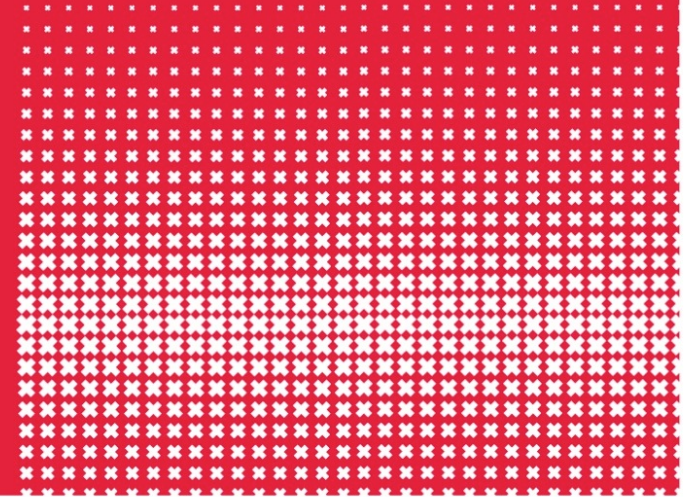


Frederik Zuiderveen Borgesius



How to regulate automated profiling
and discrimination?

2-year Marie Curie fellowship
1/1/2018, I start at:



LSTS

LAW, SCIENCE,
TECHNOLOGY &
SOCIETY STUDIES

VRIJE UNIVERSITEIT BRUSSEL
BELGIUM



How to regulate automated profiling and discrimination?



Profiling

- (i) Automated data processing
- (ii) to develop profiles
- (iii) to make decisions about people



Profiling

- (i) Data collection
- (ii) Analysis: construct a profile
- (iii) Decision, based on profile



Profile (phase 2)

IF person lives in ZIP code 5037 DE
THEN 80% chance the person pays
 bills too late



Profile-based decision (phase 3)

E.g. - No loan

- Higher interest rate



Profiling: general issues. e.g.

- Lack of transparency
- Risk: illegal discrimination
- Decisions can be incorrect for individual



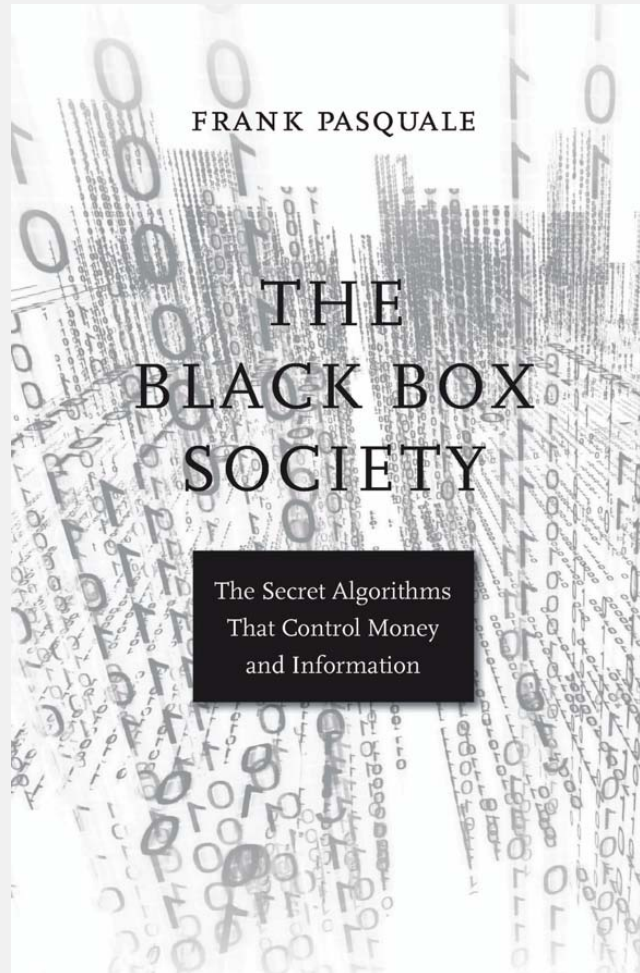
Lack of transparency: Automated credit decisions

With Wonga, your prosperity could
count on an algorithm

You can borrow money in minutes from Wonga - as long as its secret algorithm says yes. But should we worry that mathematics is replacing human judgment in the lending industry?

Wonga checks 6000 - 8000 data points

Lack of transparency



Profiling: general issues. e.g.

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THE WALL STREET JOURNAL.

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WHAT THEY KNOW

Websites Vary Prices, Deals Based on Users' Information

By JENNIFER VALENTINO-DEVRIES,
JEREMY SINGER-VINE and ASHKAN SOLTANI

December 24, 2012



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IF person lives in ZIP code 5037 DE
THEN 80% chance the person pays
bills too late



IF person lives in ZIP code 5037 DE
THEN 80% chance the person pays
bills too late

Bank denies loans in ZIP code 5037 DE



IF person lives in ZIP code 5037 DE
THEN 80% chance the person pays
bills too late

Bank denies loans in ZIP code 5037 DE

Hence: it also denies loans to the 20%



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ADD

Interest

Bicycles & Accessories

Books & Literature

Celebrities & Entertainment News

Finance

Fitness

Food & Drink

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Profiling: general issues. e.g.

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- Risk: illegal discrimination
- Decisions can be incorrect for individual



Current law:

- Data protection law



Current law:

- Data protection law:

Leaves gaps

E.g.: group profiles outside scope

(‘80% in ZIP code X pay bills too late’)





Current law:

- Non-discrimination law



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- Non-discrimination law:

Only applies to certain protected grounds,
such as race, gender, age...



Current law:

- Non-discrimination law:

Only applies to certain protected grounds, such as race, gender, age...

“Discriminatie op grond van inkomen is niet verboden.” College Rechten vd Mens

Profiling, promises and threats

Some general

Some sector-specific



3 sectors / case studies:

(1) Retail price discrimination

(2) Insurance

(3) Predictive policing



3 sectors / case studies:

(1) Retail price discrimination

(2) Insurance

(3) Predictive policing

Different legal & economic principles



Predictive Policing

Kansen voor een veiligere toekomst

POLITIEACADEMIE - Lectoraat Intelligence



Profiling: sector-specific issues

- Price discrimination value-based
- Insurance risk-based
- Predictive policing fair trial etc.





Approach: each sector



Approach: each sector

- Which rules apply & what are their rationales?



Approach: each sector

- Which rules apply & what are their rationales?
- How could profiling be used & what are the risks?



Approach: each sector

- Which rules apply & what are their rationales?
- How could profiling be used & what are the risks?
- Considering the rationales for the rules in this sector, should the law be improved in the light of profiling?



After 3 sectors / case studies

Can principles for regulating profiling be developed?



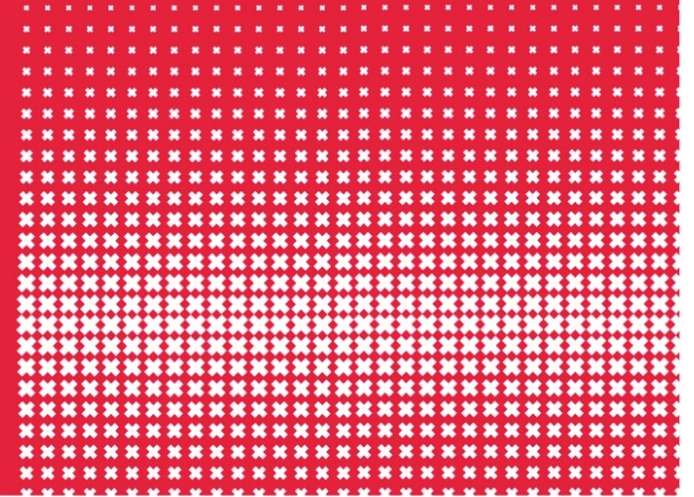


Overarching question



To respect fundamental rights,
while considering the particularities of
different sectors,
should profiling be regulated,
and if so, how?





Thank you!
@Fborgesius