

Critical Data Studies

An A to Z Guide to Concepts and Methods

Rob Kitchin

Maynooth University Social Sciences Institute

Polity Books, Cambridge, 2025.

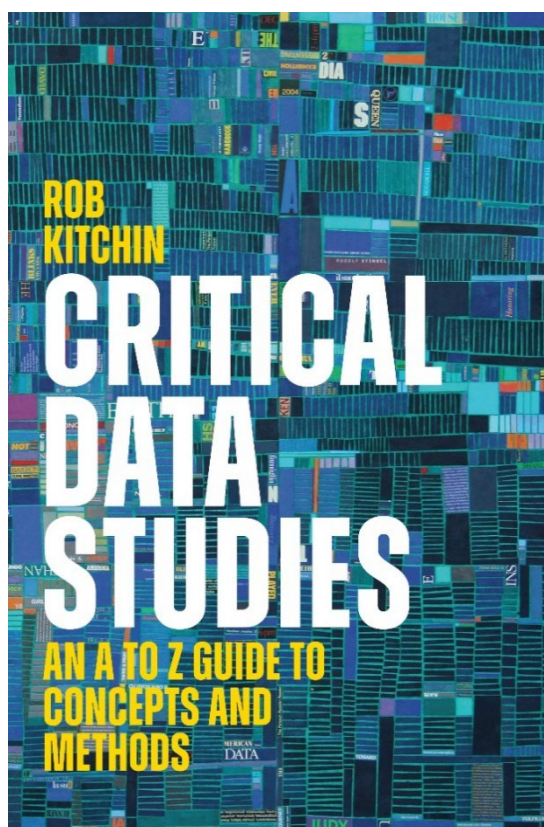


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<http://www.lauriefrick.com> and [@lauriefrick](#) on Instagram.

Provides an essential reference point for the field of Critical Data Studies. Kitchin's explanations are clear, concise, and illuminating: an excellent scoping of the field.' **Linnet Taylor, Tilburg University**

'Maps the conceptual terrain of Critical Data Studies, guiding researchers through the field and offering a roadmap for future studies. Providing meaningful and succinct definitions for everything from "abduction" to "zombie data", this book is a great resource for students and scholars and for anyone seeking an understanding of the field's complexities.'

Matthew Zook, University of Kentucky

Critical Data Studies has come of age as a vibrant, interdisciplinary field of study. Taking data as its primary analytical focus, the field theorises the nature of data; examines how data are produced, managed, governed and shared; investigates how they are used to make sense of the world and to perform practical action; and explores whose agenda data-driven systems serve.

This book is the first comprehensive A-Z guide to the concepts and methods of Critical Data Studies, providing succinct definitions and descriptions of over 400 key terms, along with suggested further reading. The book enables readers to quickly navigate and improve their comprehension of the field, while also acting as a guide for discovering ideas and methods that will be of value in their own studies.

Critical Data Studies is essential reading for students and scholars from across the sciences, social sciences and humanities, as well as those who work with data professionally who want to extend and enrich their conceptual and practical understanding of data and their use.

A to Z by focus

Field

computational social sciences
Critical Data Studies
critical GIS
data feminism
Data Science
data-driven science
digital humanities
feminist data science
metrology
positivism
radical statistics

Data nature

exhaustivity
extensionality
granularity
heterogeneity
information
interoperability
liveliness
mutable mobiles
non-rivalrous
relationality
representativeness
scaleability
timeliness
validity
variety
velocity
veracity
volume
data materiality

Assemblage / framing

algorithm
artificial intelligence
automation
context
contingency
data architecture
data assemblage
data ecosystem
data futures
data geographies
data habitus
data history
data infrastructure
data lifecycle
data model
data ontology
data practices

data topography
data universalism
datafication
data-ism
datascape
environmental sustainability
epistemic knowledge
forgetting
glitches
path dependency
socio-technical system
software
spatial data infrastructure
taxonomy
temporalities of data
truth
unanticipated consequences

Organisations / actors

chief data officer
communities of practice
data brokers
data intermediaries
data subject
national statistics organisations
open data movement

Methodology

abduction
deduction
epistemology
falsification
hypotheses
induction
knowledge
legacy issues
methodology
methods
mixed methods
objectivity
ontology
ownership
pilot study
positionality
reflexivity
reliability
repeatability
reproducibility
research design
research ethics
research questions
sampling

scaffolding
scientific method
situated knowledge

method

API
articulation
arts-based methods
census
crowdsourcing
data archaeology
data audit
data autoethnography
data derive
data entry
data ethnography
data scraping
data walks
data walkthrough
digitisation
focus groups
follow the data
genealogy
interviews
oral history
participant observation
participatory methods
questionnaire
research-creation
survey
XML

Data analysis / analytics

benchmarking
dashboards
data analytics
data mining
data visualisation
descriptive statistics
digital twin
discourse analysis
exploratory data analysis
inference
inferential statistics
longitudinal data/analysis
machine learning
mapping
modelling
non-parametric statistics
parametric statistics
pattern recognition
pre-analytics

prediction
qualitative analysis
quantitative analysis
simulation
spatial analysis
statistics
visual analytics

Data type

administrative data
analogue data
attribute data
automated data
autographic data
big data
biometrics
born-digital data
composite indices
cooked data
demographically identifiable
information
derived data
digital data
disclosure data
exhaust data
fact
gendered data
indexical data
indicator data
Indigenous data
inferred data
interval data
KPIs
linked data
machine-readable data
metrics
models
mundane data
nominal data
official statistics
open data
ordinal data
pattern data
personal data
personally identifiable information
primary data
proprietary data
proxy data
public sector data
qualitative data
quantitative data
queer data
racial data

ratio data
raw data
real-time data
scale
secondary data
semantic web
semi-structured data
sensor data
simulated data
small data
social media data
spatial data
statistical geography
stranded data
structured data
synthetic data
tertiary data
tortured data
training data
transient data
unstructured data
visceral data
zombie data

data management

aggregation
categorisation and classification
curation
data amplification
data dictionary
data enrichment
data fusion
data ingestion
data maintenance and repair
data management
data management plan
data phronesis
data pipeline
data transformation
data wrangling
deidentification
deletion
documentation
ETL (extraction, transform, load)
generalisation

data governance

accountability
anonymisation
CARE principles
choice
consent
copyright

data controllers and processors
data governance
data maturity framework
data minimisation principle
data policy
data protection
data regulation
data security
data standards
data stewardship
data strategy
digital rights management
encryption
End User Licence Agreement
Fair Information Practice Principles
FAIR principles
freedom of information
group privacy
information commissioners
institutional review board
intellectual property rights
law
licensing
notice
obfuscation
privacy
privacy by design
protocols
pseudonym
right to be forgotten
right to information
standardisation

Data quality / data issues

accuracy and precision
bias
broken data
calibration
cleanliness
completeness
consistency
coverage
data breach
data cleaning
data dredging
data fragmentation
data integrity
data quality
ecological fallacies
error
fake data
fit for purpose
gamed data

gaps and exclusions
good enough data
joking the stats
lineage
lying with statistics
metadata
methodological transparency
noise
paradata
provenance
transparency
uncertainty
validation

data storage

blockchain
cloud, the
data centre
data format
data holding
data loss
data storage
data trusts
database

data access and sharing

archive
black-boxing
community archives
data access
data commons
data hugging
data philanthropy
data refuge
data repository
data sharing
data silos
gatekeeping
opacity
open access
open government
preservation
repurposing
re-use
trusted digital repository

data mobilities

data circulation
data friction
data journey
data mobilities
data threads
seams and seamful data

data communication

data affordance
data bounds
data imaginaries
data journalism
data literacy
data narratives
data physicalisation
data publics
data stories
data valences
fixation of evidence

data ethics / activism

counter archiving
citizen science
civic hacking
counter-data action
data activism
data citizenship
data humanitarianism
data justice
data pyramid
data rights
data witnessing
decolonizing data
ethics
ethics of data care
ethics washing
hackathon
pro-equity data initiatives
slow computing

Data power / politics

automated management
Big Brother
bureaucracy
calculative regime

control creep
control room
data determinism
data double
data doxa
data footprint and shadows
data politics
data power
data regime
data sovereignty
dataveillance
discursive regime
governmentality
performance management
political arithmetic
power/knowledge
predictive privacy harms
profiling
redlining
social credit scoring
social sorting
sousveillance
surveillance
uncounted

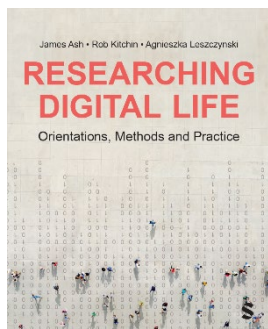
data political economy

data capitalism
data labour
data markets
data monopolies
data services
geodemographics
platforms
political ecology
political economy
postcolonialism
surveillance capitalism

Experience

affect
data anxieties
data performativity
datafied agency
embodiment
memory
quantified self

Other recent books

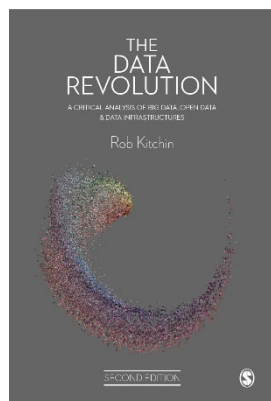
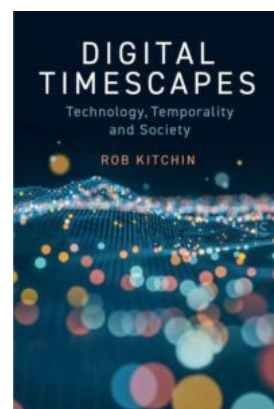


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