## GRASPING THE COMPLEXITY IN POLICING TRAFFIC: A METHODOLOGICAL EXPLICATION

Vesa Huotari Senior researcher Police University College Finland Presentation at the Northern Police Research Webinar 31.8.2023 Why is the effectiveness of policing traffic/roads less than it could be (actual vs. ideal)?

Methodology = The context in which this question is meaningful and guidelines for a possible approach in finding an answer to it.

Framework for my presentation: Man against machine (in this case, my answer and the answer ChatGPT provides)

## Content of my presentation

- Performance Perspective
- Bacon's Factory Epistemic Complexity in Research and Real Complexity in the World
- Explanatory Understanding of (Under)Performing
- Contradictory Tendencies undermining Performance in Policing Traffic
- References & Publications
- Appendix: ChatGPT's answer

Performance perspective: How could X perform better?

Everyday problems have usually many dimensions. Any field of science is able to cover and handle effectively just a few of them. Nevertheless, each is inclined to proclaim that the whole, actual, or true problem is captured by their own framework and best dealt with their tools too (result: exaggerated efficacy claims).

Core problem: How to bring together or combine the contributions from several disciplines into coherent understanding, that is capable in providing for performance improvement, say, in policing traffic?

I.e. how to make psychological, sociological, economic, etc. accounts to meet and contribute jointly to the pursuit of improved performance at police work?

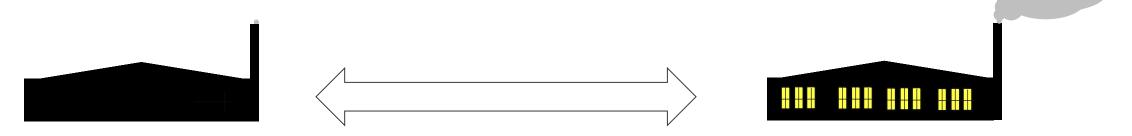
In Francis Bacon's "factory",

Knowledge is power (potentia)

Nature is commanded by obeying its laws

Therefore, knowledge of those laws is a prequisite for the betterment of the human lot (improved performance by releasing/ activating/harnessing real potentials/powers).

How would you explain the difference between a factory that does not work/perform and a factory that does?

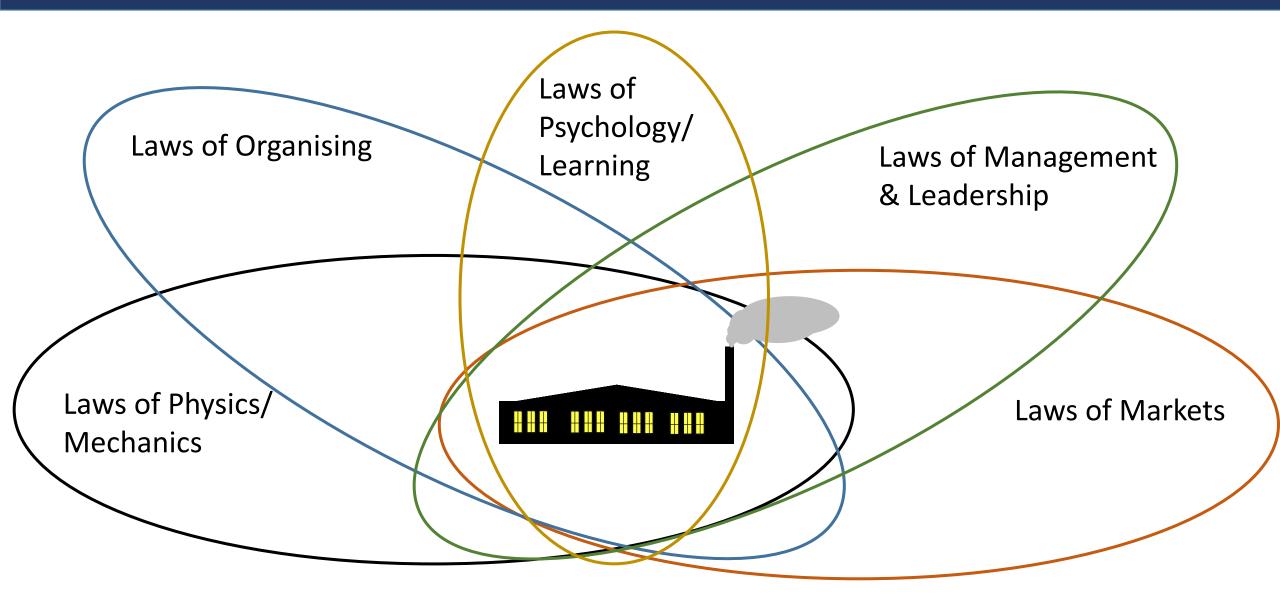


Seeing a factory as a simple entity is likely to lead to simple or one dimensional explanations.

What would explain a factory that does work/perform, but not very well?



### Complexity underpinning performing<sup>3</sup>



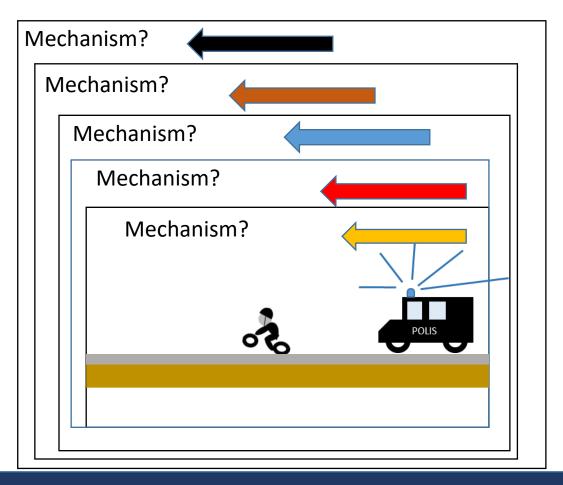
### Thinking in terms of generative structures (nested mechanisms)

# Layered structure underlying "what works" in traffic policing<sup>3</sup>

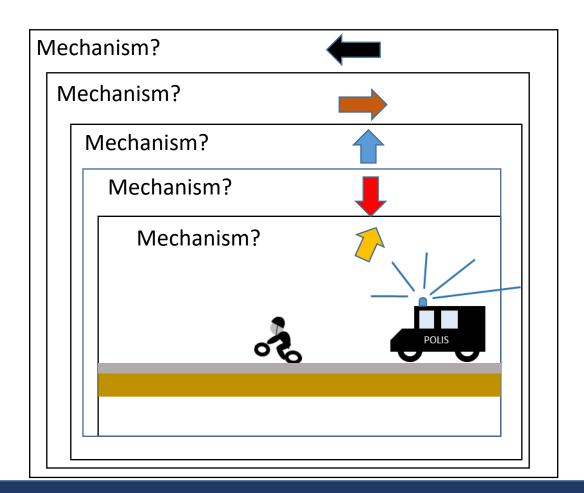
Mechanism?						
Mechanism?						
	Mechanism?					
	Mechanism?					
	Mechanism?					
	POLIS					

#### The Emergence of (Under) Performing in General

Ideally: potentialities residing in different layers align perfectly and converge in action Actually: potentialities from different layers undermine each other (?)



#### Potentiality Fully Utilised in the Performing



#### Underperforming Because of Evaporation of Potentiality

#### **Explanatory Understanding?**

(1) The Covering Law-Model<sup>2</sup>: Explanation by figuring out the laws underpinning empirical regularities (constants in the coming together of events)

#### Initial Conditions

The Unknown: Whenever in spesific kind of initial conditions something follows regularly, we can try capture the relation in a testable symbolic form, test it to see if it truly holds across situations and times, and, when successful, name "the force" behind it, and characterise its functioning in general sense as a scientific law.

Observed Event(s) – explanation of which is usually the starting point of research, i.e. how come x rather than y or something else happenned)

#### The Unknown: Conditions

The law already known, i.e. rationality principle Popper: We know that this law is not true, just an approximation. Therefore, it is pointless to try to falsify it. The focus should be in figuring out the situation explaining the event of interest

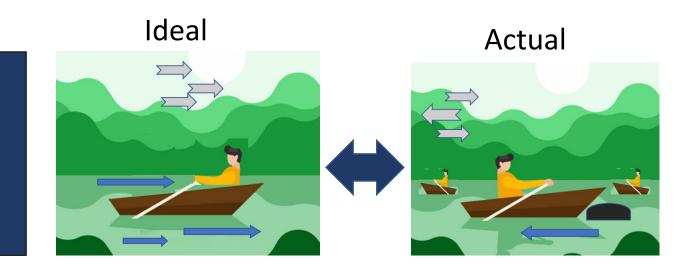
Observed Event(s) – explanation of which is usually the starting point of research, i.e. how come x rather than y, or something else, actually happenned?)

A reasonable objective is to create generalised or typical models of situations where police officers do their work and strive to fulfill their purposes

Such models can be used as ideal types against which we can contrast the actual situation (and put a finger on how to improve that performance).

Such a type should not only help us to identify the relevant issues and their actual state in the situation under scrutiny, but also – in the multidimensional world of ours – track down the way they relate to each other.

Deficiencies in performance in rowing grasped by comparing the actual situation with the ideal one in order to figure out ways for improvement =>



Why is the effectiveness of police work on the roads less than it could be (actual vs. ideal)?

It is because police work on the roads in burdened by real dilemmas making policing roads both an inherently complex accomplishment (perhaps unnecessarly so) burdened by competing values and purposes deriving from/residing in different layers/layered structures that, on their part, make learning from experience difficult at it.

Personal Dilemma	Professional Dilemma	Organisational Dilemma	Institutional Dilemma	Societal Dilemma
New ideas, knowledge and innovations	Safeguarding road users	Risk management/ mitigation	Enhancement of order and predictability	Policing local order
Established ideas, practices, and tactics	<b>Fighting</b> crimes	Crime prevention	Efficient deterrence	Policing translocal order
Learning	Professionalism	Role/function	Purpose	Orientation

ambiguities in task related learning

underpinned by divided professional identity

resulting from a mixed role or blurred function that

reflects competing ideas of the purpose that

resonates with the way the order on the roads is justified (expertise vs. local consent).

## Summary

- How to improve police work?
- Adopt Performance Perspective
- Construct a generalised model of situation (explanatory understanding of the evaporation of effectiveness)
- Bring the model down to earth by grasping the complexity behind the performance in a specific case (overcoming epistemic complexity)
- Identify the lack of alignment or, even, contradictory tendencies in the former [grasping sources for (under)performing].
- Discuss with the police officers towards a joint understanding of the conditions of their work and on the ways to improve them.

# Thank you!

#### **KEY PUBLICATIONS**

<sup>1</sup> The idea discussed briefly in Huotari, V. The police – a tool, machine or technical ensemble? Paper presented at CEPOL Research & Science Conference in Vilnius, Lithuania 8.6. 2022.

<sup>2</sup> See Nadeau, R. 1993. Confuting Popper on the rationality principle. Philosophy of the Social Sciences 23 (4), pp. 446-467.

<sup>3</sup> The idea adopted from Collier, A. 1989. Scientific Realism and Socialist Thought. Hemel Hempstead: Harvester.

<sup>4</sup> On the topic:

Huotari, V. 2020. Poliisin liikennevalvonnan ja liikenneturvallisuustyön vaikuttavuus. Kompleksisuuden analyysi ja kuvaus (In Finnish). Poliisiammattikorkeakoulun raportteja 137. <u>https://www.theseus.fi/handle/10024/349686</u>

Huotari, V. 2022. Indicators for the effectiveness of traffic law enforcement. Proceedings of the Estonian Academy of Security Sciences 21, pp. 35-61.

https://digiriiul.sisekaitse.ee/bitstream/handle/123456789/2959/proceedings-21-

web.pdf?sequence=5&isAllowed=y

Rintamäki, I., Huotari, V. & Sutela, M. 2022. Vaikuttavuuden indikaattorit poliisin liikenneturvallisuustyössä (in Finnish). Poliisiammattikorkeakoulun raportteja 141. <u>https://www.theseus.fi/handle/10024/746457</u>

# Of interest, a reply from AI on Why is the effectiveness of traffic policing less than ideal? (ChatGPT 3.5, 30.8.2023, reduced list):

- **1. Limited Resources**: This can lead to inadequate coverage of traffic enforcement, making it difficult to effectively police all areas and times where traffic violations might occur.
- **2. Prioritization of Other Crimes**: This means that traffic enforcement might take a back seat to addressing violent crimes or property crimes.
- **3. High Volume of Violations**: Even with dedicated efforts, the sheer volume of violations can make it difficult to effectively enforce traffic laws.
- **3. Resource Allocation**: Even within the realm of traffic enforcement, resources might be allocated more towards certain types of violations (such as DUI checkpoints or speeding) than others, leaving some violations less policed.
- **4. Inadequate Technology:** While technology has improved traffic enforcement (e.g., speed cameras, red light cameras), some areas may lack access to such technology, reducing the ability to monitor and enforce traffic violations.

- **5. Evasion and Avoidance**: Some drivers actively try to evade traffic police, using tactics like changing routes or slowing down when they see a patrol car. This can make it difficult for officers to catch and penalize offenders.
- **6. Lack of Deterrence:** If enforcement is sporadic or lenient, it can reduce the overall deterrent effect of traffic policing. Drivers may be less motivated to follow the rules if they believe there's a low chance of getting caught.
- **7. Complexity of Traffic Laws**: Traffic laws can be complex and vary from region to region. If drivers are unclear about the rules, they might unintentionally violate them, leading to enforcement challenges.
- 8. Legal Challenges: Traffic violations can lead to legal challenges, and officers must follow proper procedures when issuing citations. Errors or inconsistencies in enforcement can lead to challenges that undermine the effectiveness of policing efforts.

To improve the effectiveness of traffic policing, a comprehensive approach is needed, says ChatGPT.