



# Predictive behavioural profiling for a more secure sense of life

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## Predictive behavioural profiling

- › Pro-active security = cheaper and better security
  - › Successful surveillance is dependent on the capacity to detect incidents in an early stage, preferably before the incidents takes place
- › Predictive behavioural profiling does not result in ethnic profiling and other forms of discrimination by (external) features.





# Questions of security organizations

Do prodding actions help detecting deviant behavior

Privacy?

How to balance service & security?

Intelligent camera's?

What is deviant behavior?

How to measure effectiveness, efficiency and customer experience?

Competences & training of professionals

$0+0=1?$

Biases in surveillance?





## The right people on the job?



Competences &  
training of  
professionals,

Rijksmuseum

Relevant work experience related (+) to predictive behavior profiling:  
Hire people with security background or train on the job.



## Training of camera-operators



Competences &  
training of  
professionals,

Training with EyeObserve by Stadstoezicht Rotterdam (source: VSTEP)



## What is deviant behavior?



What is  
deviant  
behavior?

### ***Nine definitions: threat based vs. continuity based!***

Behaviour which is part of the modus operandi of a criminal act; **or**  
Behaviour which falls outside the normal distribution of behaviour at respective location



## Suicide prevention: Search, Detect, React

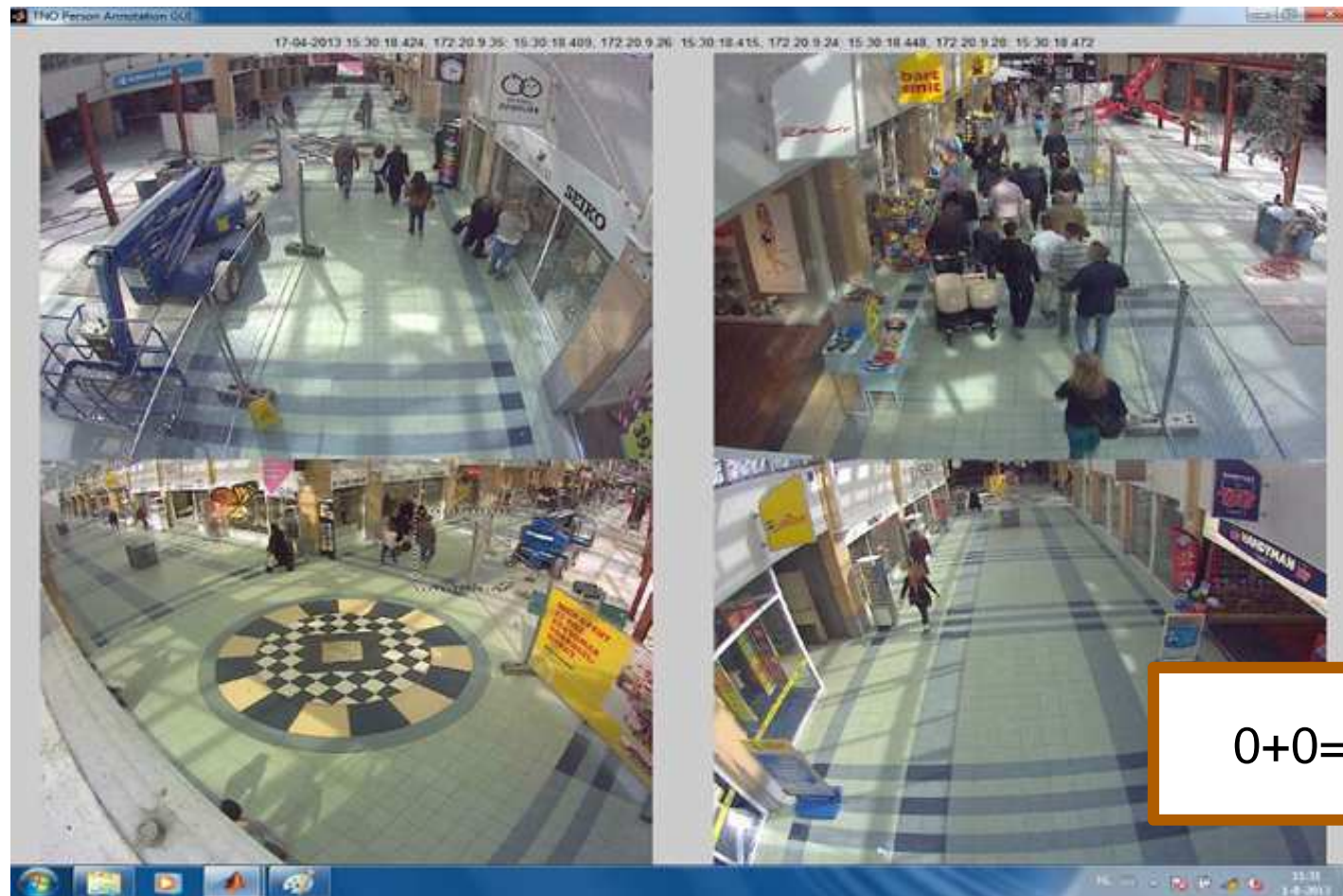


What is  
deviant  
behavior?

“Behaviour which falls outside the normal distribution of behaviour at respective location”



## Who is a deviant behavior detection-wizard?



Combining observations of independent operators improves accuracy





## “The yellow line” ...

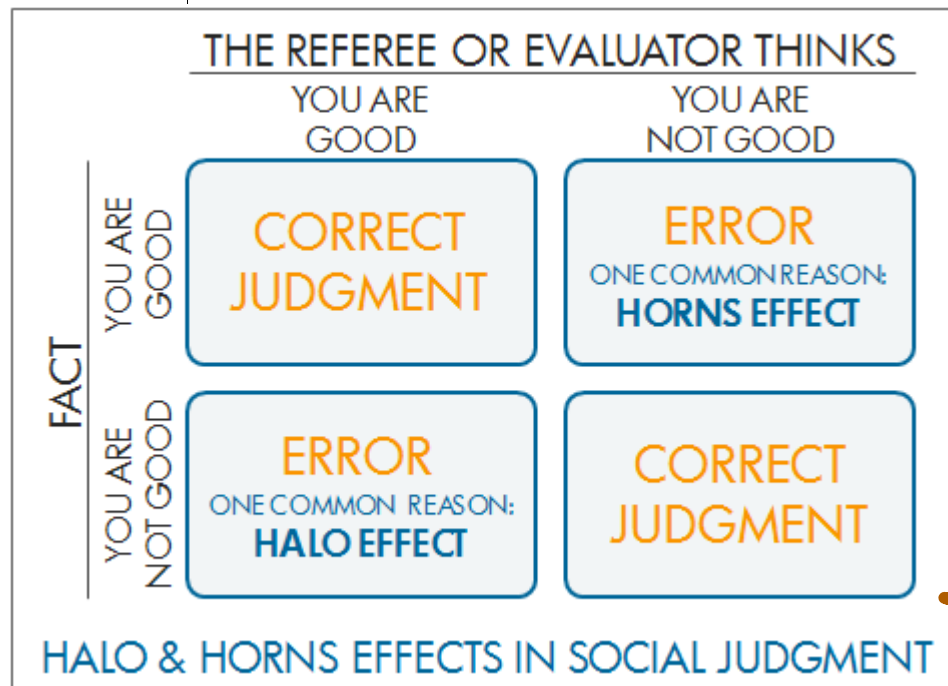
Do prodding  
actions help  
detecting deviant  
behavior



...helps to distinguish people with malicious intent from other people



# Biases: Halo (horn) effect



Biases in surveillance?

Deployment strategies should focus on countering boredom and high work pressure.



# Propositions for debate



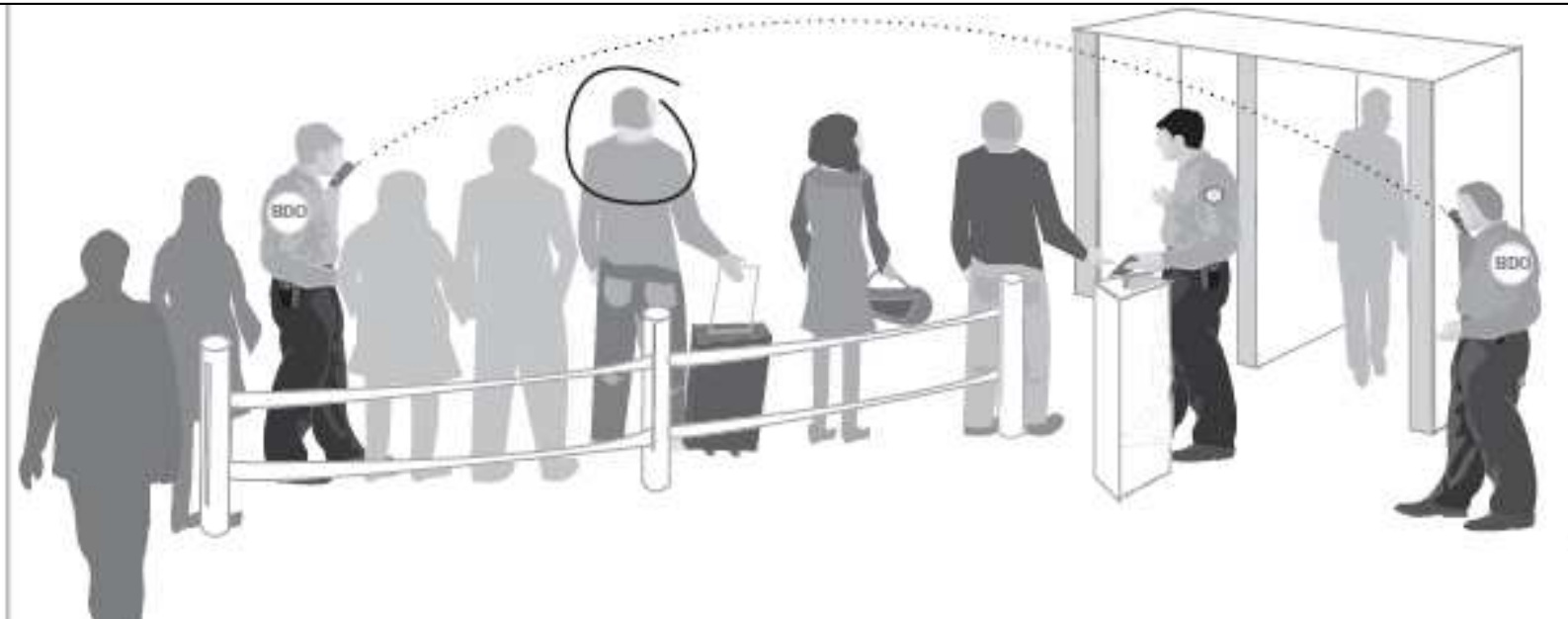


## Business case for deviant behavior-programs is positive

Figure 2: The First Step in the SPOT Process: BDOs Observing Passengers About to Go Through Checkpoint Magnetometer

Friday, 29 November 2013 11:30

# SPOT-ting \$900 Million, TSA Program Hasn't Caught One Terrorist



**Demonstrating effectiveness of crucial importance**



# Security needs to be in balance with service





## Todays model is no longer sustainable

*“Today’s passenger security screening process works—but at great cost to authorities, the airline industry, and to passengers themselves. Given the predicted growth in air travel—and continuously evolving security threats—today’s model is not sustainable for the long term.” (IATA website, 2014)*



**Positive signs?**



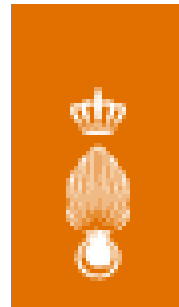
# Security without hinder is undesirable



Security = invasiveness



## Central examination is needed for behavior profiling



Koninklijke Marechaussee



Professional market requires harmonisation





## References

- Rest, J.H.C. van, Roelofs, M.L., Nunen, A.M. van, Afwijkend Gedrag: Maatschappelijk verantwoord waarnemen van gedrag in context van veiligheid – tweede herziene druk, TNO 2014 R10987 (2014)
- Rest, J.H.C. van, Roelofs, M.L., Nunen, A.M. van, Deviant behaviour - Socially accepted observation of deviant behaviour for security - extended summary. TNO, 2014.
- Van Rest, J., Roelofs, M., & Van der Kleij, R. (2014). Gebruiken van kennis over afwijkend gedrag. *Security Management*, 9, 28-30.