Democracy and Social Justice in an Age of Datafication

Joanna Redden
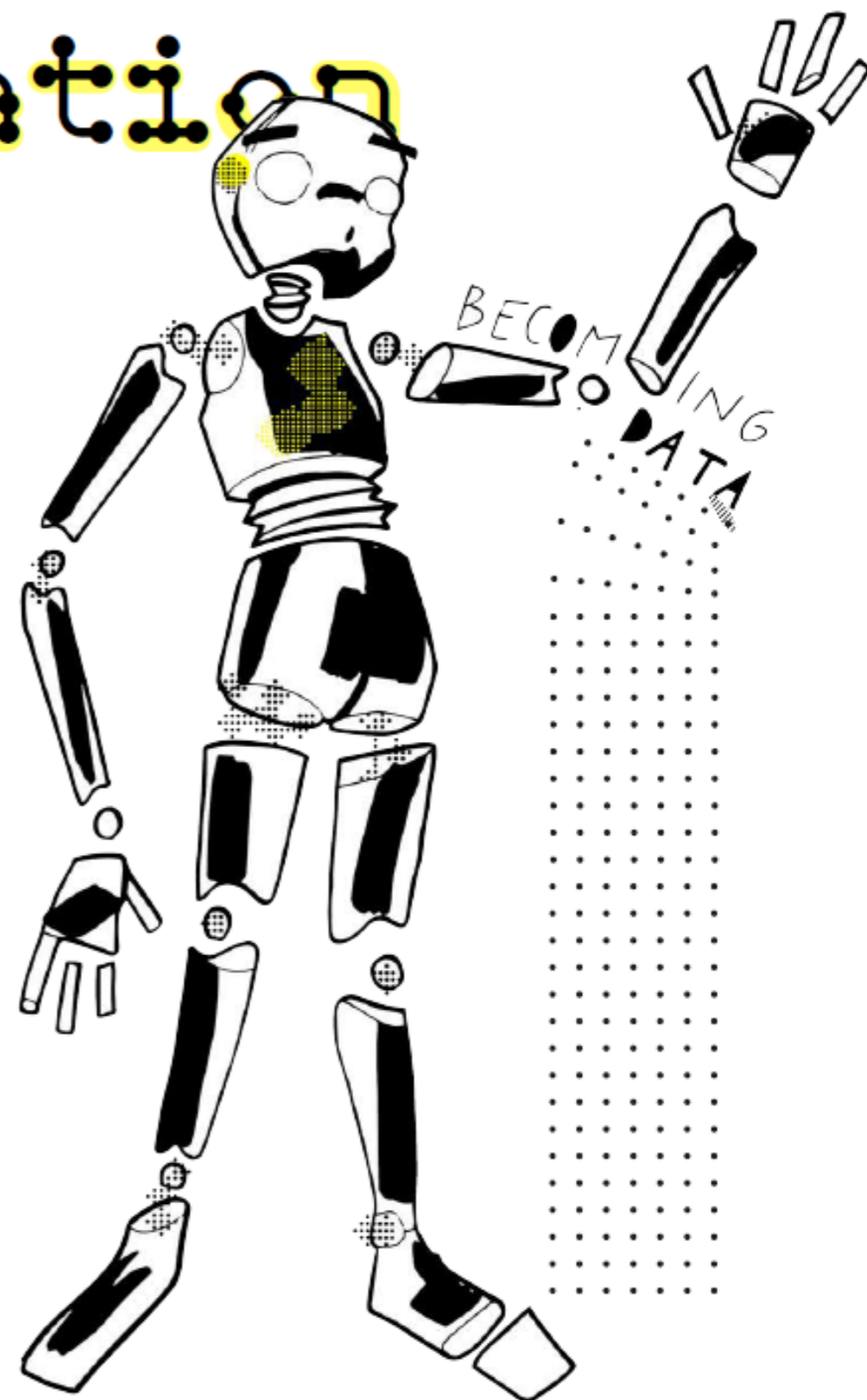
Reddenj@Cardiff.ac.uk

www.datajusticelab.org

@DataJusticeLab

Researching & advancing social justice in the age of datafication

BECOMING DATA

Data Justice Lab

Research Approach:

- – Neoliberal Context
- – Power / Agency
- – Datafication
- – Data Assemblage

Research Approach:

Central Premise:

We need to understand, in a grounded way, what is happening now in order to understand where we are headed and where we may want to change course.

Four Work Streams:

1) Data Harms and Democratic Futures
2) Mapping and Analysing Changing Data Systems
3) Toward Democratic Audits of Datafied Governance
4) Empowering Citizens, Practitioners, Policy Makers

1. Attending to the Concrete:

Data Harms and Democratic Futures

Methods

- Building record: literature review, desk research, media analysis, document analysis

- Case studies: Netherlands, United Kingdom, Canada, United States, Australia, New Zealand

- Interviews: activists, practitioners, lawyers, citizens
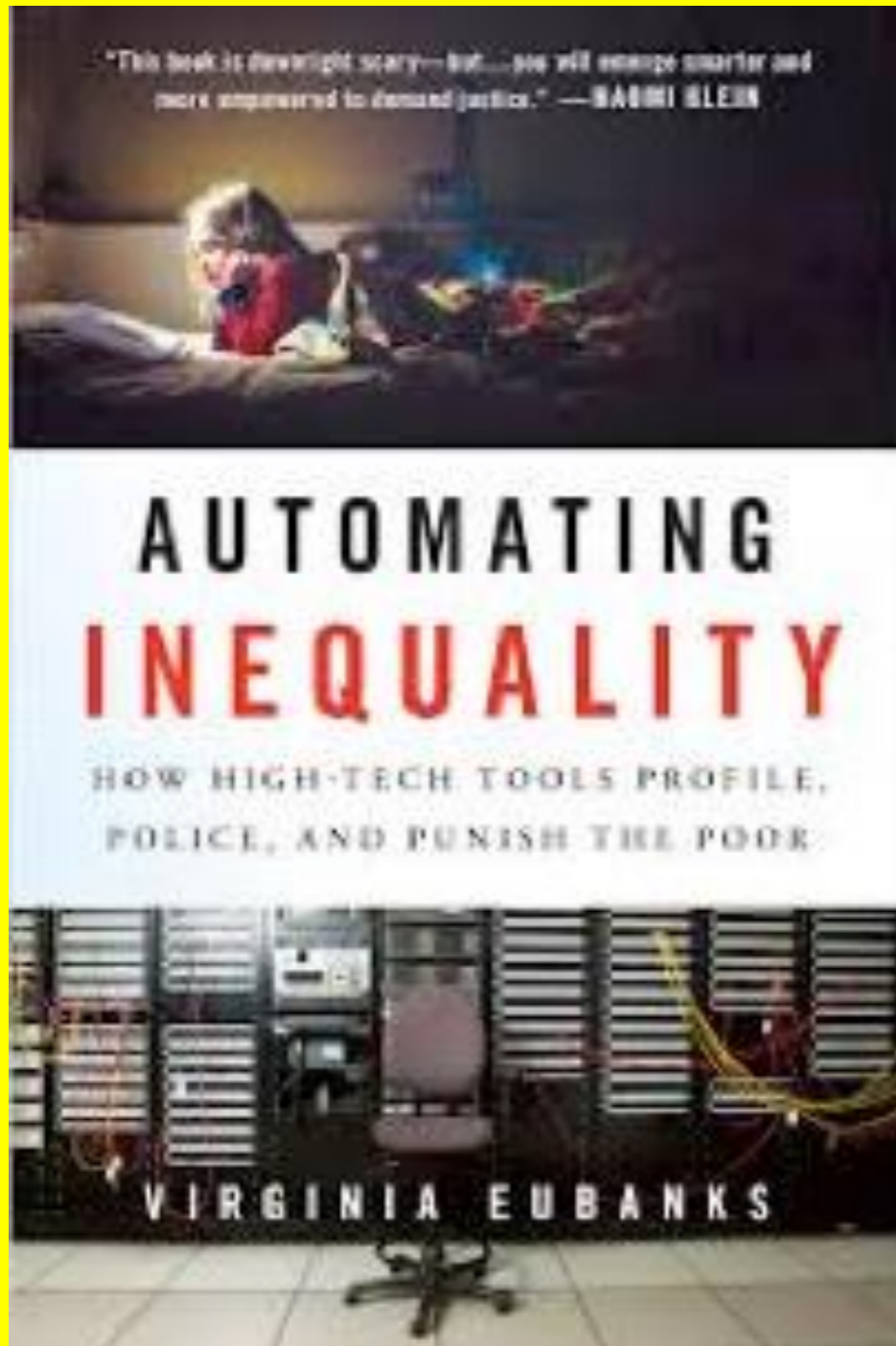
Data Harm Record

Commercial:

—Potentials for exploitation

—Unintentional and intentional discrimination

—Loss of privacy, data breaches

—Physical injury

—Invisible, dark areas of data
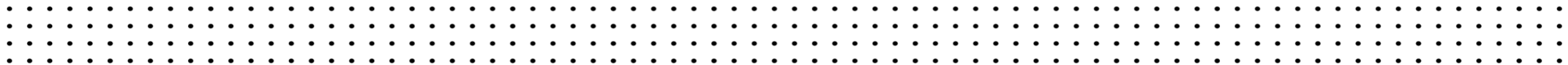

Political:

—Information manipulation and targeting

Governance:

—Automation errors

—Algorithm and machine bias
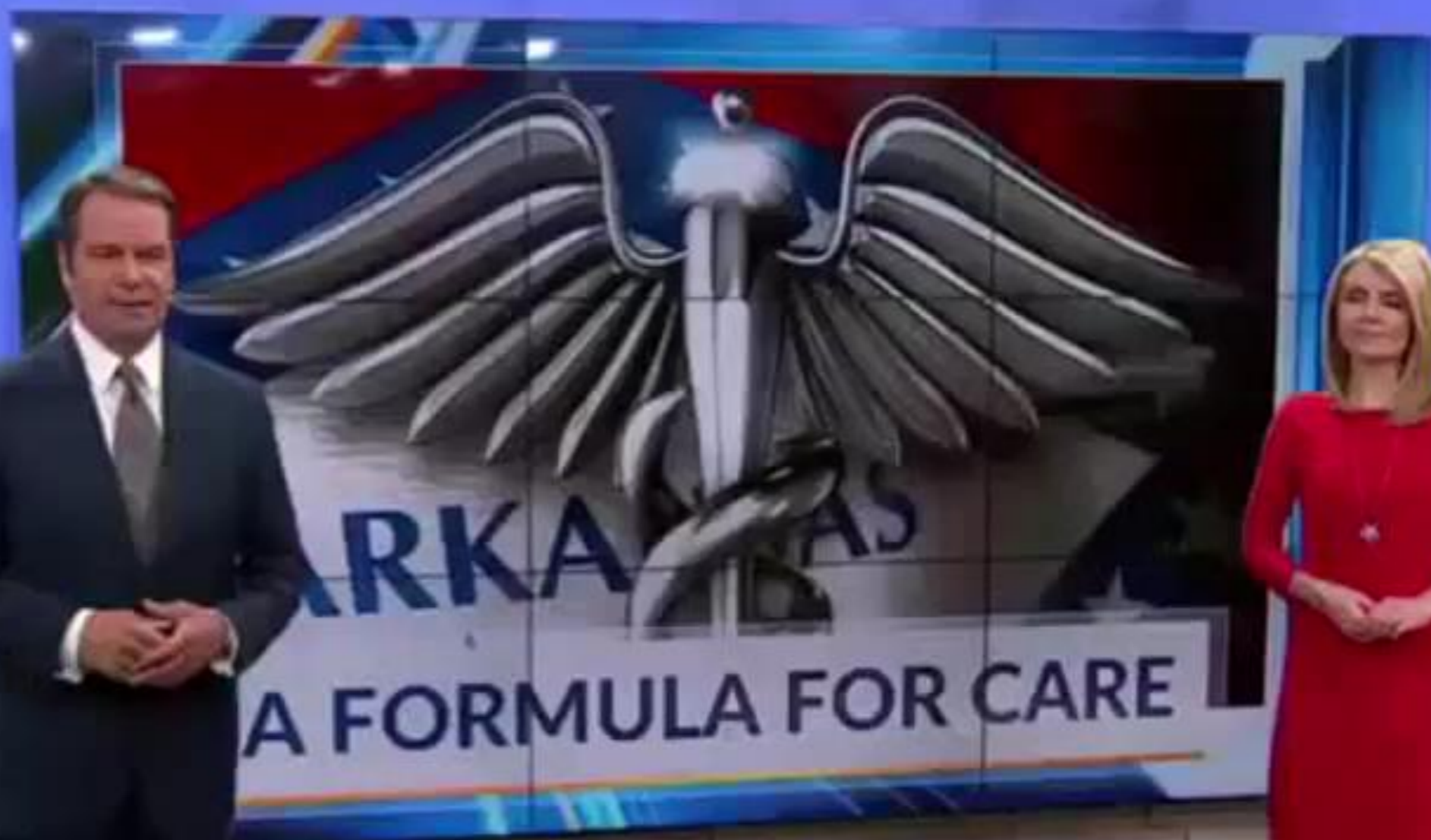
"These systems impact all of us, but they don't impact all of us equally"

(Eubanks, 2018)

Case Study: Arkansas, U.S.

WHAT HAPPENS WHEN AN ALGORITHM CUTS YOUR HEALTH CARE

By Colin Lecher | @colinlecher | Mar 21, 2018, 9:00am EDT

Illustrations by William Joel; Photography by Amelia Holowaty Krales

ARKA...AS
A FORMULA FOR CARE

BOB CLAUSEN
@BobClausen4

KARK 4
9:59 | 55°

ARKADELPHIA | TONIGHT MOSTLY CLOUDY | 50° | TOMORROW 30% SHOWERS | 64° | WEATHER

Arkansas Blog

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## Judge orders DHS to stop using algorithm for home care hours; DHS says services won't be disrupted

Posted By Benjamin Hardy on Mon, May 14, 2018 at 6:07 PM
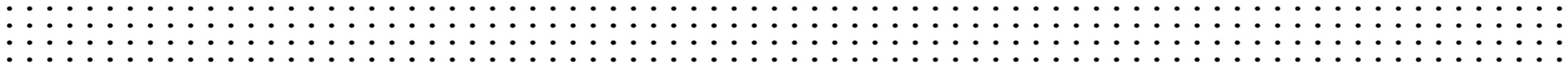
Algorithms all the way down

- Public and political hearings

- Contempt order overturned by Supreme Court

- DHS develops new system: '[S]witching out one algorithm based system for another.'" Kevin De Liban

- Algorithm now determines where person ranks in terms of needs for 'activities of daily living' like eating, bathing, grooming, using the bathroom, housekeeping, shopping and other living tasks.

- A person is categorized and ranked according to time needed with help for each daily living activity. They can get 5 to 45 minutes per category.
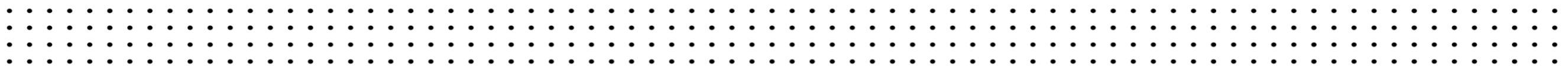
Summary: Democratic Implications

Inequality

- Differing levels of state accountability for socially sorted citizens.
- Digital poorhouses (Eubanks 2018)
- Automative and predictive systems for those deemed 'unworthy'

Fairness

- Removal of professional discretion as deliberate.
- Disempowering human relations, breakdown of communal behaviour.
- Changing power dynamics, citizens do not understand or have access to these new systems.

Rights

- Pillars of democracy not enough – Media, Law, Parliamentary Review
- From citizens to data subjects

2 a) Rendering Visible:

Mapping Changing Government Practices

Findings: Benefit Arguments

- Surveillance and security
- Accelerate research
- Customize and improve program and service delivery
- Strengthen enforcement, compliance, crime prevention
- Save money and improve performance and productivity
- Promote health
- Better management of agricultural and natural resources
- Create wealth for shareholders and stakeholders
- Improve data

Profound changes require democratic attention

o Citizens knowable, traceable, trackable across lifespans, social and professional networks, government interactions and space
o Encouragement and compulsion to collect and combine data about citizens
o More services and decision-making automated and inscrutable
o Changing power dynamics – citizens infinitely knowable but with little ability to 'know' about uses of their data or systems affecting them
o From causation to correlation
o Increased public private partnerships – 'cognitive solutions' and service provision
o Pervasion of logic – from co-creators to 'risk'

Mapping Changing Government Data Practices: UK

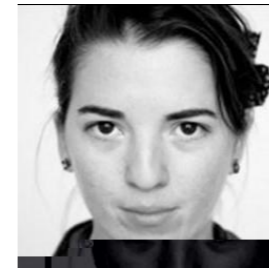## Data Justice Lab: Project Research Team

Lina
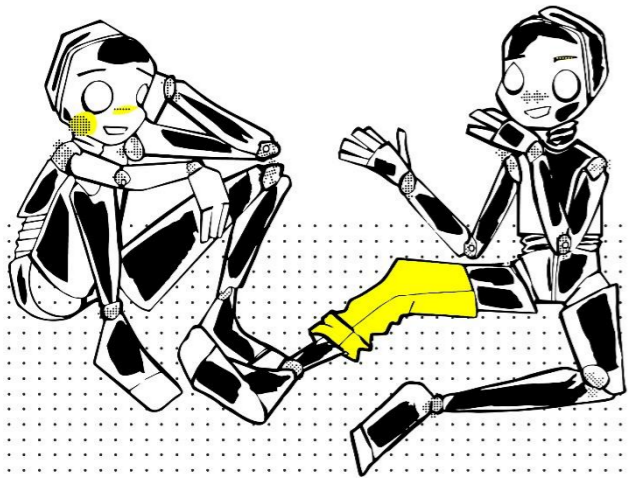Dencik

Arne
Hintz

Joanna
Redden

Christo

Harry
Warne

Olivia
Solis

Data Scores as Governance

Mapping and analysing UK local government uses of data systems

- Countermapping

- Multi-stakeholder workshops

- Desk research, automated searches
  (gov't), FoI requests (423)

- Case studies: Interviews with public
  officials and civil society organizations

- Tool building and Journalist training
  workshop
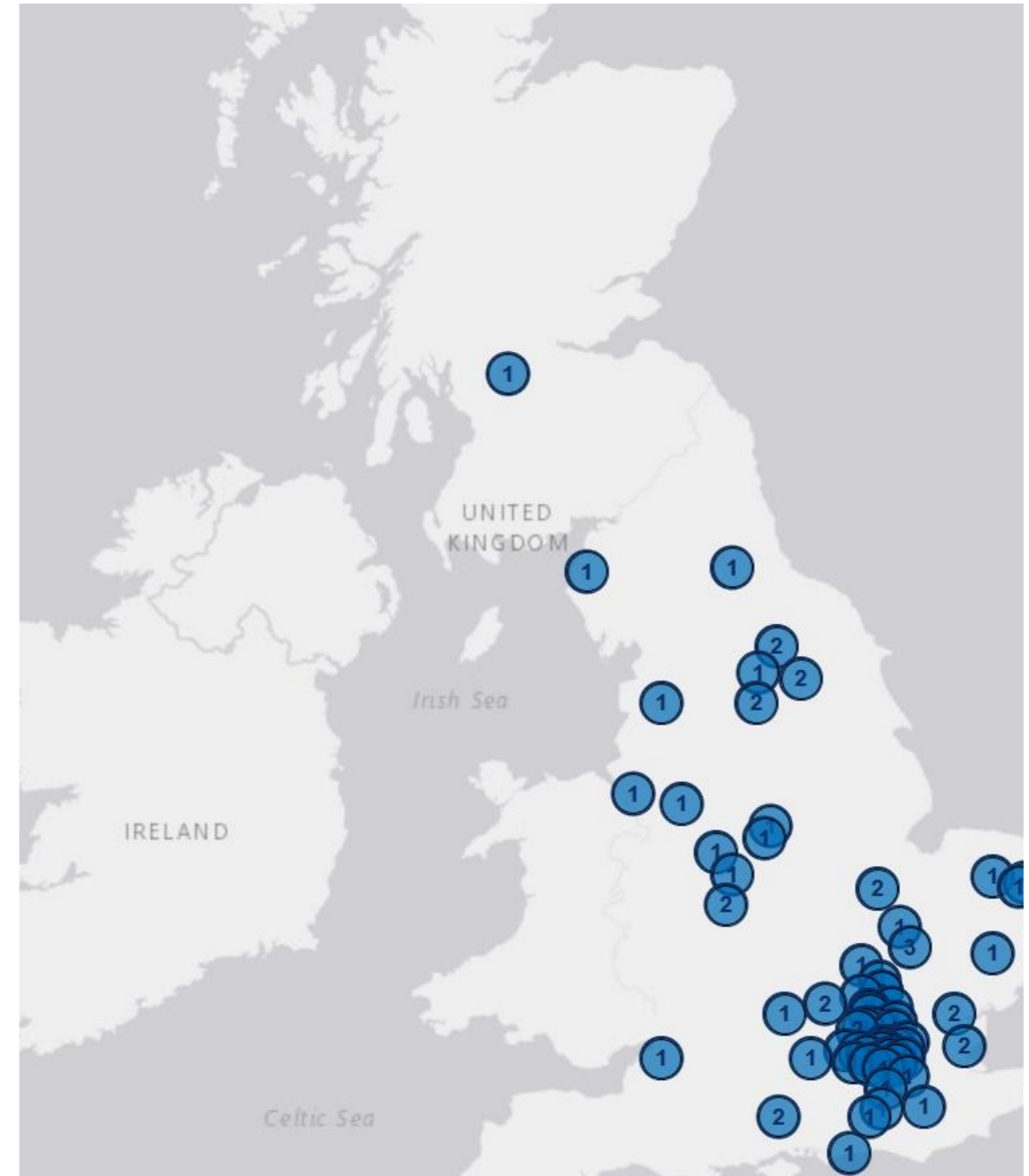
Toward a Map of Predictive Analytics
https://data-scores.org/overviews/predictive-analytics

https://data-scores.org/

DATA SCORES
IN THE UK

INSIGHTS   DOCUMENTS INDEX   CASE STUDIES   METHODOLOGY

DATA SCORES

Investigation Tool

Data scores that combine data from a variety of both online and offline activities are becoming a way to categorize citizens, allocating services, and predicting future behavior. Yet little is still known about the implementation of data-driven systems and algorithmic processes in public services and how citizens are increasingly 'scored' based on the collection and combination of data.

As part of our project 'Data Scores as Governance' we have developed a tool to map and investigate the uses of data analytics and algorithms in public services in the UK. This tool is designed to facilitate further research and investigation into this topic and to advance public knowledge and understanding.

The tool is made up of a collection of documents from different sources that can be searched and mapped according to different categories. The database consists of more than 5300 **unverified documents** that have been scraped based on a number of search terms relating to data systems in government. This is an incomplete and on-going data-set. You can read more in our Methodology section.

DATA SCORES AS GOVERNANCE

HOW TO USE THIS TOOL

There are 3 main sections for exploring the data.

Data Insights

Exploratory overview

The data presented here is partial to the category selected, it gives a visual hint so it is easy to navigate.

Document Index

Specific word or phrase

Here you can search within the whole database. You can find search terms or phrases in context categories.

Case studies

Research

Here you can read about some examples of uses of data analytics in public services based on in-depth research.

By: COMPANIES & SYSTEMS

This provides an overview of how names of companies appear in the database.

By: LOCATIONS

This provides a geolocation map over mentions of local authorities in the database.

By: DEPARTMENTS

This provides an overview of government departments mentioned in the database.

North Sea

Skagerrak

North Sea

Kattegat Sea

DENMARK

1

8

UNITED KINGDOM

3

15

IRELAND

Irish Sea

3

NETHERLANDS

1

3

57

16

GERMANY

Celtic Sea

31

3

English Channel

BELGIUM

+
−

Leaflet | © OpenStreetMap contributors

DATA SCORES AS GOVERNANCE

Case studies

o Bristol's Integrated Analytical Hubb

o Kent's Integrated Dataset

o Camden's Resident Index

o Hackney's Early HelpProfiling System

o Manchester's Research & Intelligence Database

o Avon & Somerset Police Qlik Sense

Manchester
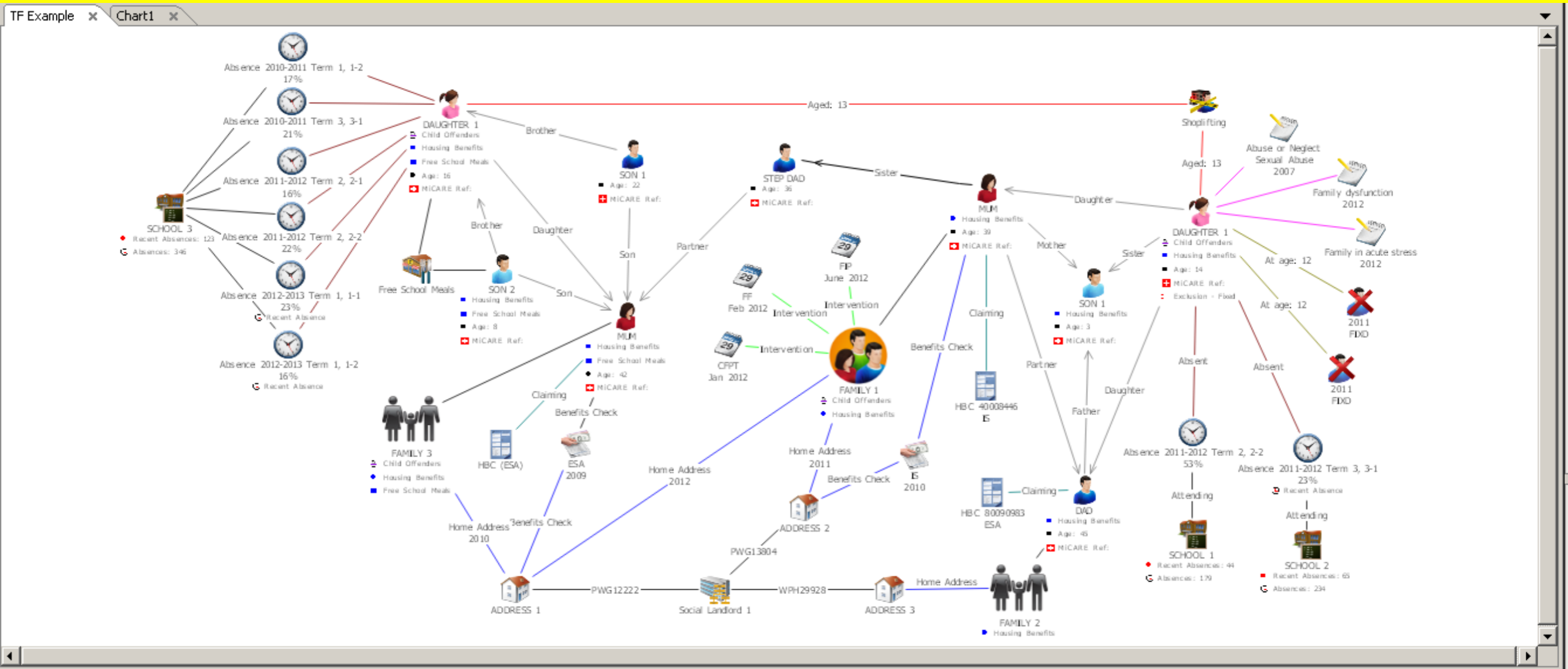
Example: Hackney Early Help Profiling System

- Linked to longer history of computerizing and rationalizing social work

- Predictive analytics, predictive modeling being used in child welfare across countries

- Predictive analytics in child welfare: Hackney, Thurrock, Newham, Tower Hamlets, Bristol and Manchester

- Critique emerging from previous investigations and applications in the United States and New Zealand (Eubanks 2018, Gillingham and Graham 2017)
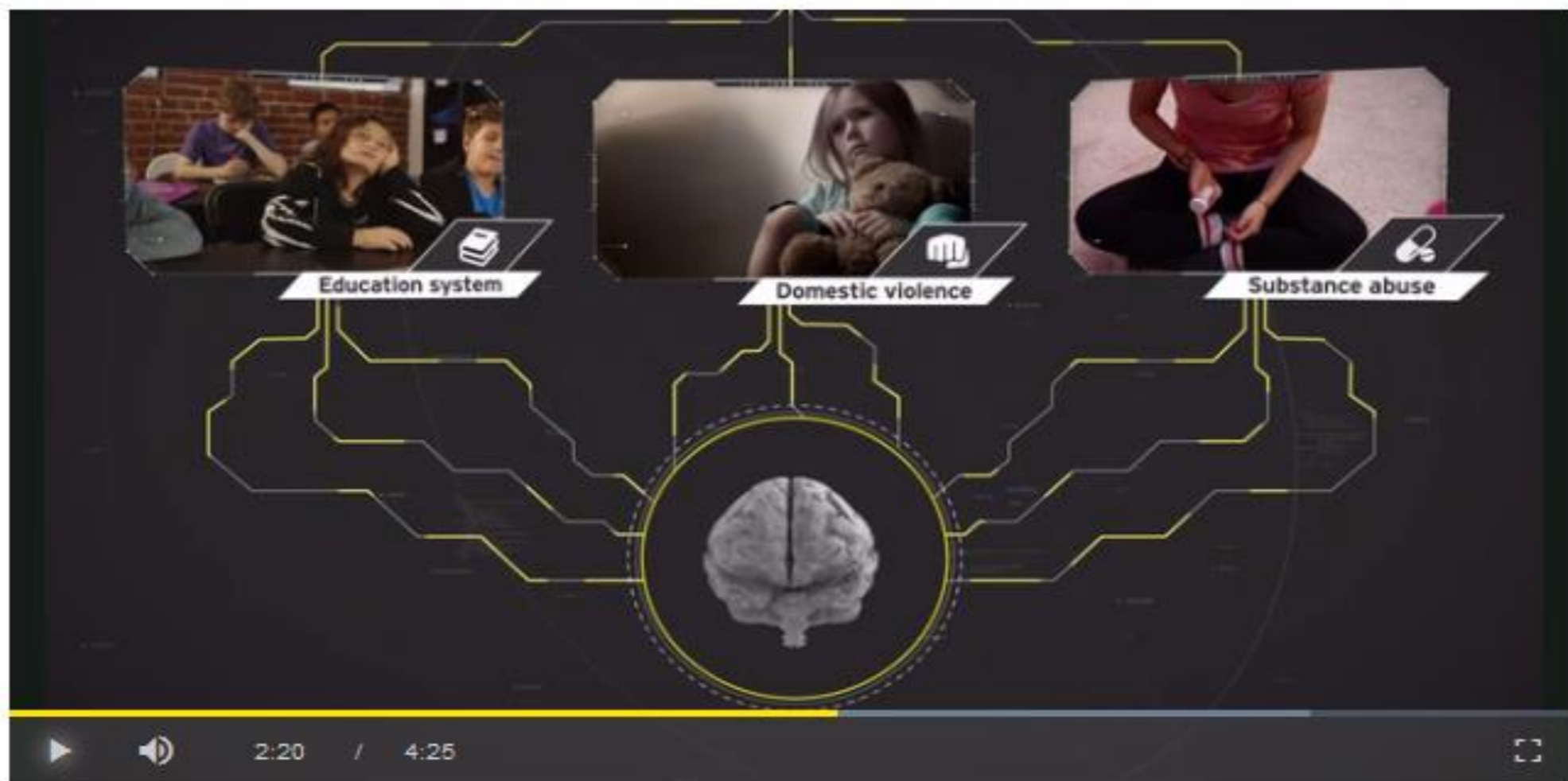
How can data tell a story that keeps a child safe?

Written by EY on 4 October 2018

EY is collaborating with public agencies to help support society's most vulnerable

Findings: Overview

- Austerity Driven

- Applications: child welfare, social care, policing, fraud

- Expanded data sharing arrangements

- Councils needs and intentions / rights and democratic principles

- From population level analytics to risk assessment to scoring to profiling

- Applications and transparency <u>context</u> dependent

- Accuracy and false positives

- Stigma, labelling and "symbolic markers" (Murphy et al. 2011)

- Limits of the data, Limiting what can be known

- Changes to working practices? Resource Allocation?

- Further individualizing of social problems

- Little effort to measure impact (particularly unintended)

- Normatization

FAIR NESS

2 b) Rendering actionable:

Towards Democratic Auditing

Towards Democratic Auditing
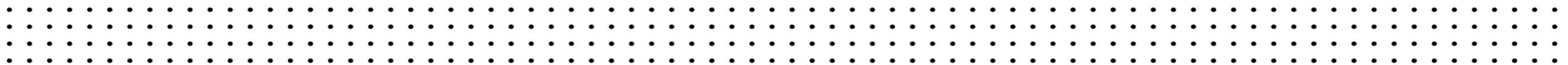
The project 'Towards Democratic Auditing' is designed to deliver both new research and a tool-kit, together with a wider set of outputs, to advance civic participation in data-driven governance.

Focus
1) Citizen Interventions
2) Organizational responses
3) Civil Society contexts
4) Literacy and education

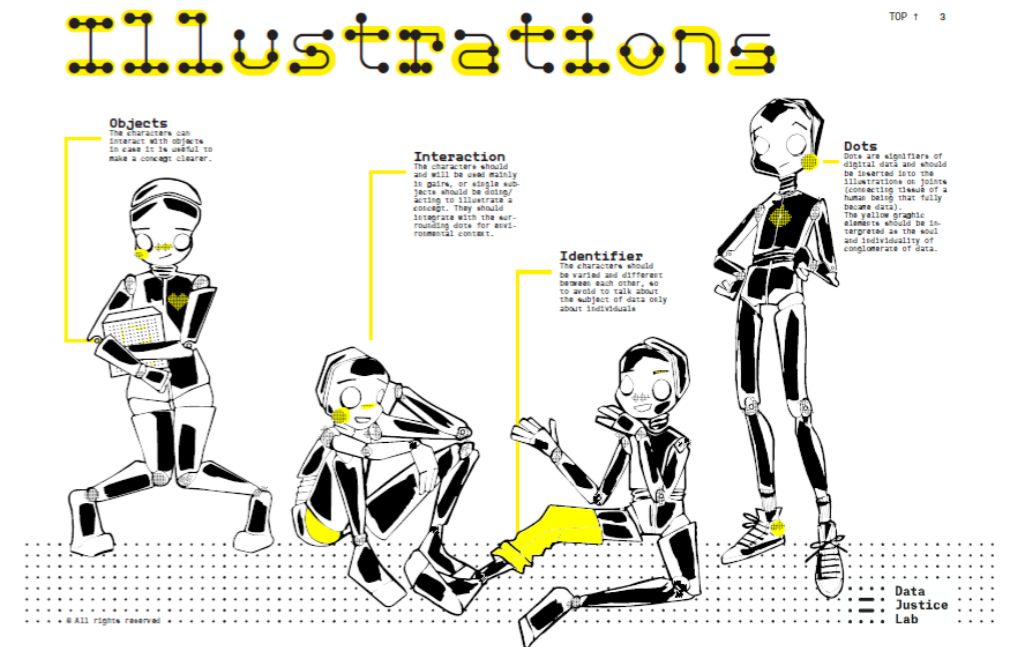# 3. Advancing Democracy in an Age of Datafication:

Empowering Citizens, Practitioners, Policy Makers

Ongoing: Community and Team Building

- Data Literacy Projects

- Workshops

- Recording and redressing data harms (expand and build infrastructure)

- AI and Social Work (analysing situated practices and empowering)

Going Forward

Socio- Technological

- Reflexive data science (Gillingham and Graham 2017)

- Systems must provide contextual reasoning (Church and Fairchild 2017)

- Insist on context specific before and after accuracy rates (Keddell 2018)

Democratic Systems

- Public private partnerships accountability

- Decide on no go areas (Eubanks 2018, AI Now 2018)

- Encourage dissent, formalize it, make it a rule

- National algorithmic safety board (Schneiderman 2016)

- People's councils (McQuillan 2018)

Political Mobilization

- Linking tech justice and social justice (Dencik, Hintz and Cable 2017)

- Challenge normatization

- Data literacy for transparency and accountability contestation
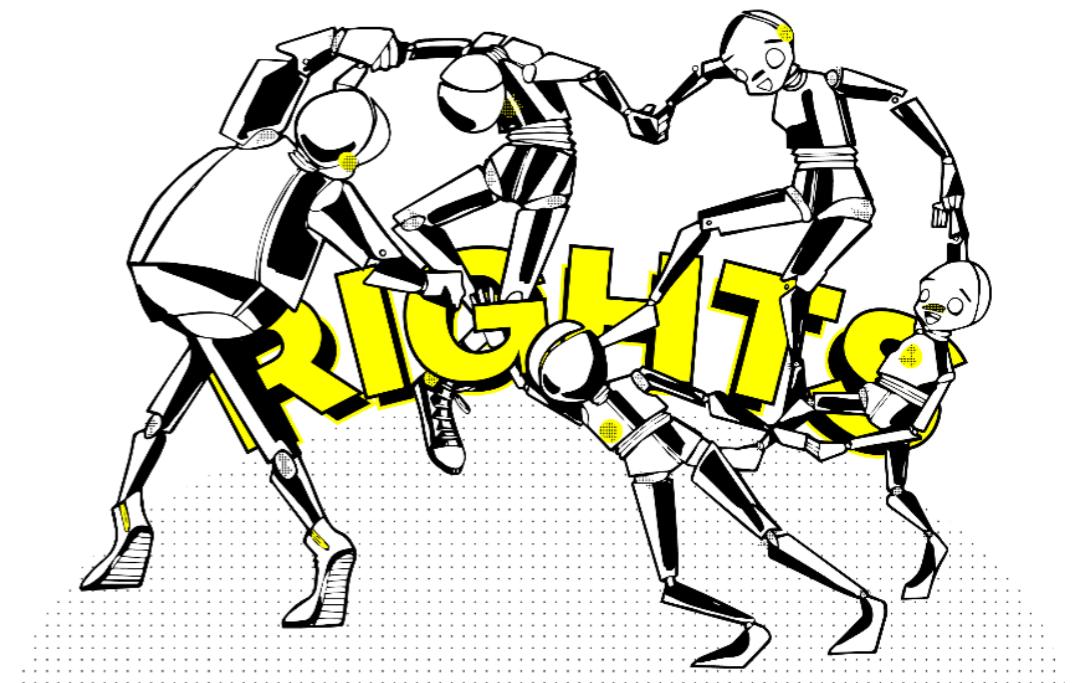
Thank you

Joanna Redden   I Reddenj@Cardiff.ac.uk
Data Justice Lab I datajusticelab.org

Illustrations by:
Matteo Blandford (www.matteoblandford.com)