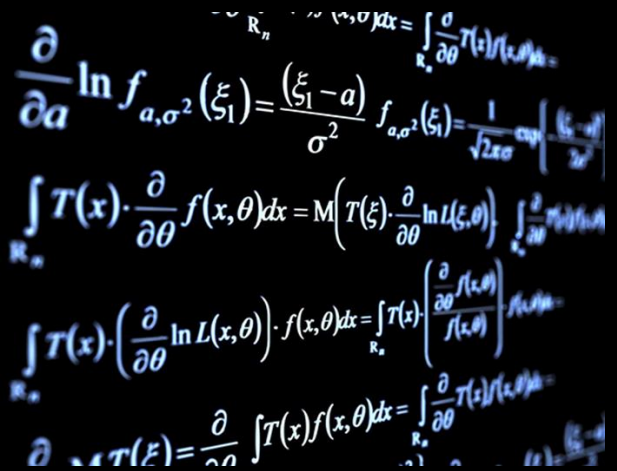
Algorithmic Patrol: The Futures of Predictive Policing



Dean Wilson, Sociology, University of Sussex

SSN SURVEILLANCE STUDIES NETWORK

University of Sussex

What is predictive policing?

- ‘the application of analytical techniques-particularly quantitative techniques-to identify likely targets for police intervention and prevent crime or solve past crimes by making statistical predictions’

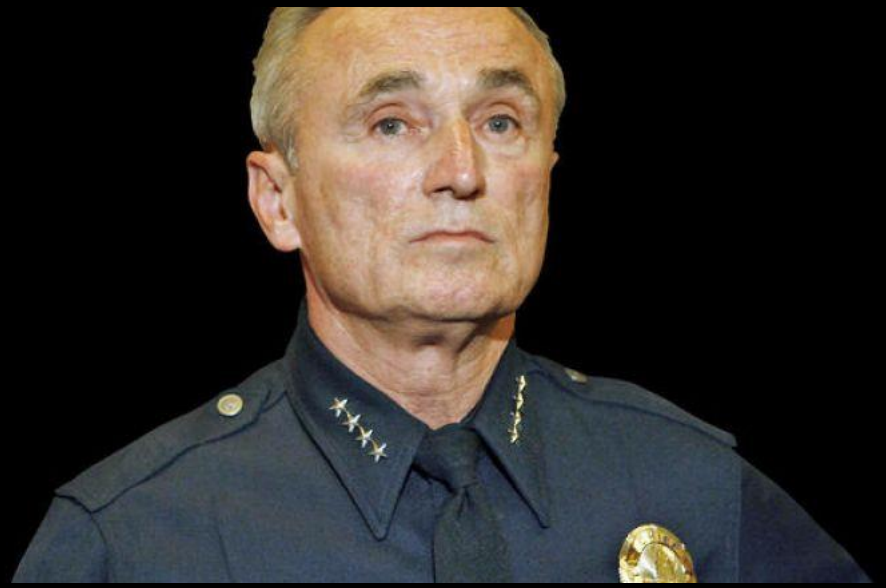
- How ‘new’ is predictive policing?

POLICE RADIO

SCIENTIFIC AID IN
THE DETECTION
AND SUPPRESSION
— OF CRIME —

Amalgamated Wireless
(Australasia) Ltd.

MELBOURNE & SYDNEY



Police Department
City of New York

Michael R. Bloomberg
Mayor

Raymond W. Kelly
Police Commissioner

Volume 19 Number 14

CompStat

62nd Precinct

Report Covering the Week 4/2/2012 Through 4/8/2012

Crime Complaints

	Week to Date			28 Day			Year to Date*			2 Year	11 Year	19 Year
	2012	2011	% Chg	2012	2011	% Chg	2012	2011	% Chg	% Chg	% Chg (2001)	% Chg (1993)
Murder	0	0	***.*	0	0	***.*	0	0	***.*	-100.0	-100.0	-100.0
Rape	0	0	***.*	0	0	***.*	2	6	-66.7	0.0	-66.7	-75.0
Robbery	7	10	-30.0	17	26	-34.6	48	55	-12.7	4.3	-45.5	-80.9
Fel. Assault	3	2	50.0	12	7	71.4	39	40	-2.5	39.3	-18.8	-40.0
Burglary	2	3	-33.3	14	14	0.0	63	66	-4.5	-23.2	-65.6	-84.5
Gr. Larceny	5	7	-28.6	33	29	13.8	108	114	-5.3	0.0	-19.4	-44.3
G.L.A.	3	4	-25.0	10	18	-44.4	31	52	-40.4	-31.1	-80.3	-93.5
TOTAL	*20*	*26*	*-23.08*	*86*	*94*	*-8.51*	*291*	*333*	*-12.61*	*-7.91*	*-52.84*	*-79.29*
Petit Larceny	15	20	-25.0	59	83	-28.9	211	238	-11.3	-11.3	***.*	***.*
Misd. Assault	10	3	233.3	43	27	59.3	128	102	25.5	29.3	***.*	***.*
Misd. Sex Crimes	1	0	***.*	5	4	25.0	14	9	55.6	40.0	***.*	***.*

BIG DATA?

VOLUME

Large amounts of data.

VELOCITY

Needs to be analyzed **quickly.**

VARIETY

Different types of structured and unstructured data.

30 billion pieces of content were added to Facebook this past month by 600 million plus users.

zynga

Zynga processes 1 petabyte of content for players every day; a volume of data that is unmatched in the social game industry.

YouTube

More than 2 billion videos were watched on YouTube... yesterday.

LOL!

The average teenager sends **4,762 text messages** per month.

32 billion searches were performed last month... on Twitter.

Worldwide IP traffic will **quadruple by 2015.**

By 2015, nearly **3 billion people**

will be online, pushing the data created and shared to nearly **8 zettabytes.**

Causality to Correlation

- ‘society will need to overturn some of its obsession with causality in exchange for simple correlations: not knowing *why* but only *what*’ (Mayer-Schönberger and Cukier 2013: 14).
- Dataism

Transparent Technologies

- Black-boxing
- ‘technical capacity is hidden from the user and the science is already built in’
- ‘Intuitive Usability’ with actionable predictions at ‘one click of a mouse’
- Seamless and invisible prediction
- Data thirst

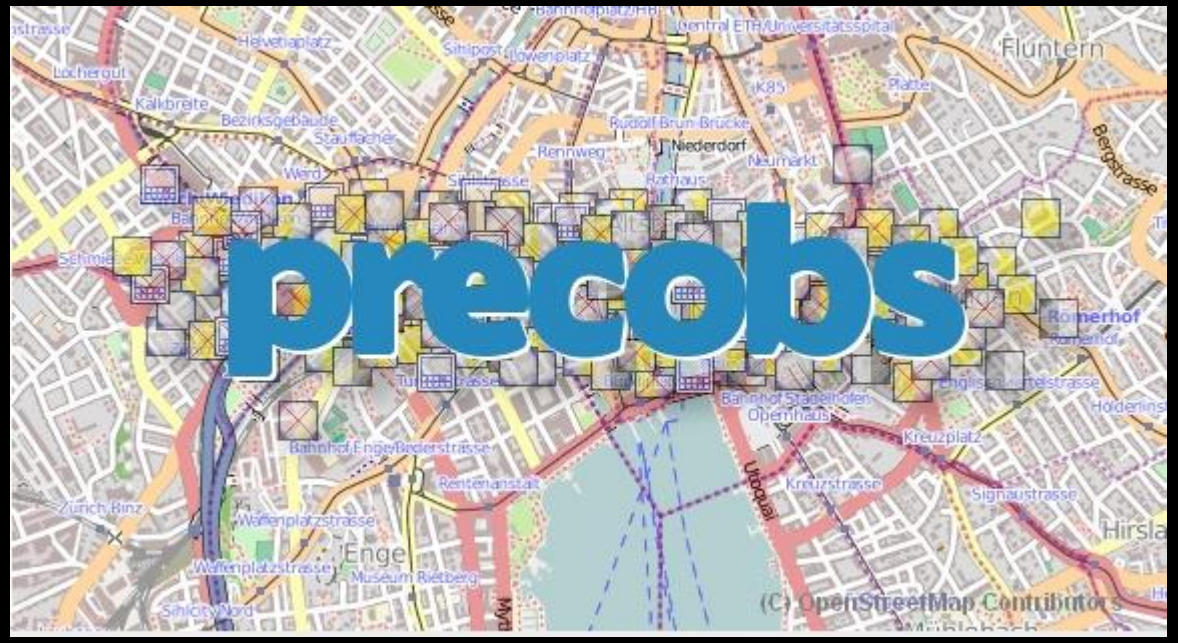
Kellogg's
7 Vitamins and Minerals
pop. tarts
toaster pastries
Real Fruit
Frosted
Strawberry
8 TOASTER PASTRIES
NET WT. 14.7 OZ. (416g)

Budweiser
12
12 FL. OZ. CANS
This is the famous Budweiser beer. We know of no brand produced by any other brewer which costs so much to brew and age. Our exclusive Beechwood Aging produces a taste, a smoothness and a drinkability you will find in no other beer at any
Budweiser
KING OF BEERS

WAL★MART

Marketing the Future

Microsoft



POWERFUL SOFTWARE.
FIGHTING SERIOUS CRIME.

IBM

WYNYARD

PREDPOL®

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PREDICTIVE POLICING®

Predict Crime in Real Time®

PredPol provides targeted, real-time crime prediction designed for and successfully tested by officers in the field.

Google

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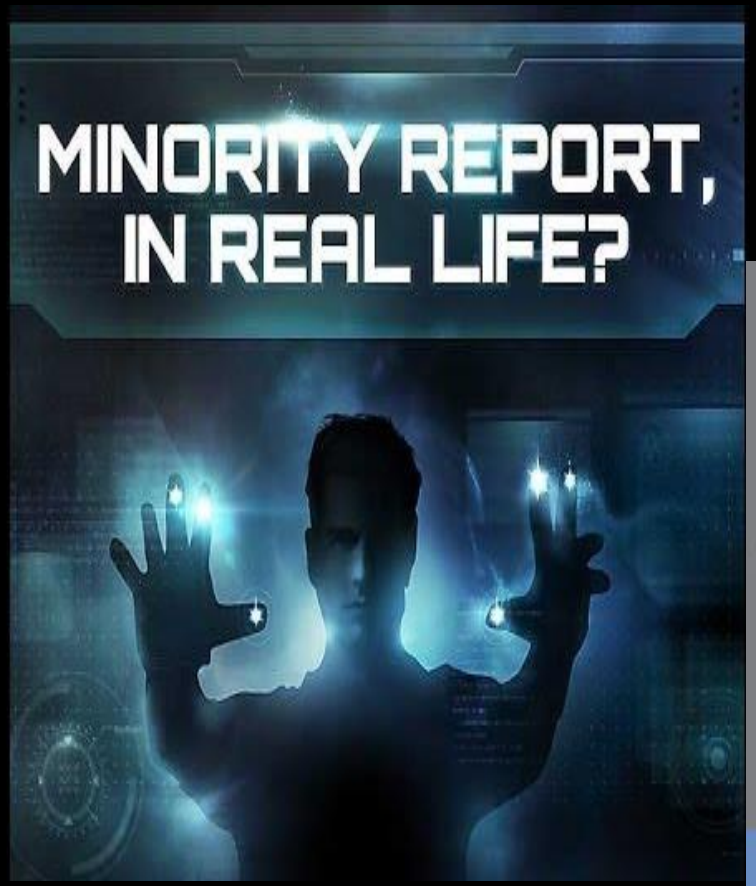
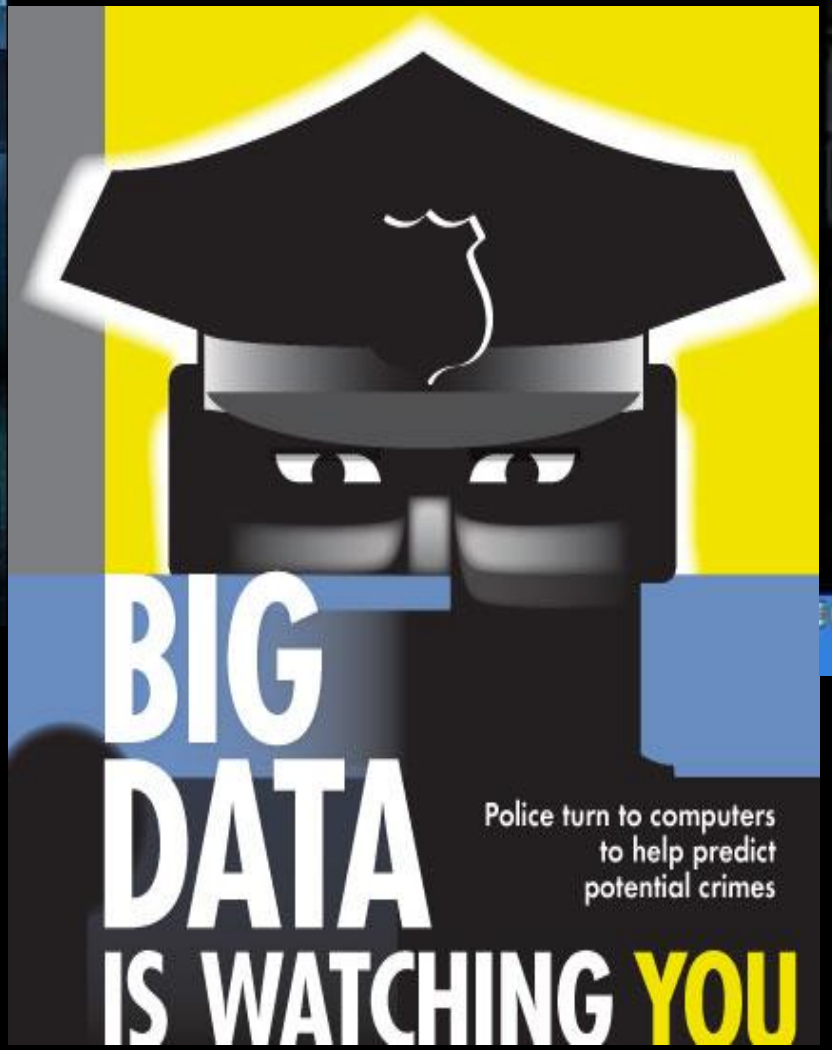

MINORITY REPORT,
IN REAL LIFE?


BIG
DATA
IS WATCHING YOU
Police turn to computers
to help predict
potential crimes

WELCOME TO
THE FUTURE
RNN
RNN
77°F 6:32
OF A MOTHER WHO WAS GUNNED DOWN WHILE WALKING WITH HER HUSBAND

- ‘Dear Sir/Madam: Please let my chief and I know where we can buy the software that will tell us where to go pick up criminals as they are committing crimes. We have read articles and seen ads on this…’
- (Composite of multiple letters sent to the International Association of Crime Analysts) (cited Perry et al 2013)

Policing for Austerity

Evaluation

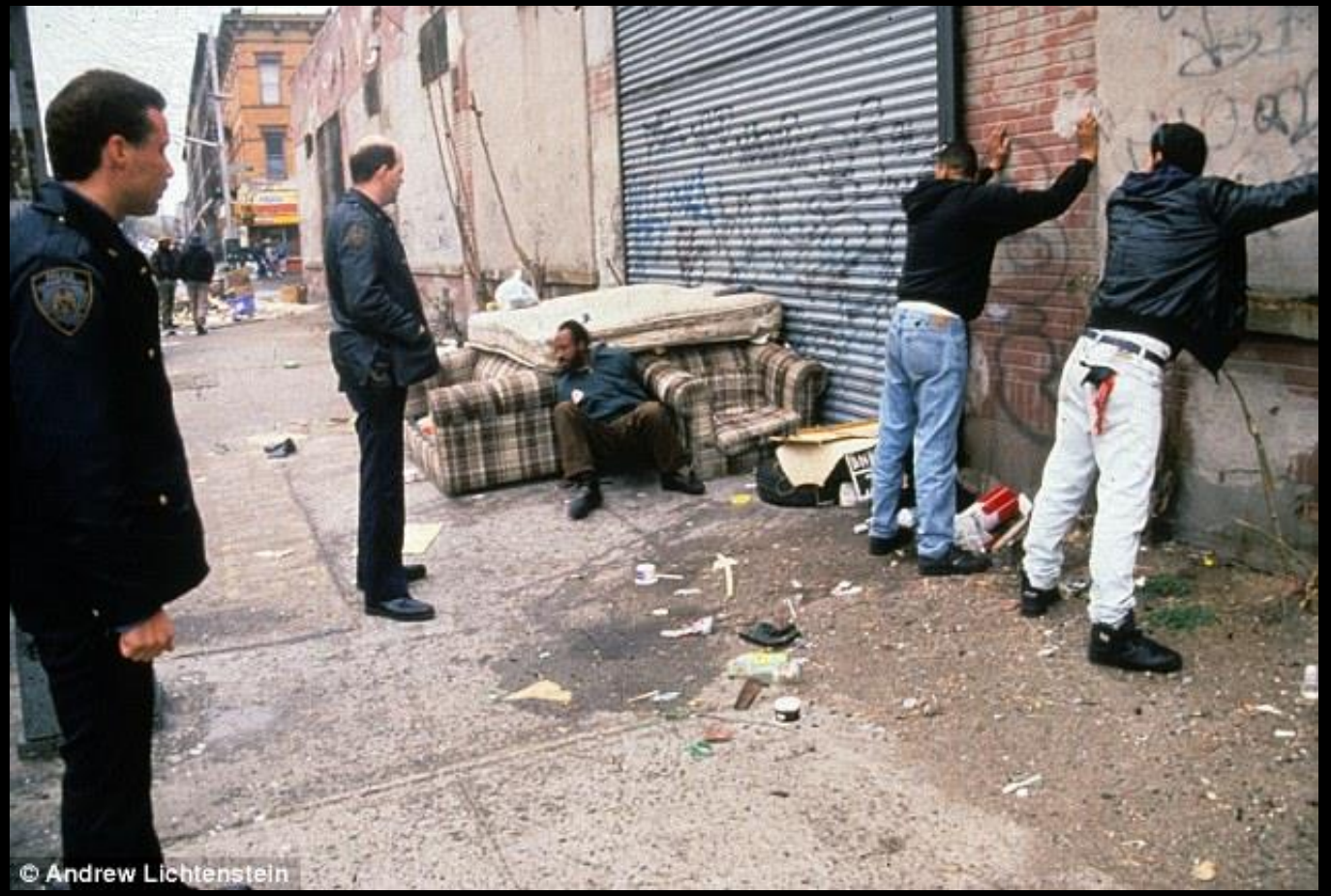
- Industry sponsored evaluation
- Rand Corporation Shreveport Evaluation
- ‘no statistical evidence that special operations to target property crime informed by predictive maps resulted in greater crime reductions than special operations informed by conventional crime maps’ (Hunt et al 2014: xvi)
- Impact upon community

- “IT and its supporting features did not change any significant practice” (Manning 2008: 251)
- Information Overload
- Over-collection of police data
- Resistance to and subversion of technology in the field

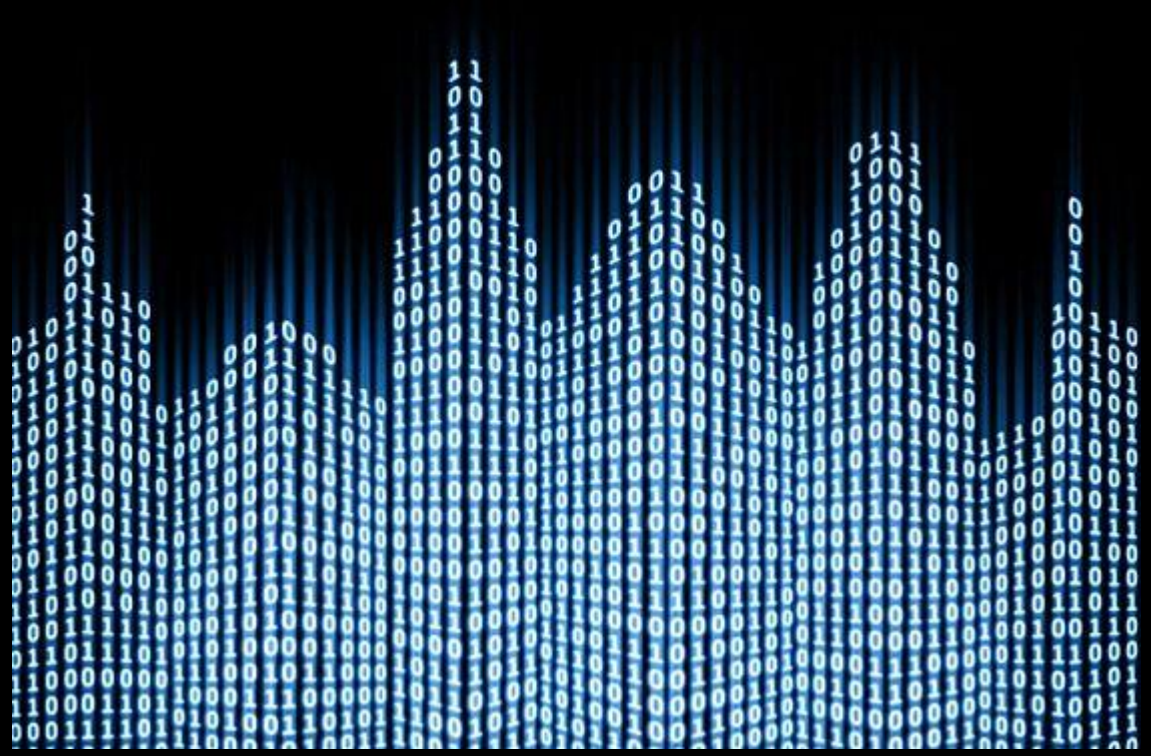
Antinomies of Prediction

- Notion of technology as ‘force multiplier’
- Deskilling/Burbank Police
- Benevolent Prediction
- Predictive policing to ‘provide a greater level of precision and also provide information on officer activity when *not* on a predictive policing mission’ (Mohler et al 2015: 1410)
- Community Policing

Post-Political Crime Control?



Tracking and Targeting in the Smart City



ST. LOUIS COUNTY
POLICE
POLICE

Some concluding thoughts

- Policing for Austerity – the erasure of politics and normalization
- Rationalization of crime control
- The scientification of police work and the narrowing of mission
- Escalating spirals of hot spots, prediction and the ‘usual suspects’