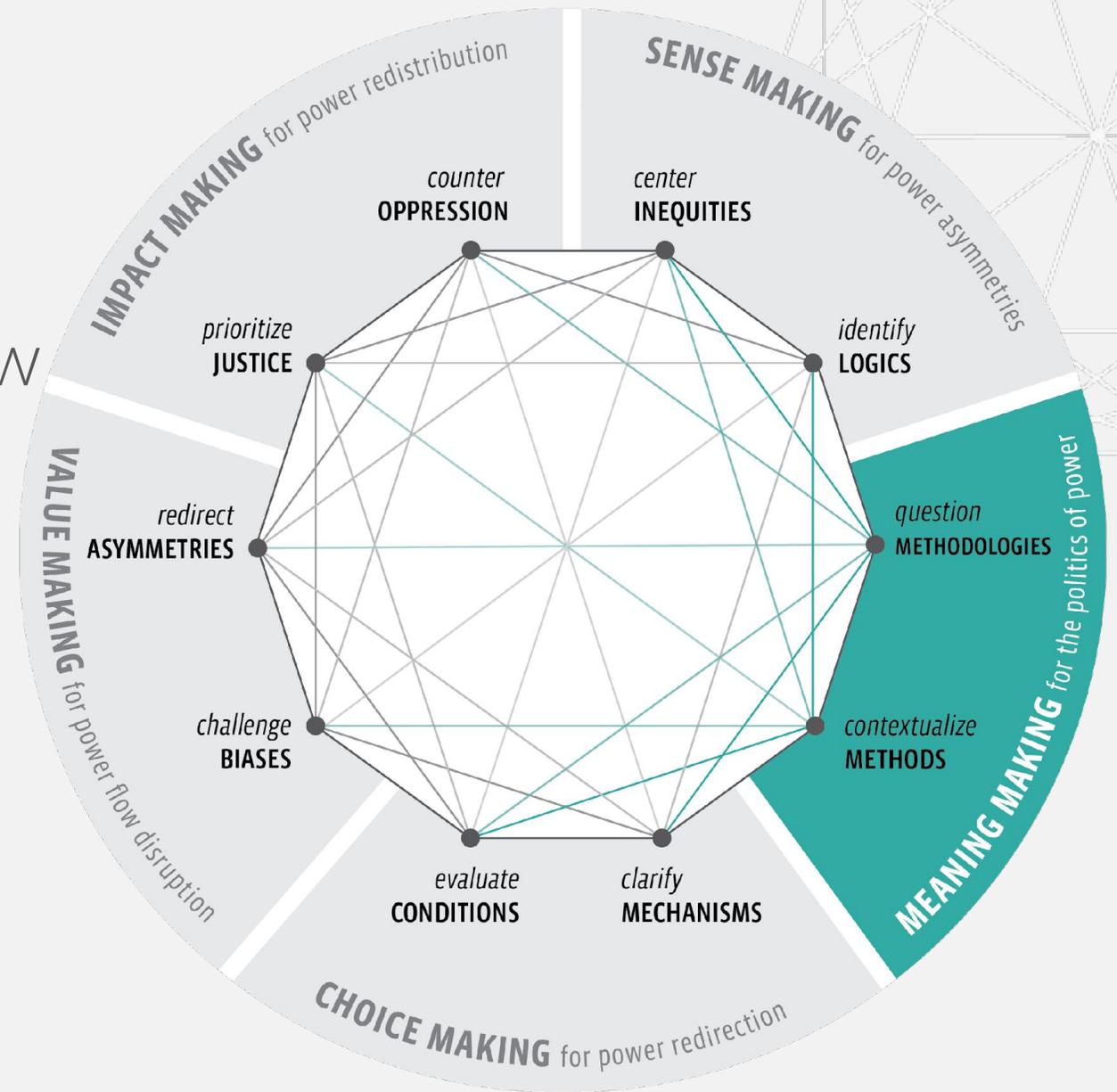
MEANING making

Take responsibility for how
position determines
politics and power

question

METHODOLOGIES

contextualize METHODS

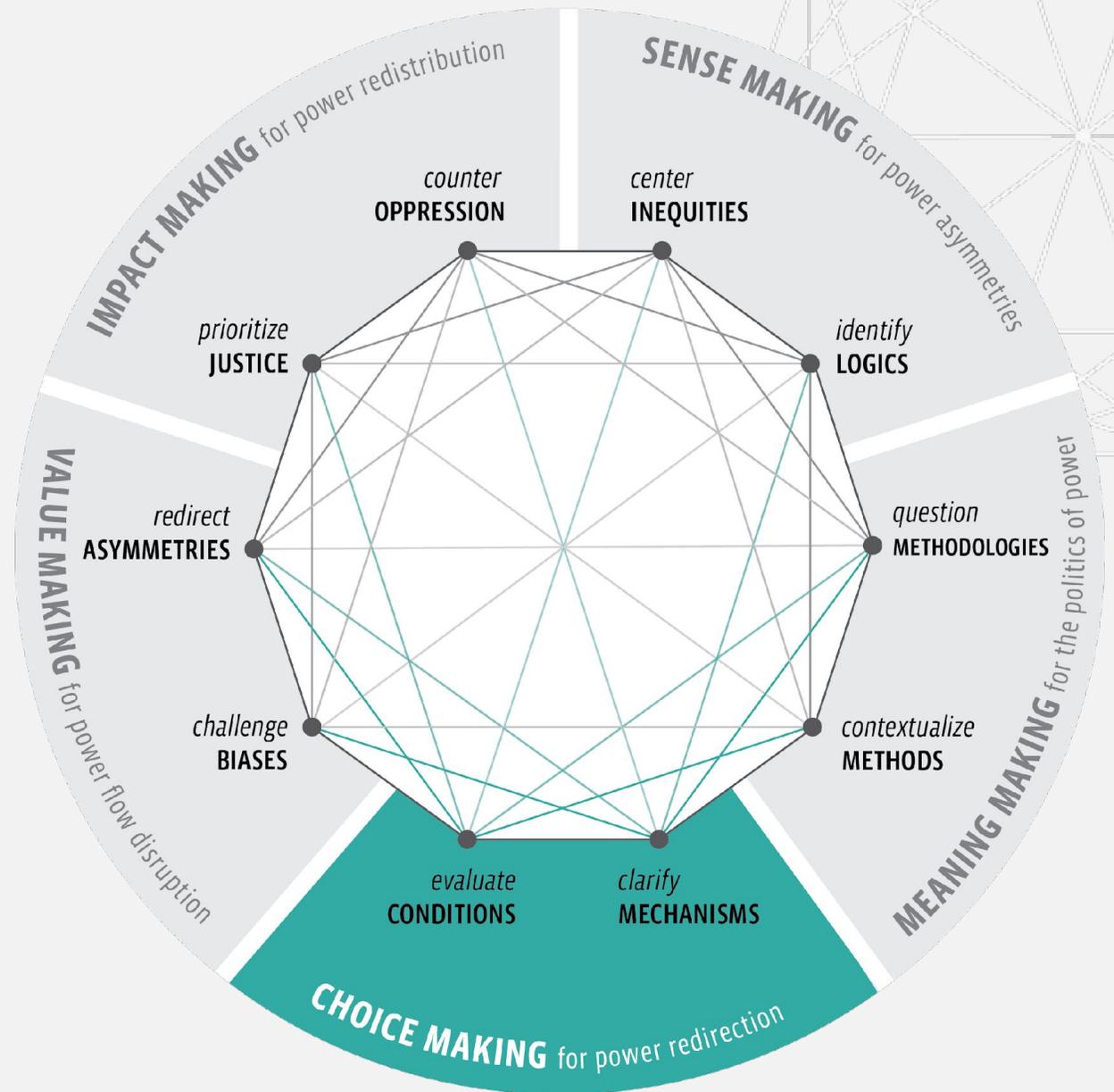


CHOICE making

Lead with an intention to
redirect power

clarify MECHANISMS

evaluate CONDITIONS



MECHANISMS

request

refuse

encourage

demand

allow

discourage

CONDITIONS

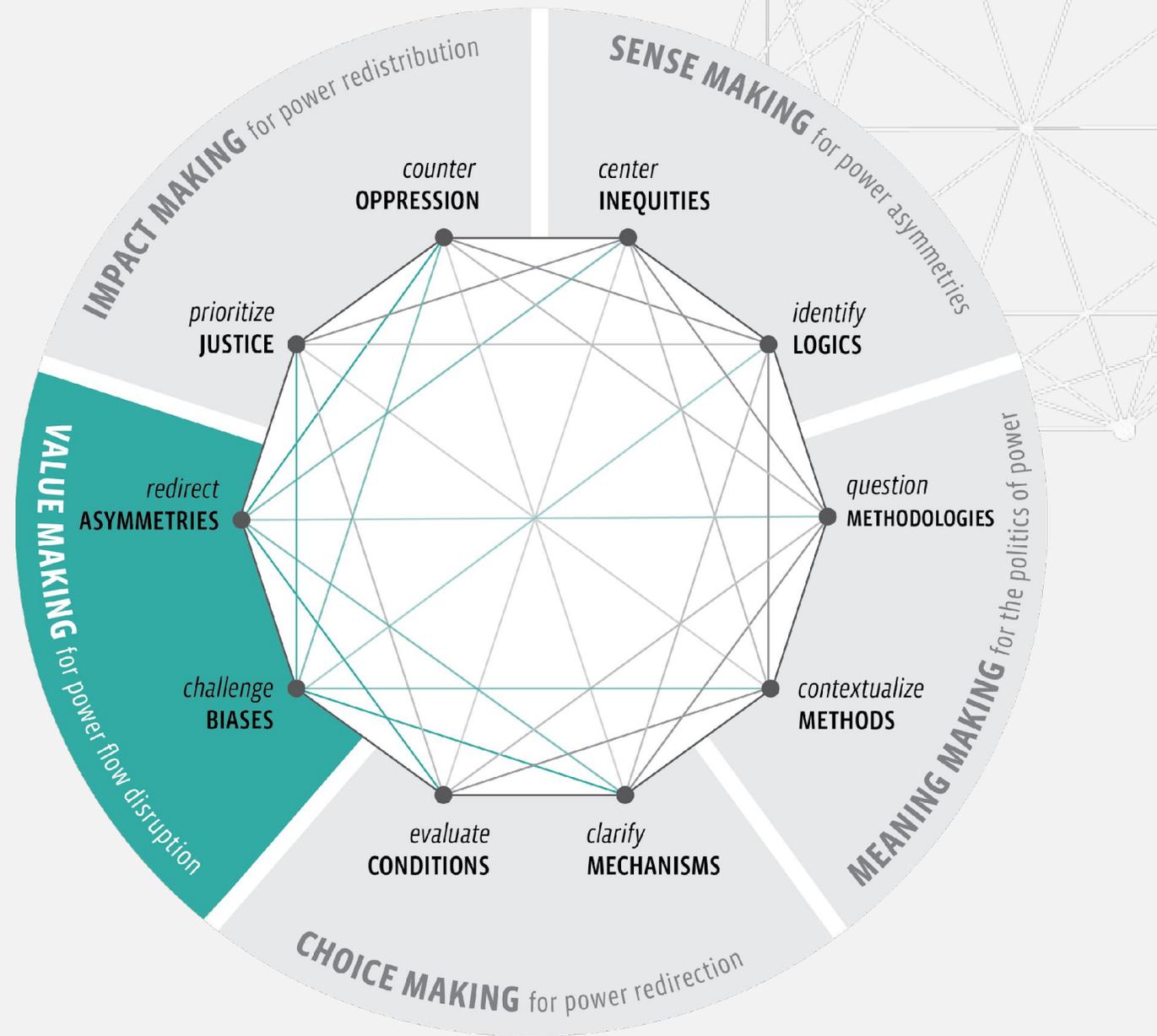
perception

dexterity

legitimacy

VALUE making

Actively seek to disrupt
power flows
challenge BIASES
redirect ASYMMETRIES



ASYMMETRIES

knowledge

control

resources

information

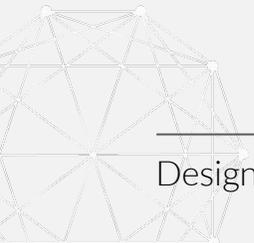
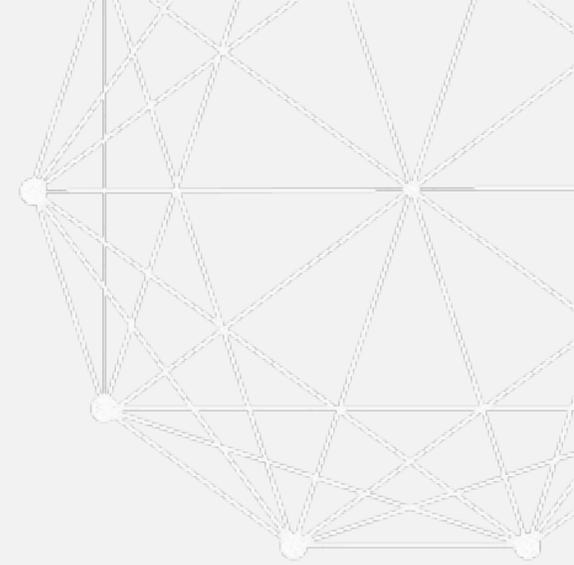
agency

assets

understanding

power

well-being



BIASES

assumption

decontextu
alization

racialization

classification

depoliticization

reparation

correction

individualiz
ation

solutionism

correlation

monetization

universalization

privatization

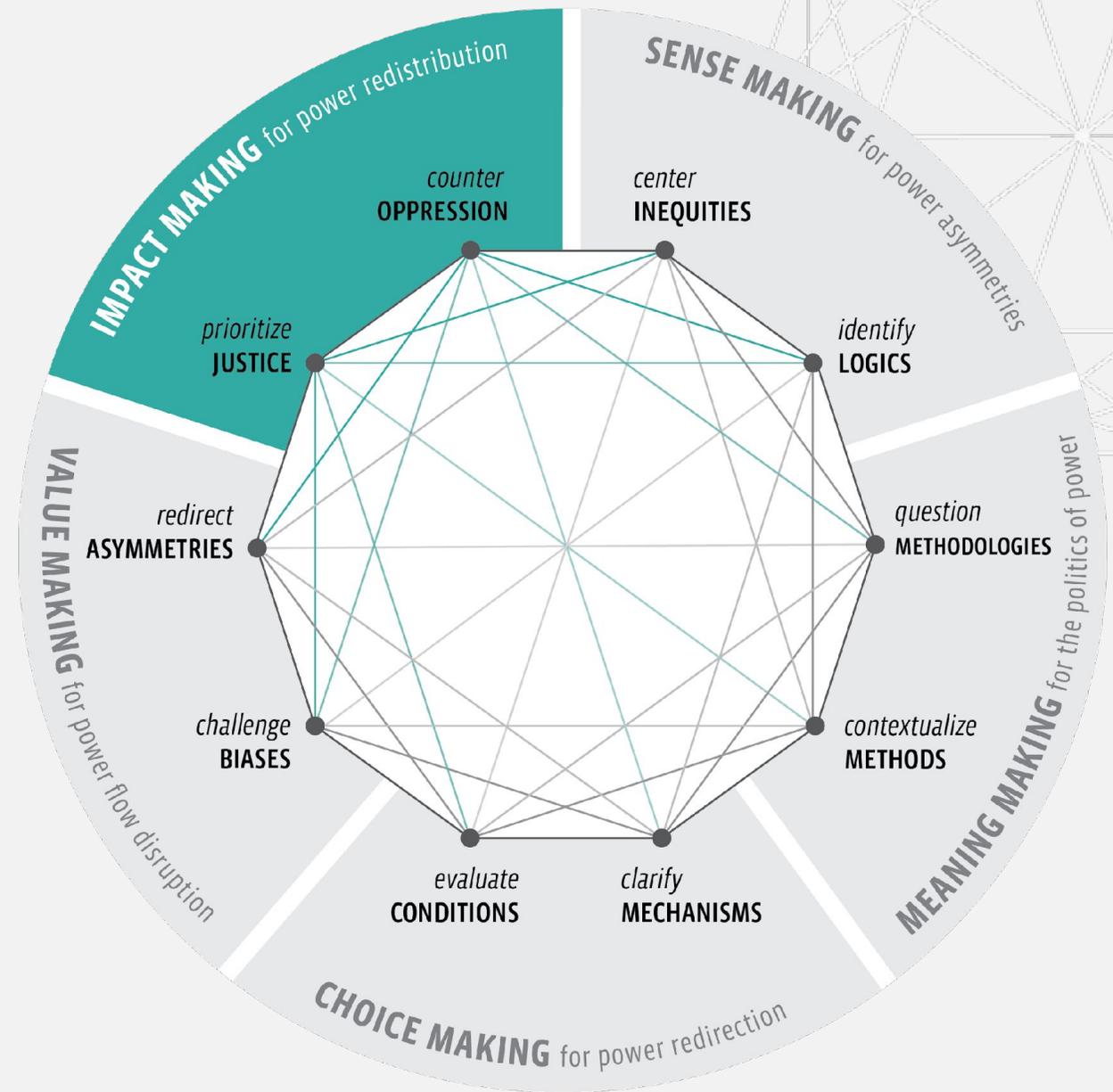
valuation

IMPACT making

Determine accountability
for power distribution

prioritize JUSTICE

counter OPPRESSION



JUSTICE QUALITIES

accessibility

enablement

recognition

accountability

inclusivity

reparation

affordability

liberty

responsibility

agency

mutuality

sustainability

autonomy

opportunity

transparency

distribution

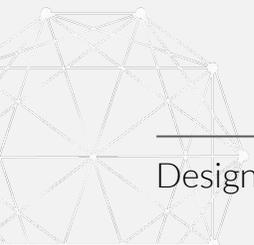
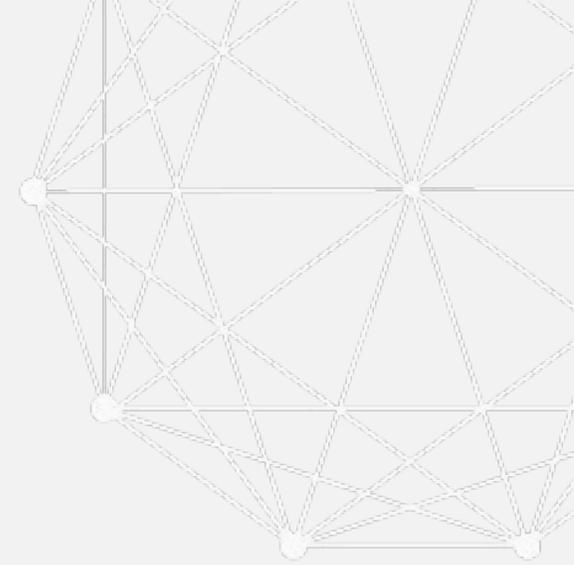
privacy

trust

empowerment

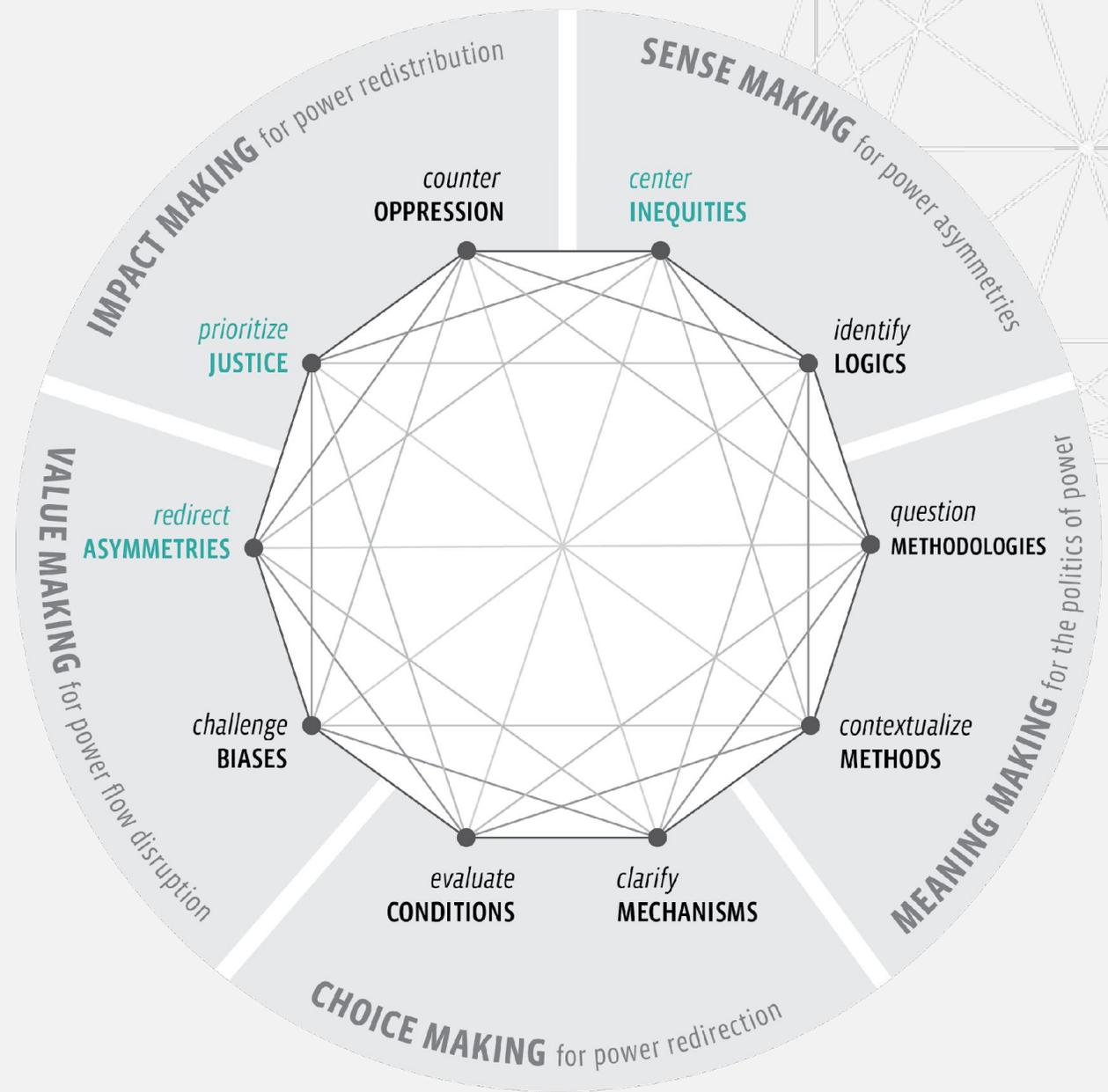
reciprocity

well-being



Fieldwork focus

center INEQUITIES
redirect ASYMMETRIES
prioritize JUSTICE



Contextually-rich design methods

Case studies

Contextual inquiry

Design ethnography

Directed storytelling

Envisioning cards

Mental model diagrams

Multi-lifespan timeline

Paradox

Power analysis

Problem framing

Prototyping

Scenarios

Stakeholder analysis

System maps

Territory maps

Triangulation

Value sketch

Value dams and flows

Mapping in design

Stakeholder mapping

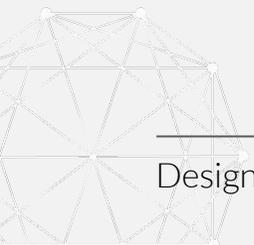
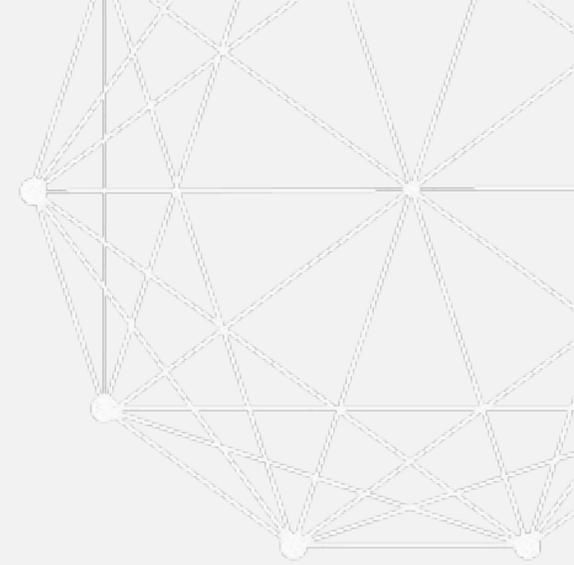
Entity mapping

Descriptive value web

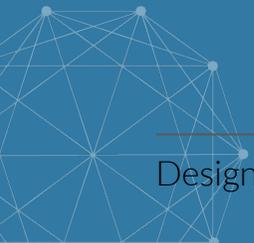
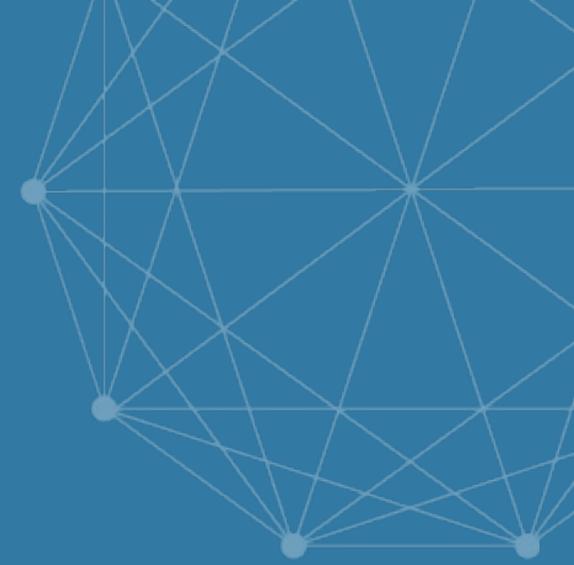
Prescriptive value web

System mapping

Network diagramming



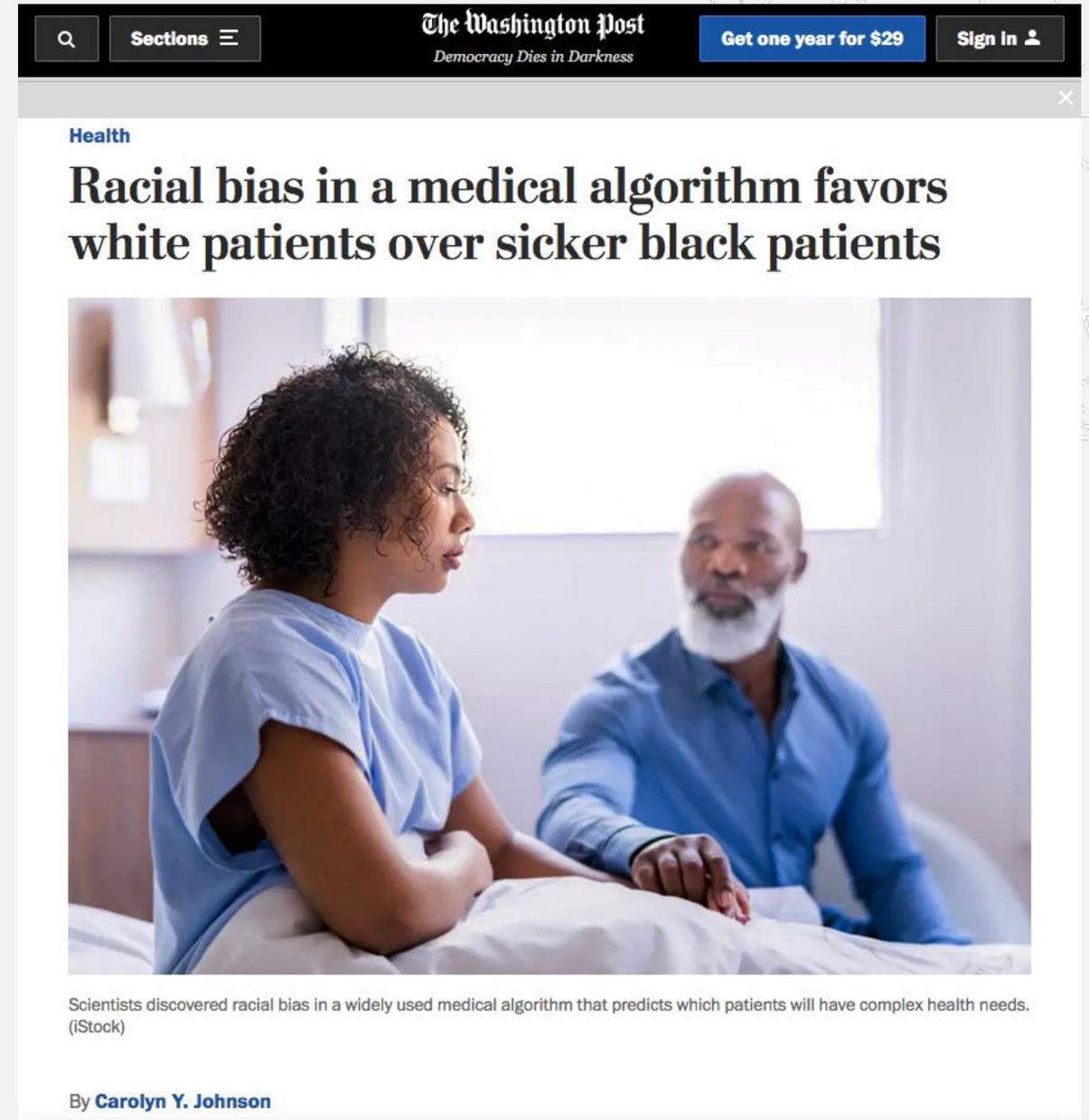
METHOD: Critical diagramming



Case study

Bias in medical algorithm
under-identified black patients
for high risk health prevention
program

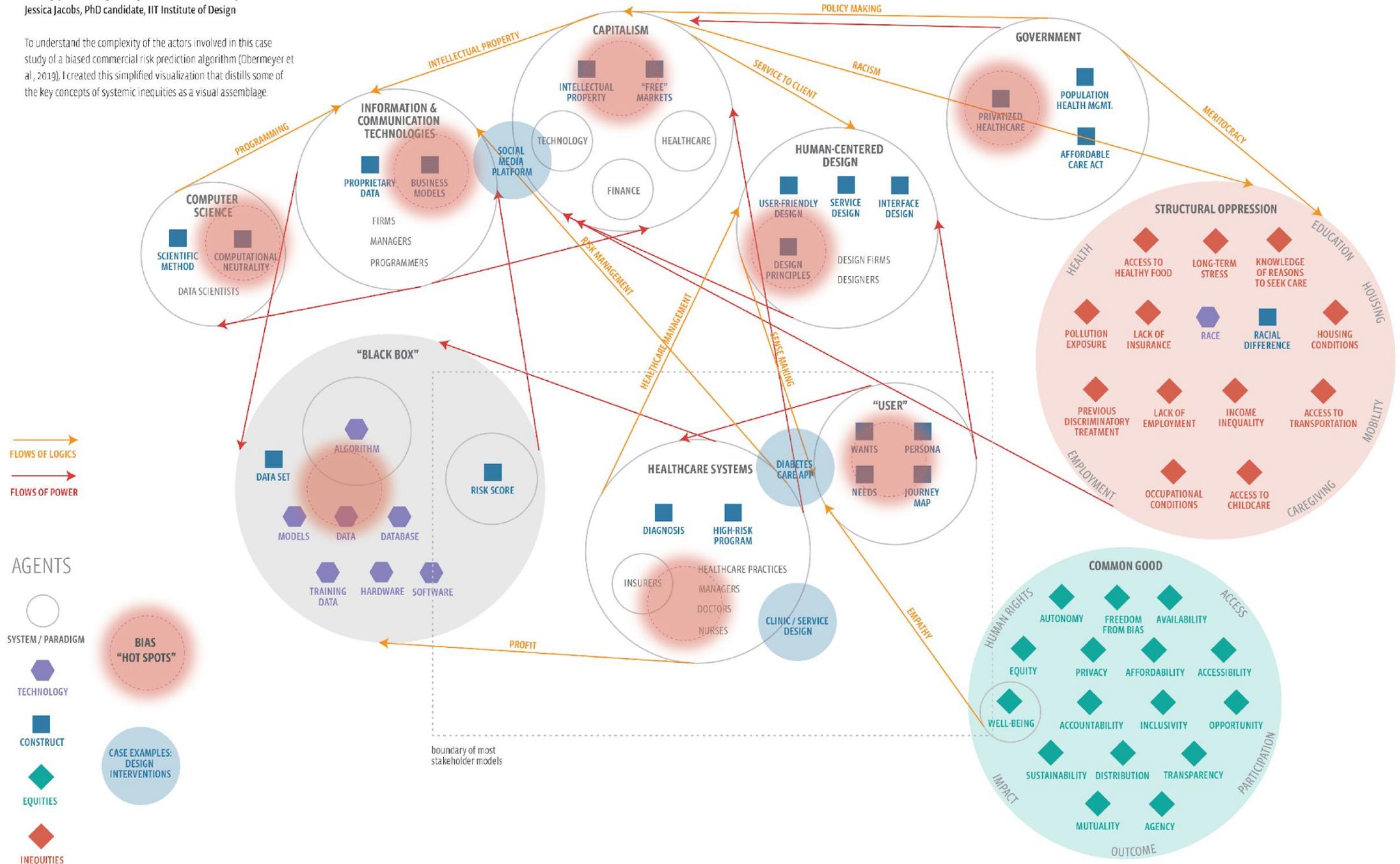
Obermeyer, Ziad, et al. "Dissecting Racial Bias in an Algorithm Used to Manage the Health of Populations." *Science*, vol. 366, no. 6464, 2019, pp. 447-53.

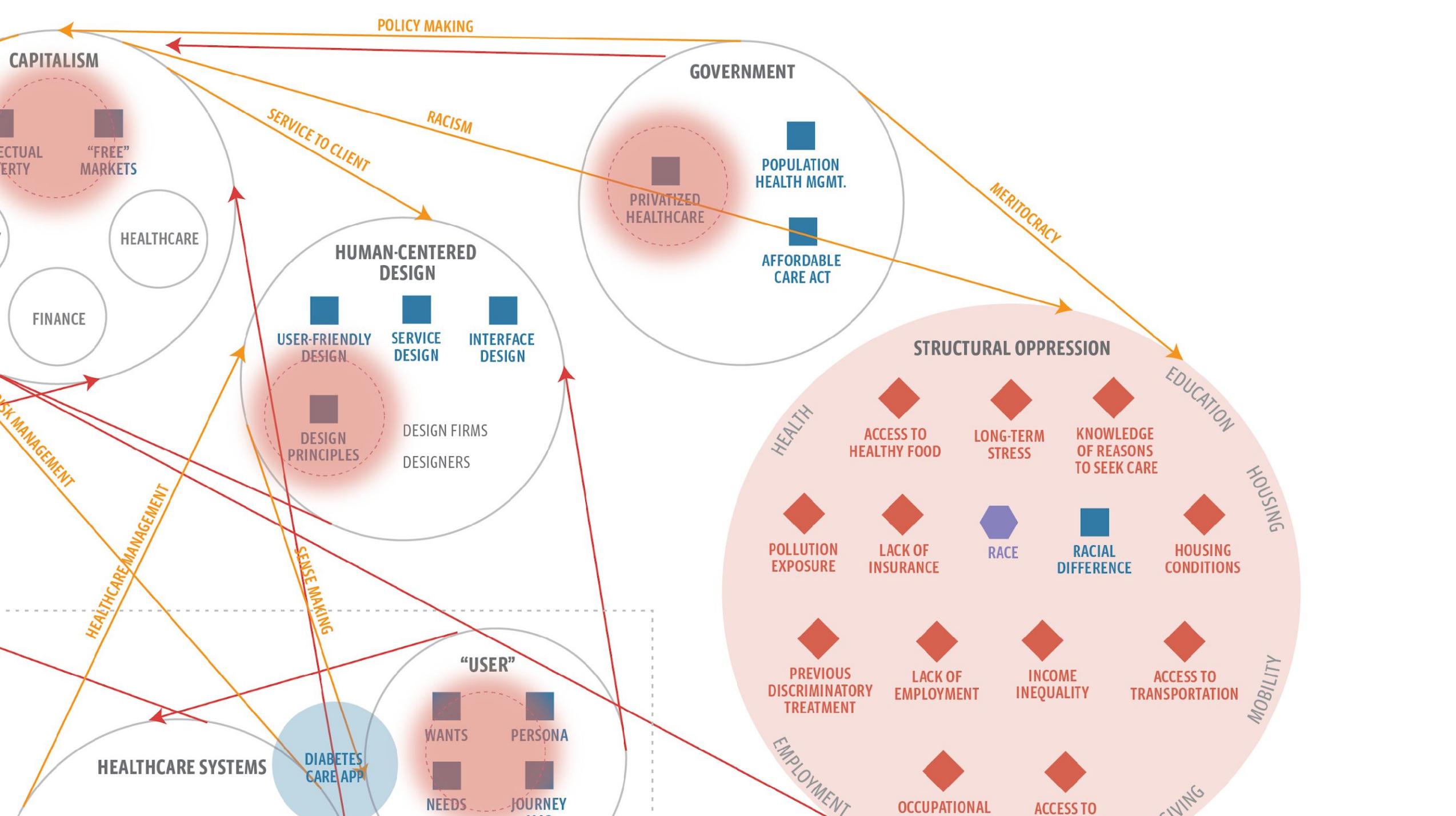


The image is a screenshot of a news article from The Washington Post. At the top, the site's navigation bar includes a search icon, a 'Sections' menu, the Washington Post logo with the tagline 'Democracy Dies in Darkness', a subscription button for '\$29 per year', and a 'Sign In' button. The article is categorized under 'Health' and has the main headline: 'Racial bias in a medical algorithm favors white patients over sicker black patients'. Below the headline is a photograph of a Black woman in a light blue hospital gown sitting in a hospital bed, looking towards a Black man with a white beard who is sitting on the edge of the bed, holding her hand. The article text below the photo states: 'Scientists discovered racial bias in a widely used medical algorithm that predicts which patients will have complex health needs. (iStock)'. The author's name, 'By Carolyn Y. Johnson', is listed at the bottom of the article snippet.

An Angry Assemblage of Algorithmic Accountability
 Jessica Jacobs, PhD candidate, IIT Institute of Design

To understand the complexity of the actors involved in this case study of a biased commercial risk prediction algorithm (Obermeyer et al., 2019), I created this simplified visualization that distills some of the key concepts of systemic inequities as a visual assemblage.





oppression as an arrangement

ASYMMETRIES

knowledge

control

resources

information

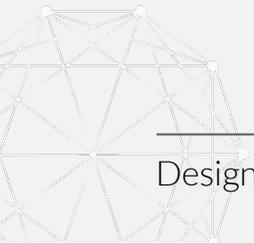
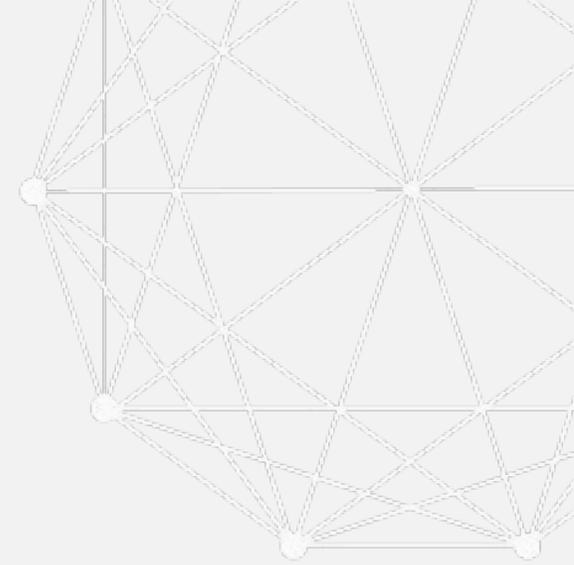
agency

assets

understanding

power

well-being



SYSTEMIC INEQUITIES

knowledge of reasons to seek care

income inequality

access to healthy food

previous discriminatory treatment

lack of employment

access to transportation

Lack of healthcare provider time

housing conditions

access to childcare

Consistency of healthcare provider

occupational conditions

caregiving responsibilities

Lack of quality of care

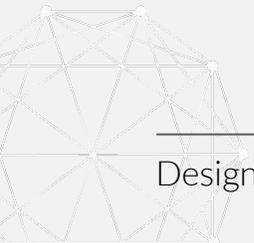
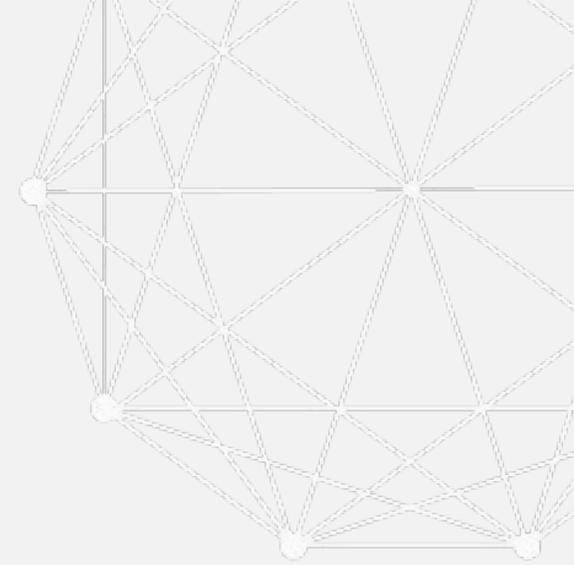
pollution exposure

lack of support network

lack of insurance

long-term stress

education differences



MECHANISMS

request

refuse

encourage

demand

allow

discourage

CONDITIONS

perception

dexterity

legitimacy

JUSTICE QUALITIES

accessibility

enablement

recognition

accountability

inclusivity

reparation

affordability

liberty

responsibility

agency

mutuality

sustainability

autonomy

opportunity

transparency

distribution

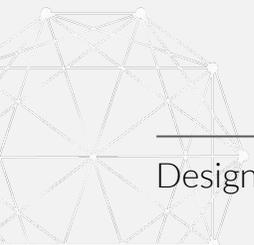
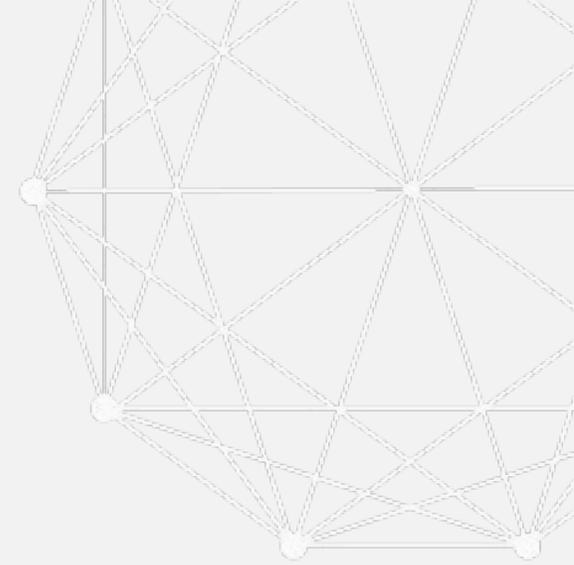
privacy

trust

empowerment

reciprocity

well-being



BIASES

assumption

decontextu
alization

racialization

classification

depoliticization

reparation

correction

individualiz
ation

solutionism

correlation

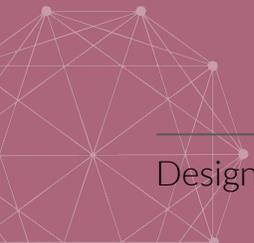
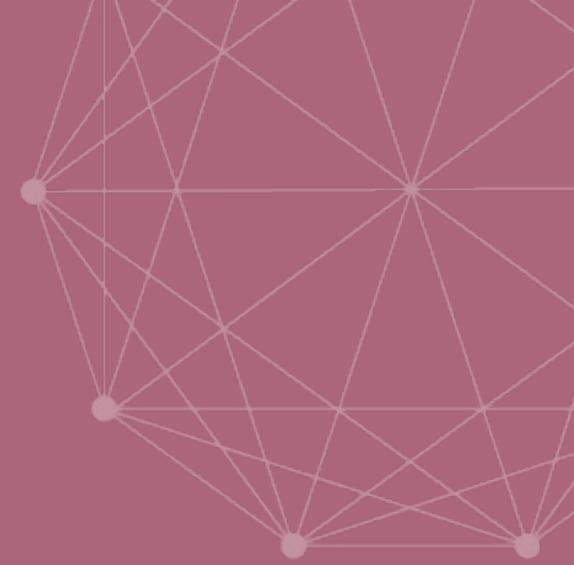
monetization

universalization

privatization

valuation

Conclusion



Is any of this possible within capitalist contexts?

Designing against oppression



A conceptual framework for an anti-oppressive design praxis

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Co-Director of Academic Diversity, Equity, and Inclusion, Columbia College Chicago

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