

Innovations and Innovativeness in the Police & Policing

Essays on History, Theory and Philosophy

POLICE UNIVERSITY COLLEGE RESEARCH REPORTS 46

INNOVATIONS AND INNOVATIVENESS INTHE POLICE & POLICING

Essays on History, Theory and Philosophy

Edited by Vesa Huotari

Police University College Tampere, 2021

Vesa Huotari (ed.) INNOVATIONS AND INNOVATIVENESS IN THE POLICE & POLICING – ESSAYS ON HISTORY, THEORY AND PHILOSOPHY

Research Reports of the Police University College 46 ISBN 978-951-815-388-0 ISSN 1455-8262

Grano Oy 2021

TIIVISTELMÄ

Poliisihallitus ja Poliisiammattikorkeakoulun tulossopimuksessa vuodelle 2020 sovittiin innovaatioihin poliisissa liittyvästä julkaisusta. Tässä julkaistut kahdeksan innovaatioihin ja innovatiivisuuteen poliisissa kytkeytyvää kirjoitelmaa ovat tulkintamme meiltä odotetusta. Julkaisu on englanninkielinen, koska se oli alusta alkaen ajateltu kansainvälisesti kiinnostavaksi ja myös kansainvälisesti aikaansaaduksi. Pandemia kuitenkin aiheutti sen, että työ toteutettiin lopulta puhtaasti paikallisin voimin.

Ensimmäinen kirjoitelma kritisoi taipumusta ymmärtää poliisi puhtaasti valtion jatkeena. Lähtökohtana käytetään yleensä Max Weberin määritelmää valtiosta voimakeinojen käytön monopolina jollakin alueella. Jos poliisissa nähdään yksinomaan valtio ja valtio nähdään puhtaasti voimakeinojen käytön monopoliksi, niin tuleeko poliisi tällöin pätevästi nähdyksi? Syvemmällä tasolla kysymys on siitä, millä tavalla tapamme käsitteellistää poliisia ovat yhteydessä siihen, miten innovaatiot ja innovatiivisuus poliisissa näyttäytyvät tutkijoille.

Seuraava kirjoitelma vastaa osaltaan edellisen esille tuomaan kysymykseen. Pitäisikö tai voisiko poliisin itsessään ymmärtää innovaatioksi? Se on ollut osa modernia yhteiskuntajärjestystä siinä määrin pitkään, että pidämme sitä – ainakin toistaiseksi – välttämättömänä uskottavan ja toimivan oikeusvaltion osana. Mikäli poliisi itsessään on innovaatio yhteiskunnallisena instituutiona, niin mitä tuo uusi ja ennennäkemätön siinä mahdollisesti on? Kirjoitelma palaa modernin poliisin syntyyn 1800-luvun vaihteen Irlantiin ja Englantiin tuon jonkin jäljittämisenä. Yhteiskunnassa, jota leimasivat luokkaristiriidat, poliisi joutui hakemaan neutraalia asemaan jostakin niiden ulkopuolelta. Tukeutuminen yksinomaan lakiin tarjosi sellaisen. Se, missä määrin laki sulki piiriinsä yleisen tahdon tai ilmensi sitä, on toinen kysymys.

Kolmas kirjoitelma siirtyy innovaatioista isossa mittakaavassa pienempään eli opettajuuteen poliisikoulutuksessa. Miten jokin, joka ei ole millään tavalla tuttua, voi tulla ylipäänsä ymmärretyksi? Tapausesimerkkinä on tutkimusmenetelmien opetus poliisiopiskelijoille. Ratkaisuna on keksiä yhtymäkohtia poliisityöhön liittyvistä jaetuista kokemuksista. Uusi opittava on täten valotettavissa sekä yhtymäkohtina että eroina suhteessa johonkin, joka jo ymmärretään, kuten tiedonhankinta puhutteluna tai kuulusteluna. Näin omaksuttu antaa myös uutta perspektiiviä jo-ymmärrettyyn. Innovatiivisuus poliisiopettajan työssä liittyy olennaisesti ongelmakohtien ylittämiseen oppimisessa.

Seuraavassa kirjoitelmassa kehyksenä on oppiminen alueellisten valmiusharjoitusten yhteydessä. Millaisia tilanteita varten oikein harjoitellaan, mitä tuo harjoitteleminen on kapasiteettien kasvuna ja millä tavalla näin vahvistettu toimintavalmius palvelee tilanteessa, joka on perustavalla tavalla uusi? Skenaariot on tapana ottaa jostakin jo tutuksi tulleesta, aiemmin kohdatusta tai todennäköiseksi nähdystä. Tällaiset tapahtumat ovat vahvasti läsnä kollektiivisessa muistissa, varustautumisen tavoissa ja välineistössä sekä tilanteita varten laadituilla toimintakorteilla. Valmisharjoitukset ja niiden pohjalta luodut odotukset varautumisena voivatkin merkittävästi viivästyttää tilanteiden tunnistamista eiodotetuiksi tai aiemmasta poikkeaviksi. Varautuminen voi täten asiallisesti vähentää

toimintavalmiutta tapahtumissa, jotka merkittävästi poikkeavat harjoitelluista. Valmisharjoittelua tulisikin laajentaa niin, että niissä edellytetään osallistujilta innovatiivisuutta ja improvisointia ja jotka palvelisivat täten varautumista tavanomaisista poikkeaviin tilanteisiin.

Neljä viimeistä kirjoitelmaa liittyvät kansainväliseen keskusteluun innovaatioista poliisissa ja niitä koskevaan tutkimukseen. Ensimmäisessä pohditaan poliisissa osin ilmenevää penseyttä uutta kohtaan. Miten sitä kannattaisi tutkimuksen keinoin lähestyä ja mikä kyseistä dispositiota mahdollisesti selittäisi? Toisessa esseessä asiaa pohditaan asiaa enemmänkin innovaatioiden ominaispiirteiden kautta. Kolmas puolestaan ruotii suhdettamme teknologiaan. Jos ymmärrämme teknologian radikaalisti toisin, miten se muuttaa tapaa jäsentää innovaatioita ja niiden omaksumista poliisissa? Viimeinen kirjoitelma tarkastelee poliisi ja innovaatiot -tutkimuksen suhdetta poliisitoimeen tietotuotteiden kuluttajana ja pohtii, millaista kuluttajavalistuksen tulisi olla. Viitekohtana on kolme poliisitoimintaan kansainvälisessä kirjallisuudessa liitettyä innovaatiota: tietojohtoisuus, näyttöpohjaisuus ja tietoperustaisuus. Kun yliopistot ja korkeakoulut ymmärretään on tullut kasvavasti innovaatioiden tuottajina ja kun ne enenevästi toimivat markkinaehtoisesti, pitäisikö uudella tavalla suhtautua myös kysymykseen kuluttajansuojasta akateemisten tietotuotteiden kohdalla?

Vaikka kukin kirjoitelma toimii itsenäisenä pohdintana, niin yhdessä ne tarjoavat moniulotteisen ja -puolisen kuvan poliisin suhteesta innovaatioihin aikana, jossa innovointi näyttäytyy yhä useammin kaikkialla läsnä olevana välttämättömyytenä. Tästä syystä tarvitaan innovaatioilmiön kriittistä sekä reflektoivaa tarkastelua.

Death and taxes,
the two certainties.
I take care of taxes,
death takes care of me,
life is in-between.

PREFACE

The theme for this collection of essays – innovations in the police – came up in the annual negotiations between the National Police Board and the Police University College. Eventually, this assignment landed on my desk and kept me very busy for few months in the year 2020.

In fulfilling it, I created a pincher strategy by turning it into an international book project, on the one hand. Professor Sirpa Virta, Professor Marleen Easton and Director Elizabeth Aston participated in giving shape and substance to this project. On the other hand, I introduced a working group on the theme at the Nordic Police Research Conference for June 2020 to attract contributions to it.

My international book project evaporated because of my unrealistic schedule, lack of marketing skills and an inadequate publishing plan. Moreover, the COVID-19 pandemic prevented us from organising the Conference at the scheduled time. Thus, my glorious pincher strategy died out, but the assignment remained.

When all hope seemed to vanish into thin air, three of my colleagues at the College, i.e. Ossi Heino, Jarmo Houtsonen, and Timo Korander, stepped in to help me with carrying out the project. Fortunately, I had some older manuscripts and some three months still to think about the theme. Perhaps, nowadays, three months is the new standard.

The manuscript consisting of eight essays was submitted to the Publication Committee of the College in March 2021. In two months, two critical reviews of it from the external referees arrived. I found their insights, recommendations, and comments most helpful. However, materialising all of them in the final version was simply beyond my grasp of the subject.

As my final remark, the assignment was a thrilling project from the beginning. While the stars were simply unfavourable to it, I am assured, that, in the end and despite all its shortcomings, we succeeded in salvaging something of value by it.

In Tampere May 19th 2021

Vesa Huotari

THE ESSAYS

TIIVISTELMÄ

PREFACE

INTRODUCTION9
THE POLICE AND THE STATE: CHALLENGING WEBERIANISM IN POLICE STUDIES15
THE POLICE AS A HISTORICAL INNOVATION30
INNOVATIONS IN POLICE EDUCATION58
NEED FOR RE-ENACTING HANSEL AND GRETEL IN THE POLICE: INNOVATIONS AS BARRIERS TO INNOVATIVENESS81
IMPEDIMENTS TO INNOVATIVENESS IN THE POLICE: SUGGESTION FOR A RESEARCH STRATEGY97
INNOVATION: THE GHOST IN THE POLICE MACHINE122
DEVELOPMENT OF THE POLICE MACHINE BY INNOVATIONS 140
INNOVATIONS OF POLICE SCIENCE – REMARKS FROM THE POINT OF VIEW OF CUSTOMER PROTECTION165

INTRODUCTION

Vesa Huotari

The Context

The main title of this report – Innovation and Innovativeness in the Police & Policing – is anything but innovative in itself. It echoes the very tune of the decade. Thus, the eight essays included in it are far from solitary voices in the dark. There are many others both preceding them as well as voiced along with them.

The policing literature, as Randol (2014, p. 54) notes, displays a strong interest in organisational innovativeness and its structural determinants. As far as the main theme is concerned, the essays originate from the same tree, reflect the joint interests in it and participate the current discussions on and around it. However, the authors of the essays published here dig the issues a bit deeper both analytically and methodologically. They draw their perspectives together from atypical elements, and approach the very theme from unconventional, relatively rare, and perhaps even unorthodox if not bluntly heretical stances.

Without doubt, the essays do not fully appropriate their respective conceptual repositories, but each of them introduces a new opening to the issue. In this sense, they make this an innovative book on innovations and innovativeness in the police.

Evidently, the interest in innovation did not originate in police studies, nor is it not limited to it. It plays a central role in modern economics in explaining economic activities, especially economic growth:

'Moving from the study of the consequences of technological change on the working of the economic system, economics of innovation has made possible to better understand the processes by means of which innovation is being introduced in the economy. We know much better how and where innovation takes place.' (Antonelli 2017, p. 689.)

'In the age of globalization, economic growth and the welfare of nations decisively depend on basic innovations. (...) In recent time, innovations emerge from problem-oriented research overcoming traditional boundaries of disciplines (e.g. material research, energy, environment, health, aging society). If problem-oriented research is beyond former divisions of faculties, it is sometimes called "transdisciplinary". Interdisciplinary dialogues are needed to find transdisciplinary problems and new portfolios of technologies.' (Mainzer 2011, p. 278.)

In a very limited or weak sense, this study stands out as a dialogical and interdisciplinary pursuit, i.e. the reference material consists of a hodgepodge of source material from various disciplinary fields. While it is about innovations and innovativeness in the police, the aim is to depict it at various levels of analysis and from a variety of viewpoints.

The essays are theoretical, but not about any one specific theory. Perhaps one could describe them as metatheoretical or methodological in a general sense. The prefix meta implies that ideas and findings on innovations and innovativeness in the police as well as the related theoretical discussions and approaches will be subsumed under a more encompassing framework. This enables questioning the very questions posed by them. There are historical, theoretical, methodological, philosophical or cross-disciplinary means for taking a conceptual step backwards that allow one to scrutinise the bigger picture, to think systematically or reflectively about the issue and the conditions for the standard discussions, approaches and analyses. In this sense meta-analyses aim at establishing another stance that is more encompassing than the original one.

Ideally, such analyses should clear the water. Perhaps they do, eventually. However, first they tend to make it murkier.

Metatheoretical analysis is evaluative in a general sense (e.g. Wallis 2015). The analysis is to enlighten underpinning theoretical and methodological stances, presumptions, and the coherence and soundness of their articulation in more substantive propositions, approaches and deeds (intelligibility, compatibility, logical soundness). However, very few are likely find such an analytical exercises very interesting, intelligible or of any practical use. Perhaps only crocodiles prefer muddy water to clear one.

This study aims to alleviate the aforementioned problem by blending metatheoretical, theoretical, methodological and practical issues closely together and travel across them. However, an evaluation without a proper understanding of the very phenomenon at the focus – a conceptually adequate model of it – remains blind and, thus, is likely to fail in providing an accurate description of it and its prevailing state. It may nevertheless succeed in giving a true account of its worth, merit and value, but for all the wrong reasons.

Theories result from innovations, mental experiments, cognitive or conceptual 'aha' or eureka moments as a flash of insight leading to their formulation and gradual refinement. Their inventors are either brave enough to swim against the current or are already well established in their respective fields with recognised merits under their belt. They look for alternative pathways and are curious about weak signals. Some are great minds, but most eventually simply go astray, get lost in the conceptual maze of their own making, fail to find a way to communicate their far too novel ideas to their intended audiences or the academic gatekeepers, fail to assure their peers, as they have none, of the merits of their theories, and never succeed in getting their ideas published or into the spotlight. Thus, unless they already have a foothold in academia, they never find themselves in a tenured position and have no students as captive audiences to their innovative ideas.

'Any and every seemingly grand idea can be subdivided into an infinite series of smaller, previously known ideas. Similar patterns exist in the work of innovation itself; for most, there is no singular magic moment. Instead, there are many smaller insights accumulated over time.' (Berkun 2007, p. 2.)

Berkun (2007) claims that the best philosophy of innovation accepts both change and tradition, while avoiding the traps of absolutes. The odds are simply against any innovator, and for good reason. They face a world consisting of more or less established and institutionalised innovations, most likely formed after a long struggle and incremental changes leading to deep and interconnected transformations across several fields and embedded into different levels of action. As such they have become part of the taken-for-granted landscape and are considered investment objects, or source of status and wealth. Thus, lots of interest is attached to the prevailing order of things, not to attempts at displacing its members fully or partly. In the research literature on innovations in the police, this innovator's dilemma is most remarkable by its absence. One would expect that the innovations that are most welcomed by the police align with traditional practices, power hierarchies and logics in policing, and provide a relative advantage that is appreciated by police officers, but do not require a giant leap from them in terms of understanding them, trying them out and perceiving their results (see Berkun 2007).

Discoveries and inventions feed innovations. They are often innovations of another kind or depend upon them. Thus, labelling something as an innovation grants it public recognition and a special status to it, as well as to the person(s) behind it. Innovations as a perspective encourage us to see the world as consisting of innovations build upon one another.

Innovations build on something that once was an innovation and now, perhaps, is a standardised and generally used tool in daily life. Innovations without an innovator, that are the result of gradual improvements and the work of anonymous people, often over time rather than a designated few in a specific place at a certain time, deserve to become recognised and appreciated for their very formation. For instance, the police as such should become conceptualised as an innovation as a result of a gradual process more akin to a continuous evolution than any specific event at some historical moment. However, without it, many innovations within it would never have happened.

Thus, innovations and innovativeness on the police and policing should be approached as a genuinely complex, but also controversial, issue. We appreciate innovations and celebrate the innovators but are often perplexed whether something or someone truly deservers the honour. Our discussion on innovations and innovativeness in the police and policing does not aim at resolving the ambiguities inherent in the theme, but reside on, or perhaps even amplify, them. The police is conceptualised as an institutional innovation, but also as an organisation that uses innovatively approaches, tactics and technologies that are called innovations in themselves within a context that is shaped both by earlier innovations institutionalised into practices and by an introduction of new ideas, approaches, technologies and tools. We need to respect the complexity instead of closing our eyes from it.

'According to the contextual perspective of innovation, new ideas are embedded within a network of existing ideas. Developing a truly unique idea is difficult, if not impossible. Even many of the most "disruptive" ideas possess an intellectual lineage or genealogy based on improvements or reconfigurations of past ideas.' (Dahlin 2011, p. 25.)

I decided to call the texts essays. They are about ideas, both old and new. They are mainly discussions about discussions, experiences and practices subjected to

scholarly reflection and attempts to say something of value about this worthy subject, to open up issues analytically and, thereby, to pave the way for the coming of more encompassing and penetrable perspectives on it. They are to feed the imagining of alternative pathways rather than to enhance current practices. They aim at insights.

The fact that I have personally played a minor or a main role in each of them means that the essays reflect my interests in research, my style of thought or the way I like to work with ideas and express them too. I am at home at the crossroad of perspectives, conflicting interpretations, competing theories, controversial philosophical standpoints. Arguably, eclecticism is my clear weakness and a highly controversial strength.

'In other words, one needs to synthesize multiple perspectives to have a holistic view of innovation. Synthesis is crucial when it comes to innovation.' (Cheng-Hua 2014, p. 388.)

Putting the essays in some kind of order is unavoidable. However, although there are some connections between them and together they cover the various sides of the theme and approach it from different angles, each is also a whole in itself. Thus, there is no need to read them in any particular order.

The first essay authored by Jarmo Houtsonen and Vesa Huotari discusses innovations in police research. At the tip of the analytical pressure generated by it is a simple conceptual issue – do we have good reasons to analyse the police and policing by starting from a presumption that the police and the state are one, i.e. that all the statements that are true of the state are also true of the police? Several police researchers take Max Weber's definition of the state as the possessor of the monopoly for coercion in a specific territory as their starting point and use it to define the police. Houtsonen and Huotari revisit Weber's theoretical and methodological ideas to see whether he would have approved of such a common practice. They claim that he would have abhorred it. Therefore, Houtsonen and Huotari conclude, it is high time to ponder the conceptual costs that result from this methodological fallacy when it comes to the understanding of the police as an institution.

The second essay travels back in time to the formative years of the modern police to try to identify any indications that would warrant seeing the police as an emerging institution that increasingly stands on its own. I presume that such signs would be easier to single out at that time and, therefore, look closely at the courses of developments in policing in Ireland and Britain that culminated in 'Peel's principles' as often seen as the ideals that underpin modern policing and give it character. The big issue put forward here is the following: should we grasp the police as an innovation in itself?

The next essay jumps back from the historical and theoretical deep waters to the police education of today. The focus is on pedagogical innovations at a personal level. The essay written by Timo Korander and Vesa Huotari deals with a problem that every police educator has to come to terms with and find a way through, i.e. how do we develop the learning of new skills and understanding by effectively utilising what a student already knows or understands? Daily work in teaching consists very much of innovating to find the best way through this problem. If what is to be learnt is genuinely new to the learners, it would be vain to expect that it appears meaningful to them straight away, except as something that they are formally required to grasp

because it stands in the curriculum. The essay describes the weaving of a new texture of meaning between the understanding of research methods and police students' previous experiences of the interrogations of suspects.

Then it is a time for a story. Naturally, a good story is pregnant with valuable lessons for learning. Ossi Heino and Vesa Huotari start with the Grimm Brothers' tale of Hansel and Gretel. It provides an introduction to a problematic typical to large-scale exercises that are to build up preparedness for future crises. As many people know, Hansel and Gretel were prepared for abandonment in a deep forest. The authors ask whether large-scale exercises organised regularly for the police and other emergency services truly provide for the capacities that are necessary in novel crises. They may well work in the opposite direction and create obstacles for innovativeness and innovations that will likely be needed in the latter. Therefore, the authors outline an alternative approach as a necessary supplement to the standard one.

The last four essays from the pen of Vesa Huotari deal more directly with innovations in the police. The first one combines empirical observations on innovativeness in the police with methodological ideas on how to make sense of it as an emergent disposition typical to the police organisation. I argue that the pursuit of innovativeness in law enforcement, when contrasted with traditional virtues, stands out as an anomaly or an institutional misfit. The essay provides a fresh view on the conditions of innovativeness in the police. How much innovativeness are we entitled to expect from an agency for law enforcement anyway?

In the second of the last four essays explicates standard or mainstream discourse on innovations in the police. I suspect that something is hiding in it, equivalent to an elephant in the room. To catch the latter up, a conceptual trap is constructed that categorises innovations to domesticated ones, to ones that will be domesticated eventually and to those that are beyond domestication. Then this trap is activated and its captures are brought out into the light.

The last essay but one scrutinises the predominant way of understanding technology. Are its fruits nothing but applied science turned into neutral tools that mediate our relationship to each other in the same way as they mediate our relationship with the natural world? If the answer to that question is negative, what is it that we are possibly missing? I turn to French philosopher Gilbert Simondon's ideas of technical individuals, and the way he explicates their mode of being and way of becoming as a new way to approach the very issue of figuring out our relationship with technology, the role of inventions and the unfolding of complexity emerging from the resulting ontogenesis. The essay provides glimpses into the possibilities inherent in rethinking technology in a radically new way for the study of policing technologies.

The last essay contemplates critically evidence-based, intelligence-led and knowledge-based policing models. I scrutinise the relationship between the Academy as the knowledge producer, perhaps increasingly as the first and foremost innovator, and the police as customers of its knowledge products. I believe scholars should inform their customers so that they could truly understand the products and the terms and conditions of their efficacy. Moreover, the police as their customer should be equipped with the critical means that would allow them to become informed without being overwhelmed by the innovations. The final essay is about criticism as an essential, but often overlooked, element in academic innovations.

There is an underlying thread that ties the essays together. The essays are about innovations, but not only innovations in, for, or by the police. The essays introduce also philosophical, methodological and theoretical innovations upon which our scholarly understanding of the police and policing builds upon. New concepts facilitate fresh insights. They are innovative tools in themselves that are necessary for the growth of understanding. However, as a rule, researchers are not encouraged to invent new concepts or equipped with tools necessary for developing the old ones further. The result is a stalemate. While the essays only touch the surface of the issue, perhaps they succeed in pointing out ways for other researchers to invent new conceptual tools and approaches that help us to expand our understanding of the subject by overcoming various theoretical constraints that tend to limit our imagination. Thus, the practitioners that are likely to benefit most from the essays as a whole, are other police scholars and researchers rather than the members of the police.

Although each of the essays is a whole in itself, together they open up new layers for the discussion of innovations and innovativeness in the police. The only source for thrilling new discoveries does not reside solely in the sphere of policing paradigms, artificial intelligence and innovative new gear and gadgets. A lot of room for innovations exists beside, behind and between the aforementioned themes. The eight essays, I hope, encourage others to explore what is hidden in between, what lies underneath and what is emerging to reconnect the future with the past. A study of innovations is also a call or an opportunity to be innovative in tackling them.

References

Antonelli, Cristiano (2017). Endogenous innovation: the creative response. Economics of Innovation and New Technology 26 (8), pp. 689-718.

Berkun, Scott (2007). The myths of innovation. BusinessSummaries.com, pp. 1-8.

Cheng-Hua, Tzeng (2009). A review of contemporary innovation literature: a Schumpeterian perspective, Innovation 11 (3), pp. 373-394.

Dahlin, Eric (2011). There is no "I" in innovation. Contexts 10 (4), pp. 22-27.

Mainzer, Klaus (2011). Interdisciplinarity and innovation dynamics. On convergence of research, technology, economy, and society. Poiesis & Praxis 7, pp. 275-289.

Wallis, Steven (2015). Integrative propositional analysis: a new quantitative method for evaluating theories in psychology. Review of General Psychology 19 (3), pp. 365-380.

THE POLICE AND THE STATE: CHALLENGING WEBERIANISM IN POLICE STUDIES

Jarmo Houtsonen & Vesa Huotari

Introduction

Theories, especially new and better ones, stand out as innovations and indispensable means for taking our own fate in the world increasingly into our own hands. New knowledge and increased understanding appear as the main instruments and pathways for human empowerment.

As Francis Bacon claimed, knowledge is power and nature is ruled by complying with its laws. Theories that grasp those laws successfully help us to increase our freedom in the world. However, there is no eternal escape from the latter.

Moreover, sometimes our cherished trains of thought lead us to dead ends. To find a way out, we need a restart. For starting afresh, we need to figure out and reflect the route followed until the turn around point. As we are often travelling in a theoretical bandwagon with jolly others, convincing them of the futility of carrying on may well be the most difficult task. Time and effort have been invested in the travel already, and, perhaps, some discoveries have been made along the way as well as new specific skills and competencies, not to mention status, gained in the eyes of the fellow travellers. Therefore, turning back is unlikely to appear as the first option.

Our article goes a long way back to assure our colleagues that the so-called Weberian view of the state has truly undermined and hampered our attempts to grasp the police conceptually. Because of its hegemonic status among sociologists studying the police and policing, our understanding, the very concept of the police, appears seriously flawed if not rudimentary. When it comes to this prevailing practice in police research, we believe that Max Weber would be the first not only to denounce his fatherhood of it, but any acquaintance with it altogether.

However, we do not claim that we have succeeded in capturing Weber's mind and his thoughts about the state and the way his concept of the state reflects his views of and interests in research and research methodology. This is likely to remain an eternal subject for the analyses of his theoretical and methodological legacy. Our aim is to question the very tracks upon which the current train of thought in police research travels. We claim that when it comes to academic – and especially sociological – research on the police, conflating the definition of the state with the definition of the police comprises an undetected elephant in the Senior Common Room. The prevailing practice, where researchers identify themselves as disciples of Max Weber, but, as we see it, only succeed mainly in mixing things up profoundly and covering it up rather than truly revealing them or building upon them, deserves a second thought.

The social sciences, Max Weber argued, were doomed for being eternally young. All knowledge of cultural reality was tied to a particular point of view (Weber 2012b, p. 119), The most encompassing substantial advances in the aforementioned sciences, he claimed (2012b, p. 134), tangled with a shift in practical cultural problems and assumed the form of conceptual critique.

It may well be that a shift in such problems is taking place. Our analysis represents a form of conceptual critique. We believe that is highly relevant both from the point of view of contemporary sociological scholarship on the police, but also from the viewpoint of enhancing the professional knowledge base in the police, and for it too.

We shall start by demonstrating the problem briefly, i.e. how Weber's claimed view of the state reappears in scholarly discussion on the police. Secondly, we explicate Weber's view of the state from a more contemporary perspective. Our essay is a relatively long methodological endeavour to Weber's views of concepts, especially his concept of the state. In the end, we try to bring the various strands together, discuss the consequences of the prevailing state of affairs in police studies and, as our conclusions, figure out possibilities stemming from alternative approaches and pathways. The latter should provide greater potential for capturing the complexities, contradictions and diverging tendencies that characterise both the relationship between the state and the police as well as the police itself as an institution.

The Problem: Conflating the Police and the State

'A shadow more tangible than its source, an expression in flesh and blood of a concept impossible to pin down, policing shows us something much more abstract and harder to see: the nature of the state' (Siegel 2018a, p. 13).

'The institution of the police is synonymous with the modern state and public policing is one of the defining characteristics of state power. Whether state's claim to a monopoly of violence was, in practice, realized through the police or was rather a highly effective, though illusory, ideological construction, is open to question.' (Zedner 2006, p. 78.)

The relationship between the police and the state stands out as a permanent source of confusion, vagueness and ambiguity in police studies. Are the police simply an incarnation of the state, a material or empirical manifestation of it, or are they separate but, like partners in crime, intimately entangled with each other both in terms of their past, present and future. While the question and putting it forward may appear a minor or even trivial one except to those scholars lost into the world of theories or philosophical speculations, we see it as a central obstacle on the way to an adequate theory of the police as an institution.

There are arguably many ways to approach the problem, many doors through which to enter into it, and various tactics for making the first move towards resolving it. We have chosen to take a methodological approach. The latter appears to us a promising one in undermining the main obstacle on the way, i.e. the view that the police and the state are only two different terms that refer to the same concept. We need a more adequate methodological stance in its stead, if we are to grasp the police as an institution, to figure out its internal dynamics, and to account its relations with other institutions in society.

Echoing the mainstream view of the relationship between the state and the police, Siegel (2018a), like many fellow scholars studying the police, takes Max Weber's definition of the state as the starting point. However, police studies are not

the sole domain for academic research, where Weber's definition plays a foundational role. His definition of the state has also acquired an almost axiomatic status in state-building literature (Lottholz & Lernay-Hebert 2016, p. 1469). In sociological and historical accounts of the police as well as in textbooks, it appears as the conceptual bedrock underpinning the analysis. Thus, to suggest that it hampers rather than helps, harms rather than assists, and undermines rather than contributes to the very quest to grasp the police conceptually and to characterise them substantially, should appear as a relatively provocative attempt to question not only the mainstream in research on the police, but, perhaps, Max Weber, a classical thinker, too.

Paying heed to the circumstances in Prussia about a century ago, is it likely that Weber did succeed in capturing the essential nature of the state and putting it into a relatively simple definition that has retained its usefulness, relevance and accuracy ever since? Is it likely to retain its value in the future too? From a methodological point of view, we could ask whether an ongoing, prosperous and fruitful research programme build upon Weber's concept of the state has truly materialised or is likely to ever emerge.

While we do not have definitive answers to the aforementioned questions, we consider them worth the doubt. Perhaps it is indeed high time to take a step backwards and scrutinise the issue beneath the surface. Perhaps it is nothing more than a figure of speech, an empty gesture, or an ideological mirage, as Zedner (2006) in the quotation above seems to suggest. For the cynical mind, it may even appear as the symbolic fee payable to the gatekeepers for entrance to this field of study. However, while it may have an important social or symbolic purpose to serve, all possible gains come with clear methodological costs.

The main methodological point is that, when the concepts of the state and the police are conflated, the opportunity to analyse their interrelation evaporate. There is simply no relationship. Consequently, everything that is true of the state holds for the police too. When one follows Weber's idea that a defining feature of the state is the monopoly in the use of legitimate force within a territory, the police as an institution is reduced to its incarnation. While this may well turn out to represent the matter of fact, we believe we should enter it from below, i.e. starting with the presumption that the state and the police have unique, but possibly partly overlapping, referents.

Misidentifications, as Pierre Bourdieu reminds us, are neither pure coincidences nor harmless. They derive from symbolic violence and therefore carry real repercussions. A police officer, after learning that they are the state incarnated on the roads and pavements, adjusting or enhancing their habits accordingly, may well end up jumping to the wrong conclusions from such a valorisation of their fundamental, but possibly falsely claimed, identity. Our motivation to scrutinise the issue more closely here stems from the aforementioned and reflects our belief that an alternative starting point could pave the way for theoretical progress and conceptual innovations.

The State and the Police in Police Studies

'In what must surely be one of social theory's best-known passages, Max Weber defines the state as a community that successfully claims a monopoly over the legitimate use of violence within a given territory' (Neep 2016, p. 64).

Research literature on the police presumes that the police equal, stand for or represent the state and that the power the police embodies originates from or resides in the state. Whenever we speak of the police, we imply the state. Whenever we think of the police's interests, what we actually articulate are the issues and concerns of the state. The two seem to be intertwined and entangled so closely that one can only wonder how we ever ended up with having separate terms for them.

For Rumbaut and Bittner (1979, p. 269), who explicitly refer to Weber's definition, see the police '... as curbside agents of the state, that is, of the community that effectively claims the monopoly of the legitimate use of physical force within a given territory...'. Seigel (2018a,b) takes a step further and claims the police are essentially defined by reliance on violence or threat of it as a direct extension of the legitimacy granted to the state. Granting legitimacy to it stands out as the main way the state itself is legitimised. For her, the two are 'rough expressions or each other' and differentiated only by degree the police being the state, but expressed on a human scale. Moreover, as violence or use of physical force represents the defining quality of the state, she interprets Weber's famous definition accordingly. For her, the police can be called violence workers that realise this core characteristic of the state (Seigel 2018a, pp. 9-10; 2018b, p. 25).

Meares (2016, p. 131) argues people meet the state in their interactions with the police and such meetings shape an individual's civic identity. For van Dijk, Hoogewoning and Punch (2015, p. 180), every public-police encounter symbolises interaction between the state and its citizens. They claim that the police systems function ultimately in the interests of the state (Ibid, p. 63). 'Globally, police are both public servant and agents of the state' Sinclair (2016, p. 33) suggests (see also Jacobs 2016, p. 89). Jackson et al. (2013, p. xx) see a legitimate police force, by its very nature, comprising a representative of the state's monopoly on the legitimate use of violence. Symptomatically, Karpiak (2016), while acknowledging first the ground-laying role of Max Weber's definition of the state for the study of the police by sociologists, dissects the latter into individual terms, and targets each of them as to demonstrate – most literally – the relevance and capacity of anthropological research in its terms. This is a strong testimony of the fundamental role and status of Weber's definition in research on the police indeed.

Bierschenk (2016, p. 170) criticises the reductionist perspective on the relationship between state and police. To see the police as mere carriers of the state monopoly of force, and as a component in the state's bureaucratic machine, fails to give due attention to the social functions of the police and their professional practices. He sees that policing and the state stand for two different modes of political power, the integration of which consist in a dilemma in modern governance (Ibid, p. 155). Miller (2016, p. 21) directly addresses the idea of the police as an instrument of and for the government. The police are there to serve the law rather than those in power. While he emphasises the institutional independence of the police, he also acknowledges, that 'determining the precise nature and extent of police independence is extremely difficult given a contrasting institutional constraint on police forces, namely, their need to be responsive to the democratically elected government of the day...'. Furthermore, high levels of police independence, as the coercive arm of the state, is not without its dangers, he remarks (Ibid.).

While some police scholars admit that conflating the police and the state could reveal something by hiding something else, the mainstream discourse effectively excludes alternative stances for approaching the police as an institution. The view of the police as having monopoly in the use of force/coercion/violence has become the institutionalised mantra within police research. It represents the dominant view of the police. It stands out as the starting point. To question the latter is like trying to cast a shadow on the views of the man himself, Max Weber. However, we claim that Weber, predicting the constant development of concepts of social sciences, would be most surprised to see his concept of the state simply refusing to yield to the times and carrying on as if universally valid or eternally true.

Appraisals of Weber's Concept of the State

Although states have pursued various purposes at different times, their ultimate means, Weber argued, have remained the same, i.e. the use of physical force. For him, it was this common feature rather than a solid end, aim or purpose that defines the concept of the state (Anter 2014.)

However, modern states are increasingly complex entities. Arguably, the emergence of the state as a true sovereignty was originally established on the capability to use force without challenge from the other traditional entitlements. Nevertheless, the current position of the state is characterised by systematically prohibiting the use of violence by non-state agencies, educating the public to withdraw from using it privately, and adopting a negative stance towards it as means in general (Anter 2014, pp. 26-39).

For Weber, the modern state without the law appears as inconceivable as the law without the state:

'By monopolising the generation of law and its execution the state becomes the source and guarantee of the law in general. (...) The monopoly of the law finds its corollary in the monopoly of violence.....the monopoly of violence in the foundation of the monopoly of the law.' (Anter 2014, p. 174.)

As the last resort, the rule of law is backed up by the state retaining the monopoly in the use of force. For Weber, 'the state can only be a state based on the rule of law,' Anter (2014, p. 178) emphasises. Thus, it is not based solely on the monopoly in the use of force, but on legality, the rule of law, and the systems for maintaining, enhancing and developing the latter further. Weber defined law as an 'order' externally underwritten by the chance that a coercive apparatus – the enforcers of the law – will exercise coercion and force to maintain conformity with it and thereby to validate the order in question (ibid.).

The rule of law, the respective social order and the respective rulings should enjoy legitimacy in the eyes of the ruled. To reach this state of affairs requires the state to provide various public services to those living within its territory. The expansion of the functions of the state would have been impossible without a

Both Adler (2014) and Wulf (2007) comment that the original meaning (Gewaltmonopol in German) is closer to monopoly for the use of force than to that of violence.

rationally organised system of administration with division of departments, offices, tasks, respective systems of competencies, and distinctive professional duties carried out by obedient, technically-trained career officials. Bureaucratisation, on its part, has increased predictability and legal security in society (Anter 2014, pp. 148-170).

States have become increasingly complex entities internally. Their monopoly, if they ever fully had one, in the use of force is constrained by the rule of law that is closely monitored by the informed public (society) suspicious of any breach of it by the state. Moreover, since Weber, there has been other significant changes on an international level.

Lottholz and Lernay-Hebert (2016, p. 1469) argue that Weber's definition of the state in terms of the monopoly of violence reflects the situation of the German nation at the beginning of the 20th century. At that time, it was possible to assume the political unity of the people, like the state and state power, as pre-existing. The contemporary, more open, increasingly interdependent and fluid world characterised by global economic ties, commercialism, common culture and increasingly free markets, according to Murkens (2007, pp. 751-755), has transformed the state into a constitution-guided political endeavour subject to historical change rather than a closed, self-subsisting and pre-existing entity.

Such changes have undermined Weber's view of the state, Wulf (2007) claims. Globalisation provides for denationalisation and promotes the relocation of authority, from the nation state to supra-national actors. While nation states in the classical era did seek full control of the territory considered theirs, globalisation emphasises open, porous borders, liberalised markets and multilateral regimes. Wulf argues that the very concept of the legitimate monopoly of force with its orientation towards the nation state needs to be reformed. He proposes a shift from the state monopoly of force to a multi-level public monopoly of force based on the local, the national, the regional and the global levels (Wulf 2007, pp. 17-18).

Weber's definition of the state appears drastically reduced, most likely outdated or far too narrow for an ultimate interpretation of the state. Paying attention to the fact that Weber did not develop a systematic doctrine of the state, nor a theory of the state or a sociology of the state (Anter 2014), it seems vital to grasp the role the concept of the state actually plays in his thinking. It is possible that numerous police scholars drawing on Weber's concept of the state have missed his substantial point, if there ever was a coherent one, and bypassed his methodological insights. What is the role of the concept of the state in Weber's thought then?

Weber's Concept of the State

For Max Weber, the logical structure of the concept of the state stood out as '...by far the most complex and interesting case...' (Weber 2012b, p. 130). In empirical reality, the idea of the state related to numerous diffuse deeds and regulated relationships held together by a belief in norms and relations of valid authority of some over others. As a scientific concept, the state, although a logical ideal-type, was also an abstraction from — and an expression of — the imprecise syntheses entertained by its inhabitants. According to Weber, the two parallel ideas are characterised by a constant tendency to shade off into one another (ibid.).

However, Weber's substantial views of the state are indebted to Georg Jellinek, while his methodological ideas of concepts are akin to Heinrich Rickert (Anter 2014;

Howe 1978). The logical treatment of historical experience demonstrated that the specific resource of the state, though not the sole one, had been domination based upon legitimate physical coercion, while politics had always meant a quest for a position of power (Marianne Weber 1988, p. 682). Such a logical approach rested on the understanding of the role of concepts in pursuit of scholarly knowledge. For Weber, the world was initial multiplicity open to multiple perspectives. The use of theoretical constructs, like the state, turned it into concrete things, events and issues possessing unity. The unity of the objects of the world was thus relatively determined. It was our interests and purposes through the concepts we use to grasp it that turned the world into the world known by us (Weber 2012a, pp. 70-71).

For Weber, the concepts applied in scientific research in order to gain knowledge of the world are a specific kind. Their purpose is to enlighten the causes behind historical events and developments. The very possibility for causal explanation in social sciences rested on the fact that human action was rationally interpretable. It was possible to explicate it in terms of means and ends. For Weber, this universal or common ground provided for the possibility for generalising causal approaches and the formulation of law-like regularities (Weber 1982a, pp. 82-85).

'There is no rational action without causal rationalization of that section of reality, which is considered to be the object of [causal] influence and the means of that influence – that is to say: without fitting that [section of reality] into a complex rules of experience that tells us what results a given behaviour can be expected to yield' (Weber 2012a, p. 82).

The task for research is to figure out and describe these complex rules of experience. Belief in empirical regularities provided for the calculation of means in the pursuit of intended results. As a given goal restrained the possible means for pursuing it, rational interpretation appeared as a conditional judgement of necessity, where, given a specific intention in the context of established rules of experience, the holder of the intention had to choose specific means to achieve it. By pointing out empirically that the chosen means was the most efficient one or, at least, situationally adequate, was to interpret it rationally (Weber 2012a).

Naturally, an action can lead to the intended goal or fall short of it. This depends on the context or circumstances and the actors 'nomological knowledge' relevant to it. For Weber, the beef was in the analysis of such contexts as objectively-given situations. The key means for it were ideal-typical constructs. Such constructs provided for the causal analysis of historical interconnections. They were either purely individual, i.e. ideal types as interpretative hypotheses of concrete individual contexts, or general, i.e. interpretative hypotheses of certain types of situations. An ideal type facilitated comparison of a given set of facts with the objectively possible interconnections brought up by the respective interpretative model and provided thus for valid empirical interpretation (Weber 2012a).

The interest for Weber, as a historian, was in pinning down the constellation of (hypothetical) factors – the configuration of cultural phenomenon – in a concrete or typical case that appears to us as historically significant. In explaining it causally, he emphasised, we needed to refer back to other equally individual configurations that were to be connected with each other by hypothetical law-like concepts. Then we were to give an ordered presentation of respective individual configurations and their

concrete interactions that are historically given and to make it understandable why and how the interaction was significant and important. The next task was to establish how they came into being and to point out how they were caused historically by earlier, equally individual constellations. Such an analysis, Weber believed, could possibly open up an insight into possible constellations in the future (Weber 2012b, p. 116).

While Weber introduced new ideal-typical concepts and demonstrated their historical significance and practical connectedness, the methodological role they played in his research programme has become the main source for misunderstandings. Ideal-types are the logical means for pinning down the factors consisting in a constellation and drawing out configurations of cultural phenomenon from their background:

'Thus we see how the "idea" of the historically given modern organization of society as a market economy is developed according to exactly the same logical principles as those that have, for instance, been used to construct the idea of the medieval "city economy" as a "genetic" concept. This is done not forming the concept "city economy" as, say, the average of the economic principles actually to be found in all the cities that one examines, but rather, again, as an ideal type. It is obtained by means of a one-sided accentuation of one or number of viewpoints and through the syntheses of a great many diffuse and discrete individual phenomena (more present in one place, fewer in another, and occasionally completely absent), which are in conformity with those one-sided, accentuated viewpoints, into an internally consistent mental image. In its conceptual purity, this mental image cannot be found empirically anywhere in reality. It is a utopia, and the task of the historian then becomes that of establishing, in each individual case, how close reality is to... that ideal image...'. (Weber 2012b, p. 125.)

Following Weber's line of thought, the concept of the state as an ideal type from a methodological point of view is nothing but a purely ideal limiting concept, against which we should measure or compare the reality in order to single out those factors or components in it that are significant to our particular pursuit for knowledge.

'Such concepts are constructions in which we apply the category of "objective possibility" to construct connections that our imagination, oriented towards and schooled by the contact with reality, judges to be adequate' (Weber 2012b, p. 127).

Whenever an interpretative rational model of an objective situation turns out to be invalid, it indicates that the goals presupposed by it were not the ones that motivated the action under scrutiny. However, while the cognitive value of the model remains intact, the empirical failure indicates that empirically valid interpretation requires in that historical case an alternative model. For Weber, this very possibility for constructing ideal-typical conceptual constructs and using them derives from the categories of ends and means that, once applied to empirical reality, rationalise the latter (Weber 1982a, pp. 84-85).

Thus, causal analysis of historical events and individual actions proceeds logically by means of isolation, generalisation, and the construction of judgements

of possibility. It is by breaking up the situation into components down to the point where we are able to apply the knowledge available to us in making sense of it and, thereby, understand the bringing about of an objectively possible outcome (Weber 2012c, pp. 176-177). It is one thing to explain a phenomenon as an instance of general law, i.e. by subsuming it under the latter as an instance of it. It is another thing to understand it in its individuality. Nevertheless, causal relationships play a central role in both.

'Where the individuality of a phenomenon is concerned, the question of causes is not a question of law but of concrete causal relationships; not a question of the formula under which the phenomenon can be subsumed as a specimen, but a question of the individual constellation to which it should be imputed as a result...' (Weber 2012b, p. 118.)

Objectively possible seems to depend on our ability to attach meaning to the situation we are interested in, i.e. to grasp the actors' viewpoint of it by a means-ends schema substantiated with the meaning they attach to it, and construct a hypothetical model of the objective situation that makes their deeds understandable and explains their outcome.

'What we are concerned with is the construction of relationships that our imagination considers to be sufficiently motivated and therefore "objectively possible", and that seem adequate in the light of our nomological knowledge. (....) ...it is never possible to determine in advance whether [such constructive efforts] are more fantasies or whether they constitute scientifically fruitful concept formation. (...) Consequently, the construction of abstract ideal types can only be considered a tool, never an end [in itself].' (Weber 2012b, p. 126).

Sociology, Weber argued, can be conducted only in terms of actions of individuals. He built it upon an individualistic point of view and abhorred collective concepts leading to the belief that there lies a real substantive being with characteristic powers behind every noun. The result was an action-oriented view of the state as an idea or 'state-consciousness' that materialised in understandings of the relevant rules of conduct and the respective systems of orders, the grasp of which called for a hermeneutic method and ideal typical concepts. From the latter point of view, the state was just a chance for the particular form of specific human action to occur. The former got shaped by the fact that the acts reflected or oriented towards a conception of the state-related situation in question that provided the grounds or a point of reference for mutual orientation as a joint context of orders. The fact of such possibilities for joint action made the state real:

'The state is not founded upon a given order, but rather on the fact that men orient their action to the idea that the state order exists and should have validity' (Anter 2014, p. 83).

The key to grasping the state as action-relevant phenomenon is in the understanding of the emergence of such possibilities for it and the way they are maintained, reproduced and moulded or transformed by conscious human action. If the state did emerge gradually into its modern presence, its prevalence is, most likely, more immediately felt in some specific places or at some moments in time than in others. This very presence should be grasped as a variable rather than a constant. Such a gradualist view of the state, or degrees of statehood, open up a new, empirically-oriented approach to the very concept and its actual meaning in social life.

According to Palonen (2011, pp. 102-103), Weber claimed that any scientific concept of the state was a synthesis of something that originated and subsisted in the heads of historical human beings. Without a synthesising relationship with the actual beliefs of historical humans, no scientific concept of the state could emerge. Without the very concept existing but in an initial or blurred form, no need for pursuing a clear formulation of it would subsist. For the mature Weber, the concept of the state refers to a horizon of the possible and the orders and powers that endow it with certain types of chances, the realisation of which depends upon the actions of persons relevant to it. The state is not a totality of chances, but a complete set of a distinct type (Palonen 2011, pp. 102-107).

'From this perspective, we can then also understand his famous "definition" of the state: "A political institutional organization will be called state to the extent that an administrative staff can successfully exercise a monopoly of legitimate physical force in the executive of its orders" [Weber]... It other words, the specific political chances of the institution of the state are connected to its possibilities to act successfully by using its monopoly of legitimate force. The state exists for Weber only in relationship to the actions and to the judgements regarding the relationship between the agents in the situation... If legitimate violence cannot be monopolised in a given context, the agents in the situation cannot have the powers of the state at their disposal.' (Palonen 2011, p. 104.)

The state appears a sort of becoming, subsisting not only in the very moments of its realisations (instantaneous), but also in value configurations carried over by institutionalised practices, prescribed procedures, and systems of rules reflecting cultural expectations, perspectives, systems of values, standards and norms. In any particular situation, the materialisation of the state as the actualisation of the monopoly in the use of legitimate force is impossible to guarantee fully beforehand. It is only possible to maintain and enhance general conditions favourable for the latter. Such conditions include a bureaucratic administrative machine that is seen in terms of expertise and professionalism, generally appreciated as effective, impartial, fair, and objective, i.e. worth our respect and support, a representative political system of power, an independent judiciary system, an up-to-date criminal code, a system of education that is equal and open to all, and so on. They all jointly serve to reduce the inclination to disobedience that would eradicate this very possibility of the state.

'If "chance",... is here raised to the rank of a category for the sake of grasping logically what is common to all social action, it really is, as Weber put it, as though the cold hand of a skeleton reached for warm life. A similar peculiar sobriety also attaches to those further conceptual definitions by which the specific substance of the various kinds of "chances" is expressed. For

example, "An order shall be called 'law' if it is outwardly guaranteed by the chance of physical or psychological compulsion... by a group of men specifically equipped for it... A compulsory political association... shall be called a 'state' if, and to the extent that, its administrative staff successfully claims a monopoly on legitimate physical compulsion for the enforcement of its regulations, etc." The law, the state, the church – all of them structures which seem to be indissolubly bound up with metaphysical notions which are impregnated with claims to objective validity – are in such definitions really freed of these.' (Marianne Weber 1988, p. 680.)

How About Taking Weber Seriously Instead of in Name Only?

In his discussion of the state, Weber never tied up all the threads together that he spread out as his starting point and never presented a systematic doctrine, a coherent theory or a sociology of the state (Anter 2014, 216-217). Because of this, his initial concept of the state has remained vulnerable to unconstrained use, even usurpation.

'The intertwining of theories of the state and of action can be read out of the structure of the "Basic Sociological Concepts". If this is read from back to front, a very interesting order becomes apparent. The concept of the state is built upon that of the institution..., the concept of institution on that of an organisation..., the concept of organisation on that of "social relationship", and this in turn on the concept of "social action"... (...) It is only on the basis of his arguments regarding social action that it is possible to render more precise the specific action that is critical for the state....' (Anter 2014, pp. 85.)

Our aim has not been to construct an ideal type of Weberian research programme or in drawing clear methodological guidelines from it. We have discussed it to a degree only that we feel is sufficient to undermine or shake up some interpretations of Weber's view of the state that thrive in the research on the police, but, we feel, in a methodologically unwarranted manner. They include, firstly, the practice that indicates the possibility to disentangle Weber's definition of the state from its theoretical and methodological contexts and transfer it then to another field without any need for further reflection, as if it is a neutral tool or objective instrument. Secondly, the idea that Weber's revelations of the state possess the power to cast light or capacity to characterise the police as an institution. Thirdly, the view that adopting the definition brings about or introduces a firm theoretical bedrock for interpreting respective empirical findings or organising their pursuit. Fourthly, the belief that by announcing it as the starting point in research on the police is enough to make a sociological inquiry on the police continuous with previous, parallel as well as forthcoming research projects providing for the growth of the field. From a methodological viewpoint in general and, particularly, from the viewpoint Weber himself embraced, these beliefs are simply ungrounded; pure castles in the air. As such, they are likely to hamper rather than help our endeavours to grasp the police in terms that are warranted, theoretically enlightening and practically relevant.

The prevailing practice could be defended as a critical stance to the police and policing. However, if it is not theoretically sound and rationally justifiable as an

account of the police rather than the state, the criticism seems to lose its very point as well as its intended target. What is left is much ado about nothing, but, most likely, with no one truly noticing or possibly caring about it.

Undoubtedly, building upon Weber's definition of the state has had an important social function to play in the emergence of a distinctive field in police studies. Without researchers adopting it, the latter would not exist and the social support, encouragement and guidance provided by it would never have materialised. Nevertheless, from a purely methodological point of view, it is high time to abandon this socially constitutive but methodologically empty idea, to look alternative pathways, and to move on along them too. Arguably, a very prominent one for the social sciences has been formulated and put forward by Max Weber. However, there are others beside him. Perhaps, they are better suited for all of us with less encyclopaedic minds than Weber.

The methodologically naïve adoption and use of the concept of the state in research on the police that can be drawn from Weber's texts has conflated the concepts of the state and the police. The state has become a synonym for the police and the police for the state. This has effectively ruled out all proper analyses on the relationship between the two. Any possibility for a form of relationship between them is effectively excluded when the terms are seen as synonymous, i.e. as two alternative ways to refer to one thing or issue.

For a methodologist, the first necessary move is to reclaim the police conceptually. Thus, we call for theoretically well-founded approaches that successfully avoid conflating the concepts of the state and the police as their first principle and, thereby, open up possibilities for a theoretically more warranted and historically more accurate picture of the police as an institution among others in society, and, potentially, with more complex, even contradictory, relations characterising both their mutual relations as well as the relationship with the state.

Conclusion

Our critique in this article has addressed to the widespread use of Max Weber's definition of the state in research on the police and policing. We pointed out the current practice of quoting a group of authors referring to Weber's concept of the state in their texts. We then visited some contemporary researchers who, more or less, doubted the relevance of Weber's views of the state in a modern, globalised world and called for updates to it. Most of our effort in this article was devoted to understanding Weber's concept of the state in the context of his methodological ideas and strictures.

When seen in Weberian terms and within his own methodological stance, the prevailing practice in adopting the definition and using it to cast light onto the institution of the police and policing, appeared everything but well-warranted in general as well as in terms of Weber's own stance. In the end, we suggested starting afresh by figuring out a new theoretical point of view starting from the idea of the police as an institution of its own kind. The latter would thus exclude the possibility for conflating the concepts of the state and the police. Therefore, it could provide for analysis that would have the potential to enlighten the relationship between them as well as thoroughly scrutinise relations between the police and the other respective institutions in society.

Since Francis Bacon's ground-breaking thoughts about the scientific method in the sixteenth century, methodology has been burdened by the expectation that it will eventually find out, explicate and turn this method into clear guidelines for its followers. However, if actually anything goes, as Paul Feuerabend famously proclaimed, the very *raison d'être* for methodology must reside somewhere else.

In this article, we turned to methodology as a potential tool for critique, criticism and renewal. We did not even attempt to formulate a viable alternative to the widespread habit of adopting Weber's definition of the state and using it to enlighten the essence of the police as an institution and societal practice. We believe that Weber, most likely, would have been first to condemn its current use. This, we hope, functions as a wake-up call that is loud and clear enough to raise second thoughts over the issue and the negative consequences that potentially derive from it in terms of scholarly understanding of the police and for the development of better policing practices.

References

- Anter, Andreas (2014). Max Weber's Theory of the Modern State. London: Palgrave Macmillan.
- Bierschenk, Thomas (2016). Police and state. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 155-178.
- Bruun, Hans Henrik & Whimster, Sam (2012). Introduction. In Hans Henrik Bruun & Sam Whimster (Eds.) Max Weber. Collected Methodological Writings. London: Routledge, xi-xxviii.
- Emsley, Clive (1999). A typology of nineteenth-century police. Crime, History & Societies 3 (1), pp. 29-44.
- Ghosh, Peter (2014a). Why Should We Read Max Weber Today? His Conception of Wissenshaft. European University Institute. Max Weber Programme for Postdoctoral Studies. Max Weber Lecture No 07. Badia Fiesolana: European University Institute.
- Ghosh, Peter (2014b). Beyond Methodology. Max Weber's Conception of Wissenshaft. Sociologia Internationalis 52 (2), pp. 157-218.
- Howe, Richard (1978). Max Weber's Elective Affinities: Sociology within the Bounds of Pure Reason. American Journal of Sociology 84 (2), pp. 366-385.
- Jackson, Jonathan, Huq, Aziz, Bradford, Ben & Tyler, Tom (2013). Monopolizing force? Police legitimacy and public attitudes towards the acceptability of violence. Psychology, Public Policy and Law. Forthcoming. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1984957

- Jacobs, Jonathan (2016). Police, the rule of law, and civil society: a philosophical perspective. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 82-102.
- Karpiak, Kevin (2016). The anthropology of police. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 103-121.
- Lottholz, Philipp & Lemay-Hebert, Nicolas (2016). Re-reading Weber, Reconceptualising State-building: From Neo-Weberian to Post-Weberian Approaches to State, Legitimacy and State-Building. Cambridge Review of International Affairs 29 (4), pp. 1467-1485.
- Meares, Tracey (2016). Public lawfulness and public security. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 122-135.
- Miller, Seumus (2016). Political theory, institutional purpose and policing. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 13-28.
- Murkens, Jo Eric Khushal (2007). The Future of Staatsrecht: Dominance or Demystification? The Modern Law Review 70 (5), pp.731-758.
- Neep, David (2016). Max Weber's Theory of the Modern State: origins, Structure and Significance by Andreas Anter (Book Review). Political Studies Review 14 (1), pp. 64-65.
- Palonen, Kari (2011). The State as a 'Chance' Concept: Max Weber's Desubstantialisation and neutralisation of the Concept. Max Weber Studies 11 (1), pp. 99-117.
- Palonen, Kari (1999). Embalming and dis-embalming a classic. The case of Max Weber. In Pertti Ahonen & Kari Palonen (Eds.) Dis-Embalming Max Weber. Jyväskylä: Sophi, pp. 5-15.
- Seigel, Micol (2018b). Violence work: policing and power. Race & Class 59 (4), pp. 15-33.
- Sinclair, Georgina (2016). Disentangling the 'Golden Threads': policing and lessons from police history. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 29-45.
- van Dijk, Auke, Hoogewonings, Frank & Punch, Maurice (2015). What matter in policing? Change, Values and leadership in turbulent times. Bristol: Policy Press.
- Weber, Marianne (1988). Max Weber A Biography. London: Routledge.
- Weber, Max (2012a) [1903-1906] Roscher and Knies and the Logical Problems of Historical Economics. In Hans Henrik Bruun & Sam Whimster (Eds.) Max Weber. Collected Methodological Writings. London: Routledge, pp. 3-93.

- Weber, Max (2012b). The "Objectivity" of Knowledge in Social Science and Social Policy. In Hans Henrik Bruun & Sam Whimster (Eds.) Max Weber. Collected Methodological Writings. London: Routledge, pp. 100-138.
- Weber, Max (2012c). Critical Studies in the Logic of Cultural Sciences. In Hans Henrik Bruun & Sam Whimster (Eds.) Max Weber. Collected Methodological Writings. London: Routledge, pp. 139-184.
- Zedner, Lucia (2006). Policing before and after the Police: The Historical Antecedents of Contemporary Crime Control. The British Journal of Criminology 46 (1), pp. 78-96.

THE POLICE AS A HISTORICAL INNOVATION

Vesa Huotari

Introduction

'Among the institutions of modern government the police occupies a position of special interest: it is at once the best known and the least understood' (Bittner 2005, p. 150).

If the police, as Bittner (2005) argues, despite being discussed and scrutinised over the years by numerous researchers from a variety of angles and viewpoints, have remained relatively poorly grasped, perhaps our conceptual tools are not fully adequate for the task or the presumptions underpinning the research methodologically are not sufficiently solid. For sociologists, the police has often appeared as an incarnation of the state, for anthropologists, a modern tribe with its own culture, rites and rituals that is isolated from others. Historians, on their part, have taken it for granted. For them, the everyday concept of the police has been sufficient for most of their professional purposes. Proclaiming that the aforementioned efforts have left our understanding the police wanting is bold, if not audacious. We should not focus only what police officers do or should be doing on a day-by-day basis and why, as Bittner (2005) argues, but also identify the police as an institution in conceptually more adequate ways.

Unfortunately, the concept of institution is hopelessly vague. Institutions are akin to practices, habits, customs and traditions. They give character and form to our daily lives, a shared ground upon which to build our expectations on the deeds of others, shared points of reference for attaching specific meanings to common expressions, irreplaceable mediums for expressing ourselves and for forming and communicating our intentions to others. The very threads in the texture of social life can be seen as institutions. Institutions are a necessary condition for life among strangers, but also an emerging result from this fact or necessity ('social').

Overlooking this institutional dimension in research on the police would be all but surprising. However, it would be potentially significant too. It would leave the police researcher without a proper conceptual ground to stand on in figuring out and explicating the mechanisms in a police organisation that relate to its stability and change, its continuity and discontinuity. It would effectively undermine the efforts to properly figure out the position of the police in wider society.

This essay aims at setting the record straight: not at one stroke, but eventually. The modern police is approached here as an innovation in itself. Police forces are not just a work environment yearning for continuous improvements and innovations; they are potentially unique institutions and an innovation in itself. This essay aims at grasping it as such and explicating what is actually unique in it as an institution. Presumably the adoption of all other innovations is conditioned by the very institution. Therefore, figuring it out is practically significant too.

Thinking of institutions as different types and claiming that their idiosyncratic features should be taken into account in the respective accounts, stands out as an Aristotelian approach. It will be discussed more closely in the next chapter. To presume that the police represents a historically unique institution, to develop a theoretical description that captures their distinctive nature, to draw out practical implications from it and, eventually, to put them under empirical scrutiny seems to open a new, untrodden path for research on the police. Relations that give character to institutions like the police can be seen as deriving from two sources that rest on different but reciprocally related layers. On the one hand, one should focus on the relations within the police that give them character. On the other hand, one needs to focus on relations between the police and other institutions in society that individuate it as an institution in society.

Thus, the police comprise an institution that is continuously emerging or in a state of becoming. It must have a starting point too and we should figure it out as an innovation in itself. As an institute, it sets the terms for further innovations within it, like organisational reforms, the establishment of new tactics, and the absorption of new tools in and for policing. From this perspective, the police appear as an emerging institution, an institution in a continuous historical process of becoming increasingly what it is as an institution, in the process of pursuing its very form or nature. Such a pursuit arguably calls for innovations, but also puts them under a selective pressure. Thus, the institution itself appears as the prime motor for innovations and their continuously emerging results. Perhaps, as the institution matures, its selectiveness intensifies and the introduction of real changes becomes increasingly demanding, leading to the solidification or concretisation of it as an institution.

Relations, both internal and external, that give the character to the police and come to define them as an institution have their origins in history. Most likely, they are most discernible, most nakedly exposed, at their birth. One would thus expect to find them documented in historical expositions of the police, though only partly, if at all, grasped in their full significance. The early history of the police, I believe, possesses the power to reveal the institutional relations that have conditioned the later development of it.

However, knowing the most promising period in time is not enough for capturing the intended beast. What is needed is an initial understanding of the constitution of the latter, i.e. a map specifying its ontology, such as it being thoroughly relation-based. The next step is to see the accounts of the history of the police through that matrix or reread it using the latter as the lens and to single out the results as the candidates for the formative elements of the police institution.

A prerequisite for such analysis is a written history of the police. As the history of the police in Britain stands out as the best documented and also the best known, the focus here is in the emergence the Bobby. It is an empirical question if anything of some general value can be learnt from a scrutiny of a historical case. However, the main part of this essay is dedicated to it. The final chapter discusses the identified institutional features of the police and their relation to innovativeness in policing. Overall, the intention is to introduce an encompassing but novel framework for the analyses of innovation and innovativeness in the police and policing.

Capturing the Police as an Institution

This chapter lays the ground for the possibility as well as for the need to ask about the nature of the police as an institution. It provides an outline of a map that is necessary for figuring out the institutional features of the police and explaining the stances or positions that are typical or characteristic to it.

The problem has two sides. On the one hand it is a question of the general constitution of institutions, like the police. On the other hand, it is a question of the character of that form at a specific point in time, i.e. an interplay between an abstract or ontological category and its theoretically informed historical specimen. The challenge is, basically, in identifying the proper form and substantiating it then historically. The former is essential in drawing the latter out from its context, in discerning agencies, events, causes and effects in the historical unfolding of time. The historical substance, in its part, is indispensable in giving a practical meaning to an abstract form and in evaluating its significance as a theoretical category.

Problematising Our Understanding of the Police

As a rule, our concept of the police seems to suffice for all practical purposes. When it comes to the police and policing, we seem to reckon we know what we are talking about. We can identify the members of the police on the streets, call them in emergencies, point out physical locations called police stations, etc.² Moreover, we are aware of their tasks and duties as well as their right to give orders to us, even restrict our freedoms and use physical force on us or others to fulfil their duties. When it comes to an average member of society, there is, basically, nothing unclear or ambiguous about the concept of the police. One would thus suspect that academic pursuits are not an exception to the aforementioned rule.

Obviously, discerning the police from the non-police is necessary for writing up their history. Respectively, to demarcate the modern police from their pre-modern predecessors requires specific ideas of the features that are present in one but not in the other. However, it seems that nothing conceptually very sophisticated is required for either of these tasks.

In the case of the police, their appearance captures our attention. For an empiricist, the idea of there being something beneath the immediately perceptible that is possibly carried across the times and somehow participates in the coming of the events, appears as a metaphysical gesture in inhabiting the world with unobservable things. Such a move is more likely to mystify rather than help us explain and make our intentions true in it.

Institutions, like other so-called social structures, are not directly detectable. They materialise only in their effects. Apparently, only the limits of our imagination seem to constrain the reading of them into the world and inhabiting the latter with powerful things residing beneath the observable as well as behind them.

As Johansen (2017, p. 118) states, the enforcement of law and social norms is a universal feature and most police scholars instinctively recognise elements of policing when encountering them in different guises and a variety of contexts. However, while policing and the police do overlap, they are not synonymous. Thus, the ability to point out one does not necessarily also identify the other.

The empiricist explains observable effects with other observable effects, understands the latter as the cause or independent variables, but refrains from any reference to abstract or mystical entities, like institution. Speaking of institutions and their relations is typical sociological discourse. The concept is part of sociologist's conceptual toolkit. However, it is often used as a vague explanatory category. Once a sociologist calls something an institution, it a powerful gesture that results in terminating further discussion of it, rather than elevating it on the sociological research agenda. Thus, the concept of institution represents true currency in theoretical discussions in sociology, but it does not stand out as a lucrative agenda for sociological research.

While policing is what the police do, only a fraction of all policing, when understood as the control of laws, rules, regulations, morals, etc. and their enforcement in society, is accomplished by the police.³ Moreover, the police have been, and are most likely to be, responsible for numerous tasks and duties in society. As a function in society, policing describes work that belongs to many instances, not only to the police. Furthermore, everything the police do does not necessarily relate to the aforementioned function. Therefore, relying on what the police do in defining the police institution puts the cart before the horse. It is using what is transient to define something intransient or, at least, less transient, and taking what is observable to us as the criterion for what is significant in the world.

Institutions as Real Entities (Methodology)

Institutions are discernible as patterns in human action. Such patterns materialise at a variety of scopes from an individual to a global level. A common feature of them is a degree of continuity over time. Thus, by definition, institutions resist change. They are more likely to be reproduced regularly than to change. They do emerge, become transformed, and thus change or evolve over time too. Furthermore, they can become objects for intentional action that aims at abolishing them, transforming them or creating them anew.

We are often frustrated by our very institutions, especially so if we try to go against, around or over, rather than along with them. However, without institutions and the regularities that derive from them as shared frames of reference, joint situational understandings, common horizons of meaning and mutual rules for conduct, intentional action, communication, co-operation and life among strangers would become impossible.

While outlining the general features of institutions is relatively straightforward, things become more complicated when one tries to draw lines between institutions, e.g. identifying an institution as a clearly circumscribed entity. It is not because they are few and far between, but because they are numerous, densely interwoven, and complex in their mutual relations. Social life has become thoroughly infested by them.

A concept of police, Brodeur (2010) argues, should target what policing is, not in what it might or might not be. Nor should the concept be based on what the police do rarely or never. However, the problem is not limited to particular features of definitions, but encompasses the grasp of their general role and function in research too.

Moreover, human beings have become very fluent at using them creatively, referring to them, building their deeds upon them and enforcing them. To say that the police are an institution at a societal scale easily hides the fact that it is an organisation built upon institutionalised practices, inhabited by persons that bring with and share the cultural institutions of the larger society, and possibly those specific to their own ethnic and vocational background, related to their gender, age, marital status, etc. On the one hand, the police as an institution exists among institutions. On the other hand, it inhabits a variety of institutions and, more or less, emerges from relations between them.

To define the police as an institution is to give an account of it in terms of a layered structure of institutionalised features. Thus, the secret does not reside in a single institutional feature as such, like a monopoly in the use of force. More likely, it lies hidden in a unique combination of relatively common features that, as a structure of relations, is idiosyncratic to the police, define them as a specific kind, give them a specific character as an institution, and separate them from other institutions. This presumption of relations attached to constitutive and character-forming power directs attention to their relata. Relations are discovered by identifying the latter first, though they are likely to emerge in the opposite order.

To identify the elements the relations of which could be claimed to be typical to the police institution is, basically, a search project. Any attempt to find, say, a yeti, benefits from a theory that approximates the true one and specifies their physical features, the environment they prefer, their nutritional habits, etc. Any search, respectively, suffers from a false theory.⁴ A theory that approximates the final one would help the search party to choose a good observation point. It would maximise their likelihood to spot a representative of the species under search. Likewise, a false theory, like blaming witches for diseases and believing that they resembled aged women of normal size rather than microscopic creatures, as detected later, puts the search parties into a hopeless situation, not to mention those accused of being witches. When it turns out that something exists that meets the theoretical description driving the search, say, an aged woman living a solitary life with a cat, once detected, it confirms a theory, but the theory thus confirmed is not related to the cause of the disease, but the false one that characterises the witches. The failure to spot a yeti does not disprove the theory that postulates them in the world. Perhaps one just needs to figure them out anew in theory, like their size and natural habitat and then find another observation spot reflecting that understanding for seeing a specimen. Fundamentally, the very idea of there being agents responsible for diseases was a correct one. However, the early substantial concept about them (witches) and the methodological guidelines drawn from the latter for detecting them were seriously flawed.

When it comes to the police, the relations and the respective relata that give character to them as institution should be at most detectable in its early history. The very hypothesis of the police possessing some distinctiveness as an institution provides the main cue. This specific feature must have been present in an early form at the start. If it is something historically unforeseen and genuinely new, it could not

The main function of our theories is to describe the things inhabiting the world, their constitution, their structure and the powers, that derive from the structure being as it is as well as their relations to each other, and how those individual powers or capacities are situationally transformed or prohibited from working.

have remained below the surface to contemporaries. To them, it should stick out as somehow controversial, alien, foreign, unfamiliar or uncomfortable.

Some such features, undoubtedly, turn out to be only temporary and transient and are passed over eventually and successfully contained, but only as building blocks, like historical developmental tasks in the becoming of the institution, while some are just ornamental attachments that have no essential function to serve. The first mentioned are good candidates for something that is constitutive, formative or, rather, institutionally informing to the police.

In one sense, the task is to re-identify the unique constellation of familiar elements coming together, becoming consolidated and reflected in the collective understanding of the police as well as institutionalised in the development of policing, the respective technologies, practices and tactics. However, instead of unfolding the whole story, only some suggestions will be forwarded in this relatively short, in many ways initial, essay.

Arguably, over the course of time a whole number of police organisations have emerged and existed in different countries, often more than just once. To proclaim that, despite this variety in their origin, durability, appearance, and life cycle, they all belong to a common kind, evolve in the same direction and share a common destiny, stands out as a daring hypothesis indeed.⁵ Even if the police as an institution stood out as a type of its own, its development would most likely depend on its relations to other institutions, their respective natures and states.

Due to globalisation, both the police and its institutional environment could develop increasingly in a converging way and making thus this conjecture increasingly true. Bayley (1992, p. 373) remarks that local contingencies may weigh less than international and professional trends in the formation of the police organisation: 'The functional organization of police, too, relates more to a professional, and international, zeitgeist than to changes in local circumstances'. To a degree, gendarmeries have become domesticated, while civil police militarised: 'After 1836 the Irish Constabulary was domesticated: it was naturalized by becoming in its composition more truly representative of the Irish population; it was attached to home as its duties became more routine, more akin to house-keeping than to peace-keeping; and it was tamed because its ability to use force was greatly diminished' (Lowe & Malcolm 1992, p. 27). 'In time the possibilities to train police officers to colonial policing emphasising the need for militarystyle drill and discipline evaporated as the R.I.C. put greater emphasis on civil rather than paramilitary styles of policing' (Sinclair 2008, p. 180). 'Although Britain seems firmly attached to the principle of local accountability of police, the structure of policing has always been determined by central initiative through Parliamentary statutes. (...) The central government developed the London Metropolitan Police in 1829, required its emulation by local communities after 1856, and determined the number and scale of local police jurisdictions thereafter. Although public opinion remains dead set against the creation of a national police force, Britain may be moving in that direction in fact.' (Bayley 1992, p. 533.) Johansen (2017) argues that the distinction is not holding up: 'Over the past fifty years there has been considerable convergence of military organised forces with standards for civilian policing; at the same time, civilian police in many countries have become increasingly militarised due security scares about terrorism. The presence of armed police in public in Britain is a particularly stark example of this new development.' (Ibid. p. 116.) 'The appearance of decentralized local control continues to be important in British politics, but in reality the central government has created the structure of policing and powerfully influenced its operating policies' (Bayley 1992, p. 533). Top-down control-oriented police forces become more consent-based police services oriented from bottom-up and vice versa and, simultaneously, become increasingly detached from these two main anchoring points of social life in modern societies, or, at least, extending the length of the chain that ties it to them (cf. van Dijk 2015, pp. 45-60). Without the latter, the police would lack the space and the degrees of freedom for playing its role as a constitutive institution accountable to the other main institutions. Miller (2016, p. 21) claims that the police need a degree of institutional and operational autonomy vis-à-vis government in order to be able to investigate possible crimes of the members of the latter. This reflects the principle of the separation of powers in society. From a citizen's point of view, the independence of the police institution is a prerequisite for the belief that exercising sound judgement by the members of the police is not an excluded possibility in general, although it may not materialise in some particular cases. The latter, rather than the former, is thus the rule (Jacobs 2016, pp. 94-98; Meares 2016, p. 127-129).

Obviously, to pursue a real definition of the police as an institution is theoretically over-determined. It carries with, and provides for, the possibility of misidentification; not everything identified as the police in history meets the definition and sometimes it has been labelled otherwise. While such an identification is not a problem in the case of natural substances, like water and gold, it is another issue in the case of institutions that emerge historically. However, the methodological principle remains the same in both cases; not all that shines and is yellow is gold, nor is everyone who enforces the law a police officer. Although a number of people may agree to call something gold, it is not sufficient to make it gold, though the callers may well act as if it the gold exists – it may thus become gold in its social consequences although it would not pass a chemical test. The same principle applies to the test of time. False pretensions will come up and real things will prevail.

The Constitutive Features of Police Institution – Ontology as Map

The age of empiricism abhors the idea of real definitions. The emphasis has been on screening out regularities, in formulating them as laws, and turning the latter into new technologies in order to extend human control in the world and over it too. Describing entities and things has become just a preliminary phase on the way to the very purpose of explaining them, fully, once and for all. To think of the world in terms of things inhabiting it and to see the purpose of research in putting forward theoretical accounts of them and explaining their tendencies and capacities by their internal structure and their relations to other respective things and their capacities is simply incommensurable with an empiricist worldview. For the latter, things subsist because of the laws (laws taken as the fundaments). Alternatively, one can claim that laws and regularities exist because there are things (things taken as the fundaments). For the empiricist the first move is to define the concepts, preferably in observable terms, and then to proceed to chart the regularities between them. For the realist, the aim of the whole endeavour is in identifying the real things, finding out their constitution, i.e. how they come together and the powers and capacities inherent in their structures, and then proceed to define them properly. In a complex world with multiple layers, the real entities exist respectively constituted.

It is no wonder then that, as Jobart (2014) claims, the police as an institution has not inspired in-depth conceptualisation efforts. For him, the police as an institution inheres dualisms; it harbours both the rule of law and violence as well as knowledge and ignorance. Jobart builds his view upon an interpretation of the police as an extension of an all-encompassing benevolent state requiring knowledge of the prevalent states of affairs as well as how to make things better – to enhance the health of the state by raising the bottom line – especially for the most deprived (morally, socially, economically, politically, judicially disorderly) groups (the reason for the state and the emergence of 'police science'). It is impossible extend the law and the rule book to cover and prescribe all police actions for every possible scenario. The latter, Jobart (2014) argues, always eludes the law and makes prudence one of the constant features of policing. The police, by necessity, resist the imposition of external rules aiming to prescribe their actions, especially the use of force, for all possible scenarios ('policing by the book'), and, simultaneously, is obliged to respect the rule of law.

This tension between emancipation and domestication, harbouring both violence and the rule of law, turns the relationship between policing and knowledge into a key issue, Jobart (2014) claims. For him, the pursuit of knowledge and the rule of law and their opposites, ignorance – absenting the latter by detecting forthcoming crimes – and violence, consist as the core elements of the concept of police. Police work is accomplished under contradictory expectations. It is seeking a situational balance in action between often contradictory calls from personal feeling, intuition, non-knowledge, joint discretion, common sense, the-way-things-are-done-here, the rule book and the rule of law. Jobart (2014) concludes that:

'Policing certainly ranks as one of the most challenging social objects to conceptualize. (...) Dualism... has established that certain phenomena consist in the reunion or coexistence of two irreducible and irreconcilable components. In this perspective, policing is the reunion of two pairs of opposites: in it coexist the rule of law and violence, as well as knowledge and ignorance. What most consistently shapes the concept of police is precisely this irreducible duality.'

While Jobart's analytical view of the inherent constitution of the police as an entity given character or being constituted by opposite or contradictory elements is the most thrilling one, he seems to misidentify the constitutive relations. Furthermore, he appears to fail to capture them all. Thus, Jobart hits the target in terms of ontology or basic structure, but succeeds less well when it comes to characterising this very constitution in historical and substantive terms. The aim here is to straighten the record by scrutinising the early days of the modern police in Britain and Ireland, when the contradictory elements that make its institutional flesh and bones were first invented and incorporated into it.

The Emergence of a Police Institution by a Consolidation of Contradictory Elements

The Plot

This chapter focuses on identifying the relations within the police that set them apart from other institutions and give them a distinctive character. This very character consists in the lens through which, or rather the tentacles by which, the relation to the outer world is maintained and the events external to it are categorised and interpreted, and needs as well as calls for action are given meaning, institutional identities negotiated, expressed, recreated and, when needed, defended too.

This institutional entity has disappeared from the sight of the members of the police, the public, and police researchers. It is observable, like magnetism, in its consequences only. Researchers are often baffled by the tensions within the police, the way they combine change with stability, resilience with resistance, adaptation with co-optation. The presumption of the police as an institution of its own type, the idea that it is possible to identify the incompatibilities that define it by revisiting its history – naturally, equipped with the conceptual tools up to this task, like a map of what one is looking for – consists in a common sense methodological framework.

Following the methodological guidelines means, firstly, visiting historical accounts of the police that address them at the time of their birth. Secondly, it guides

one to find from them traces that indicate issues or features that were then considered anomalous, controversial, doubtful, being against nature, or, like in this case, un-English, continental, French, unconstitutional. Thirdly, despite the aforementioned, such features have resisted successfully the doubting, remained, and perhaps even turned around and pronounced later as the very materialisations and expressions of the national character.⁶ Thus, if the modern police institution appeared once as a genuine misfit, perceived as having something seriously flawed or wrong with it, even unnatural, etc., such features do demarcate it from the other contemporaneous institutions, give it a distinctive character and potentially also set it on a trajectory of its own.

Foreign/Alien in the British Police

When London's Metropolitan Police was established in 1829, Britain was at the centre of a vast empire where the sun never set. In the world of empires, it was inequality, difference and hierarchy, not equality and reciprocity, that was sanctioned by the normative international system (Lam 2010, p. 891). The problems with administering the colonies, especially the closest of them, Ireland,⁷ required innovations in policing, but also provided an open field for experimenting with it. The problems appeared 'different', therefore, they were deemed to require or provide

Possibly, while the police have retained their character as an institution, society itself has changed. The role of the former in this change is debatable. 'Despite bitter opposition, the English police established itself not only as an agency of social control, but became an institution of central symbolic importance, seen as embodying the very essence of Englishness' (Ellison & Smyth 2000, p. 17).

Whether Ireland was a colony at all, or if it was one in the 18th century but not in the 19th century, when it became subsumed with the United Kingdom of Great Britain and Ireland, is a contested issue. 'Historians of modern Ireland reject any kind of colonial model for the nineteenth century. (...) Although a simple colonial model, assuming such a thing to exist, is clearly wrong, some new theorising about the nature of governance in nineteenth-century Ireland is required to advance understanding of its history, particularly in the first half of the century.' (O'Callaghan 2004, pp. 39-40; see Howe 2008). 'The very terms used to describe the administrative situation of Ireland reflect the reality that, while London of course remained supreme, those in immediate charge continued to head what continued to be called a "government" of their own. The phrase "Irish government" marches through the political idiom of the period just as does the term "Irish cabinet" widely used in relation to a group consisting of the viceroy, chief secretary, undersecretary and their legal and other advisers in Dublin Castle. This terminology, continued from pre-union days, accurately reflects the fact that, in this area at least, no integration had taken place, quite the reverse.' (Hoppen 2008, p. 339.) A hybrid in itself as '...Ireland reflected both the "imperial" and the "colonial" (Sinclair 2008, p. 173). With the exception of a brief, and to some degree unsuccessful, period in the late sixteenth and early seventeenth centuries, the post-medieval development of Ireland does not truly adhere to a colonial model as it would be understood in North America, Africa, or India. This development was an uncertain process riven with violence, insecurity, and incompletion. (p. 100.) Ireland was not simply divided between Protestant and Catholic but between settler and native, Saxon and Celt, and landowner and peasant. Although it would be misleading to see every issue through this prism, this divide did give Irish politics its organizing dynamic' (Bew 2016, p. 80). 'Peel in Ireland would be the formulator of the government's Catholic policy as well as the representative of the government's will' (O'Brien 1988, p. 136.) '... could not be described as in any way sympathetic. For him the Catholic question and its effects upon the masses was for the moment merely one more aspect of the Irish law-and-order problem.' (O'Brien 1988, p. 139.) 'Once the Catholic demand became a potential source of popular disorder it became a legal or police matter and so could be dealt with without recourse to politics.' (O'Brien 1988, p. 139).

for different approaches to the home country. This 'foreignness' catered for the development of new modes of policing, a police organisation and a new perspective to the very issue of keeping order, public safety and security, and preventing crime. Thus, once security and safety in the home country became a political issue calling for a new approach, something new, but already thought of, though foreign too, was at hand already.

'It was not simply the case that policing in the colonies represented an imperfect version of 'real' policing: rather, the police work carried out in Ireland, in India, in the West Indies, in Africa, and elsewhere frequently provided the template and the tools for civil policing in other parts of the Empire, including England itself' (Purdon 2016, p. 140).

However, adopting a mode of policing in the home country, which was originally introduced to keep the disordered and uncivilised natives of the colonies at bay and, eventually, to turn them into law-abiding subjects entitled with the same rights of as the citizens of England, would imply that the latter were fundamentally no different to the first mentioned – say, morally superior, born to rule, and thus justified in transforming the other to her own image. From the innovator's point of view, this state of affairs was a marketing or PR problem rather than an insurmountable obstacle calling for a truly alternative approach. Thus, addressing the problem required simply inventing new descriptive terms for communicating the purpose of the forthcoming mode of policing to the new establishment. Citizens were concerned that the modern police was just a way to establish a suppressive force that would spy their private spheres, threaten their primordial civic liberties and represent a foreign element added into the British system interfering with the daily life of her citizens.

The constitutive characteristic of the colonial police force was the idea that there is a difference in kind between the police and the policed (Owen 2016, p. 308). Dissolving the doubts that the British 'Bobby' was not an Irish 'Peeler' in disguise but something anew required spinning a new narrative of it. However, Ignatieff (2005, p. 28) claims that the success of the police in securing the cooperation of the public derived from gaining a near-monopoly of violence and negotiating local policing orders rather than the general public buying into the rosy image of impartiality and official characterisation of the police.

At the turn of the 18th century, if not even earlier, the state was a main concern for people across the social spectrum in England. Suggestions for the establishment of a police force was attached to the emergence of a despotic state possessing a standing army, but under another name, interfering the life of citizens, undermining both democracy and citizens' own responsibility for their own safety and security

Exporting administrative order, high technology, and British culture to the supposedly primitive and unruly spaces of the empire, British policy-makers came to see the nation they served as pre-eminently global law-giver and policeman...' (Purdon 2016, p. 139).

[&]quot;... in many ways the most striking distinguishing feature of the 'new' police is that they were presented and perceived as something new. Although they were far from homogeneous and in most respect drew on existing practice, the fact that... highly identifiable and self-consciously innovatory forces were superimposed, at a stroke, on a variety of local policing practices represented a significant and very visible change.' (Styles 2005, p. 83.)

ending up in police rule and government by the police foreign to English habits.¹⁰ These concerns prevailed long after the birth of the Metropolitan Police in London in 1829:

'In London we have in fact all the materials existing for the same despotic government which we have been contemplating as existing in Paris; the same irresponsible head of the police; the same vast police machinery which, though it may not hitherto have been so used, stands a powerful engine for political purposes, ready to the hand of any future autocrat or political party who may yield to the strong temptation of making such a use of it.' (Government by the Police 1880, p. 38.)¹¹

Fear of tyranny was greater than fear of criminals, Tobias (1972b, p. 204) remarks. Although, Emsley (2014, p. 22) argues, no self-respecting nineteenth-century Englishman was ready to suggest the deployment of a French gendarmerie-style policing within the empire, the Irish constabulary was created to maintain public order and prevent crime aligned with this continental counterpart. In England,

The dominant orientation in England, Boyle (1972b) argues, was to praise the virtues of traditional structures even when their inadequacy had become obvious. Mythical Anglo-Saxon freedoms, the institutions of Alfred, were claimed to be the real and efficient guarantee of the constitutional freedoms of the Englishman. Everything even apparently related to the growth of the power and position of central government was thus vehemently opposed as a threat to those institutions and a breach of the natural liberties the citizens acquire as their birthright (Boyle 1972b, p. 95). 'In England the idea or uniformed body of policemen patrolling the streets to prevent crime and disorder was anathema. Such a force smacked of the absolutism of continental states. (...) The fact that these models were French, in itself, was sufficient to make most eighteenth century English gentlemen conceive of a police force as something inimical to English Liberty. Policing... was perceived as a local task... depended upon local men being selected, or voluntarily coming forward, to serve in an official capacity...' (Emsley 1986, pp. 69-70.) 'Englishmen of all classes generally viewed the Continental monarchy as being based on a police tyranny. Consequently, any measure suggesting a strengthening of the power of the central government was suspect.' (Lyman 1964, p. 143.)

Whether the police service directly under the government would consist of a threat to the democracy or not has been discussed ever since. As safeguards for democracy and against tyranny by the police, Melville Lee (1901, p. 249) pointed out that parliament was democratically responsible to the country, the actions of the police were supervised by the public press and every bystander could report their perceptions of the conduct of the police to that constituency. Melville Lee emphasises the benefits from centralisation: 'This centralization not only materially conduced to increased efficiency and diminished expense, but by severing the too intimate connection that had previously existed between magistrates and policemen, was calculated to reassure the public, in so far that a magistracy untrammelled by police responsibility would be less prone to be over-indulgent towards any excesses of which the Constabulary might at any time be guilty' (Melville Lee 1901, pp. 265-266.) The Met, being under the Home Office and thus the government, not the local authorities, was not local, but an imperial force: '...the Metropolitan Police is an Imperial rather than a local force—provincial towns and districts have only provincial interests to guard, London has responsibilities as wide as the Empire; and however public-spirited local authorities may be, the danger will always remain that they may be induced to prefer local to national interests. The Houses of Parliament, the British Museum, public offices and foreign embassies happen to be in London, but they are not local institutions...'. (Melville Lee 1901, p. 395.) Reith (1943, p. 257) claims that '...it is unlikely that central, national organization would have been accompanied by any disadvantages to the nation. The disregarding of the historic tradition of local control and responsibility would have been regrettable on sentimental ground, but it was clearly advantageous and most necessary in London.' Keeping up with the local control of the police has, he claims, been an obstacle to the evolution and further development of the police. 'A little consideration of the historic and other facts of the British police conception will show that a centrally-controlled National Police Institution which functions on British Police Principles need to be feared, and that it could provide for Great Britain, and for any other community which decided to establish it, a new road of hope and promise leading to possible final fulfilment and perfecting of the highest envisaged ideals of democratic government' (Reith 1943, p. 258).

although not much was actually known about it, or not many cared to know, Ireland did appear very different to the home country.

'Unlike the New World and its indigenous inhabitants, sixteenth-century Ireland was long known to the English, and the English were long known to the Irish. Yet by the end of the sixteenth century, Ireland became unknown through the construction of difference, or otherness, a process integral to early modern colonialism.' (Horning 2013, p. 17.)

'Ignorance and extravagance did not, however, preclude the articulation of confident opinions about Ireland, its problems, difficulties and (above all) the benighted behaviour of its inhabitants. In this respect, the union and incorporation meant little more than the handing out of colourful beads and trinkets to uncivilised natives. Ireland was seen as irredeemably "corrupt" (a term more used than defined), preternaturally violent, riven by sectarian frenzies, inhabited by exotic, amusing, and incomprehensible people. (...) There was, in other words, some canker in Ireland's social fabric, which rendered almost all of the people different, foreign, strange and inferior. (...) Indeed, deploying the language of an amiable (or not so amiable) anthropologist surveying "primitive" peoples proved irresistible for those governing Ireland.' (Hoppen 2008, p. 345, p. 346, p. 374.)

'The real "problem", according to Croker, lay with the uneducated mass of the population, among whom "the Irish language, a barbarous jargon, is generally and in some districts exclusively spoken; and with it are retained customs and superstitions as barbarous" (quoted in O'Callaghan 2004, p. 38). (...) Up to a certain point in that century, successive London administrations consented to exceptional law in relation to civil order in Ireland because they broadly accepted a pathologising of the Irish character that was the staple of official discourse from the Union onwards.' (O'Callaghan 2004, p. 42.)

Colonies, like Ireland, were seen as calling for an armed, paramilitary police force living in barracks – sort of fortified outposts in the midst of a hostile environment – prepared to suppress the indigenous population, protect officials, maintain public order, and keep anarchy and rebellion at bay. Natives were seen as backward (primitive, tribal) and 'uncivilised' (barbaric) and thus lacking sovereign rights, equality, capability to self-governance, and civil liberties (see Lam 2010, p. 890). The police were a coercive arm and an agent of central government, ideally, if not in always practice, entitled with an agenda of imposing higher values, ideals, mores, (Christian) sentiment and a moral code, representing them in their own posture and conduct, as well as enforcing them too (Emsley 2014). 12

Sir Robert Peel, as home secretary, is generally acknowledged, though not solely, as the main figure behind the birth of the Metropolitan Police, immortalised in Peel's principles for policing. However, before his role in establishing it, he became the Chief Secretary (1812-1818) for Ireland in August 1812. At the age of twenty-four he held thus the second highest post in the Irish executive, subordinate only to

^{&#}x27;To achieve public security police must understand themselves in a didactic relationship with the public...' (Meares 2016, p. 124).

the lord lieutenant (viceroy). Peel moved to Ireland and left behind his previous post at the Department of War and Colonies (Kanter 2001, p. 55). In Britain, his name is associated with the 'Bobbies', but in Ireland with the 'Peelers'.¹³

Introducing 'The Peelers' 14

Peel's predecessor in Ireland, Under-Secretary Sackville Hamilton and Chief Secretary Thomas Orde, had pondered three options for reorganising the police services in Dublin in 1786; the police of Edinburgh (considered too army-like), the Bow Street thief-takers in London (seen inefficient), and the police of Paris (considered ideal, but politically controversial) (Palmer 1975). The police appeared as an alternative to the use of military force in preventing civil unrest and rioting since the disturbances in Munster in 1761 (Boyle 1972). However, the model that Orde proposed to the parliament sitting in Dublin – unrepresentative in many even of Protestant opinion in a deeply Catholic country – was a copy of none of them. When compared with the respective system in England, it was, Palmer (1975, p. 415) claims, a revolutionary one.

The Irish Police Act passed through Parliament. The opposition did claim, however, that the Bill imposed a system that seemed foreign to British subjects. Furthermore, Dubliners were now to face a system of policing that had actually been rejected by Londoners (Palmer 1975, pp. 416-420).

As preventative measures, the Dublin police enforced anti-combination laws by directing threat of punishment to the owners of premises where offenders could gather rather than at participants. An extensive licencing system extended control over a wide class of services provided by the lower classes. To halt the traffic in stolen goods, the police started to license various occupations, which might serve as possible outlets for them. To prevent fraud in the setting of prices, the police granted licences to butchers, porters, messengers, pennyboys, etc. (Boyle 1973, pp. 328-342). As Brodgen (2005, p. 76) points out, 'notions of preventative policing (supposedly a unique feature of the mainland British style) justified the creation of colonial forces long before the Metropolitan Police Act 1829.'

However, the new police establishment in Dublin never succeeded in winning the trust and consent of Dubliners. After a decade of agitation, riots, inquiries, petitions and repeal Bills, the Irish Police Act was abolished. The new Dublin police from 1795–1799 entrusted the responsibility for night watches back to parishes and the influence of the government was reduced to a shadow. However, this new system turned out to be more costly than the previous one. Furthermore, the belief that the city would be both able to administer its own police as well as being interested in doing so, did not come to pass. The next step was to make the central control of the police in Dublin even more complete, the very eyes and ears of Dublin Castle acting as the nerve centre of the British administration in Ireland (Ellison and Smyth 2000,

Peel's main principle, as a politician, was flexibility: 'What most strikes the observer in glancing over Sir Robert Peel's parliamentary career, is the fact that he was always in a state of transition. He was always learning, and as fast as new ideas became impressed upon his mind, he applied them in the administration, and converted them into realities. Hence the apparent inconsistency of his conduct as a politician' (Anon 1854, p. 35; see also Melville Lee 1901, p. 206.)

The pejorative term 'Peeler' was in wide use both in Ireland and among Irish communities in North America (Jenkins 2002, p. 10), but it did not, obviously, belong to the vocabulary of the Royal Irish Constabulary (e.g. Curtis 1871).

p. 7). The traditional role of the feudal constable appointed by and carrying out the duties given by the municipal magistracy was replaced by a conception of the police as an arm of the government carrying out public policies (Boyle 1973, pp. 328-342).

In Ireland, it was one issue to police Dublin and another issue to police disturbances in rural areas. For a long time, the administration had shared the traditional assumptions that the best way to maintain order and keep control was by inherited institutions of justice, a voluntary magistracy and law-abiding citizens instead of a centrally controlled government police linked to a professional magistracy (Boyle 1972, pp. 116-117). The latter was originally established as an auxiliary force to intervene on request wherever the parochial powers turned out to be insufficient in maintaining public order and controlling public outbursts among peasants. Traditional volunteers wanted to maintain their role and control and there was none willing to pay the costs for a system of policing, which was not in local hands. While establishing a gendarmerie for Ireland was to be the ultimate solution, it came only with time, Phillips (2004, p. 33) notes.

The disturbances in Ireland were characteristically agrarian. Rebelling Catholic peasants had suffered at the hands of the military and paramilitary (militia, yeomanry¹⁵) trying to perform police duties. Lord Lieutenant Earl Fitzwilliam, acknowledging the problem of using the military to restore and maintain order in the countryside, emphasised the need for an armed constabulary that should be composed of the better orders of the people who had an interest in the authority of law, like the first tenants, that is the middlemen between the landlord and the peasant (Boyle 1973, p. 345).

Robert Peel himself had spoken of 'gendarmerie' in 1814, when he started to outline a police for – the Peace Preservation Force – for the maintenance of public order in rural areas (Tobias 1972, p. 216). He tried to avoid the stigma of central control and the burden to the public purse, but also to spare the pride of local gentlemen. Moreover, he wanted the Lord Lieutenant to have the administrative and organisational tools – superintending magistrates responsible directly to the government and special constables with salaries – required for efficient policing. It had become obvious that the preservation of public peace and the prevention of disorder were impossible without active involvement and co-operation from local peasants (Boyle 1972). Peel's idea was to encourage their active involvement in peacekeeping by making the baronies pay the extremely high costs for the deployment of a new force (Ceallaigh 1966). ¹⁶

'Although the yeomanry faded away over the first half of the nineteenth century it was to return to haunt the politics of Northern Ireland in the form of the Special Constabulary. It is one of those ironies of history that almost immediately after the establishment of the Specials in 1923 a constabulary lodge was founded known as the Sir Robert Peel Loyal Orange Lodge whereas under 19th century RIC regulations membership of the order was forbidden.' (Smyth 1999, p. 107.)

^{&#}x27;The Peace Preservation Force was to be sent into a disturbed area after a specified number of the local magistrates had requested the lord lieutenant to proclaim the area in a state of disturbance. At the centre of the force would be a stipendiary magistrate, a full-time police official with the powers of a magistrate, appointed by and responsible to the Irish government. The stipendiary magistrate would have under his control a body of special constables, also selected by the government. While the force was in operation, the stipendiary would be the superior of the magistrates of the area, who would function under his direction. The coercive portion of the plan lay in the system for financing the force. The proclaimed district would bear the cost of the entire operation-the salaries of the stipendiary and the constables, the cost of their equipment and horses, and the salaries of members of the force were made as high as possible. (...) This was precisely Peel's intention, for, as he wrote to a friend, "the most effectual way, I am confident, of keeping the country tranquil is by making the inhabitants pay for the luxury of disturbance". (Broeker 1961, p. 366.)

The Peace Preservation Force, Ellison and Smyth (2000, p. 12) claim, was a compromise between a fully-fledged centralised police force and the extensive use of the military in a policing role. It established a sort of riot squad. It was sent into disturbed areas to restore order, while the local population was to cover all the expenses for its deployment. Putting a high price tag on local disturbances and making locals aware of such fiscal consequences from rebellion was to work as a preventative measure (Boyle 1973a, p. 115).

However, in Ireland the cost factor raised the bar for requesting the deployment of the new force rather than preventing the rural uprisings and disorders. Therefore, the larger part of the cost for deployment of the Peace Preservation Force was transferred to the government in 1817. However, along with larger financial responsibility, the government also took greater control. The modification of the financial provisions of the Peace Preservation Bill paved the way for widespread acceptance of the new police.

'By early 1818 a sizable portion of Ireland had been introduced to the "Peelers" with generally satisfactory results. (...) In other areas there appeared no desire to have the force removed, especially in the traditional trouble spots where some degree of disorder was always present. And in January 1818 units of the force were organized in five counties as permanent "separate police establishments".' (Broeker 1961, pp. 371-372.)

Hoppen (2008, p. 348) claims that Peel was the most eloquent exponent of coercion and had come to the firm conclusion by 1816 that Ireland needed an honest despotic government. To his regret the parliamentary system made the latter difficult.¹⁸ Although Peel believed that a proper civil police force for the whole country, though

The magistrates preferred banditti outrages to the costs of maintaining the Peace Preservation Force. Once the disturbances became serious enough, the government had to apply the Insurrection Act and send in the soldiers, when magistrates systematically refused to request the deployment of the Peace Preservation Force (Broeker 1961, p. 370-371).

In a pamphlet, Peel was held directly responsible for the disturbances: 'You, Sir Robert Peel, were for years the stubborn oppressor of Ireland, the foremost champion of the penal laws, the grand enslaver of the Roman Catholics. You it was that called agitation and O'Connell into existence; he was the spawn of your intolerance, he is a monster of your own nurturing. You gave him birth; and by acknowledging him your vanquisher, you confirmed his strength and legalised his power.' (Anon. 1836, p. 13.) 'Though Peel sincerely believed that a Catholic ascendancy in Ireland would imperil both the British constitution and the Act of Union, his first-hand experience with the Protestant Ascendancy had left him with little love or respect for the very constituency which he found himself defending in Parliament. From his early days as chief secretary, Peel was confronted by the contradiction in Ireland between his desire for efficiency and equity in administration and government on the one hand, and his determination to maintain the Ascendancy on the other. His hesitant, often painful, and ultimately courageous decision to accept not only the legislative necessity of Emancipation in 1829, but also its practical implications in terms of support for Roman Catholic institutions and patronage in 1844-1845, can at least in part be explained by his gradual application to Ireland of the principles of efficiency and equality at the expense of an Ascendancy with a decreasing political value.' (Kanter 2001, p. 71.) O'Connellism was as much a symptom as a cause of the polarisation of Irish politics in the first three decades of the century. It was the failure to pass Catholic emancipation in the immediate aftermath of the Union that created the conditions for his rise to prominence (Bew 2016, p. 84). 'Another irony was that it was English liberals who were given to celebrate the virtues of authoritarian, central government when it came to national improvement in Ireland...It was a Whig lord lieutenant who suggested that "Ireland wants a Bonaparte"...' (Bew 2016, p. 87.)

unsuitable for England, was required in Ireland, ¹⁹ he never succeeded in organising it until the creation of the Metropolitan Police for London in 1829 (O Ceallaigh 1966). In 1822 County Constabulary was established alongside 'Peelers' as a permanent national police force until their amalgamation in 1836 as the Irish Constabulary (Smyth 1999, p. 108).

'Control was centralised in Dublin Castle; the force was heavily armed and, effectively, garrisoned in barracks scattered strategically across the country. In both organisation and practice, the IC [Irish Constabulary, later, Royal Irish Constabulary, RIC] was a military force rather than one dedicated to civil regulation.' (Ellison & Smyth 2000, pp. 13-14.)

"...the RIC was an armed force. Its men, save when performing beat duty in the towns, went armed and in couples. It was organised in larger units than was common in England. Even in the quiet districts, a country village, which in England might have had one constable living on his own, was in Ireland policed by three or four constables and a sergeant. The police were housed in barracks, which determined the minimum size of the unit. There was a rule that each man in turn must be barrack orderly for a 24-hour stretch, not leaving the barracks during that period. Another difference between the two systems of was that the Irish Constabulary was a national force under the control of the government, whereas Britain was policed by local forces under the control of the local authority. The capital cities formed exceptions in each case; the lawenforcement body of each was a Metropolitan Police, paid partly from local funds but under the control of the executive government. In the other cities and towns of Ireland the constabulary shared the duties of law enforcement with a local night-watch force which legacy from medieval responsibilities.' (Tobias 1972, pp. 216-217.)

'The obligation placed on the RIC to observe and report, and the categories through which the society was observed and understood, are not features of nineteenth-century Irish life that should be 'normalised', but profoundly revealing structures through which to understand how the country was categorised and governed' (O'Callaghan 2004, p. 55).

The use of the military for police duties was levelled by the fact that the enlisted were positioned outside their counties of birth and lived in barracks. Likewise, in Ireland, members of the police force until the mid-nineteenth century were deliberatively set apart from the communities by their place of duty, living arrangements, restrictions related to marriage and use of free time, such as the prohibition to enter public houses. The constables were encouraged to see the service as a career with clear considerable social costs in terms of relations to local communities. A distinctive way of life contributed to it. By promoting recruitment from the families of former

^{&#}x27;Ireland was not deemed to be amenable to civil control; indeed, it was not deemed to be a civil place for much of the nineteenth century. Practices established in what was viewed as an uncivil polity, especially in relation to policing, were initially particular to Ireland. Ultimately, they were exported to other imperial sites or cross-pollinated with systems put in place in other imperial locations. Ireland was not governed like a 'normal' part of the United Kingdom, nor was it thought of as such by the political elite.' (O'Callaghan 2004, p. 55.)

police officers and thus creating family lines of officers made police work appear as a special kind of calling (Lowe & Malcolm 1992).

Enter the 'Bobby'

Peel, tired and disgusted with Ireland and its problems (Broeker 1961, p. 372), returned to England in 1818. When he became Home Secretary 1821 in a Tory government, he suggested a schema for a unified and centralised police system that reflected the failed London Police Bill from 1785 (Boyle 1972b, p. 94; Palmer 1975, pp. 412-413). Peel believed that a lax police system rather than societal conditions was behind the high rate of crime in London. The new system, ultimately financed and administered by Parliament, was to extend gradually from a few to all parishes in the London area. Peel paid particular attention to the cost factor and avoiding conflict with the City of London, which was attached to the traditional system of policing, thus preferring to stay out of Peel's scheme. Peel also emphasised the preventative role of police work to alleviate public fears, that the new systems would be utilised to repress the poor or the political opposition.

The Bill passed through Parliament. It expressed very little about the new force to come, but simply provided the political mandate to establish it for the metropolitan area. Colonel Charles Rowan and barrister Richard Mayne were to materialise the Met as its first commissioners.²¹

'Rowan faced his task of creating, out of nothing, a new, civilian, police force, by adopting and adapting and paraphrasing for the purpose, with consummate genius, the frame-work and many of the details of Moore's Shorncliff Camp training scheme [Rowan had emphasised the prevention of crime in his regiment]. (...) What was made, and made in reality by Rowan alone, from the foundations supplied to him by Sir John Moore, is the British police institution, almost in its entirety, as it exists to-day.' (Reith 1943, p. 119.)

Reith (1943),'the architect of Whig history' (Sinclair 2016, p. 30),²² focusing on the very first decade of the new police, acknowledges the challenge met by its first commissioners. The force needed to be strong enough to maintain order, but, at the same time, not too strong to suppress the fears of the government through the police. In a hierarchically divided society characterised by antagonistic relations between classes, the police searched for a neutral ground by announcing the fighting of criminal elements in society and by identifying itself with the legal system only.

² 'Reith outlined the 'nine principles of the police'... (...) ...laid the groundwork for a dominant model of police history that tended to be 'congratulary'. (Sinclair 2016, p. 30).

For Peel, when it came to crime prevention, the laxity and inefficiency of the local magistrates, living among hostile population, was one of the root causes for lawlessness in Ireland. His attempts to reactivate them and to make them to do their duties were in vain.

Melville Lee (1901, p. 232) praises Peel's approach to reforming the police: 'Certain sound and well-proved principles, admirably suited to the national temper, underlay the structure which he was bent on modernizing, and these, he saw, could not be dispensed with. No mania for novelty blinded him to the value of much of the groundwork of the old system; and his reforms, therefore, were in the best sense conservative, for whilst there was no break in the continuity of whatever was good, neither was there any deliberate retention of anything that was bad. It is largely due to Peel's moderation that, the more one studies the anatomy of modern English police, the more one discovers birthmarks of its Anglo-Saxon parentage.' According to Brodgen (2005, p. 69), 'ethnocentricity, inadequate comparative knowledge of policing, and a-historicism' had been 'the hallmarks of the Anglo-American sociology of the police'.

According to Miller (1975, pp 83-84), defining the new force as agents of the legal system made their authority impersonal. Furthermore, it insulated the police from the narrow local expectations as well as from the directives of the party in power. This escape to a third-party stance was effectively pushed both from the bottom, the middle and the top. On the one hand, the public did not just mistrust the police, but was openly hostile to them. On the other hand, even the King personally criticised the new police establishment. Moreover, the Tories lost the next election and a liberal government, suspicious of its predecessor's work, came into power. The Metropolitan Police lost most of the support it had enjoyed for a short period of time when Peel was running the Home Office.²³ In the middle, magistrates and parish authorities kept reclaiming their traditional roles overtaken by the new police establishment. The fact that the commissioners systematically objected to the order of the day, i.e. patronage, filling the positions in the police, did not help with integration with wider society, but rather separated the police from it. Both the rich and the poor objected to them. Reith (1943) describes the numerous enemies of the new police eloquently:

'A host of enemies attacked them, including the King, George IV, in person; the entire Whig Cabinet who replaced that of the Tories in 1830; almost the entire Whig and Tory aristocracy of the period who felt their many extralegal privileges threatened by the creation of police; all the house-holder tax-payers of London; all the Radicals; all the criminals; and all who were in the habit of benefiting, financially or otherwise, by ability to break or ignore laws with impunity. Nor need I dwell on the shameful sufferings of the police...; the martyrdom of brutal assaults and murders and imprisonment on false and unjust charges which the police endured at the hands of all who hated, not them, but the idea of them, and sought revenge on them, as individuals, for the fact that they had been established. '(Reith 1943, p. 120.)

For the new police institution in a divided society impregnated with violence, insecurity, crime, political tensions, riotous passions and open conflicts (e.g. Silver 2005), to openly take the side of the law offered a foothold, albeit a shallow one. When the actual design of the new police services was left to the two police commissioners, it was the administrative rule book rather than the law that was to

²³ 'In refusing to define their [commissioners] duties and status more clearly he [Peel] may have been prompted by faith in his ability to support and protect the Commissioners from his place of authority at the home office. What followed was that he was out of office within fifteen months of the establishment of the New Police, and the Commissioners found themselves alone, unsupported and attacked by new and subtle enemies...' (Reith 1943, p. 40.) The Whigs, now in power, had opposed the police idea and the efforts of police reformers, but supported the police Bill 1829, and, when in government, at first years could not now made up their minds about it. (Reith 1943, p. 77.)

regulate the conduct of its members.²⁴ It was thus by deficit, not by design, that, at the beginning, especially in the eyes of the law, members of the new police were just citizens in fancy uniforms.²⁵ According to Reith (1943, p. 103), the police commissioners acknowledged from the beginning that a reform of the laws was needed to increase the efficiency of the police. However, it took a considerable amount of time before they started to appear in the statutes book. Common law emphasised the rights and liberties of the citizen and restricted any interference in them by the police. Police officers were strictly constrained to their duties. They were to apply the minimum force necessary, to adhere to all forms of law, while acknowledging that they were personally liable for their acts performed in their public capacity. For each member of this new force, it was safest to limit the use of force to the lowest possible denominator and refrain as much as possible from interfering in the life of Londoners (Tobias 1972, pp. 204-205).

'If a police constable is in need of assistance, he can call upon any bystander, and in the King's name demand his active co-operation; should the bystander refuse without being able to prove physical impossibility or lawful excuse, he can no longer be considered as a loyal citizen, but is guilty of an indictable offence and becomes liable to punishment.' (Melville Lee 1901, p. 328.)

Literally (judicially and administratively) citizens in uniform entitled with the duty of preventing crime in London faced a serious challenge in earning the sympathy, trust and respect of their fellow citizens. The police, without a strong legal stance underpinning their work at the beginning, needed the support of their fellow citizens to be able to succeed in their task of preventing crimes – a prerequisite reckoned by Peel and the first commissioners (e.g. Miller 1975). If they were to align with law-

^{&#}x27;All this criticism of the police had the effect, in time, of revealing not only what was occurring in the streets, but also the simple fact that the only cause of police inability to eliminate or diminish existing evils was the absence of clearly-specified laws regarding them (...) The sufferings of individual policemen from the vagueness and obscurity of laws would be incredible.. (...) In view of the risk of imprisonment and financial ruin which a policeman ran in making an arrest, it is surprising that he ever dared to take such action.' (Reith 1943, p. 60-62.) 'The balance of justice in the court was, unquestionably, heavily weighted against the police, a criminal had good reasons to consider himself safe after arrest if he was able to persuade a few friends and colleagues to perjure themselves as witnesses on his behalf.' (Reith 1943, p. 83.) '...the fault lies with Peel. They were obliged by him to carve for themselves the complete separation of their executive functions from those of the judicial branch of the law... Having secured this separation, they had to fight for its maintenance against the jealousy of magistrates which would have deprived them of it.' (Reith 1943, p. 101.) 'Another important rule which the Police discovered as the result of their successful application of the preventive principle, was the need of keeping completely separate Police and judicial functions. They realized early the need of consistently refraining from even an appearance of usurping judicial functions such as judgment of guilt or ignorance, and punishment of the guilty.' (Reith 1943, p. 208.)

²⁵ 'From the date of its first establishment, the modern police force was planned as an instrument of law which was to be almost wholly independent of governmental, departmental, or party policy. This was, at first, a theoretical principle, the success of which created, later, its more exact definition in practice. Every detail of the duties, actions, and authority of the police is now defined for them by law. (...) By her success in evolving a police Force which is wholly the instrument of Law, and not policy, and is dependent for its power on its ability to secure and maintain public respect, good-will and approval, and to use these in place of physical force for securing observance of laws, Britain has solved the fundamental problem of the existence of all democracies, which is the finding of means, not only of securing effective observance of democratically-made laws, but of uniting the people in willingness of purpose and sacrifice for the maintenance of order and the consequent preservation of community union and strength.' (Reith 1943, pp. 5-6.)

abiding citizens in order to protect them from the deeds of those who were not lawabiding, a strong moral stance was needed. Individual police officers were expected to be masters of their emotions and deeds, and to remain above verbal insults and mishehaviour.

'He (the constable) must remember that there is no qualification more indispensable to a police officer than a perfect command of temper, never suffering himself to be moved in the slightest degree by any language or threats that may be used: if he do his duty in a quiet and determined manner, such conduct will probably induce well-disposed bystanders to assist him should he require it.' (Richard Mayne quoted in Melville Lee 1901, p. 242.)

The emotions and deeds that were to be controlled as well as those that were to be displayed in conduct, did not reflect only observance to laws, but the social standards considered ideal at the beginning of the nineteenth century. Among police officers recruited from the lower classes, middle-class virtues and manners were not something they learnt at an early age. When distinctive formal authority was thus in short supply and, as Miller (1975, p. 92) argues, in Victorian England the impersonal authority belonged to 'respectable' people, the police needed to join the latter rank. As the law very much promoted middle-class values, simply enforcing it naturally imposed those values onto their enforcers or at least created an impression of it. No wonder then that when it came to the police, members of the working class remained suspicious, while the middle classes started to worry less about the police being suppressive and more about it being inefficient (Miller 1975).

Besides observance of law and impartiality in enforcing it, high moral character was thus formally required from the members of the new police force. They were to enforce the law, and the law only, as a duty in a quiet, determined, tempered, self-controlled and civilian way and without fear and regardless of the status of the breaker of the law (Reith 1943, p. 129). Those that did not pass the test of duty, or who turned out to be morally or otherwise corruptible, were discharged from the police.

'In every court and alley the policeman stands for good citizenship, he is a reality that the most ignorant can comprehend, and upon his impartiality, efficiency, and intelligence depends the estimation in which the law is held by the masses' (Melville Lee 1901, p. xii).

The police became the most visible posture for the rule of law, good citizenship and a mode of conduct deemed preferable in society. These demands were imposed, for

The law to be enforced, that promoted values and practices, that were foreign to the enforcers themselves, effectively detach them from it. Taking the side of the law, while leaving the task of judging the guilt and punishing the guilty to the courts of law, seeing oneself as the servant or pure instrument of the law, enforcing it as it stands, without questioning it, created a new institutional stance. Becoming a pure instrument of law provides for an instrumental view of the self. 'To gain the approval of the public it was necessary to offer stinted personal service without distinction of wealth or social standing. It was necessary to avoid carefully behaviour, that could be construed as pandering to any form of sectional public opinion, and to demonstrate perfect impartiality of service, in complete independence of government policy and Party or class politics, and in complete disregard of the nature of the laws which had to be enforced and the justice or injustice of their substance.' (Reith 1943, pp. 207-208.)

different reasons, both externally and internally, by a public suspicious of the police and the police commissioners striving to win the trust of the public.²⁷ The first set of police orders of the Metropolitan Police in 1830 dictated that a constable was to devote the whole of his time and abilities to the service, married officers had to live near the station and single officers in the section house. In order to demonstrate to the public that the police had the moral authority to impose restrictions on the citizenry, the officer was expected to exemplify model conduct and good character even after work. Drinking alcoholic beverages on and even off duty as well as talking to local maidens were forbidden. In the belief that policemen should have a morally sound family relationship, superior officers regularly intervened in the choice of a bride. Beards and moustaches were forbidden too. The fact that policemen were obliged to wear their uniform outside of work provided for the enforcement of these regulations. The leisure time of the police officers was thus controlled by both their superiors as well as the public. To lure officers away from improper influences and workingclass entertainments, to contribute to the adoption of more preferable values and to support the officers themselves, specific off-duty recreations like choir singing, bands, sports and other character-building leisure activities were provided to them by the police (Shpayer-Makov 2002, pp. 216-220).

While the new police officers were to refrain from interfering, especially spying, on the private lives of law-abiding citizens, this did not include superiors keeping the private lives of the members of the police under a close eye. When it came to police officers, the private sphere was almost non-existent. It was intimately regulated, controlled and kept under a supervising eye by senior officers.

The intrusive internal order within the police was strikingly different from the co-operative role based on consent designed for the police for keeping order, detecting and preventing crimes in society. Bobbies as public servants were themselves thus served by applying very different, it not opposite, standards by their own organisation. Their canteen culture was thus moulded between a rock and a hard place.

By joining the police, the recruits joined a world that quite literally separated them from their civilian life-worlds and introduced them to a foreign world characterised by different values, rules and regulations. While the police became increasingly central and significant to orderly life in society, it consisted increasingly as a society of its own, a distinct institution residing in an orbit of its own, a step or two away from the rest of society. The practice where senior positions in the police were filled from the lower ones in the police and the view of police work as a lifelong career provided for such insulation – the wider such a detachment, the more that realistic career prospects existed within the police only. In the colonies, the police forces were of the people, but insulated from them too, Brodgen (2005, pp. 74-75) remarks.

The emergence of the modern police institution, Reith (1945, p. 166) claims, was not a result of, but the main cause for the progress of the civilised character of Britain. Nor was it a product of national wisdom but of accidental discoveries. Police services have formed as a response to local circumstances and as a result from incremental innovations.

This resulted in the emergence of a divided institution of 'the thin blue line'. It was further divided by the incorporation of the detective function ('police spies') in the 1850s.

While accidents may well explain the timing for the changes, they give an overly haphazard view of the emergence of the police as an institution. Institutions may well emerge as a result of accidents, but their further development, as a function of the degree of their institutionalisation (consolidation), is unlikely to happen purely accidentally. Their very nature as an institution, i.e. an idiosyncratic system of relations, set conditions for their further formation and the way they respond to changes in their relations to other institutions.

Police Institution Conditioning Innovations in the Police and Policing

There are good reasons to believe that the institutional development of the police has put it on a course that has effectively detached it from other institutions in society or, at least, made those interrelations problematic. Consequently, today the police as an institution resides in an institutional orbit of its own. While it is part of the institutional texture of the society, it consists in an idiosyncratic, but also constitutive, part of that very fabric. While it exists in a cog in the state apparatus, it is not under the control of the state. Curiously, as an institution, it subsists somewhere outside this state/society axis. To grasp the police conceptually as an institution, it should be approached as existing next to them rather than under either of them or, rather, as the third institution beside the aforementioned two.

It is no wonder, then, that the police have not been properly identified by sociologists or scholars interested in the state (Staatslehre). Historians have documented changes in the police over time, but they not compared it with the development of other institutions or focused on the features that remain unchanged and thus, to them, appear unworthy of their scholarly attention.

As an institution, the police consists as a third party. This of course emerged early in history. Robinson and Scaglion (1987, p. 147) note that by the end of the 13th century, the constable was no longer a member and integral part of an independent community, but subject to competitive 'struggles for his services waged by the landlord and the crown'. In Italy, the city republic of Bologna, among others, saw it better that her laws were enforced (impersonally) by a third-party (the 'familia') consisting of trustworthy, good and lawful foreign men rather than solely by her own residents. Lawbreakers of all sorts going undetected and thus unpunished appeared as a problem for the common good of the communes, i.e. not paying the public debt they owned for their crimes:

'Instead of denouncing suspicious persons only, like the night watch, familiares were to denounce anyone they found in violation of curfew since they could not know (in theory) who belonged in a given neighbourhood and who did not.' (Roberts 2019, p. 154.)

Many of the basic principles for what become known as the Metropolitan Police in London, while originally formed there, were tested first in Ireland for keeping peace and order among people who were publicly displayed in the home country as being void of all the virtues and full of their very opposites. It was a hybrid organisation, neither clearly civilian nor part of the military machine.²⁸ Naturally,

²⁸ 'Civil and colonial styles of policing depend largely on "how that authority is exercised", reflecting the "relationship between the state and citizen" (Sinclair 2008, p. 176). Colonial territories, ruled by a system that incorporated some local practices and delegitimised some others, partly by consent and partly by coercion, provided for the birth of a hybrid institution that stood somewhere between the society and the state. It was locally present, but at the same time alien to the locals.

introducing a system of policing that is pregnant with features inherent to the mode of despotic rule plaguing the continent among free-born Englishmen was highly controversial politically. It was possible to proceed with it only by representing it as something unforeseen, a true innovation without precedent. Thus, what was in public pronounced of the police and their character became increasingly distant from its true character, origin and kind.

To claim that the people were the police and the police were the people camouflaged the fact, not that the police, in one way or another, were closely aligned with power apparatus of the state, but, specifically, that it was neither part of society nor the state, but consisted increasingly as an agency of its own as an institution. The police are thus likely to benefit in various ways from the fact that they are, have been in the past and will be in the future, systematically misidentified both by their internal and external stakeholders.

Many practices of the new police force contributed to this state of affairs and its development. In a society rife with contradictory relations between its different parts, street-level activism, even revolutionary as well as revisionary political passions and an underdeveloped political system, the police seek a foothold and asylum for itself on the side of the law. However, the law did not provide the police a neutral side, but made police officers enforce norms that were foreign to their own class background. They were to keep and enforce order, norms and values they were unlikely to feel as being at home with and to do so under the eyes of a public suspicious of the very agenda of this new establishment (e.g. their suppression, a threat to their rights and liberties, a government interfering in their private sphere). Both in their daily work and in their free time, the police officers, who had to wear the uniform, were under surveillance by the public and by their superiors. They were to become beacons for a higher moral stance and its living materialisations, while struggling to make their daily living from it. Furthermore, the practices that the new police adopted, like resisting patronage and recruiting officers to upper positions from below, insulated it further from the common practices of the age. Becoming a police officer implied a personal transformation and membership in an institution that progressively formed an institutional niche for itself.

The relational pressures at the crossroads of which the thin blue line was forged became substantiated and inscribed with a spirit of its own, derived from several sources. They materialised in a constant feeling of being under siege and at the edge of disintegration. There was a mismatch between the public account and insider's understanding of the police, like being portrayed as a neutral instrument of the law, while, actually, negotiating it on a daily basis and enforcing trans-local norms while apparently serving purely local concerns and interests.²⁹ The distance from other institutions held it together, though, as a fragmented entity consisting of antagonistic parts.³⁰

[&]quot;...pattern of authoritarian organisations with strict discipline based on extensive regulation that were tightly enforced from above persisted; this tended to elicit solidarity in the lower ranks with inventive rule bending. (...) This rigid, hierarchical and unthinking system was at odds with the idea of policing as a craft whereby the lower ranks exercise discretion and as a profession with senior officers espousing independent ideas. (van Dijk et al. 2015, p. 77.)

^{&#}x27;Indeed, there emerges from many accounts a near universal feature of police organisation which is the gulf between the lower and higher ranks' (van Dijk 2015, p. 78).

Although institutions, by definition, resist attempts to change them, most of them cannot stand still in order to remain fundamentally the same, especially when their very mandate, the legitimacy of their role and the justification for the way the latter is carried out are closely connected with other institutions, and this has become constitutive to the relationships between them, like in the case of the police mediating the relationship between state and society. The police as an institution is under constant pressure to change. However, such pressures usually come from a variety of sources that do not align well with each other, but point in several directions simultaneously – even opposite ones. They usually have their advocates too, who express, suggest and put forward fancy solutions, problem definitions, definitions of the situation, needs for change, and so on that, occasionally, become, as calls for action, part of the general awareness or included in the political programmes of powerful parties.

The police, being an institution of its own, have become experts in dress rehearsals, window dressing, and speaking of their traditional work practices in fancy new terms while keeping their core structures and modes of operation very much intact, at least in the short term. As an institution, the police are resilient survivalists. The police acknowledge the need to fit in, to be acceptable, worthy of support and eligible for co-operation in the eyes of the other constitutive institutions, and thus avoid, by all means, the threat of putting those relations in jeopardy. However, it also reckons, perhaps not explicitly, but as wisdom inherited from the past and never really put under question, that it has to retain its very position and character. Thus, it displays high levels of readiness to change, while minimising the level of change actually introduced into it.

'Very frequently, organizational innovations do not simply replace extant arrangements, but rather accumulate, as sediment does. (...) As a result, all bureaucratic organizations, including the police, are characterized by the concurrency of the non-concurrent...' (Biershenk 2016, p. 163).

Having, or doing its best to keep, the monopoly in interpreting what a call for change actually implies in terms of its own professional vocabulary for policing and in terms of respective deeds, practices and structures, the police institution also possess the means to reformulate them, to water them down, and, possibly, even to turn them into actions that increase such a capacity to strengthen the status of prevailing practices and structures, but under a fresh label. Thus, as an institution, the police are required to innovate in terms of how to keep the increasing flux of innovations introduced from the outside at bay, and to minimise their influence on their daily practices, internal order and interrelationships within the police. The voiced needs for change in some police practice, organisation, or even the eradication of the very institution, are effectively co-opted in ways that result in a more critique-proof, but essentially unchanged practices. The police, as an institution, is required to innovate constantly in order to retain the change, maintaining both its internal order and its external relationships.

When innovativeness and innovations in the police and policing are approached from an institutional point of view, the inclination or temptation to get carried away by the halo of anything labelled or publicly claimed as an innovation and utilised as a springboard in cursing the old way of being or doing things, is avoided by taking

a more encompassing perspective. While innovations in business may well wipe out big firms and technologies from the markets and make it possible for newcomers to step in their stead, such incidents are unlikely in the world of policing. While the adoption of new tools and technologies do happen, the contexts for their use and the social relations between their users tend to remain intact, or at least take longer to change.

From the perspective of innovations, we need to focus on the dynamics and processes that not only allow the police to change in order to remain essentially the same, but also to become increasingly themselves as an institution. Thus, we should conceptualise the police institution as a source for selective pressure on itself and try to cast light onto the latter through the innovations the police have adopted though the years, how it has handled external pressures to change, taken positions in terms of them and by them, and used them as both self-expression and veiling its true self as an institution.

I believe there is a lot to be explored. What is required from the explorer are new concepts, methodological guidelines and fresh perspectives.

References

- Anon (1836). A Few Plain Words to Sir Robert Peel. London: James Ridgway & Sons.
- Anon. (1854). Sir Robert Peel. The Illustrated Magazine of Art 4 (19), pp. 33-35.
- Bayley, David (1992). Comparative organization of the police in English-speaking countries. Crime and Justice 15, pp. 509-545.
- Bew, John (2016). Ireland under the Union, 1801–1922. In Richard Bourke & Ian Mcbride (Eds.) The Princeton History Of Modern Ireland. Princeton: Princeton University Press.
- Bierschenk, Thomas (2016). Police and state. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 155-178.
- Bittner, Egon (2005). Florence Nightingale in pursuit of Willie Sutton: a theory of the police. In Tim Newburn (Ed.) Policing Key Readings. Cullompton: Willan Publishing, pp. 150-172.
- Boyle, Kevin (1972). Police in Ireland before the union: I. Irish Jurist 7 (1), pp. 115-137.
- Boyle, Kevin (1973a). Police in Ireland before the union: II. Irish Jurist 8 (1), pp. 90-116.
- Boyle, Kevin (1973b). Police in Ireland before the union: III. Irish Jurist 8 (2), pp. 323-348.
- Bradford, Ben & Quinton, Paul (2014). Self-legitimacy, police culture and support for democratic policing in an English constabulary. The British Journal of Criminology, 54 (6), pp. 1023-1046.
- Bogden, Mike (1987). The emergence of the police the colonial dimension. The British Journal of Criminology 27 (1), pp. 4-14.

- Broeker, Galen (1971). Robert Peel and the Peace Preservation Force. The Journal of Modern History, 33 (4), pp. 363-373
- Curtis, Robert (1871). The History of the Royal Irish Constabulary. Dublin: McGlashan & Gill.
- Ellison, Graham & Smyth, Jim (2000). The Crowned Harp: Policing Northern Ireland. London: Pluto Press, pp. 1-17.
- Emsley, Clive (2014). Policing the empire Policing the metropole: Some thoughts on models and types. Crime, History & Societies, 18 (2), pp. 5-25.
- Emsley, Clive (1986). Detection and prevention: the old English Police and the new 1750-1900. Historical Social Research 37, pp. 69-88.
- Government by Police (1880). Second edition. London: Dyer Brothers. LSE Selected Pamphlets.
- Hill, Jacqueline (2008). The language and symbolism of conquest in Ireland, c. 1790-1850. Transactions of the Royal Historical Society 18, pp. 165-186.
- Hoppen, Theodore (2008). An incorporating Union? British politicians and Ireland 1800-1830. The English Historical Review 123 (501), pp. 328-350.
- Horning, Audrey (2013). Ireland in the Virginian Sea Colonialism in the British Atlantic. University of North Carolina Press.
- Howe, Stephen (2008). Questioning the (bad) question: 'Was Ireland a colony?' Irish Historical Studies 36 (142), pp. 138-152.
- Ignatieff, Michael (2005). Police and people: the birth of mr Peel's 'blue locusts'. In Tim Newburn (Ed.) Policing Key Readings. Cullompton: Willan Publishing, pp. 25-29.
- Jacobs, Jonathan (2016). Police, the rule of law, and civil society: a philosophical perspective. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 82-102.
- Jenkins, William (2002). Patrolmen and Peelers: Immigration, urban culture, and 'the Irish Police' in Canada and the United States. The Canadian Journal of Irish Studies 28 (2), pp. 10-29.
- Jobard, Fabien (2014). Conceptualizing of Police. Encyclopedia of Criminology and Criminal Justice, Springer.
- Johansen, Anja (2017). Future trends in historical research on policing: Towards global and interdisciplinary perspectives. Crime, History & Societies, 21 (2), pp. 113-121.
- Kanter, Douglas (2001). Robert Peel and the waning of the influence of the Crown in Ireland, 1812-1818. New Hibernia Review 5 (2), pp. 54-71.
- Lam, Tong (2010). Policing the imperial nation: Sovereignty, international Law, and the civilizing mission in late Qing China. Comparative Studies in Society and History, 52 (4), pp. 881-908.

- Lentz, Susan & Chaires, Robert (2007). The invention of Peel's principles: A study of policing 'textbook' history. Journal of Criminal Justice, 35, pp. 69–79.
- Lindsey, Kieran (2014). The Absolute Distress of Females': Irish abduction and the British newspapers, 1800 to 1850. The Journal of Imperial and Commonwealth History 42 84), 625-644.
- Lowe, W. & Malcolm, E. (1992). The domestication of the Royal Irish Constabulary, 1836–1922. Irish Economic and Social History 19, pp. 27-48
- Lyman, J. (1964). The Metropolitan Police Act of 1829: An analysis of certain events influencing the passage and character of the Metropolitan Police Act in England. The Journal of Criminal Law, Criminology, and Police Science 55 (1), 141-154.
- Meares, Tracey (2016). Public lawfulness and public security. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 122-135.
- Melville Lee, W. (1901). A History of police in England. London: Methuen & Co.
- Miller, Seumus (2016). Political theory, institutional purpose and policing. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 13-28.
- Miller, Wilbur (1975). Police Authority in London and New York City 1830-1870. Journal of Social History 8 (2), pp. 81-101.
- O'Brien, Gerard (1988). Robert Peel and the Pursuit of Catholic Emancipation, 1813-17. Archivium Hibernicum 43, pp. 135-141.
- O'Callaghan, Margaret (2004). New ways of looking at the state apparatus and the state archive in nineteenth-century Ireland 'Curiosities from That Phonetic Museum': Royal Irish Constabulary Reports and their political uses, 1879-91. Proceedings of the Royal Irish Academy: Archaeology, Culture, History, Literature, 104C (2), pp. 37-56.
- Ó Ceallaigh, Tadhg (1966). Peel and Police Reform in Ireland, 1814-18. Studia Hibernica 6, pp. 25-48.
- Owen, Olly (2016). Policing after colonialism. In Ben Bradfrod, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: Sage, pp. 303-319.
- Palmer, Stanley (1975). The Irish police experiment: the beginnings of modern police in the British isles, 1785-1795. Social Science Quarterly, 56 (3), pp. 410-424.
- Phillips, David (2004). 'Weak' state? The English state, the magistracy and the reform of policing in the 1830s. 'Weak' State? The English State, the Magistracy and the Reform of Policing in the 1830s. The English Historical Review 119 (483), pp. 873-891.
- Purdon, James (2016). Literature and global policing. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 136-151.

- Radzinowicz, L. (1953). Trading in police services: An aspect of the early 19th century in England. University of Pennsylvania Law Review 102 (1), pp. 1-30.
- Reith, Charles (1943). Preventive principle of police. Journal of Criminal Law and Criminology 34 (3), pp. 206-209.
- Reith, Charles (1943). British Police and the Democratic Ideal. London: Oxford University Press.
- Reith, Charles (1945). Comparative Systems of Law-Enforcement. Transactions of the Grotius Society 31, pp. 150-173.
- Reith, Charles (1952). International authority and the enforcement of law. Transactions of the Grotius Society 38, pp. 109-124.
- Roberts, Gregory (2019). Police power in the Italian communes, 1228-1326. Amsterdam: Amsterdam University Press.
- Robinson Cyril & Scaglion, Richard (1987). The origin and evolution of the police function in society: notes Law & Society Review 21 (1), pp. 109-154.
- Shpayer-Makov, Haia (2002). Relinking work and leisure in late Victorian and Edwardian England: the emergence of a police subculture. International Review of Social History 47 (2), pp. 213-241.
- Silver, Allan (2005). The demand for order in civil society: a review of some themes in the history of urban crime, police, and riot. In Tim Newburn (Ed.) Policing Key Readings. Cullompton: Willan Publishing, pp. 7-24.
- Scott, Julie (2010). Evolving strategies: a historical examination of changes in principle, authority and function to inform policing in the twenty-first century. The Police Journal, 83, pp. 126-163.
- Sinclair, Georgina (2008). The 'Irish' policeman and the Empire: influencing the policing of the British Empire-Commonwealth. Irish Historical Studies 36 (142), pp. 173-187.
- Sinclair, Georgina (2016). Disentangling the 'Golden Threads': policing and lessons from police history. In Ben Bradford, Beatrice Jauregui, Ian Loader & Jonny Steinberg (Eds.) The SAGE Handbook of Global Policing. London: SAGE, pp. 29-45.
- Smyth, Jim (1999). Policing Ireland. Capital & Class 23 (3), pp. 101-123.
- Styles, John (2005.The emergence of the police- explaining police reform in the eighteen and nineteenth century England. In Tim Newburn (Ed.) Policing Key Readings. Cullompton: Willan Publishing, pp. 80-87.
- Tobias, J. (1972). Police and public in the United Kingdom. Journal of Contemporary History 7 (1/2), pp. 201-219.
- van Dijk, Auke, Hoogewonings, Frank & Punch, Maurice (2015). What matter in policing? Change, Values and leadership in turbulent times. Bristol: Policy Press.
- Williams, Keith (2003). Peel's principles and their acceptance by American police: ending 175 years of reinvention. The Police Journal 76, pp. 110-119.

INNOVATIONS IN POLICE EDUCATION

Timo Korander & Vesa Huotari

Introduction

'If we assume that we can simply pour knowledge into the heads of students, then we are faced with the problem of how those students can ever recognize what they receive as knowledge, rather than as something to be rote-memorized' (Petrie & Oshlag 1993, p. 582).

A teacher's work is continuous problem solving in the context of learning, i.e. how to make learning happen in the first place and identifying the best ways to further or enhance it for each individual learner. Teaching is not just about knowing the right words, issues and principles, but inventing whole narratives or imaginary landscapes for introducing unfamiliar issues to students in ways that help them understanding them. It is about inventing ways to bridge the gap between rote-memorising something and truly understanding it. As learners are all different and their differences are all but apparent, their teachers have to innovate new pathways to the very issues they are to help them to learn.

This is an essay on pedagogical innovations in police education. It tells a personal story about inventing a simile that has helped police students come to terms with unfamiliar abstract principles. The essay introduces this a step-wise scheme and discusses the pedagogical principles it reveals.

There are several ways to enhance learning as there are different mechanisms behind it. The use of similes builds upon one of them. The learning mechanism and the pedagogical technique for triggering it are nothing unforeseen or previously unheard of. The innovation is in how to use it deliberately, systematically, and reflectively to enhance learning and support understanding in police education.

The article describes, firstly, educational or pedagogical innovation on personal level. The first author of this essay, Timo Korander, a researcher and teacher at the Police University College in Finland, is responsible for teaching research skills to police candidates as well as to experienced police officers without previous knowledge of them. In the case of the latter group, he has used a simile that bridges their understanding of police practices with the pedagogical objectives in learning research skills, to link the previous experiences of the police students with his own as a researcher in criminology. The second author, Vesa Huotai, has assisted in explicating for this essay the pedagogical dimensions that this case displays.

Timo has scrutinised crime and its control in Finland as a criminologist. At the turn of the millennium he did research on zero tolerance policing in the city of Tampere (Korander 2014). Then the problems were young people gathering on Friday and Saturday nights to party and drink alcohol in public places in the centre of Tampere. Citizens who lived in the centre of Tampere found this behaviour disruptive and disturbing. Similar behaviour was a concern in other cities too. Therefore, Tampere police decided to intensify the control of the city centre by introducing an experiment in zero tolerance for a year. The number of police patrols on Friday and

Saturday nights was increased by recruiting police students from the Police School. The police students, supported by their instructors, kept an eye on the young people in the city centre at weekends and made sure the new tightened control was clearly visible to all. The strategy was to address, as far as it was possible in practice, all the problems caused by them: all detected bottles with alcohol were seized and emptied, most of the underage 'public drinkers' were fined, many of them were taken to a local 24-hour social care centre, Paussi, and child welfare officials contacted their parents from there.

Experienced police officers are all too familiar with such scenes. However, they are unfamiliar with the principles and methodology that turn it into a research problem for the pursuit of new academic knowledge. From the point of view of a police educator, the problem is in how to bridge the two worlds, the one in which a criminologist and experienced researchers are at home, and the one that is well-known to experienced police officers. The two meet in a pedagogical situation where it is the task of the researcher to help the police officers understand the way such events and situations are approached and grasped in research. An ideal solution would lead to mutual learning and reciprocal understanding. Finding it requires innovations and creative problem-solving. The mechanisms behind learning are all shared, but the learners themselves have individual learning experiences and individual skills and interests in learning too.

Innovating entangles closely with learning. All genuine learning is inherently innovative. For a police teacher like Timo, the challenge is in facilitating learning for students, like experienced police officers, who often have no previous knowledge of scientific research, but have to learn its basic principles and methods, who see themselves as practice-oriented and share a distaste for theoretical or abstract matters, but have to write a thesis displaying academic virtues.¹

The first part of this essay comprises Timo's personal account of a pedagogical innovation in teaching research skills to police students at senior level. The second part, written jointly by the authors, accompanies it closely. It conceptualises the former empirical case as a process that approximates gradually general pedagogical ideas or increasingly materialises valid learning principles.

While there are potentially many ideas or principles that are logically compatible and therefore could be claimed to account for the pedagogical innovation that is the focus in this essay, we shall discuss the use of similes as pedagogical means in facilitating mutual understanding. For us, this personal case is an example of an innovation that grows and matures in time by becoming increasingly conscious of itself, the principles behind it and new possibilities within its reach, while remaining forever fresh, discursive and open to new interpretations. Thus, innovations are not something given once and for all, but something calling for further research and reflection. They are both results of learning and irreplaceable means for it.

When we talk of criminal or pretrial investigation or mere investigation, we refer to the work of crime investigators, criminal investigators, detectives and head investigators. With the term research we refer to the work of researchers with a university degree in criminology, sociology, psychology, etc. In Finland the head investigator, the director of a pre-trial investigation, is a senior police officer, not a prosecutor, as in many other countries. Police students graduate from the Police University College with a bachelor's degree at the entry level and a master's degree at the senior level.

Part I: A Personal Experience from Teaching Police Officers²

I have worked – and still work – as a researcher in criminology at the Police University College. The college, like all the police departments in Finland, is part in the national police administration. Therefore, like the police departments, it works under the supervision of the National Police Board, but, unlike the police departments, it is characterised by a degree of academic freedom too. In a sense, the college functions in between.

One of my tasks is to teach police students, both those aspiring to become police officers once they graduate as well as those with years of field experience in policing under their belt, skills in carrying out social scientific research. Most of the police officers who investigate crimes or currently work in the police have no background in scientific thinking. They are forensic and crime investigators, detectives, who have learnt the basics of their trade at Police School and most of it on the job and in further education provided by the police.

Fortunately, in this case, in the Finnish language, the same term (i.e. *tutkija*) can refer to the academic researcher working at a university and a crime investigator or detective working for the police. However, the work of the academic researcher is *tutkimus* in Finnish, while the work of a crime investigator is called *tutkinta*. Thus, due to the poverty of Finnish vocabulary reflecting, perhaps, a lack of interest in inventing a new term for each new concept, there is a sort of natural bridge in terminology between the world of academic research and the world of police research. This observation guided my quest in finding out and identifying such shared points of contact as joints where the two worlds seem to meet, which I could use as stepping stones or clearly visible landmarks in building a way into the world of a researcher for experienced police officers and introduce it to them in a truly communicative way.

I came to notice that there were several similarities in the work of a crime investigator and my work as a researcher. My initial insight was that such similarities could be used as steps or rungs on a ladder descending or, depending on the point of view, ascending from the world of policing to the world of scientific research. However, to me they appeared more like adding new elements to a bridge that extends its reach. Step by step, moving onto the bridge would then open up a vista to scientific research, while remaining firmly attached, simultaneously, to the familiar world of crime investigation.

I realised too that scientific research and the investigation of crimes have a number of shared principles, processes and outputs, like in-depth planning, systematisation, objectivity, resolving the problem, i.e. seeking well-warranted answers to key questions, identifying relevant data and using tools for obtaining it, data analysis, and reporting findings and conclusions with summaries. The aim for a crime investigator is an investigation protocol report and for a researcher a published research report, and nowadays, an article in an international journal. Moreover, a critical evaluation or professional reflection from the point of view of further learning is often included in both of them. Reported research aims for the cumulative growth of knowledge, while crime or forensic investigators, or detectives, have final

The comparison of the features that are common to crime investigation and research process was originally published in Finnish as part of the reading material for the entrance examinations to the Police University College (see Korander 2019).

assessment discussions with their superiors. Ultimately, it is the prosecutor who assesses the case on the basis of the investigation protocol report.

The college has a long history of teaching, developing and transmitting the skills needed in the role of crime investigator. Learning research skills was introduced as the college upgraded its degrees to align with other higher education institutes. I believed that a true transition from the old system to a new one, a true transformation, not just changing the label at the entrance to another one, required building numerous such bridges across the divine, innovations in establishing new pathways connecting the old with the new, and a conscious effort in their construction, especially from teachers. A leap from one system to another is not possible, but it is by a bridge.

A closer scrutiny of the similarities between empirical social research and pretrial investigation by the police brought to the surface a number of shared phases, processes and deeds. I became convinced that they could, or actually should, be utilised as points in pre-understanding that provide for the expansion of the participants' horizons of understanding into the world of empirical social research and the respective research methodology, its basic principles and ideas as I had come to understand them through my research work. The next discussion will cover them in detail. My starting point will be the importance of proper planning. Then I shall proceed to the need for a systematic approach, the right framework and concepts that helps focus on the key questions or problems, and the importance of good design for ending up with good data. I shall end by discussing effective data analytics as a means to solve a problem, reporting findings, while maintaining integrity and ethics throughout the process and also how to maximise professional learning from each individual case. The processes and procedures reflect the national system of crime investigation in Finland.

The Importance of Proper Planning

A criminal investigation requires, firstly, careful pre-planning. Secondly, it is vital to follow the plan systematically. Thirdly, the latter must also be supervised. In a criminal case the planning is accomplished jointly by the head investigator and detectives. They must solve questions like how many police officers can be tied into, say, a stabbing case, who will be responsible for the technical forensic examination at the crime scene, who takes care of the interrogation of suspects and who looks for possible witnesses. The investigation plan is to guide the investigation of more serious offences.

A pre-trial investigation includes several focal points. They consist of a general description of the case, the time and place of the suspected offence, persons suspected of it, details of the victims, i.e. the plaintiffs, a preliminary description of the event, evidence, the amount of criminal damage and, when necessary, other issues to be investigated, such as the liability of the legal entity, the tracing of proceeds of crime and the conditions for the prohibition of business.

Respectfully, a research plan or a plan for a thesis is needed in scientific research whether one aims for a degree awarded by the Police University College, like a bachelor's degree for all aspiring police officers or a master's for those aiming at senior positions in the police or a PhD at a university. The plan is to guide the research process.

As in the criminal case, the plan is to provide a preliminary definition for the problem to be solved. A pre-trial investigation builds upon historical knowledge of what is known about such crimes, both legally and based on forensic expertise and detectives' experience. For example, what is known about previous stabbing cases and how have they been investigated successfully in the past?

In the same way, in scientific research researchers try to identify the previous research knowledge that is relevant in understanding the problem and collect it from the research databases and research literature. Crime investigators need to identify the suspected crime case categorically – in some cases this takes lots of time and effort, i.e. is a case suicide or a homicide staged as a suicide? Researchers seeking new knowledge need to identify gaps or contradictions in our current understanding or beliefs. Ideally, the research is designed to fill such a gap or to resolve a contradiction in knowledge for good. Moreover, a researcher needs to identify the resources needed, the available sources for data, how to get access to it, how to collect it and how to process or analyse it once it has been acquired. For example, whether to do face-to-face interviews, send a questionnaire to a sample of respondents by e-mail, use register data or data previously collected and made publicly available by data repositories.

It is good to pay attention to the fact that both the investigation plan and the research plan may change along the way. They are thus often continuously updated as the investigation and research processes progress, understanding grows and new knowledge is acquired. This allows a research target better-specified research questions. It often turns out that the initial plan was based on superficial knowledge or false presumptions. The investigation plan and the research plan will thereby become increasingly focused and, thus, more capable of solving the issue. At the beginning of a pre-trial investigation, unlike in research, there can be more than just one line of investigation. Moreover, a new line of investigation may emerge in a drastic way such as, for example, in a case where it turns out that the main suspect has a watertight alibi and, thus, could not have been at the scene of the crime. Then the search for other possible suspects starts immediately.

In the protocol report of a criminal investigation, the first introductory chapter represents the investigation plan. Likewise, a good part for the text of the final research report should exist already in the research plan. The preliminary outlines for the investigation plan will guide the investigation until the actual and the formal plan for it have been approved by the prosecutor. In Finland, this approval is given in a joint opening discussion by the head investigator and the prosecutor. In our college, the research plan for a thesis must be approved by the thesis supervisor. Furthermore, an official permit for collecting the data or an ethical pre-evaluation may also be required.

Both experienced police officers as well as police students, once they start designing their research or development project for the thesis, have to come to terms, more or less thoroughly, with the process of criminal investigation and making the plan for it in a number of cases of suspected crime. This understanding helps them to acquire the skills necessary for planning a research project and carrying it out.

A well-planned systematic pursuit, I believe, is one of the main keys to a successful research project. The opposite to it is proceeding randomly, like collecting data from here and there, without a clear plan on how to analyse it once it has been collected, reporting the observations haphazardly, etc. Basically, the aim is to proceed systematically, to cover all the corners, turn over every stone, check all the clues, verify all the alibis. This is difficult to accomplish without a proper plan or framework for the work.

In criminal investigations, legal texts are systematically reviewed; for example, the characteristics of which specific category of crime are actually met by a suspected or reported case. Systematic consideration is given to what will be done and how. A pre-trial investigation by the police uses both tactical and technical methods of criminal investigation: interrogation of witnesses and parties, searches, a search of the premises, seizures, arrests and apprehensions. A search for similar cases in criminal databases, i.e. an attempt to link a case with previous cases, crime pattern analysis to find out whether the culprit could have been involved in other similar offences. This is supported by the provision of technical evidence, fingerprints, telecoms identification and interception data. The aim is to proceed in a well-planned, methodical and systematic way, whether there are just one or more lines of investigation.

Scientific research, at best, proceeds in an organised and systematic manner too. At the initial stage, a systematic review of the literature is carried out in order learn more about what is already known of the problem, what are the main findings, who are the leading researchers in the field, the most promising approaches and methods in tackling the issue, and, especially, the key questions requiring further illumination. Systematic literature research reviews or meta-analyses comprise a highly appreciated field of research in themselves. A whole literature exists on how to identify the research material for it, select representative cases from it, compare their findings, make the right conclusions from it and report the results clearly and communicatively. The key is in proceeding systematically. The key for it is a good plan.

In criminal investigation, systematic proceeding maximises the chances of identifying and arresting the right suspect by effectively ruling out the possibility that an innocent person is to face prosecution, the threat of becoming found guilty, and sentenced for a crime the person is innocent of. In research, a systematic approach aims at resolving the issue or research problem at once, fully and for good. Moreover, it aims at maximising objectivity in the sense that other researchers interested in the issue are able to figure out the research process in detail, take a warranted critical stance in relation to it, identify possible shortcomings and sources of error, and, possibly, to replicate it to verify the original findings. It is to preserve the possibility of putting any research under truly critical scrutiny – the research design, the evidence gathered by the measurements and the conclusions drawn from them – in order to ascertain its value. Objectivity in scientific research resides in critical evaluation and criticism in general, not in the absence of subjective bias, the presence of a neutral attitude or having a specific scientific gaze.

Both criminal investigation and scientific research call for a systematic, methodical approach. The first aims at specifying the crime in question and identifying

the culprit for it, the second at putting forward an empirically warranted view of an issue or a problem, like identifying mechanisms that enhance the willingness of the public to co-operate with the police. As the outputs for such projects are likely to become inputs for further judicial proceeding or could become an impetus for redirecting public policies, it is important to exclude all possible sources of error from both. This is best served by a disciplined and systemic way of proceeding.

Finding out the Right Framework and Concepts

In a pre-trial investigation, it is relatively common to start with a range of concepts that could potentially identify the case at hand as an incident of crime. If an incident is a crime, what type of crime is it? What were the specific laws that were violated? What kind of evidence is it possible obtain in the circumstances at hand? What is it that actually speaks for the suspect's guilt or innocence? What is the punishment one could expect from a suspected act of crime?

The point in the pre-trial investigation appeal is to prove that something criminal took place. If a person is beaten up, this can be testified by a doctor or by an eyewitness testimony, by video material from a security camera or a mobile phone. Such an incident can be considered mild, assault, or more serious. However, the victim may fall and hit their head fatally on the pavement because of it. It can be investigated as a homicide, for example, under the title of assault and manslaughter.

Investigators reflect their professional knowledge and understanding from previous respective cases, the information that is already available from the case at hand and data on the possible suspect. Eventually, the necessary information is included in the pre-trial investigation plan and finally the investigation report. It is worth noting that what is necessary and what is not, what pieces of information to include in the report and what to leave out of it, depends on the framework under which the case is investigated – not to mention the purpose of investigating it in the first place.

Legal practice, such as precedents of the Supreme Court, offers examples of how respective cases have been resolved. A researcher should specify the framework or perspective, the key concepts, and the main points of reference that clarify the context of the problem and make it more understandable. In scientific research, the academic background of the researcher, as a rule, determines the adopted disciplinary point of view. For instance, psychologists are inclined to use conceptual tools, principles and points of view provided by their discipline. It is relatively rare for a sociologist to borrow from psychology's conceptual toolkit. However, knowing that a researcher is a criminologist does not reveal much about the specific tools, but hints at the perspective from which the question at hand will be approached.

There are numerous such disciplinary frames and even more approaches within each of them. In the case of academic research, the problem of deciding between them is perhaps not solved, but is at least limited by the fact that most researchers have received their education and learn their trade within one of them. However, for a police student, choosing between them is often a true issue. The problem is alleviated, though not fully resolved, by the palette of disciplines represented within the potential supervisors for the theses.

A potential case of crime is identified or given a preliminary identity by the categories of crime in the criminal code. A research question is given an identity by conceptualising it within a research tradition. Each discipline, like common parlance in daily life, stands out as such a tradition on the grand scale. Each of them provides tools, like concepts, orientations to the world, ideas of likely causes and effective causal mechanisms, readily available for use in specifying the problem by articulating it as part of a larger and more systematic context. Similarly, in criminal investigations, prior knowledge of circumstances, crimes, perpetrators and methods of committing them will help to solve the problem at hand. For example, in my evaluation of the zero tolerance experiment in Tampere, I looked for previous studies both from Finland and abroad. I wanted to learn about the results from similar intensive and targeted police control projects. In Finland, for example, there were reports of the effects of increased control over homeless alcoholics and street prostitution. Several studies displayed a wide range of results like the Tampere experiment eventually did too.

The way an incident is categorised as a particular type of crime and the way a problem is conceptualised are not without practical consequences. Understanding a research problem in one way rather than another impacts on what is possible to know about it, what kind of data is needed to truly valorise it, what are the possible knowledge gaps, and what can and cannot be said about them. A lot depends on the frame of reference by means of which the research problem is articulated.

Learning how to step out of one theoretical context and enter another one is a delicate skill, a bit like speaking two languages. However, one can demonstrate it to experienced police officers by pointing out what it would mean in the case of criminal investigation, like when a presumed suicide case turns first into a suspected homicide and later into a possible act of terrorism. In research, such a change of context could mean, for example, approaching satisfaction in police work purely as a reflection of differences in personality, the intensity of bureaucratic control, the work becoming more monotonous, or as an issue that reflects a decrease in the legitimacy of the police. While the perceptions that made a person interested in the phenomenon originally could remain intact, one would interpret them very differently and attach a different meaning to them when the context for conceptualising them changes.

The Centrality of Written Report

A written report is the most important and also the most visible output that comes from a criminal investigation and scientific research. As already mentioned, what has been written in the investigation plan or in the plan for the research should comprise a noticeable part in both. However, they share more features with each other than just the aforementioned. The similarities between them – the pre-trial investigation report, the investigation protocol and the research report – are easy to discern.

In the case of a pre-trial investigation, the protocol allows the criminal justice process to be carried out by the police and to transmit its findings later to the prosecutors and the judicial proceedings. It serves all parties involved, namely the suspect and the victim of the crime, their legal representatives and the prosecutor and the court in the criminal proceedings. Its structure is the following: the cover sheet, the table of contents, the introduction with the results of the police investigation, the interrogations, the list of annexes and the annexes themselves. The cover page

introduces the people, matters and contexts that the investigation report is concerned with. For example, in the case of a stabbing, the suspect(s), the victim(s), potential witnesses, and where, when, and under what circumstances the incident took place. The table of contents indicates the structure of the protocol. The beginning of the introduction includes the latest version of the report of the offence to the police. The way the incident came to the attention of the police is stated in the report of the offence. Furthermore, the report contains a preliminary description of it.

The crime report lists the types of offences that may be involved, and the description of the incident reveals the characteristics of these offences. For instance, in a stabbing case, the content must cover, among other things, whether the victim has suffered minor or serious injuries or even died. The interrogation minutes reveal essential information about what the suspects, the victims, and the witnesses have pronounced during interrogations, and, where appropriate, they include the questions put forward by the interrogators and possible occurrences during the interrogation.

Interrogations share the same outlook as research interviews. Naturally, the police interrogators, unlike academic researchers, have more means available to them in finding out who actually did what, to whom, when and where. Both are after the truth in the matter of interest at hand. Especially the investigator, who aims at reconstructing the unfolding of events, and a historian, who has the very same aim, are almost indistinguishable from each other.

The bulletin page of the pre-trial investigation minutes, together with the list of annexes, contains information on the coercive means adopted in the preliminary investigation: apprehension, arrest, detention, search, prohibition of loss of property or seizure, and other coercive measures, if this information is required for the prosecution and the trial. The annexes should include all necessary material required for the legal process that is not already included in the protocol. They should document word by word all that has been said elsewhere. Usually the annexes contain statements from forensic investigations, photographs taken in the investigation, decisions on existing seizures, prohibition on wasting property and travel bans, and possible property inventory lists.

When the pre-trial investigation protocol is compared with the traditional research report, they turn out to be almost identical. The research report includes the cover page, the abstract, the introduction, the table of contents, the literature review, i.e. knowledge base, the research problems or questions, the data description, the account of the method, the observations or results, the conclusions, the critical assessment and reflection, the list of references and the annexes. This is not pure coincidence.

It is essential to remember that both reports do not serve their authors only. An investigation report is important for all parties involved in the preliminary investigation, the prosecutor and the court. A research report informs other researchers, the potential readers, especially those whose situation it is about, the decision-makers as well as anyone interested in the subject matter for whatever reason. The quality of the output matters in both cases. The better the pre-trial investigation protocol or the research report, the more useful it will be along the way.

Focusing on the Key Questions and Problems

In the pre-trial investigation, a main challenge is to ascertain the right or proper legal

terms for describing the incident. The possibility to characterise an incident as a crime depends on the fit between it and categorical descriptions of crimes included in the criminal code. If it is a crime, what sort of crime is it? Who would be the suspects and on what grounds? What would count as evidence in a particular case and where should the investigators focus in order to prove the case and to convince the prosecutor of it too.

In scientific research, researchers often need to secure external funding for their research project. To do so, they need a concise research problem in the form of a question, or a few of them. They also need to be able to tell why it is worth the funding or what difference the knowledge pursued by it would make. What is it that makes answering a particular research question worth the time, money and human resources invested in it?

Research questions should be expressed clearly. If we increase lighting in a particular car park, would it reduce crimes against the parked cars? If we increase police foot patrols in a certain residential area, would it increase the residents' sense of safety? If police officers patrolling by car regularly engage in temporary exercise during patrolling, would it reduce or alleviate their back and neck pain?

Good practice in research is to limit the research questions both in number and scope. Questions that are precise and narrow, rather than imprecise and allencompassing, can be solved with a reasonable effort and limited resources. Research questions that are very broad are hard to pin down empirically and resolve within a reasonable time, energy and mental capacities. Moreover, they seldom lead to results that are sufficiently profound, but just manage to scratch the surface of the issue.

In criminal investigations, it is the task of the head investigator to direct the pre-trial investigation and keep it on the most progressive tracks. Respectively, in a police student's research project, the thesis supervisor carries the main responsibility in helping to specify the research question until it comes time to answer it. It is important to take notice of the following: the timeframe for the task, access to relevant research material, level of personal ambition, prior skills and level of aspiration.

Professional researchers usually have a steering group that consist of experts and colleagues, who give support and advice at various phases of the project. Although it is possible to make amendments to a research project on the way, a total turn or a drastic change of direction in it implies a shortcoming in the planning process. In a pre-trial investigation, such changes are more common. Many crimes, despite the very best efforts of the detectives, remain unsolved and, perhaps, forever so, and many lines of investigation turn out to be dead-ends. In the case of a homicide, the detectives return to square one and start thinking about the case anew.

A task of the Police University College is to increase research-based knowledge and understanding of the police and on policing. The main thrust in research reflects this purpose. The theses of police students contribute to it on their part either as academically-oriented research projects that aim at an increase in knowledge and understanding, or as more practical and practice-focused developmental projects. In both cases, the relevance of the project reflects or is closely tied to the significance of the problem in focus. The time and energy dedicated to thinking about it and discussing it with others is often time and energy very well spent.

Whenever a research and development project has a clear client, it often motivates the researcher or developer in the work, helps them to figure out a communicative way to express the main findings, and provides a valuable lesson

in grasping the contingencies involved in any quest for a better understanding or practice. Any variance in understanding at the start of a project can result in great misunderstanding at its end, unless communication between the researcher and the client is open, focused on ascertaining good mutual understanding at every phase of the project, and in keeping the main research question in sight.

Scientific research supports the development of criminal investigation. For a professional police detective and criminal investigator, comprehensive police education, work experience and learning from it remain the main sources of the essential skills in their work. However, beside them, they benefit increasingly from skills in research, development and innovation (RDI). The latter helps them to learn from others, participate in developmental projects, run them, finalise them and utilise the knowledge learnt in them and other respective projects.

In organised work settings, neither research nor crime investigation are just about accomplishing the task technically. They include an element of human aspect too. Issues like leadership, well-being at work, interpersonal skills, good communication, ethical integrity and so on relate closely to the success and effectiveness of both.

Research Design — Data and Methods

When a researcher has succeeded in formulating a research question that is practically and/or academically relevant, clearly expressed and also possible to answer with the available resources, the next step is to think in detail about the research design called for by it. It is mainly a question of the way observations, the empirical research material, is acquired. It could be by experimenting, comparing the results from natural experiments, like police departments organising the work of their criminal investigation teams in a different manner, identifying relevant documents, organising the data collection by observation, interviews or questionnaires. The design reveals the setting that is necessary for acquiring a set of relevant observations in terms of quality and quantity for answering the research question.

Returning to the research questions posed earlier, if the lighting in car park in increased, would it reduce car crimes? If police foot patrols in a residential area are increased, would it enhance the residents' sense of safety? If the police officers who sit in a patrol car most of the day take regular breaks for exercise, would it reduce their back and neck pains? What kind of research design would be needed that would, respectively, solve each at once and for good?

In scientific research, we need research designs that make comparisons possible. In the first example, we would identify car parks where, before the experiment, we would check from the police records the number of cars that are subjected to vandalism and theft. The experiment itself would consist of increasing lighting in one of them, but keeping it constant in others. After a sufficiently long period of time – the determination of which is an important design issue – we would return to police records and compare the cases to see if there is a change in the number and kind of offences to parked cars between the car parks. The comparison should inform us about the effect of the change in lighting on car crime. Our data is the number of offences registered by the police at each of them. There are statistical tools to ascertain when an observed change is significant and when it is not, but ultimately, we need to decide what we consider an effect that would justify increasing the lighting in all of them.

In the second example, it is possible to conduct similar measurements before and after the experiment, but in one residential area only. When we measure the safety experienced by residents, we cannot consult police records. It is not an issue or event commonly recorded by the police. The most likely solution is to organise a survey and send a questionnaire that measures the level of safety experienced by residents. In order to detect the possible effect from the experiment, we need knowledge of the level of experienced safety before and after. It is possible that, as the residents see the police reducing their presence in their neighbourhood, their sense of security withers away. It may go even below the level before the experiment. In a more adequate design, we would have numerous measures both before and after the experiment.

The third example relates to the pain in the backs and necks felt by many police officers. The very symptoms can originate from different causes. Sitting for hours and hours in a patrol car every day is one of them. Pain in the neck and back is not a typical problem for a criminologist. However, finding out if regular exercise has an effect on such pain could be discovered using a relatively simple research design. We would need to find out the level of pain each of our participants experiences before the programme, collect data on how closely they follow the exercise and, after a reasonable time, measure again the pain they experience in their back and neck. Although we may not have exact medical reports, we can rely on personal accounts of the effects and on the logs kept on the exercising to see if there is a relationship between the amount of exercise and the experience of pain. If we have variance in the problem and a large number of officers participating in the research, we could get a more nuanced picture of this relationship. However, making conclusive judgements from complex, essentially open or only partially controlled situations leaves room for alternative explanations. For instance, the participants may support the programme and encourage its adoption for many reasons. They may see in it an indicator that their health and well-being at work is high on the agenda at police command, and such programmes may enhance their position in their negotiations on the terms of their work.

Various methods for collecting the data, as well as analysing it and displaying the results from the analysis, play a crucial role in both criminal investigations and research. In criminal investigations, one needs to decide on the material to collect, the methods used, the persons to be questioned, the forensic evidence, like fingerprints, shoe prints, tyre prints or DNA samples to be gathered, the use of crime analysis and analytical data, the clustering of comparative cases from previous crimes, the conduct of crime pattern analysis, acquiring a permit for wiretapping or other covert tools for gathering information, and the need to consult special forensic or information technology experts. These different methods should be appropriate to provide the prosecutor with the best possible evidence and a good pre-trial investigation protocol report.

In designing the gathering of research data that is needed to answer the research problem, a researcher has to consider carefully whom to interview or to ask to respond to the questionnaire. Moreover, the design should inform us about the number of respondents or participants needed, how to reach them, how to make the differences in their experiences, view or beliefs regarding the issue clearly visible, how to analyse their possible interconnections or correlations, how to visualise the result to the readers, and how to decide what one is entitled to claim or conclude in taking on board the research design and the magnitudes possible in the connections

between the measured variables. In research, like in a criminal investigation, it is possible to go astray in several ways. Moreover, there is no royal road leading to success in every case. Therefore, one needs to become aware of the factors that are likely to have an effect on the reliability and validity of the observations that tend undermine the conclusions.

Police students often want to interview experienced police officers from various specialities in the police. Overall, experience at work is highly rated within the police. In designing research that would solve an issue at once and for good is hard to accomplish, if at all. There are sources of error that will reveal themselves only afterwards. The concepts of our natural language are often not specific enough, measurement tools designed to capture the variance in one variable capture the variance in the other unknown variables too, people want to collaborate with the interviewer and adjust their views accordingly, participation is biased, and so on.

One of the best methods is observing what actually takes place in the police and policing. My personal experience comes from sitting in the back seat of a police patrol car observing police officers at their work in order to learn more about their culture, attitudes, views, experiences and, in particular, what they actually do in their job and how they do it (see Korander 2019). My research increased both academic understanding of police culture and offered means for members of the police to reflect on their work, their professional identity, and their orientation to policing. The design provided an opportunity to observe closely and in person police officers doing their work, to discuss it with them and to learn how the work appears to insiders.

A research design that would serve the learning of an experienced police officer well when it comes to learning academic research skills would ideally help an officer in taking a step further from that insider or native knowledge. Thus, there should be an element in it that is more or less foreign or unfamiliar to them personally. Learning is often facilitated by finding a way to take some distance from the daily experiences and the standard ways in reading or interpreting them. To use what is already known in opening up a vista to an unfamiliar terrain assists in taking the necessary steps while simultaneously being fully conscious of it too. However, one has never left the home terrain unless something that is alien or foreign in it is actually gazed upon.

Results Solving the Problem

In a criminal investigation report, the chapter with the title Results of Pre-trial Investigation is usually the most interesting one. In a well-conducted study, the most interesting chapter in the research report is about the results.

The chapter under the heading 'Pre-trial investigation results' presents the findings from interrogations, forensics and other evidence. The most important part in a research report simply answers the research question. When a particular question was presented, specific data that is related to it collected systematically and properly analysed to give a clearer picture, say, of the decisive relationship between variables, what was it that turned out or became evident then?

A trivial study is called *nollatutkimus*, an empty study in Finnish. In English, it might be a 'boondoggle'. The result of such a study is self-evident. There was no need for doing research in it. For example, do people living on the seventh floor use the lift more frequently than those living on the ground floor? Unfortunately, research projects tend to cumulate nearer to the trivial end in the quality continuum,

not it its opposite end. However, writing an academic thesis should be a learning experience in becoming increasingly aware of possible sources of error, learning to read, evaluate and use research knowledge, and planning, implementing and reporting a project that aims to increase understanding. Learning takes time and mistakes are a necessary part of it.

A research report that dutifully reports the steps taken in the research process is seldom an interesting or assuring one. More often than not, the final report is streamlined to appear as a very convincing argument that is almost impossible to disagree with on the subject. A qualitative gap exists between a well-designed research and a text of argument that a reader finds literally convincing. Reporting research findings necessarily means balancing the two, the way research was conducted and the needs for turning it into a good argument.

In a criminal investigation, the investigator needs to tie up all the evidence into a watertight case, even when the suspect has confessed to the crime. The investigator should seek for evidence that speaks for the confession being a false one. Did the person have the opportunity, the motive, and is there a smoking gun that connects the suspect to the crime under investigation? Likewise, a researcher should do everything possible to question the measurements, the observations and the conclusions, especially when they clearly diverge from the results obtained by other researchers.

In criminal investigations, investigators are interested in how the case succeeds in the judicial proceeding and how the prosecutor finds what is presented of the case in the protocol. They tend to compare their latest pre-trial investigation with previous ones: what seemed to work well in it and what perhaps not and what could have been a better solution to it.

Researchers struggle to find ways to publish their results in the most respected forums. Their manuscripts need to pass a threshold called peer review, or critical screening by journal editors and reviewers, who evaluate whether the manuscript carries a true contribution from the point of view of the scholarly field in question. The first requirement is having peers. Secondly, as a peer, one needs to prove to be, besides being knowledgeable, an honest, humble and respectful one too. Research is, essentially, a collective pursuit.

Reliability, Reflection and Self-criticism: 'The Tops and the Flops'

The investigators and the head investigator have final evaluation discussions together — what were the tops and what were the flops, where did the investigation succeed and what left room for improvement. The focus is on the entire pre-trial investigation process, including the pre-trial investigation report. Ultimately, the prosecutor and the criminal court assess the quality of the police's pre-trial investigation based on the pre-trial investigation report. A pre-trial investigation report, unlike a research report, does not include a critical reflection like weighing the evidence and the conclusion by pondering on possible sources of error related to methodological issues, decisions on the research design, and the methods used in collecting and analysing the data. In it, an oral evaluation takes place only after a pre-trial investigation report has been completed.

The fact that the researchers themselves are expected to assess and critically reflect on their success in answering the research question, to adopt a critical stance

to their own achievement, provides for learning from it. It should assure one of the credibility of the conclusions. For a reader, it is a sign of the professionalism of the researcher. By revealing possible shortcomings and less-than-perfect performance, the researcher displays reflective understanding of the ideal research process and an ability to look at the process from the outside. Despite a perfect plan for the research, implementing it in the real world tends to leave something to be desired in every case. Honesty about them may well help others to avoid pitfalls in the future.

The researcher is usually always a bit wiser afterwards than when trying to figure out beforehand the whole processes in its complexity. The measures taken to ascertain the validity and the reliability of the results usually always fail to take all possible contingencies on board.

It is usually better to be a bit too critical rather than simply bypassing this last phase in research. Was the research design spot on in terms of answering the research question? Was enough data received, was it from proper or the best sources? Was it processed, analysed and reported effectively? Did it provide a definitive answer to the research question beyond any reasonable doubt? Is there something genuinely new or unexpected in the result? Was diligence cherished at every step? Were all the questions on research ethics thoroughly considered and successfully resolved?

Ethics in Criminal Investigations and Scientific Research

Criminal investigations and scientific research are subject to a number of legal and ethical principles, not only epistemological and methodological ones. Criminal investigations are guided by the constitution, various laws, regulations, principles, rules of conduct and professional ethics of the police, that must be respected in order not to jeopardise the due legal process. Naturally, scientific research is no exception when it comes to compliance with the general legislation. However, the history of science knows cases where scientists have violated basic human rights, for instance, in carrying out medical experiments on patients without their consent. The current emphasis on ethics and integrity in research did not emerge without good reason. What is at stake in both is public trust in the science and the police.

The Police University College has agreed to follow guidelines for the good scientific practice, which are enshrined in 'The ethical principles of research with human participants and ethical review in the human sciences in Finland (2019)' by the Finnish National Board on Research Integrity (TENK). The principles proclaim, for example, that the research should carried out with honesty, general care and accuracy.

The ethical expectations in research are more explicit than in criminal investigation. The main ethical difference is that people are not always, if ever, asked for their consent to participate in a criminal investigation, but the participation in scientific research should always be voluntary and based on informed consent. Informed consent means that the participants are fully aware of the purpose of the research, of the setting, the possible treatments as well as of the potential risks involved in it. Failure to follow ethical principles creates a negative image both for the scientific research and the criminal investigation. A negative public attitude to scientific research and police work undermines them.

The researchers should always have the best interests of the participants at the top of their mind, no matter how significant the information they are after. In criminal

investigations, finding out the truth or the true course of events tend to overcome such concerns. The interrogations may take hours, the interrogator may not always speak the truth and may well mislead the suspect in terms of evidence at their disposal or what the other suspects or eye witnesses have revealed of them. Interrogation tactics cannot be followed fully when interviewing citizens for research purposes. Moreover, there is an ongoing discussion about the limits to their use as means in criminal investigation (e.g. Hoffman Roppe 1994; Slobogin 1997; Dorfman 1999; Magid 2001; Alpert & Noble 2008).

What is written in a research report or a criminal investigation protocol must align fully with the known facts. Faking evidence, like reporting observations that actually never materialised or referring to statements that were never given, not only compromises the integrity of the person in question, it also casts doubt over the integrity of the whole profession, the effectiveness of institutional control processes and the ethical integrity of the social endeavour in question. In the case of criminal investigation, an innocent person may end up in prison and the basic rights and liberties of the citizen severely violated by society. In the case of research, resources could be wasted in trying to travel down a dead-end, while other more promising pathways are cast aside and the respective opportunities in solving human problems and alleviating human suffering perhaps lost for good. While ethics matter in both, there are substantial differences in them too.

Parallels between Research and Criminal Investigation

Arguably, there are numerous convergences between criminal investigation and scientific research: the importance of planning; the need to proceed systematically; starting with a good framework and concepts; the central role of written reports; finding answers to key questions; the essential role of research design; the ability to resolve a problem; learning from the process by critical reflection; and the importance of ethics. Expertise in criminal investigation provides for learning to do scientific research and analysis and vice versa. In the example there is a pedagogical or didactic purpose, that is possible to apply in any country, at any police academy, for police training and education. In fact, the aforementioned comparison is a direct proposal, from an experienced academic police lecturer, to be utilised for informing the police students and police officers in the art of scientific research.

The zero-tolerance in Tampere project, as far as the main objectives were concerned, appeared successful. However, there were other results from it that were contrary to its main objectives. The young people did stop gathering together to party and drink in the city centre at weekends. City dwellers living there were very pleased with it. However, the problem did not disappear. It was just displaced. The young people stayed in their own neighbourhoods or municipalities near to Tampere. Their partying and bad behaviour continued, but in the courtyards of schools and in children's playgrounds. The police found it even more demanding to respond to the misdemeanours and vandalism afterwards, as it was more dispersed than before enforcing the policy of zero-tolerance in the centre.

My conclusion from this study, which became my doctoral thesis (Korander 2014), was that focused and tight situational police control can calm the desired areas, but it is likely to result in the problem being reproduced somewhere else. In criminological scholarship, this is called 'displacement'. The Finnish experiment

speaks for it too. When we know that the Achilles heel of situational crime prevention is the problem of displacement, we need to take it into account in the implementation of such programmes for crime control.

Part II: Enhancing Learning in Police Education through Pedagogical Innovations

The Pedagogical Use of Similes

'What makes a simile striking, of course, is an author's sensitivity to previously unnoticed resemblances; it can link together two spheres of knowledge or experience in novel and revealing ways. (...) Similes are less interesting than metaphors only in that the terms of the similitude are explicit and require less work from a reader.' (Miller 1993, p. 375.)

'Similes are figures of speech like metaphors, but instead of asserting something that is literally false, they have the structure of comparisons, asserting something that, on the face of it, seems to be claimed to be literally true (...) We now have a three-way distinction:

- a) Metaphors assert something that is not literally true, in order to activate the readers' or hearers' imagination....
- b) Comparisons assert a semantic property that is shared by two entities and is literally true.
- c) Similes exploit conventional, linguistically encoded beliefs, not shared semantic properties.' (Hanks 2008, p. 44.)

'The results of this study suggest that the one of the primary distinctions between similes and metaphors may lie in the cognitive cues they provide to the hearer. In this corpus, similes using like were most often used to introduce a mapping, which was not extended in the discourse. Most commonly, the simile introduced the mapping and then explicated it in one or two immediately following sentences. Similes appear to have been used here to consciously draw the listeners' attention to the upcoming mapping.' (Moder 2008, p. 318.)

According to Miller (1993), apperception as a general term for psychologist Herbart (1898) refers to mental processes whereby an attended experience is brought into relation with an already acquired and familiar conceptual system. It encompasses psychological processes like encoding, mapping, categorising, inference, assimilation, accommodation and attribution. Herbart claimed that new things are grasped by being related to things already known (ibid., p. 357). Becoming aware of this is the first step for a teacher who aims at expanding that understanding to anything that is new to the learners. The use of similes, analogies and metaphors are thus irreplaceable pedagogical elements in police education. Innovation is needed in identifying them as well as introducing them to the students.

In science education, analogical transfer theory has played a major role in guiding research (Mayer 1993, p. 571): instructive metaphors create an analogy between a to-be-learnt system (target domain) and a familiar system (metaphoric domain). It predicts that a metaphor that fails to create a familiar analogy would have no positive effect on retention or transfer. It directs the learner's attention to

key points by providing a structuring framework for mapping the unfamiliar terrain, for encoding it. The latter makes it possible for police students to discern separate phases with clear identities, roles and purposes in the research process based on the literal similitude with the criminal investigation. Understanding them as parts in a more encompassing whole helps to attach meaning and significance to each, learning the respective concepts as well as remembering them. The latter, once grasped, could be used reciprocally to cast new light on the criminal investigation process. With it, it is possible to introduce an epistemic rupture to a taken-for-granted view and to help the thinking mind to, metaphorically, escape from the box, and create a stance somewhere in between that could be utilised for both critical reflection, de- and reconstruction of the prevailing understandings and the related practices.

Thus we learn, first by assimilating new experiences into the prevailing conceptual frameworks. Once we have first learnt to see it as an extension of what is already understood, the next step is to introduce a rupture to it by pointing out differences, divergences and opposites between the new domain and the already acquired understanding, the one believed to be thoroughly known. The third step is to use the latter as stepping stones, levers or a new but related and thus relevant perspective on shaking up and expanding understanding of the familiar domain.

'Metaphor, as condensed simile, permits us to think about one thing or event being like (and in that regard related to) something else' (Sticht 1993, p. 627.)

"... metaphors and analogies play a central, even indispensable role in the pedagogical process

of acquiring that subject. We call this use of metaphor the pedagogical use.' (Petrie & Oshlag 1993, p. 581.)

If our perceptions of ourselves as well as the world are never direct ones, if they are always mediated by mental models, identities, schemas, scripts, or even the tools at hand, then learning anything new becomes essentially a question of the relationship between the to-be-learnt and the already learnt or internalised. Like Petrie and Oshlag (1993, p. 583) claim, much learning derives from the ability to process our experience in terms of existing contexts and schemas and the relations among them. In police education at university level, it is not just a question of new knowledge and understanding acquired within the prevailing schemas, but of transforming, restructuring and expanding those schemas too.

What appears as comparison from the point of view of the teacher, like Timo, as he has come to know scientific research from personal experience and learnt about criminal investigation in his work and relies on the students' personal experience as crime investigators, is an interactive simile from the students' point of view. Like in the case of interactive metaphor, 'it provides a way of understanding how the student's existing modes of representation and understanding can be changed through interaction with the new material, even granting that experience is dependent on a particular mode or scheme of understanding' (Petrie & Oshlag 1993, p. 585).

Similitude between two different fields, if they are truly different, breaks down at some point. It is partly superficial or deceptive and thus literally false. However, this fact does not diminish its pedagogical value. If the students come to believe

that they already know everything there is to be known about scientific research by simply having thorough understanding of criminal investigation, then, obviously, the learning process has not gone deeply enough. This could mean, for instance, that students' knowledge of the source of the simile, i.e. criminal investigation, has been consolidated, but their grasp of the very object of the course, i.e. the research process, has not grown.

While in the view of some rules, principles or purposes, the scientific research appears literally like the criminal investigation, there is more than just one account of the scientific knowledge and the best way to acquire it. While a criminal investigation simile provides for the departure from a well-known field of criminal investigation and entering into the previously unfamiliar terrain of scientific research, it establishes only a bridgehead. It is easy to see it as a mere continuation of the home ground unless the attention of the students is consciously put on the features or characteristics that make it anomalous in terms of what exists or prevails at their familiar end of the bridge. Valorising the differences, the train of thought behind them, introduces an insider's view of research to the students and makes the students acquaint with it. Increased proficiency in another cultural domain emerges as a perspective or a system of conceptual tools that should be utilised or tested in the familiar domain too. For instance, the researcher, unlike the criminal investigator, should not give false information to participants and thus mislead them without their consent. Why is it important in the former, but, it seems, not in the latter?

Learning the idea of a theoretical perspective and the skills of adopting one deliberately and applying it in re-interpreting, reflecting or criticising something stands out as a worthy objective for any higher education institute. Such a learning tends to emerge as by-products from the time spent with diverse reading material and among teachers with a variety of backgrounds, theoretical orientations, styles and preferences. However, it is possible to aim for it directly in instruction. Pedagogical objectives consist in a layered structure. While we often tend to put the emphasis on the knowledge content to be learnt and aim for it, on the next level the former appears just means, which are fully interchangeable with many other respective contents as means, for a more general objective. The teachers usually innovate new ways to introduce them to the students, but the students are to learn them, not to innovate them anew. However, we expect that their learning also increases their innovative capacities and understanding of how to put them to good use.

At the most pragmatic level, police students should have a clear picture of the phases in research process in order to be able to follow them when writing a thesis. On the next level, they should acquire skills that would help them to utilise research knowledge in their work and to know how to find it, read it, grasp it and apply it. On a higher level, the students are expected to develop cognitive skills in adopting alternative perspectives, changing between them, and comparing them in terms of their practical consequences. However, on the highest level, they should be able to formulate new ones that, for instance, help co-operation and communication in teams with participants that come from different walks of life, with an academic and non-academic background, represent different fields of authority, expertise and specialities. Eventually, knowledge contents tend to fade away, but the skills to remain.

The very focus on the content of learning as stated in the curriculum and understanding the main challenge in identifying the best ways for opening access

to it for the students, to facilitate and support their learning of it, the pedagogical problems at hand, tend to leave the more abstract and encompassing objectives in their shadow. As the pedagogical strategy becomes increasingly one dimensional, learning experiences are also impoverished. Learning the educational content, which should be seen as a means for inducing a change in the cognitive apparatus of the students, replaces the latter as the purpose. Thereby, didactics usurp the place of educational theory, the forest is lost from the trees, and tactical concerns conflate the strategic goals.

Concluding remarks: Innovations are everywhere

'Innovation has become a leitmotif of policy-making and institution-building around the globe. Hardly a week passes without some government announcing an "innovation strategy" for a city, region or country, or without some institution branding itself a driver of innovation. (...) Innovation has become a go-to answer, a panacea that carries the promise of curing socioeconomic ailments almost irrespective of what these ailments are or how they have arisen. Indeed, it has become virtually impossible to talk about economic development or social progress in terms that do not invoke, explicitly or implicitly, the need for innovation.' (Pfotenhauer & Jasanoff 2017, p. 784.)

The innovation panacea emerges from the view that economic success is increasingly driven by innovations and their adoption across fields of life. It is like a catching-up game where running ahead of the others and being constantly caught up by them, but, in the best scenario, in vain as the forerunner has already moved on, offers the best position. As so many invest in innovation systems, others must too. Thus, everything becomes evaluated in terms of its impact on innovations and innovativeness as the key source of value.

Pfotenhauer and Jasanoff (2017) speak of practice turn in innovation policy as innovation has become a category for practitioners or a practical policy imperative instead of an analytic one used to theorise technological change and economic growth. Moreover, it is something that can be universally fostered, enhanced or strengthened by adopting (read: copying) the most advanced models, proper toolkits, and fit-for-purpose management practices. The innovative capacities and capabilities can also be wasted, underutilised and overlooked by failing to do so. What is called for are innovations all the way from the very top to the very bottom across all sectors and fields of action. In terms of education, this means innovative teachers using innovative pedagogics teaching innovative students with increasingly innovative minds endowed with transformative cognitive capacities capable of turning, metaphorically speaking, lead into gold.

'Amongst all this innovation in teaching, learning and assessment, some principles endure. The teacher still performs a central function, but that is changing from delivery of educational content to facilitating discussion and reflection. Structure is still important, perhaps even more than it was before, as we discover effective ways to initiate, embed and extend learning. Learners still need appropriate goals and support. Most important, learning is a collegiate process. It works best when people want to learn, enjoy the

process and support each other. The next decade of innovating pedagogy may focus less on the individual elements of instruction and more on how to merge the new pedagogies into an effective process of lifelong learning.' (Sharples et al. 2016, p. 10.)

A recent study on the role of research, development and innovation activities at the Police University College as perceived by the personnel clearly indicates that the current changes put pressures on all shoulders: students as well as staff:

'To cross the line between RDI activities and teaching has proven to be more difficult than initially thought. It requires rather profound procedural changes as well as changes in thinking. The most problematic barriers stem from strong identities and rise from traditional viewpoints, not so much from concrete, clearly visible boundaries' (Myllylä et al 2017, p. 48.)

Pfotenhauer and Jasanoff (2017, p. 801) argue that innovation models are not neutral technologies, models that can be adopted unchanged in different social, cultural, administrative and educational settings. Local imaginaries reflecting prior conceptions of the need for innovation as well as justifications for it always mingle with their implementation.

Expanding and deepening conceptually cognitive horizons related to pedagogical innovations – like Timo's experiences of familiarising police students with the world of scientific research – experimenting with them, sharing personal experiences on them with the other teachers, involving the learners increasingly in the pedagogical innovation process and keeping in sight the more encompassing objectives – seeing both the forest and the trees and appreciating them equally – is endowing the educational process with a vital force and its relevance in individual and social growth. If this 21st century really calls for skills, like critical thinking, creativity, innovation and collaboration (Sharples et al. 2016, p. 36) – intrapersonal as well as interpersonal skills, these features need to become integral elements to pedagogical approaches that give character to police education too. Involving them in such an educational environment, participation in an innovative culture and thus coming to terms with cultural practices and meeting teachers who cherish and embrace them, would then materialise, echo and enhance the essential pedagogical message.

Undoubtedly, it is possible to design a cultural change. It is also possible to attempt to implement it, to introduce a cultural change, to lead a cultural transformation, and even a revolution. However, success in securing the aspired state, as cultures also tend to develop, is the problem. The very call for innovations is letting the spirit escape the bottle for good.

Nevertheless, a culture of innovation should be systematically nurtured, enhanced and promoted. Leadership that displays the very virtues it preaches, is in itself agile, nimble, collaborative, reflective, innovative and learning too. Establishing clear, consistent innovation goals, and encouraging collaboration internally and externally contribute to an emergence of culture of innovation and materialise it too (e.g. Zhu & Engels 2014, p. 138).

In innovation culture, new ideas are openly and actively distributed and appreciated, but also reflectively and critically scrutinised both conceptually and through experimenting with them. This calls for venues and dedicated time from all

those involved in it, as well as social support, an adjusted reward system, the ability to keep the toilets working and daily work progressing at the same time, i.e. success balancing with routines as already established or institutionalised innovations, and innovations as candidates for the routines to become.

Perhaps our challenge is not so much in providing for innovations or innovativeness, but in adopting the ones with added pedagogical value in comparison with the current practices. Evaluating this worth is a complicated task that should not be taken lightly by devaluing what has become seen as the traditional, the taken for granted, or the conventional or standard way. For sure, it is often easier to burn bridges, or nowadays explode them, than to build them. However, the point of our article is to encourage the latter rather than the former as an essential element in all development of pedagogical practices by innovation.

References

- Alpert, Geoffrey & Noble, Jeffrey (2008). Lies, true lies and conscious deception. Police officers and the truth. Police Quarterly 12 (2), pp. 237-254.
- Dorfman, David (1999). Proving the lie: litigating police credibility. American Journal for Criminal Law 26, pp. 454-503.
- Hanks, Patrick (2008). How to say new things: an essay on linguistic creativity. Brno Studies in English 34, pp. 39-50.
- Hoffman Roppe, Laure (1994). True blue? Whether police should be allowed to use trickery and deception to extract confessions. San Diego Law Review 31 (3), pp. 729-773.
- Korander, Timo (2014). Rikottujen ikkunoiden nollatoleranssi. Tutkimus New Yorkin rikoksentorjunnan uuskonservatiivi-mallista Suomessa. Turun yliopiston julkaisusarja, Annales Universitatis Turkuensis C 390.
- Korander, Timo (2019). Tutkijat poliisissa. In M. Westerbacka (Ed.) Kun isolla kengällä astuu: kahdeksantoista näkökulmaa poliisin työhön. Police University College, pp. 169-193. http://urn.fi/URN:NBN:fi-fe202001081441
- Korander, Timo (2019). Poliisikulttuuri. In Matti Vuorensyrjä (ed.) Siniset klassikot. Poliisialan moderneja klassikkotutkimuksia 1. Poliisiammattikorkeakoulun tutkimuksia 44, pp. 44–69. http://urn.fi/URN:ISBN:978-951-815-362-0
- Magid, Laurie (2001). Deceptive police interrogation practices: how far is too far? Michigan Law Review 99 (5), pp. 1168-1210.
- Mayer, Richard (1993). The instructive metaphor: Metaphoric aids to students' understanding of science. In Andrew Ortony (ed.) Metaphor and Thought Cambridge: Cambridge University Press, pp. 560-578.
- Miller, George (1993). Images and models, similes and metaphors. In Andrew Ortony (ed.) Metaphor and Thought Cambridge: Cambridge University Press, pp. 357-400.

- Moder, Carol Lynn (2008). It's like making a soup: Metaphors and similes in spoken news discourse. Language in the context of use. In Andrea Tyler, Yiyoung Kim & Mari Takada (eds.) Discourse and cognitive approaches to language. Berlin: Mouton de Gruyter, pp. 301-320.
- Myllylä, Markku, Hakala, Juha & Myllylä, Miia (2017). Modernizing the police with research, development and innovation activities. The transition of the Finnish police education into a bachelor's degree. Nordisk Politiforskning 4 (1), pp. 45-67.
- Petrie, Hugh & Oshlag, Rebecca (1993). Learning and metaphor. In Andrew Ortony (ed.) Metaphor and Thought Cambridge: Cambridge University Press, pp. 579-609.
- Pfotenhauer, Sebastian & Jasanoff, Sheila (2017). Panacea or diagnosis? Imaginaries of innovation and the 'MIT model' in three political cultures. Social Studies of Science 47 (6), pp. 783-810.
- Sharples, Mike, de Roock, Roberto, Ferguson, Rebecca, Gaved, Mark, Herodotou, Christothea, Koh, Elizabeth, Kukulska-Hulme, Agnes, Looi, Chee-Kit, McAndrew, Patrick, Rienties, Bart, Weller, Martin & Wong, Lung Hsiang (2016). Innovating Pedagogy 2016. Institute of Educational Technology. Open University Innovation Report 5. Milton Keynes: The Open University.
- Slobogin, Christopher (1997). Deceit, pretext, and trickery: investigative lies by the police. Oregon Law Review 76 (4), pp. 775-816.
- Sticht, Thomas (1993). Educational uses of metaphor. In Andrew Ortony (ed.) Metaphor and Thought Cambridge: Cambridge University Press, pp. 621-632.
- TENK (2019). The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish National Board on Research Integrity guidelines 2019. Publications of the Finnish National Board on Research Integrity. TENK 3/2019. https://www.tenk.fi/sites/tenk.fi/files/Ihmistieteiden eettisen ennakkoarvioinnin ohje 2019.pdf
- Zhu, Chang & Engels, Nadine (2014). Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. Educational Management Administration & Leadership 42 (1), pp. 136-158.

NEED FOR RE-ENACTING HANSEL AND GRETEL INTHE POLICE: INNOVATIONS AS BARRIERS TO INNOVATIVENESS

Ossi Heino & Vesa Huotari

Introduction¹

In the Grimm Brothers' well-known fairy tale, Hansel and Gretel are abandoned deep in a forest. However, as they have heard about this malicious plot in advance, they are prepared for finding their way back to home on their own. On the way deep into the forest, they create a trail by dropping white pebbles they had collected beforehand and put in the pockets. Afterwards, by following this shining path of pebbles, they succeed in finding their way out from it. When they are taken back into the forest for a second time, they try to repeat the trick, but by using breadcrumbs instead of pebbles. However, the morsels are detected by birds before Hansel and Gretel and their way back home, quite literally, vanishes into air. Hansel and Gretel get lost.

Evidently, crumbs are a poor substitute for pebbles, at least occasionally. A relatively minor variation in the original scheme may fully undermine its efficacy. Unexpected events can turn even the best plans into ashes. Being prepared means creating a scheme for action by weaving together a view of what is expected to lie ahead, what resources, like pebbles or crumbs, are at hand or otherwise available, and how the aforementioned two should be brought together so that, eventually, the chances of finding the way out from the problem situation increases significantly. Moreover, whenever rushing forward, perhaps it is good practice to give a thought or two to how we might find our way back to our starting point.

As Klein (2017) suggests, two different approaches are needed to improve performance: On the one hand, an organisation and its members need systematic improvement through the elimination of errors, increasingly sophisticated tools and protocols, and clearer division of labour supported in these all aspects by regular training. This materialises in increases in efficiency and decreases in variation in its performance. On the other hand, the organisation and its members need support for situational sensitivity, decision-making capacity, and a mindset that nurtures insights. It is not too far-fetched to assume that the police – the target organisation in this essay and a key first-responder – face situations where the latter capabilities, or lack of them, is likely to play a central role. In other words, this duality implies that the police – both as an organisation and as its individual members, police officers – is justified in fine-tuning its formal capabilities, to develop better scripts and procedures for policing that reflect changes in legislation, experiences gained and new knowledge acquired. These capabilities are tested and developed further

Ossi Heino is the original source for views. He has participated as an expert evaluator on regional exercises aimed at maintaining and enhancing preparedness for crises a at regional level in Finland. Vesa Huotari has slightly edited the original manuscript to align it with the other articles.

in exercises, and transmitted in lessons, training and action plans. However, this is opposite to what feeds an inquiring mindset, innovativeness and the generation of new insights. In this essay, we shall focus on the way the operational skills and capacities of the police that are deemed critical in crises are defined in large-scale regional exercises and by them too. We claim that the systematic pursuit of enhanced operational and co-operational capacities to create and maintain organisational capabilities in responding to likely crises caters for systemic failures too, when the innovative capacities that are required for tackling novel situations are notable in the exercises by their absence only.

At the time of writing this article, 2020 is coming to an end. The year has been an exceptional one because of the coronavirus pandemic, with its second wave currently underway. Although various threat assessments highlighted the possibility of a global pandemic, the rapid spread of COVID-19 took everyone by surprise and profoundly highlighted the interconnectedness of the world.

The surprise concretised the actuality of living in a VUCA environment: the changes in it are rapid and continuous (Volatility); the key elements of events are unpredictable (Uncertainty); they have both consequences and consequences of consequences that spread in all directions (Complexity); and no clear solutions to the situation are available, only various interpretations of how to tackle it best (Ambiguity). The very environment and context in which the various crises occur consist on an ever-more complex platform that is increasingly susceptible to the unfolding of nonlinear, fast-spreading and increasingly unpredictable consequences. While the crises of yesterday possessed a different dynamic when compared with the crises of tomorrow (Rosenthal et al. 2001), how are we to prepare effectively for whatever may lie ahead?

In a VUCA environment, problem situations and their critical parts are difficult to single out, identify and, therefore, resolve. As long as a crisis remains vague and, thus, without a proper label, whether a legal term, a scientific concept or a historical counterpart, it is difficult to delineate the resources and their mobilisation that are essential and critical for finding the way out of it. Moreover, crises can also evolve not only as a response to their impact to other systems, but also to our attempts to manage the events associated with them.

Most likely, our very best plans turn out to be crumbs rather than pebbles, our schemes seriously flawed, and many of our rehearsed capacities without the milieu that is necessary for implementing them effectively. Consequently, it is not possible to point out in advance and with certainty the skills and competencies that will be most crucial in meeting the next crisis (Borell & Eriksson 2013; Farazmand 2009). Nevertheless, we would expect the police to act effectively and respond appropriately, i.e. display their ability to rise to the demands of the situation.

In any crises, the police are expected to introduce some order to chaos, if not otherwise, then simply by maintaining their own deeds and actions organised by command and control and by establishing temporary new systems and organisations with others (Punch & Markham 2000). In order to meet this challenge as an organisation, the police, like Hansel and Gretel, should know their way back from the woods. What would the latter mean for the police within the prevailing hypermodernity?

Perhaps for an organisation, once the way forward becomes blocked, perhaps partly because of its very structure, the way around the obstacle calls for a new

opening by returning to its own past, by reversing into itself in time. The way forward requires defusing the adopted innovations one by one until a true opening emerges. Organisations handle increasingly complex problems in their operational environment by increasing their own complexity, by adding new resources and tasks to their portfolios at all levels. As their complexity grows, their very milieu appeared more complex too, reciprocally requiring more fine-grained approaches. Following that track, the police have inevitably entered deep into the woods of modernity, or have come to epitomise it in its own structure and mode of functioning.

It is all but self-evident that the innovations adopted by the police enhance or create purely and only such new capabilities and capacities that make it only better and better prepared to meet novel situations. It is possible that large-scale regional exercises actually create operational capacities that create obstacles on the way for noticing, paying attention to, and utilising the possible openings available in their own past that could well be essential in responding effectively to unforeseen crises.

Perfection is commonly pursued by detecting deviations from the path that is deemed the ideal one. Development means reducing the possible deviations from this ideal path both in number and degree, starting from the most critical ones. The deviations are reduced by bringing all the elements, whether machines, tools or human participants, to full compliance with the ideal path in order to achieve the predetermined goals and effectively exclude the pursuit of other goals that may emerge or unfold from the relationship between their very deeds and its environment. Our essay outlines what it would require from large-scale regional exercises to enhance the capabilities and capacities to address unfamiliar situations and, consequently, avoid the so-called perfection trap (Klein 2017).

Forward on the 'Via Negativa'

The COVID-19 pandemic has demonstrated its surprising and systemic nature. Whether or not a genuine Black Swan (Taleb 2007), it has brought with it an unexpected shock, valorising multiple interdependencies and crushing some takenfor-granted presumptions. Obviously, the interdependent world is also vulnerable in unexpected ways to unexpected events. The COVID-19 virus effectively utilised conventional mechanisms, standard systems and procedures as well as the gaps between them. While we are becoming more and more acquainted with its short-term consequences, public discussion about its effects in the long term is scarce.

An increasingly nuanced division of work both reflects the differentiation in domains of knowledge and results from it too. It fragments competencies, responsibilities and perspectives. While, apparently, covering more and more of the ground, it actually deepens the gaps, sharpens the ruptures, distorts mutual communication, impedes co-operation and obscures the very meaning of preparedness. Consequently, there are different conceptions of the threats, different estimates of their likelihood, a multitude of ideas about the appropriate responses to each, various suggestions for their proper frameworks, and different vistas on the proper competencies. It is no wonder then that the very concept of preparedness appears as a hopeless amalgamation of competitive ideas, interests and values (Staupe-Delgado & Kruke 2017). In practice, for instance, it appears as hidden standards in organising such exercises only that call for the use of standard equipment, and that respect the traditional role, professional identity, position and tools of the participants as well as

the division of responsibilities between them.

To return to the ongoing COVID-19 pandemic, society, not having any relevant experience in their institutional muscle memory, or a capability deeply ingrained in their structures, struggles to find effective responses to it and gain control over the virus that appears to be innovative in finding its own countermeasures to them. However, what is perhaps even more surprising is that society, it seems, has no previous engrams in their memory for being surprised.

To put it bluntly, preparedness is seen to derive from learning effectively from experiences of the past. It stands for learning the lessons from them in order to be well prepared to meet a relatively similar event in a similar operational environment in the future. The value of the exercises are based on the presumption that the dynamics responsible for the unfolding of the events in the past remain unchanged in the future (Ohlsson 2011).

However, the most fundamental feature of the VUCA environments is precisely related to the evolving dynamics beneath the surface. To learn that one can, and will, become surprised requires preparing for the idea that operational capacity cannot be built solely upon adherence to the mechanistic notations derived from the historical experience. Such notations are unlikely to provide credible picture of the surprises ahead. The people we have met so far can tell us something about the people we shall come to meet, but not everything about the latter.

More generally, it is about addressing situations with insufficient or non-existing prior knowledge of them. Unexpected situations may well resemble past events, but the similarities that meet the eye could be superficial. The differences beneath may undermine the efficacy of the response and falsify the presumptions that were previously sufficient for meeting the task and the challenge related to it in a practically adequate way. Thus, such situations surprise us in terms of the level of our preparedness and the adequacy of the lessons drawn from previous events, in terms of our expectations related to the degree of control over our future, and the sufficiency of our skills and competencies. Learning exclusively from past events has created practical skills, true capacities and organisational capabilities, but also, illusions of control, expertise and security.

The issues and events that seem to be under control may hide potentialities, a range of possible interactions and dependencies that the overlearnt best practices effectively remove from sight and consciousness. Such practices are a main source of professional pride, an anchor point for a group identity and a cause for celebration, not a target for reflective analyses that aim at valorising its very possibility or the validity of its presumptions. The very competence anchored to practices and structures prevents us from formulating new problems from novel perspectives and hinders the development of situation-specific solutions that deviate from standard practices. The innovativeness, the ability to look at issues from a fresh perspective, and to see them afresh, is needed in making sense of novel situations, or finding it jointly in the latter, and has been supressed rather than encouraged (see Weick 2001; 1996; 1993).

'To me, the major risk today may well be the litany that "everything is under control", that "we mustn't be pessimistic" and therefore there is no point "asking too many questions" while simultaneously insisting that citizens must abandon the notion of zero risk and lamenting society's unhealthy preoccupation with legal action' (Lagadec 2007, p. 506).

The quote from Lagadec (2007) reminds us of the fact that the police, just like the other authorities, operate in a world where resilience to the established ways for doing things, interpreting them and approaching them deserves truly critical scrutiny. Established ways entangle with perceptions of their efficacy. However, the latter are often indistinguishable from their status and position in policing.

Innovation offers a perspective for examining them and their need for change critically. In the standard view, the attention is absorbed by the new solutions, whose operational deployment and embeddedness are discussed in terms of their effectiveness in resolving the problems of the day. The problem is often conceptualised as something that is lacking or absent. This absence motivates the search for finding or innovating that which is longed for. When the missing piece is found, the deck has been very much set for deploying it, attaching it to the other piece identified and adopted earlier, and thereby updating the operational capacity to better match the demands of the operating environment or to utilise the newly emerged affordances in it. The standard view is characterised by technological optimism, a step-wise path of progress and a view of the world, where capabilities are increased by adding new pieces upon and next to the old ones.

Rarely, if ever, are innovations approached from the opposite direction by asking what should be cast away, ripped off or unlearnt, to refresh the operational capabilities and capacities. Obviously, the march of progress, or evolution in general, proceeds forwards only. The idea of intentionally going backwards, reversing back in time, represents regression. From an evolutionary perspective, it stands for defeatism and an unnatural and thus futile attempt to return to an earlier phase in the development of forms from simple to complex ones. However, to us, like to Hansel and Gretel, finding our way back appears potentially as an essential skill or capacity that is critical in responding to novel crises.

The role of police in providing for security and continuity in any society is so central that we have to ponder the potential negative spillover effects that derive from the pursuit of progress through incremental innovations. Innovations, especially when externally initiated and imported into the organisation purely from the outside, may well hinder innovativeness, situation-sensitive action and putting forward our own insights, thus hampering the emergence and implementation of novel ideas in the environment and effective ways to respond to it. From this point of view, innovations bring along path dependencies and over-determination. They force organisations and individuals to follow specific trajectories in specific ways, constrain their trains of thought, restricting the imagining of the possible, to communicate it to the others, and subsume the ways problems are perceived and acted upon. This perspective on innovations motivates us to look at them from the perspective of a 'Via Negativa' (Taleb 2012).

'Via Negativa' refers to the understanding of what should be avoided in order to improve the conditions for success. It calls for paying attention to the systemic elements that hold us back in situations where critical insights would be extremely important. It requires both critical thinking and a kind of scepticism to what is normally perceived as purely positive. In this sense, scepticism can be viewed as a kind of opposite to good faith, or the ability to see behind what something seems to be in principle.

The standard view presumes that experience and training inevitably lead to increased capacity for action and better performance through incremental innovations.

We believe so as well. However, we also want to point out that the validity of this view depends on the compatibility of the conditions between situations. Occasionally, the new situation only superficially looks like a previous situation that is the source of the lessons drawn from it, the criteria against which their validity has been (con) tested in exercises and, possibly, in practice too, and where the proof of the efficacy of the related schemes, tactics and approaches comes from. High-level performance in meeting the most likely problems that we have learnt to expect from experience and for which we are prepared, however, does not automatically indicate high-level performance in future situations.

Learning from crises and learning in exercises aimed at improving capacities for their management consist of a well-known challenge (Smith & Elliott 2007). In the context of preparedness, learning and improving performance through innovation easily focuses on the obvious problems that are relatively simple to fix (Kachali et al. 2018). The issues that are difficult to comprehend, ambiguous, hard to pin down, to demonstrate to be possible, or to verbalise clearly and communicatively escape attention. However, the complexity of this challenge and the fact that the very tools and practices adopted may well play a formative part as obstacles to innovativeness and critical learning in such situations, are good reasons for reclaiming the issue as worthy of reflection and analyses.

Learning to Address Crises²

Organising Exercising as the Standard Approach to Joint Learning

Preparedness exercises aim to increase resilience by simulating fictitious events. The crisis scenarios provide for the making of plans, creation of protocols, delineation of responsibilities, improving skills in coordinating emergency responses, etc. across organisational levels and between different sectors (Zebrowski, 2019). Participation in them is expected to improve the capabilities and capacities in handling emergencies in large crises as individuals, individual organisations and combinations of these (Sommer et al., 2013).

The view of preparedness and preparedness training by exercising put forward in this essay derives partly from observing few regional preparedness exercises as an external evaluator and partly from exercises carried out as part of a research project on preparedness and capabilities of authorities. The content of the exercises is very much bypassed here, because it is classified as sensitive information. The focus is on their implementation as it illustrates the logic of learning from the previous crises entangled with the propensity to learn their logic only.

The exercises, like in the case of police students, as Lakoff (2017) emphasises, are also test situations for the operational capabilities of the participants – and also occasionally showrooms for them. They are organised to reveal possible operational and technical shortcomings, gaps in knowledge, coordination of actions, misunderstandings and flaws in leadership and communication systems. Undoubtedly, there are crucial lessons for learning in all of them.

² See different exercise types and how to learn them in e.g. Berlin & Carlström (2014).

'In producing system failure, simulation exercises generate knowledge of gaps, misconnections, and unfulfilled needs. These can then be the target of intervention. In so doing, they forge new links—communicational, informational—among various agencies: local and national government, public health, law enforcement, intelligence. These simulations, by making infrastructural vulnerabilities visible, are part of a method for designating priorities and allocating resources in a preparedness system.' (Lakoff 2007.)

According to Zebrowski (2019), the preparedness exercises contribute by increasing the participants', such as police students', confidence in their own and their colleagues' abilities to respond to future events. Thus, the frame of reference for designing exercises and developing them further should emphasise principles that are most likely to provide a realistic view of those abilities and their trustworthiness and their relation to the individual and joint learning at the exercise. Therefore, preestablished competence and learning outcomes and the exercises that are designed to increase the relevant capabilities and capacities consist of their pedagogical cornerstones.³ Exercises and exercising in them provide for learning then, not just for testing, evaluating or displaying. Explicitly-stated competence and learning outcomes can be used to describe what the participants in the exercise are expected to master cognitively, to be able to do in practice and to understand after their participation in it. This helps them to adopt what is expected from them and what kind of skills they should pay attention to during the exercise.

After the exercise, the participants will be able to evaluate their progress in terms of the objectives and identify areas where further learning and exercising is needed. For the designer of the exercise and the operator – in preparedness exercises, usually the game centre – objectives that are explicitly stated help to plan the scenarios and provide additional inputs at the right time that help meet the objectives as the exercise progresses. For the evaluators, the objectives provide a systematic framework that supports the planning of the evaluation and carrying it out. In other words, it is important to recognise and be aware of the critical issues or points that are the very reason for organising an exercise in the first place. Without it, it is impossible to develop such exercises further and to make them systematically better, not just different. Clear understanding of the conceptual model that each exercise aims at materialising and developing further too, both informs exercising and turns it into a true tool for a better practice. Arguably, when exercises try to be both tests for performance capabilities and opportunities for professional learning, the need to show off the current capabilities tend to subsume all objectives related to learning from it. The latter, if it takes place at all, is only after the exercise, not during it.

Exercises that the participants prefer usually put their current skills and knowledge under stress, but do put them face-to-face with challenges in learning that go beyond them. The exercises tend to have a flipside too. They assume that it is possible to figure out in advance the skills that will be needed in the forthcoming situations (Borell & Eriksson 2013). As the essential knowledge about future crises is believed to reside in experiences from previous ones, the 'learning system',

More precise criteria for the realisation of a successful exercise can be found, e.g. Grunnan & Fridheim (2017).

respectively, is biased to look in the rear mirror in order to see what possibly lies ahead. Exercising becomes rehearsing (in old French, *rehercier*, to go over again). As already mentioned, there is a certain wisdom to it, but definitely not all of it. In the context of uncertain and ambiguous threats that are typical to our VUCA world, such exercises in preparedness fall short in simulating the non-linear and chaotic nature of events (Farazmand 2014). Moreover, they succeed in wiping them effectively under the carpet. Simply removing them from sight does not make them disappear. Berlin & Carlström (2014) came to a similar conclusion in their study:

"...exercises tend to be based on their own logic, which differs from actual events. Exercise participants believe that they mainly learn single-track, parallel, and path dependent behavior. The exercises do not facilitate the use of cross-boundary activities. This means that learning, as well as benefits from the exercises for actual events, is limited." (Berlin & Carlström 2014.)

The flaws in exercises that follow the aforementioned logic, i.e. remain highly past- and path-dependency in general and tradition-centred in particular, can be demonstrated by new kinds of exercise scenarios. The latter should bring them to the surface and reveal them, when the standard practices fail to measure up the demands of the situations the scenarios put forward. If the participants agree on the relevance of the scenario, which they are unlikely to do after doing badly in it, it would be a true revelation to them in several respects. Moreover, innovations would be needed to fill such gaps and to ensure that future operations will not fail. The aforementioned case also demonstrates the difference between exercises as test situations and exercises as learning situations. One learns very different lessons from them.

Both the organisation and its members learn. Innovations increase their operational capacities. Both learn to fix their operation by reflecting their relationship with their consequences, but are likely to remain ignorant of the causes underlying it. The presumptions and logics behind their plans, operational procedures, habits and practices remain in the dark. They are never raised on the level of direct analysis, made subject to reflection and critical discussion. Their relative merits and worth remain veiled.

Current exercises develop skills in following the established plans, protocols and schemes, not in deviating from them. In normal or standard situations this is the best practice. However, in situations that are beyond them, such habits may well hamper all attempts at meeting them. Instead of focusing on the ability of the participants to learn to figure the demands of the situation in situ and possibly in co-operation with others, they learn to rely on systems, defined roles, operation cards, manuals and task responsibilities. For example, in collaboration exercises, each participant learns to optimise their own task. It undermines the emergence problem formulations that are collaboratively formed as well as joint responses to them (Berlin & Carlström 2014). Exercises aimed at better collaboration between authorities turn out to optimise the well-established operation procedures of each of them (Berlin & Carlström 2008). In the former case, 'the success' of the exercise gives a false signal of the capabilities when facing unfamiliar situations or a familiar one, but with untypical collaborators.

Exercising strengthens learning for the standard operational capacity, the standard procedures and methods that receive their basic character from the traditional division of responsibilities between the emergency services and other

service providers. It echoes the circumstances that tend to prevail in a normal day at work, but not necessarily in situations that drastically deviate from it.

The way the effectiveness of such an exercise is defined and evaluated is seldom, if ever, truly discussed, properly scrutinised or reflected by the organisers or the participants (cf. single and double loop learning, see e.g. Bakacsi 2009; Argyris & Schön 1978). Learning and innovations emerge as a mechanical adaptation as responses to perceived drawbacks, but leave the cultural roots of the problem unnoticed (Varano & Schafer 2012; Deverell 2009). This, for its part, explains why crises seem to teach, more or less, the very same lessons every time (Donahue & Tuohy 2006).

On the Individual Level

The capacity to act that has been gained, systematically enhanced and categorically refined, but also tied externally to practices, tools, manuals and tactics and internally to professional identities, norms, shared perspectives and group solidarities, facilitates the actions but constrains the actors themselves. For instance, the police learn to perceive the world in terms of needs or calls for policing. What is perceived as something, whether it is seen as harmless, normal, suspicious, a call for immediate response, etc., is mediated by professional self-understanding, which, for its part, emerges in the daily practice of work. The protocols for joint operations, for instance in a car accident, cast light on mutual relations with other emergency services and the respective responsibilities. Joint exercises provide for articulating them and acting them out more clearly.

In a crisis that diverges from a standard day at work, where the stakes are high, the resources below the normal, well-versed plans of pure castles in the air, and where time is almost non-existent, the following is likely to come up:

- most of what was formally learnt in exercises has no true relevance;
- what would have been useful to learn, was not aimed at, not truly brought to the surface and turned into the very subject to be learnt in the exercises; and
- what has been actually learnt and rehearsed effectively slows down the efforts in figuring out the right thing to do.

At first sight, to think of well-meaning exercises as factors contributing to crises rather than their resolution seems almost absurd. However, it is a sign one should expect on the 'Via Negativa'. Denying it is a way out of the dilemma. However, it is only the last resort once all the other hypotheses have been weighed up and found wanting. While there are no silver bullets to be confiscated and then used to solve the problem, there are approaches, ways of processing experiences, previous knowledge, organising resources at hand and innovating ways out jointly, etc. that should become part of the standard gear and the professional competence of members of front-line emergency services.

The exercises and exercising should allow participants to become acquainted with the limits of the standard operational procedures, the conventional ways of thinking and the well-established approaches to bureaucratically given sets of

problems. They should consider the flaws in the logic in processing them and learn about the presumptions underlying them (see Aradau & van Muster 2011).

As inhabitants of the VUCA environment, members of the emergency services should learn to maintain a healthy scepticism in the improvements in the form of incremental innovations. Their validity is not universal, but intimately tied to an organisationally given and bureaucratically constituted grasp of the problem. When the latter is seen as a privileged professional sphere that in its essence is maintained nothing but the presence of other emergency services, it effectively enlightens the clay footings of the whole system.

The system of emergency services that is characterised by the clear division of responsibilities between its different parts, is likely to be among the first casualties in novel crises. When it goes down, the remaining members need tools to reinvent themselves, their responsibilities in the light of an overwhelming purpose. They should learn to make the most of the resources at hand from the point of view of the purpose. What they have learnt from 'standard' exercises is likely to paralyse them rather than trigger them into identifying what is actually at hand, in figuring out the overwhelming concern, and inventing the best ways to organise them in a way that matches up to the situation. In the new situation, perhaps they should see themselves, in the first instance, not as police officers, firefighters or medical experts, but incumbents and public authorities. This would imply a step backwards on a personal level in order to find an opening, a way of getting forward in a situation that puts stress on innovativeness rather than the ability to follow that standard procedure.

The question is about the metacognitive skills and identities that help the members to perceive themselves as agile and adaptive problem solvers, to relate the problems to the available resources, like the tools, the machines, the physical and cognitive powers and the skill sets, and to make the necessary decisions on how to combine and mobilise them in the most potent way. Sorensen et al. (2018) have found that those individuals with the most exercise experience actually feel that they learn the least from the exercises and vice versa. This observation contributes to the notion that judgments on competencies are filled and turned into confidence through exercises.

Exercises that are likely to enhance innovativeness and strategic capacities for handling novel crises on an individual level should intentionally introduce apparently familiar situations as scenarios, where, despite their apparent familiarity, adopting the well-rehearsed practices, following the operational cards and utilising the standard tactics would lead them astray, to where other public services and traditional sidekicks would not be and would be unlikely to arrive, with command structures effectively knocked down, the available information scarce and also potentially flawed. The participants should learn to learn effectively more about the problem situation, to identify the critical resources available in it, to invent best ways to use them in the short and the longer term, and resolve the issues of leadership likely to evolve in them.

Undoubtedly, respective approaches have been adopted in innovativeness education for a long time. Therefore, it is a surprise that when it comes to preparedness exercises, they have played a relative minor role in them. This is, we believe, due to the fact that the lessons taken predominantly reflect the history of such crises, on the one hand, and the strength or rigidity of the organisational framework established for providing the emergency response in society one the other. If the next crisis is one

that is not included in the list of known crises, at the centre of rehearsals should be the ability to disengage with the standard operating procedures, while keeping the core principles and purposes giving them integrity and character intact, and reinventing one's professional self to meet the demands of the situation where the conditions for the standard way have evaporated. While lessons learnt, practices mastered, technologies and tools possessed and professional identities adopted are likely to keep police officers on a well-trodden path even in situations where other ways would be called for, we can create exercises that effectively help them in learning to take the necessary steps backwards in order to see the situation with institutionally younger eyes. However, when it comes to learning at the organisational level, the problem may well turn out to be insurmountable.

On the Organisational Level

The police as an organisation is managed in a very bureaucratic manner. The legislator as the ultimate author of policies, standards and guidelines should be aware of the problems that the police face in their work. Consequently, interventions and capacity-building in the police are based on rules, standards and guidelines. Their main tasks and the appropriate means for tackling them are defined in the legislation. Their legitimacy in the eyes of the public derives from their success in maintaining the rule of law by means that are both lawful and experienced as justified. However, the police are also expected to handle possible contingencies with scarce resources, especially in the initial stages of events (Sommer et al. 2013).

Successful policing requires capabilities for situation-specific decision-making and discretion at the individual level, supported by organisation culture and learning processes (Thompson 2012). As an organisation, the police exist between contradictory demands. Therefore, it oscillates between rule-bound and controloriented bureaucracy and the use of professional discretion in order to manage the tensions between them. In one sense, the police embody an organisation that strongly adheres to the idea of bureaucracy – a particularly challenging platform for innovativeness as such. In another sense, it encourages discretion and professionalism at the grassroots level.

Innovations do not arise by themselves, but are a result of human interactions. In bureaucratic and hierarchical structures, human interactions are not only limited to formal channels, but also happen formally by sending and receiving forms, taking part in meetings in one or another role, commenting on plans, evaluating events and deeds against formally-given categories and criteria, responding to inquiries, complaints, and so on. The bureaucratic environment is relatively antithetical to change, redefinition of problems or bold experiments (Varano & Schafer 2012) as it is not particularly benevolent to failures. While success is usually celebrated, failure is either bypassed or explained away.

When it comes to innovations, the police stand out as a particularly challenging organisation (Virta & Gustafsberg 2018; Berlin & Carlström 2014). As Martin et al. (2017) point out, such an organisation is likely to discourage motivated new graduate officers from utilising their renewal and innovative powers and to encourage them to full-heartedly adopt the more traditional approaches. Hence, the organisational structure and the respective culture may simultaneously favour incremental innovations but hinder radical innovations and situation-specific insights.

However, it would be an exaggeration to say that the police are not innovative at all. The need for innovation in the police stems from similar arguments to those emphasising the continuous pursuit for increases in efficiency and the need to respond to changing requirements.

The operating environment for the police has changed dramatically in recent decades. The police could not have avoided acknowledging the need to respond to it. The latter is an important prerequisite for the diffusion of innovations. Typically, innovations have emerged as externally initiated critiques of standard policing models (Weisburd & Braga 2006).

For instance, the community policing model can be clearly termed as an innovation. It aims at good relationships with the community through strategic partnerships or technological innovations, for instance. It has also challenged the ideals and performance indicators related to the traditional policing model. It has received criticism too. It is all but clear whether the police act as an equal partner in the pursuit of common goals in various communities and share their problems in solving power genuinely with the partners. The police seem to engage in change, but, like the leopard and its spots, appear to be unable to transform or overcome themselves. In other words, it is controversial whether community policing as an innovation or all the innovations together have managed to transform the traditional identity of the police as 'law enforcement' to, say, 'problem-solver' (e.g. Braga & Weisburd 2006).

Perhaps the solution is simply to seek from the wrong direction. Figuring it out calls for hindsight rather than foresight.

Apparently, it is particularly difficult to introduce structural changes to the police. The structures serve as accounting mechanisms, too. The legitimacy of police work is partly tied to the credibility of this mechanism. It offers an account of what the police are for and how the very acts of the police are, in the last instance, judicially controlled, publicly accountable and democratically wanted. Therefore, whenever the legitimacy of the police comes under fire, the solution is to add something to the bureaucratic control structure, a new organ that simply makes the organism even more complicated.

As Varano and Schafer (2012) point out, the organisational culture of the police upholds an image of the need for technical fixes to complex problems. The police could be best grasped as a historical conglomeration of them. While the road to remedy on the individual level may well be, as Weick (1993; 1996) has suggested, learning to drop one's tools, on an organisational level it is most likely to derive from a clear distinction between the institutional core and the organisational means for turning it into systematic operations, services and outcomes in society. However, further theoretical and empirical work is needed in terms of them both. In an increasingly VUCA world, there is hardly any option to it.

We should boldly leave the question posed – being prepared for what? – unanswered. We should see it as the very answer we have been longing for, the missing element in the current scheme for exercises and the source of new inspiration in redesigning them as efficient learning environments that provide the capabilities and capacities that will be put to the true test by future novel crises.

Conclusions

This essay has discussed the operational capacities of the police in unfamiliar, exceptional situations. Our point of reference has been the emergence of novel conditions where the well-established action plans, procedures, division of labour, power relations and so on that have been designed by drawing lessons from the past events and that have also demonstrated their value in resolving the known problems no longer hold. As we suggested, the image of control, expertise and security that is a child of the institutionalised practice in seeing the world as if continuously repeating itself, effectively conceals the important dynamics behind the unfolding of the events. While we are well prepared for known scenarios, we pay too little attention to the genuinely new and unforeseen. Consequently, we are ill-prepared for them and the more we are so, the more the standard view conditions the respective exercises as their hidden presumptions.

Approaching this problem from an innovation perspective avoids the trap of over-optimism, but only when the 'Via Negativa' is followed. In this essay, we put forward outlines for what it would mean in the context of regional exercises that aim at enhanced preparedness in a crisis. The strategic skills appeared to us as an ability to defuse innovations and dig into the past of the organisation while keeping the modern understanding of the purpose and the current ethical standards intact. However, we cannot expect much from organisations. We need to put our trust in their individual members and redesign the exercises so that they possess the strategic capacities that help us all out of the crises that are not included on the list of standard scenarios.

We noted that the system of learning that materialises exercises consists of incompatible parts that tend to undermine their very point. Moreover, what is learnt from them and rehearsed in them is unlikely to help much in situations that drastically deviate from a normal day at work. On the contrary, the lessons learnt are likely to work against the very learning that is necessary in them. They are more likely to paralyse rather than spur into situation-relevant action.

The essay gives some guidelines for avoiding a fall into the innovation trap. We should learn to pay more attention to the fact that learning, training and development have their own conditions of truth too. They have their limits, presumptions and flipsides. A more sceptical stance – alongside constructive optimism – should be adopted in the exercises that are designed to enhance the capacities of the police to meet forthcoming crises. That is, there is a need to re-enact Hansel and Gretel in the police.

Acknowledgements

This work was supported by the Academy of Finland [decision no. 315074].

References

Aradau, C. & van Munster, R. (2011). Politics of Catastrophe: Genealogies of the Unknown. Abingdon, Oxon: Routledge.

- Argyris, C. & Schön, D.A. (1978). Organizational Learning: A Theory of Action Perspective. Reading, MA: Addison-Wesley.
- Bakacsi, G. (2009). Managing Crisis: Single-Loop or Double-Loop Learning? Strategic Management 15 (3), pp. 3-9.
- Berlin, J.M. & Carlström, E.D. (2008). The 90-second collaboration: A critical study of collaboration exercises at extensive accident sites. Journal of Contingencies and Crisis Management 16 (4), pp. 173-181.
- Berlin, J.M. & Carlström, E.D. (2014). Collaboration exercises the lack of collaborative benefits. International Journal of Disaster Risk Science 5 (3), pp. 192-215.
- Borell, J. & Eriksson, K. (2013). Learning effectiveness of discussion-based crisis management exercises. International Journal of Disaster Risk Reduction 5, pp. 28-37.
- Braga, A. & Weisburd, D. (2006). Conclusion: police innovation and the future of policing. In D. Weisburd, A. Braga (Eds.) Police Innovation: Contrasting Perspectives. Cambridge: Cambridge University Press, pp. 339-352.
- Deverell, E. (2009). Crises as learning triggers: exploring a conceptual framework of crisis-induced learning. Journal of Contingencies and Crisis Management 17 (3), pp. 179-188.
- Donahue, A.K. & Tuohy, R.V. (2006). Lessons we don't learn: a study of the lessons of disasters, why we repeat them, and how we can learn them. Homeland Security Affairs 2 (2), pp. 1-28.
- Farazmand, A. (2009). Hurricane Katrina, the crisis of leadership, and chaos management: time for trying the "surprise management theory in action". Public Organization Review: A Global Journal 9 (4), pp. 399-412.
- Farazmand, A. (2014). Learning from the Katarina Crisis. a global and international perspective with implications for future crisis management. In A. Farazmand (Ed.) Crisis and Emergency Management. Theory and Practice. 2nd Ed. Boca Raton: CRC Press, pp. 461-476.
- Grunnan, T. & Fridheim, H. (2017). Planning and conducting crisis management exercises for decision-making: the do's and don'ts. EURO Journal on Decision Processes, 5(1–a4), pp. 79–95.
- Kachali, H., Storsjö, I., Haavisto, I. & Kovács, G. (2018). Inter-sectoral preparedness and mitigation for networked risks and cascading effects. International Journal of Disaster Risk Reduction, 30, pp. 281-291.
- Klein, G. (2017). Seeing What Others Don't. The Remarkable Ways We Gain Insights. London: Nicholas Brealey Publishing.
- Lagadec, P. (2007). Crisis management in the twenty-first century: "unthinkable" events in "inconceivable" contexts. In H. Rodríguez, L. Quarantelli & R. Dynes (Eds.) Handbook of Disaster Research. New York: Springer, pp. 489-507.

- Lakoff, A. (2007). Preparing for the next emergency. Public Culture 19 (2), pp. 247-271.
- Martin, H.C., Rogers, C., Samuel, A.J. & Rowling, M. (2017). Serving from the top: police leadership for the twenty-first century. International Journal of Emergency Services 6 (3), pp. 209-219.
- McConnell, A. & Drennan, L. (2006). Mission impossible? Planning and preparing for crisis. Journal of Contingencies and Crisis Management 14 (2), pp. 59-69.
- Ohlsson, S. (2011). Deep Learning: How the Mind Overrides Experience. Cambridge: Cambridge University Press.
- Punch, M., Markham, G. (2000). Policing disasters: The British experience. International Journal of Police Science & Management 3 (1), pp. 40–54.
- Rosenthal, U., Boin, R.A. & Comfort, L. (2001). Managing Crises: Threats, Dilemmas, Opportunities. Springfield, IL: Charles C. Thomas.
- Smith, D. & Elliott, D. (2007). Exploring the barriers to learning from crisis: organizational learning and crisis. Management Learning 38 (5), pp. 519-538.
- Sommer, M. Braut, G.S. & Njå, O. (2013). A model for learning in emergency response work. International Journal of Emergency Management 9 (2), pp. 151-169.
- Sorensen, J.L., Carlström, E.D., Magnussen, L.I., Kim, T., Christiansen, A.M. & Torgersen, G-E. (2018). Old dogs, new tricks? A Norwegian study on whether previous collaboration exercise experience impacted participant's perceived exercise effect. International Journal of Emergency Services 8 (2), pp. 122-133.
- Staupe-Delgado, R. & Kruke, B.I. (2017). Preparedness: unpacking and clarifying the concept. Journal of Contingencies and Crisis Management 26 (4), pp. 212-224.
- Taleb, N.N. (2007). The Black Swan: The Impact of the Highly Improbable. New York: Random House.
- Taleb, N.N. (2012). Antifragile: Things That Gain from Disorder. New York: Random House.
- Thompson, D.D.P. (2012). Leveraging learning to improve disaster management outcomes. International Journal of Disaster Risk Science 3 (4), pp. 195-206.
- Varano, S.P. & Schafer, J.A. (2012). Policing disasters: the role of police in the pre-disaster planning and post-disaster responses. In M. Deflem (Ed.) Disasters, Hazards and Law (Sociology of Crime, Law and Deviance, Vol 17). Bingley: Emerald Group Publishing Limited, pp. 83-112.
- Weick, K.E. (1993). The collapse of sensemaking: the Mann Gulch disaster. Administrative Science Quarterly 38 (4), pp. 628-652.

- Weick, K.E. (1996). Drop your tools: an allegory for organizational studies. Administrative Science Quarterly, 41 (2), pp. 301-314.
- Weick, K.E. (2001). Tool retention and fatalities in wildland fire settings: conceptualizing the naturalistic. In G. Klein & E. Salas (Eds.) Naturalistic Decision Making. Hillsdale, NJ: Erlbaum, pp. 323-338.
- Virta, S. & Gustafsberg, H. (2018). Innovation management in police organisation. European Law Enforcement Research Bulletin, (4 SCE), pp. 189-195. Retrieved from http://91.82.159.234/index.php/bulletin/article/view/351
- Weisburd, D. & Braga, A. (2006). Introduction: understanding police innovation. In D. Weisburd & A. Braga (Eds.) Police Innovation: Contrasting Perspectives. Cambridge: Cambridge University Press, pp. 1-23.
- Zebrowski, C. (2019). Emergent emergency response: speed, event suppression and the chronopolitics of resilience. Security Dialogue 50 (2), pp. 148-164.

IMPEDIMENTS TO INNOVATIVENESS IN THE POLICE: SUGGESTION FOR A RESEARCH STRATEGY

Vesa Huotari

Introduction

'Innovation, and how it is managed, is a key strategic issue' (Baregheh, Rowley & Sambrook 2009; p. 1334).

All humans, I believe, are innovative. In a continuously changing world, the necessities, the mother of invention, tend to evolve too. In a changing world even remaining the same, gaining a foothold or a stance requires recurrent innovations. Our daily survival depends on being continuously creative in our communications and interactions with others as well as on our ability to recognise innovativeness in others (e.g. Peters 2014, p. 143). Without them, our capability to adapt to changing situations, our sense of humour, ability to play with words, gestures and symbols, to engage creatively in processes initiated by our fellow innovators and carry them forward reciprocally would not exist. Without our innate capacity for innovations, we would simply be very different beings.

While innovativeness on a small scale is a general human feature, it is unevenly distributed among us (e.g. Phillips 2015). Furthermore, it is neither a constant capacity nor equally appreciated across places, times and collectives. In fact, there are structures, like customs, habits, practices, conventions and standardised solutions that not only constrain human innovativeness but that are purported to do so in social settings. Innovativeness as an inherent human capacity has been regulated or socially constrained in history and it still is. For good reason, some such limits will prevail in the future too.

The structures or practices that constrain our innovativeness are first external, like social expectations, norms, control mechanisms, monitoring or policing systems, roles, design of material spaces, and, later, internal too, like self-efficacy, identity, skill structure, adopted habits, aspirations and motives. Historically, innovativeness and innovations have been seen as an unwelcome source of instability, uncertainty and unpredictability from the point of view of power hierarchies as a. In Silicon Valley, innovators have been renamed disruptors (Martinez-Vergara & Valls-Pasola 2020). For an innovator, life is more challenging.

^{&#}x27;Substantial evidence shows that some agents innovate more than others, some regions innovate more than others, some industries are more innovative than others: innovations cluster in time and space' (Antonelli 2017, p. 692).

^{&#}x27;Several interviewees mentioned that there has been a kind of reversal in learning in the sense that the primacy of street knowledge, acquired by elder police officers after long years on the job, is being undermined by the need for the technological skills that the younger generation seems to understand spontaneously. Not only has technology thus destabilized the authority of elder officers...' (Tanner & Meyer 2015, p. 391.)

'Agents are reluctant to make all the efforts that are necessary to innovate for two basic reasons: (i) the innovation process is characterized by radical uncertainty. Its outcome and timing cannot be predicted, (ii) because of limited appropriability and tradability, the economic exploitation of innovations is itself characterized by radical uncertainty.' (Antonelli 2017, p. 692.)

While police organisations adopt new technology as a response to a variety of needs and challenges and often within both historical (path-dependency, e.g. Tzeng 2009) and budgetary constraints, they often leave it to the user of the new gadgets to develop the best ways in putting them to good use in policing. While adopting new technology is, thus, one thing, innovativeness required in using them effectively is another. Sometimes such uses go beyond the imagination of the developers.

'In their opinion, the adoption of new technology devices is first and foremost a way to better respond to its mandate. Police officers preserve a space for "discretionary use" of new technology devices, though in a "new governmentality" customized horizon. This practical reinterpretation is a way for street police officers to adapt such devices to how they perceive and do police work.' (Tanner & Meyer 2015, p. 398.)

Innovativeness appears as a source that is inherent to humans and thus impossible to exclude or contain fully, and that is likely to lead to surprises and what Schumpeter calls creative destruction. Thus, innovativeness comes with an aura of danger. Historically, human curiosity, a companion to innovativeness, possesses a controversial reputation.

This essay scrutinises conditions for innovativeness in the police. Its starting point is the presumption that innovativeness is an inherent human capacity that tends to become supressed socially and organisationally. The essay focuses on dynamics and mechanisms that are likely to suppress innovativeness in the police. Identifying them is the first step in overcoming them and paving the way for the enhancement of innovativeness in the police. It represents a theoretically oriented response to a call by Easton (2014) for increased research in order to better understand the management of innovations in public policing.

Curiosity – Conversion from a Sin to a Virtue

'Though curiosity is generally regarded as a virtue today, during the Middle Ages, *curiosity*, or as it was known then – curiositas – was universally considered a vice. (...) the vice was present when the speculative part of the intellect was unregulated, that is, when a subject pursued illicit objects of knowledge (anything from the trivial or useless to the secret and demonic) or pursued licit objects but did so for illicit ends, for instance, for the sake of self-aggrandizement.' (Smilie 2015, p. 4.)

Before the Enlightenment, all pursuit of knowledge beyond the Holy Book was to lead to the sin of pride. Pride was the root cause for all the other sins. Curiosity, that

got the cat killed, was to lead to the sin of pride. This view emerged in monastic life. The sin of curiosity was first in minding the character, deeds and sins of other monks rather than one's own character and conduct, but it also included pursuing knowledge of hidden or forbidden things, i.e. things not exposed or informed by the Bible. In the twelfth century, Bernard of Clairvaux raised the sin of pride to its previously unforeseen level. Curiosity caused the Fall of Man, led to paradise lost and comprised a constant threat to the well-being of one's soul. In time when the salvation of the latter was the main purpose in life, losing one's soul and salvation as well as eternal life in Heaven was not a matter to be taken lightly (Bruce 2019).

The *curiosi* taking pride in their knowledge, their invention, perhaps even in revealing something God had hidden from us, were deemed to pave their road to hell rather than to salvation. This was mainly because the seeker of such knowledge could not keep it at bay, but had to share the discoveries with others and, thereby, become known by them as the knower of the very things or issues (Griffiths 2006, pp. 53-54). As a remedy, the monasteries kept the monks busy. Studiousness prevented curiousness. Inventors were to keep their gaze on practical matters, like tools and machines. The latter were not seen then as technologies materialising growth of knowledge or resulting from it.

Today the tables have turned (e.g. Phillips 2015). What appeared earlier as following the path and example of Lucifer is today the royal road to well-being and wealth, both private and public. By the eighteenth century, most European thinkers saw *curiositas* virtuous. The curiosi were endlessly interested in gazing things unknown, to be the first to witness novel events and discover unforeseen things. (Griffiths 2006, pp. 48-52.) The tone for the Enlightenment was set by sapere aude, the courage to think autonomously. Küpers (2020, p. 222) argues that sapere is not just mental process (thinking), but closer to bodily sensing (becoming wise). It means having an embodied sense of what is to be done and how to make it happen.

Today we are expected to be innovative in inventing better ways for doing things, meeting our objectives and replacing the latter with better ones. Dare to be innovative! However, sapere aude also implies the courage to oppose such demands.

The reason celebrated by the Enlightenment was epitomised in scientific research and scientists. It is worth remarking, the modern sciences started as a popular movement open to all. Everyone was able to make systematic observations and thus contribute the growth of knowledge empirically. This populist understanding of science was later displaced by a view that emphasised theories and theoretical work as the very essence of science. From then on, true scientists stood out as another breed to the data-collecting amateurs. The role of the public was thus transformed from a co-worker or collaborator in a joint endeavour to that of an eye-witnesses of or audiences to scientific experiments testifying to the theories of the most brilliant, but rare, minds among humans. Although their theories, like thermodynamics, owed more to the steam engine than the other way round, such technologies were displayed increasingly as materialised results, practical applications, or spin-offs from such theoretical work.

In France, the patent law of 1791 actually ruled out any prior examination of the utility and novelty of inventions. It was built upon the premise that the purchasing public and the markets were to decide upon the usefulness, worth and value of all inventions, while the patent was to protect the material rights of the inventor to their inventions. The Ministry of the Interior, among its other duties, was responsible, for

an informal and unofficial examination of patent requests- Although it was to play an unofficial and consultative role, it did not refrain from commenting on the utility or the novelty of the respective inventions. Moreover, it regulated the language, the specificity and the way inventors described their inventions. The policing of patents in France was accomplished by experts with a scientific outlook and an academic worldview. The inventors were compelled to surrender their custom and sometimes inaccurate lexicon in favour of the 'universal' language of science.' The officials, the savants, were quick to distinguish themselves and their own activity from that of the inventors, patentees and manufacturers. For them, the patentable inventions belonged to the sphere of property rights and stood out as industrial applications. They refused to grant patents to ideas, concepts, abstract principles and scientific theories, only to their useful applications. This affirmed the distinction between science and industry and established a hegemony where the pre-eminence belonged to science and industry simply manifested and applied the ideas, principles and theories originating from the sphere of science and belonged to it too. (Baudry 2019.)

A conceptual rupture was thus introduced by a regulatory practice that, eventually, set the makers and manufactures apart from their very arts and products, as their very work and skill became an application of principles foreign to them, but not to the sciences and scientists. From then on, the latter was the pathway for their further development and the true source of innovations.³ The later proliferation of domains for scientific expertise turns everyone to users or customers to research-based technologies. Paradoxically, the very movement that was to liberate us from the straightjacket of religious systems of thought appears to constrain us today - dare not to step beyond your own field of expertise.

'In universities, including some that explicitly present themselves as champions of curiosity, it is said that curious people find themselves against the grain of output-driven research management and professionalized, specialized disciplinary structures. In business, too, curious people are not always welcomed as the innovators and creative problem-solvers they often are, and tend to be regarded as upstarts, and kept out or kept down.' (Phillips 2015, p, 150.)

Any attempt to enhance innovativeness within the police needs to start from mechanisms that constrain or inhibit it. Individuals are the sole source of innovations, the only true innovators. Their innovativeness can be provided for, supported and enhanced, but also constrained and suppressed. The larger environments that materialise as layered structures consisting of various levels, like groups, organisations, regions, national and transnational contexts, consist in innovation systems. However, their impact and effectiveness in originating innovativeness is mediated by the individual capacity for innovations.

^{3 &#}x27;The stages of innovation are especially pronounced in industries where research scientists spend innumerable weeks, months, or even years brainstorming, inventing, and then developing a product in research and development labs. In the biotechnology industry invention begins with scientists exam examining thousands of chemical compounds in search of one viable drug candidate.' (Dahlin 2011, p. 23.)

The Police and Innovations

'Similarly, some police leaders, scholars, and reformers may see technology as a means to facilitate innovations (e.g., problem/community-oriented policing; hot spots policing, and third-party policing) that can reduce crime or improve citizen trust, rather than just as a means to react to crime or increase arrests and detections. However, these expectations might be overly optimistic if these innovations are not part of daily police work or are inconsistent with the technological frames of officers, detectives, or supervisors. Hence, the potential benefits of technological innovations may not be realized if, due to organizational and technological frames, officers throughout the organization — including line-level personnel — do not fully capitalize on the aspects of technology that enable them to do things that could make them more effective (i.e., proactive, preventive, targeted, or problem-oriented policing).' (Lum, Koper & Willis 2017, p. 139.)

A general view is that the police and policing have remained essentially the same while society has changed (e.g. Worden & McLean 2017, p. 22). It is difficult, Easton (2014) remarks, to generate changes to established cultures and practices in the police. She claims that this is related to the nature of public police work and the emergence of respective structures and cultures (Ibid.). The factors that insulate police departments from their institutional environments are, according to Worden and McLean (2017, p. 18), the vagueness, ambiguity and often conflicting nature of their goals, the uncertainty of their technology, and the difficulties in measuring the effectiveness of their work.

However, in the current world staying put increasingly requires moving fast and innovating continuously. Naturally, this does not mean adopting innovations, but rather effectively co-opting them, say, by making terminological renovations, like redressing traditional practices by attaching new labels to them that appear up to date and learning to speak of them by using new vocabularies reflecting new philosophies and fresh ways of thinking (see Roth 2000, p. 237). Another way to cope with external pressures is by double standards communication, i.e. including two contradictory messages into one sentence.

'Often, the "technical core"... is buffered from structures with which the work is not compatible. (...) Structural forces are more powerful than the wills and good intentions of police executives... (...) Efforts to change such organizations require winning the "hearts and minds" of operators. (...) The adoption of structures that are incompatible with work requirements may breed cynicism toward managers who are seen to engage in political posturing' (Worden & McLean 2017, pp. 20-21.)

The police, due to their role, have become a synonym for conventionalism, conformism, formalism, conservatism and lack of change. While it is possible to reorganise the bureaucratic boxes and draw their organisational charts anew, to reorganise old responsibilities and to introduce new ones, it is much harder to make fundamental changes to the traditional way of policing and to its purpose. The public police, Easton (2014) argues, seems to prefer traditional practices to more innovative

approaches. It is not just the police; the public has also become accustomed to being policed along conventional lines. They are not necessarily prepared to change their traditional expectations either.

At the bottom of the rank order in the police, innovative models and approaches are often deeply despised, while they are, apparently, enthusiastically welcomed, celebrated and even promoted at the top of it (see also James 2014). Deep internal divides, like between different ranks, uniformed and non-uniformed services, civilians and sworn officers, provide effective means for buffering the police from external pressures for change. It is likely to slow down innovations and to make it necessary to introduce more than one interpretation of an innovation to make it compatible with the expectations of each internal stakeholder. All it takes for an innovation to evaporate into thin air is to slow it down, increase the complexity in adopting it and win time until something else pops up and captures the minds of reformers both within and outside the police. When it comes to a waiting game, time, it seems, is on the side of prevailing structures and arrangements.

Police managers, due to their position, need to respond to priorities and political pressures stemming from the environment, display concern for their public responsibilities in terms of communities, and engage in dialogue with the public in order to enhance the legitimacy of the police and public support for them (Easton 2014). However, they face expectations and challenges deriving from within the police as well. Being subject to contradictory expectations (e.g. Sheptycki 2019, p. 135), police managers often find themselves situated between a rock and a hard place.

'To maximize benefits of technology application, police leaders must be proactive in addressing managerial issues inside and outside the police organizations. For internal issues, police leaders need to seek financial resources to provide resources for the purchase of required technologies and the support of related trainings and education. They also need to develop new policies, procedures and guidelines to change officers' attitude and the agency's culture to embrace technology application and reduce potential negative risks and consequences. For external issues, police leaders must pay attention to the tension of police–community relations and the influence of technologies used by the citizen. Again, they must change their management practices to integrate technology's application with community policing concepts and strategies to improve the community relation and develop public trust.' (Liou 2019, pp. 204-205.)

Particular organisational structures reflect the public demands for accountability, but have little or no demonstrated efficacy in regulating officers' behaviour (Worden & McLean 2017, p. 29.) The police are characterised by a clear bureaucratic control structure and chains of responsibility that are only loosely coupled with actual policing practice that on the street level builds upon professional discretion and autonomy. The police are thus built upon two incompatible principles. By making (seemingly) small innovations recurrently, especially adopting the latest technology, the police avoid claims of being backward, outdated, dysfunctional and needing reform by external interference (e.g. Lum et al. 2019), but, simultaneously, by promoting professionalism at the street level, they protect and keep intact their mode of operation.

No wonder then, that, as Okabe (2014) describes, the process of police innovation or the police innovation paradigm has three key components: the generation of ideas, the promotion of ideas, and the factors that obstruct the process. When it comes to innovations, as Woolgar (1998, p. 442) remarks, they are conditioned by factors that emerge in individual, social, organisational and management dimensions.

Garcia-Buades et al. (2015) found out that the innovative climate was the main predictor of officers' job satisfaction. Officers who feel they can contribute with suggestions and ideas to how to improve their work and work methods also score higher in terms of job satisfaction. In the absence of such a climate, job satisfaction benefited most from support among colleagues. The priority, they argue, should be on developing a favourable climate for innovation. Although the police have been versatile in adopting new technological innovations and new devices are usually welcomed by officers, a climate for innovation needs to be created in order to involve the grassroots contribution in how to adopt new technology, information or work processes and use them to improve the performance and quality of policing (Garcia-Buades et al. 2015, pp. 732-733).

Typical research on innovations in the police rests on empiricist methodology. The aim is to enlighten relations between the measured variables, split into dependent and independent ones. The aim is to capture as much as possible of the variance in, say, the personal innovativeness of a police officer, innovative climate, number of innovations, attitude to them, or success in adopting them as the dependent variables by introducing a single independent variable or a combination of them as their *explanans*.

At best, this research strategy leads to an understanding that is conditioned both by the *Ceteris Paribus* clause and the first principles of the discipline behind the approach. While it is possible to use such an understanding in formulating an internally coherent model and apply it for creating policies or designing practices to enhance innovativeness in the police, they are likely to lead to disappointments in practice. The conditions that are presumed to prevail in a research model almost never do in real situations. As a rule, there are interfering factors that the statistical model, as a practical necessity, bypasses or ignores, not to mention the disciplinary matrix, but that in real life interfere and prevent the materialisation of the expected result or significantly transform it. As an antidote to this empiricist, theoretically narrow, perhaps even naïve, strategy, another approach is needed to replace it or supplement it.

Human dispositions, I believe, exist as a layered structure. Their facticity is a result of an emergence of historical amalgamation of biological, psychological, sociological and other processes that meet in an individual way in each person and give them character, define their inclinations, preferences, motives, the way they interpret the world and reason for it. We need theory construction to identify the respective layers categorically and empirical research to characterise them substantially. Theoretical ideas are needed to figure them out and to address their mutual relationships in a particular context, to draw the picture we are interested in from its context, and to discern the entities inhabiting the world by their form. Empirical research is then needed to specify them, add details and nuances to them that link them to particular places and historical times, i.e. to substantiate the aforementioned forms. However, it is necessary first to discuss in a more detailed way this strongly theoretically anchored approach that underpins the latter strategy in research on innovations and innovativeness in the police.

A Short Methodological Excursion

Towards Explanatory Understanding

Social researchers have become increasingly interested in explanation and the best ways to proceed with it (see e.g. Daigneault & Béland 2015; Roth 2017). However, there is no universally agreed view of what is an explanation (Jones 2008, p. 624). While, as Léon-Medina (2017, 503) argues, it may well be a trivial truth that a variety of optional syntaxes exists for explanation in social sciences (e.g. Henderson 2010; Kincaid 2004), grasping and applying any one of them systematically, not to mention agreeing on the status of the very idea of explaining, is left wanting in one way or another. If understanding is an epistemic goal of science, then explaining a phenomenon is simply a way to it (Verreault-Julien 2018, p. 10).

Scholars, Daigneault and Béland (2015, p. 391) urge, should pay more attention to the structure of their explanatory claims. Explanation is sensitive to how events or objects are characterised (Henderson 2010, p. 32). In the case of explanatory understanding, the characterisation should explicate their generation (Marchionni & Ylikoski 2013, p. 330).

"...for the explanation of social phenomena, it is not sufficient to identify the macro-level changes that produce them. It is crucial to show how macrostates affect individuals at certain point of time and how the actions of those individuals produce new macrostates at a later time' (Hedström & Ylikoski 2010, cf. Marchionni & Ylikoski 2013, p. 330.)

To theoretically grasp a system-level phenomenon, like the proclaimed, but possibly false, abhorrence of innovations in the police, by explicating how it travels across levels to its only true anchoring point at the individual level, calls for the construction of conceptually adequate, situationally relevant and contextually sensitive models. The latter should provide a more profound understanding of how to transform this claimed-to-be-barren ground into a more fertile one for innovativeness and the coming of innovations. A well-grounded explanatory understanding of the generative mechanisms behind its barrenness offers the most promising starting point.

Talking of mechanisms sets us apart from the syntaxes for explanation that reflect the covering-law model. In that model, explanation starts with an observed phenomenon (*explanandum*), like the stubbornness of the police, and proceeds from there by figuring out the necessary law or set of laws (*explanans*) that, given a certain set of circumstances (conditions), result in the very event or phenomenon. The syntax for explanation is borrowed from deductive argument ('why-necessarily', see Verreault-Julien 2018, 2).⁴

However, there is an alternative way to use this syntax. Social scientists, Karl Popper suggested, should not aim at identifying the laws, but start with the assumption that the law is already known, i.e. the rationality principle. The main thrust in explaining would then be in constructing adequate models of the situation.

^{4 &#}x27;The main information it provides is one of logical explanatory entailment. This information, albeit necessary and valuable, is limited.' (Verreault-Julien 2018, p. 6.) 'Formal and semantic considerations – validity and soundness – suffice on this model for purposes of evaluating the move from explanans to explanandum' (Roth 2017, p. 42).

The latter would then be animated by the rationality principle and used to explain the observed phenomenon ('why-possibly').⁵

I fully agree with Popper that the focus in theoretical work should be on providing better general models of the conditions for a multiple human endeavours, the Weberian ideal types, instead of trying to figure out the laws to explain the observed regularities. However, as a syntax for explanation, the Popperian explanatory framework is insufficient. It says very little about the very means, i.e. the model. To overcome this shortcoming, a more adequate social ontology, i.e. a philosophical description that gives a categorical explication or an analytical account of the very constituents of the social world and their mutual relations, is called for.

Like the rationality principle, all social phenomena exists as dependent upon human activities including, among others, their desires, thoughts and deeds. As Léon-Medina (2017, p. 507) argues, only human activity has causal powers in the social realm.

However, the very use of those powers, their formation and results, are contextually conditioned. This means that those deeds and thoughts are both individually and socially constrained, restricted, controlled, channelled, enabled, encouraged or facilitated. This conditioning in itself is mediated by a multiple structures inhabiting different mechanisms laterally and providing for the emergence and prevalence of multiple dynamics across them.⁶

The conditions influence our acts, deeds and doings by becoming internalised as customs, habits, rules of conduct, incentive structures, paths in life and possible life courses, fates, things to avoid and things to desire, etc. While the conditions leave room for individual choices and thus for voluntary action, different choices are attached to different consequences. All meaningful acts and deeds are socially predefined, while meaningless acts consist in a category of their own. Their meaning is often institutionally bound to roles, practices, routines, and responsibilities tied to specific circumstances called work, jobs, tasks, positions. In an organised society, opportunities for action are not equally distributed, but hierarchically organised and socially controlled too. On the individual level, the social realm is as if wired to reproduce itself rather than change radically. When explaining social events, structures are important, time counts and history matters.

Popper argued that his rationality principle is but a good approximation of the true law and thus false. However, by acknowledging the falsity of this premise, we should focus on comparing the adequacy of alternative models of the conditions suggested by researchers and not put our efforts into trying to figure out better law statements. This, effectively, turn a law statement into a statement of a general disposition. 'To say that laws describe how physical systems would behave in specified situations is to say that laws ascribe dispositions to physical systems' (Hüttemann 1997, p. 130). 'When an explanation refers to a disposition, this explanation no longer requires a law-statement' (Vanderbrooke & Weber 2002, p. 48). Thus, the model as such carries the explanatory burden and the rationality principle is just to remind us of the fact that nothing happens unless real people take something on board and carry it out.

A persons needs to be alive in order to be able to act in the first place. Being alive, arguably, depends on the functioning of the complex structure called the body. The mechanisms essential for existing and staying alive are not only physical, chemical and biological, but also psychological, sociological, economical, pedagogical, etc. It is the task of the respective disciplines to figure out the fundamental mechanisms characterising their respective realms, i.e. the physical, chemical, biological, etc. In explaining any empirical phenomenon, a true explanation should pay attention to them all. However, the quest for such explanations will need to come to terms with established boundaries between disciplines turned into claims for incompatible presumptions, methodological divides, and proclaimed explanatory self-sufficiency. While such a monopolist claim may help to ease individual fears of obsolescence, it undermines all efforts to explain the real events and phenomena in their complexity and to truly understand them too.

Ideally, we should first give a categorical description of the relevant structures, explicate the way they interact and jointly form a new mechanism, the triggering of which is capable of producing the phenomenon or set into action the social dynamics behind the phenomenon we want to understand. Secondly, we should descent from this theoretical sphere as an abstract highland to the material world of daily pursuits, and address the latter using the categories contained in our theoretical model of it. It would give us a theoretically coherent account of the phenomenon, but tied to a specific historical place and time. The first task is thus to find the very concepts that are constitutive of the theoretical model. The second is to come to terms empirically with it, to define a slice of empirical reality by the terms of the model, to give historical content to its concepts and to put forward a coherent explanation of what is really going on there and then.

Obviously, there are numerous such theoretically adequate and logically compatible accounts that are meaningful and seem to lead to understanding that make sense. Thus, meaningfulness is not enough to validate the theoretical model or to reveal its worth. A thorough empirical scrutiny is required too (also Léon-Medina 2017, p. 519).

'...mechanisms... a micro-detailed social configuration capable of triggering a dynamic that leads to the generation of the explanandum; a dynamic that is initially unknown in its characteristics. (...) Mechanisms are no longer conceived as causal chain of events, but as micro-detailed descriptions of a theoretical initial state of a system whose generative power of the explanandum must be demonstrated.' (Léon-Medina 2017, p. 512.)

While we could succeed in demonstrating the generative power of the model, it does not exclude other possible generative mechanisms producing the very same effect (e.g. Marchionni & Ylikoski 2013, p. 327), and, in any empirical case, being partly or fully responsible for it. Nevertheless, the model can be used to screen out the more credible lines of action or strategies.

In a complex world where other things are often unlikely to be equal (*ceteris paribus*, e.g. Drewery 2001), a mechanism set into action by some triggering events may fail to materialise the expected dynamic or the outcome because another mechanism intervenes or interferes it otherwise. In an open world the scope and degree of human control remains limited. A child may intervene and the expected result fails to reproduce itself in a laboratory experiment that was particularly designed to exclude all potential sources of causal influence that could interfere with the dynamics at the focus in the latter.⁷

We can thus separate one form and three levels in explaining. On the first level, explanatory understanding refers to an account of universally valid mechanisms (basic constituents and the way they work). On the second level, explanatory understanding implies the use of the former or a number of them in giving a possible account of some class of empirical phenomena by using terms that refer to real historical conditions.

⁷ 'So the method of abstraction as it is used in physics can be characterised as follows: In a first step, the complex physical system is split up conceptually into subsystems. In a second step, these subsystems are treated as if they were isolated; their behaviour in isolation is determined. Finally, the contributions of the subsystems are added up so as to determine the behaviour of the complex system. The method of abstraction... works if no interaction between the subsystems occurs.' (Hüttemann 1997, pp. 125-126.)

On the third level, explanatory understanding stands for figuring out mechanisms responsible for the emergence of some local phenomenon (cf. Verreault-Julien 2018). The three levels reflect practical contingencies, i.e. the degree of openness of the context as the possibility to control all possible mechanisms and their influence in it⁸ The essay is about explanatory understanding in the second sense.

Explanatory understanding in this case resembles a narrative form, like in explanatory accounts of historical events (e.g. Roth 2017). Instead of explicating the unfolding of events, it purports to explanatory understanding of the presumed effect, i.e. the lack of innovativeness in the police, by seeing it as a combined effect from a number of mechanisms that materialise at different levels. Furthermore, the more one descends from the closed sphere of ideas that discuss the dynamics of abstract entities to the open world of actual human experiences, the more one needs to turn to the narrative mode of explanation for acquiring explanatory understanding. The more narrative an explanatory understanding, the more clearly and openly it should pronounce its theoretical underpinnings and the perspective adopted in it.

Explanation, as Kincaid (2004) argues, requires contextualisation. While an explanatorily adequate contextualisation portrays the very object of interest as result of a web of mechanisms, it should also reflectively valorise this very pursuit for explanation in itself, as Pierre Bourdieu reminds us. Furthermore, whether we take something as a context for something or a being within a context depends on the chosen perspective. Ontologically, there are only contexts within contexts.

'The overcoming of the subjectivism/objectivism divide refers, in Bourdieu's thinking, to the irrevocable necessity of constructing explanatory models of the historical course of social processes that make reference to the specific causal contributions of: (1) structured environments in which agents intervene; (2) the subjective interests and resources that actors mobilize to produce their actions; (3) the dynamic effects provoked by the interaction between the aforementioned factors.' (Peters 2014, p. 134.)

Popper argued that his rationality principle is only a good approximation of the true law and thus false. However, by acknowledging this, we should focus on comparing the adequacy of alternative models of the conditions suggested by researchers instead of trying to figure out better law statements. This, effectively, turns a law statement into a statement of a general disposition.

'To say that laws describe how physical systems would behave in specified situations is to say that laws ascribe dispositions to physical systems' (Hüttemann 1997, p. 130).

⁸ 'It is a necessary condition for the application of laws that the relevant behaviour is realised. Since disturbing factors would prohibit this realisation, laws can only be applied to isolated systems. (...) If there are such factors, the law cannot be applied.' (Hüttemann 1997, pp. 124-125.) 'Laws describe the behaviour of physical systems under very special conditions that are hardly ever realised, namely, in isolation. But they can be applied to non-isolated systems as well.' (Hüttemann 1997, p. 129.)

Kincaid (2004, p. 204) claims, that '... causes can be picked out by more than one description' and 'causes can be thus picked out at different levels of abstraction'. However, once the context is changed from the world of research characterised by division of epistemic work to the world where results of that work are to be applied in an open environment, It is not an epistemic question of the respective levels of abstraction or systems of description but a real question of generative mechanisms at work in the specific situation.

[&]quot;...standards for good explanation will rest on contingent, empirical assertions about the world. They are likewise likely to be relatively local and domain specific, at least when they have any bite. Arguments over empirical adequacy are empirical issues that cannot be decided by philosophical argument all on its own." (Kincaid 2004, p. 203.)

'When an explanation refers to a disposition, this explanation no longer requires a law-statement' (Vanderbrooke & Weber 2002, p. 48).

Thus, the model as such carries the explanatory burden. The rationality principle just reminds us of the fact that nothing happens unless taken on board by real people.

Emergence of Typical Dispositions to Innovativeness in the Police

When viewed from the point of explanatory understanding, a law, or an empirical regularity as its materialisation, that is claimed to hold once the other things are equal (ceteris paribus), seems to undermine its very status as a law that is, presumably, universal, efficacious and binding too. One would suppose that the condition 'other things being equal' refers to other efficacious, possibly interfering, laws being either successfully excluded or controlled or happen to be so by a chance or a lucky coincidence.

'... recently an alternative view about the nature of laws has appeared which offers a different kind of answer. On this view, while there may be regularities strict or only holding cp [ceteris paribus], these are not the fundamental principles of explanation and prediction as has been suggested previously. Instead, it is dispositions, or capacities of things, which are more basic and to which we do or should refer in explaining and predicting. Dispositions, it is claimed, are the real objects of scientific study; laws are about dispositions. On this view, there is no difference between cp-laws and traditional laws; both describe dispositions of systems or kinds of things.' (Drewery 2001, p. 724.)

Instead of asking about the laws behind the unfolding of empirical events, we should aim at identifying capacities making them possible and materialising in them. Capacities are displays of power mediated by mechanisms, embodied in structures and materialised in things and entities.¹¹

'...dispositions are general tendencies conceptualised as properties of individual systems. When explanations refers to a disposition, this explanation no longer requires a law-statement. (...) A singular approach using dispositional terms in sentences can be a successful alternative to D-N account, especially when it comes to ceteris paribus laws. (...) Dispositions provide an alternative to cp laws in explanation because dispositions imply a necessity (or support counterfactuals), and gave the same flexibility.' (Vanderbeeken & Weber 2002, pp. 50-51.)

Dispositions inhere in particular systems, while laws are supposed to rule the whole universe (Vanderbeeken & Weber 2002, p. 51). When the task in scientific

^{&#}x27;They [dispositions] are causally relevant for explanations since they tell us where the causes can be found: they inform us about the causal powers of a system and they inform us about situations that will trigger a typical manifestation' (Vanderbeeke & Weber 2002, p. 45). The task of explaining the disposition that results in the absence of innovativeness in the police is accomplished by constructing a model where, following the rationality principles, results in a logic of and for action, that puts the preference on continuity (maintaining latency) rather than on change.

research is in figuring out the covering laws explaining empirical regularities, this vast landscape of entities and things requiring identifying, conceptual mapping and theoretical accounting is bypassed and cast aside as epiphenomenal or of secondary value only. Identifying dispositions and the conditions for their manifestation (presumably, as the state of other dispositions) offers an alternative view of this very task. Real dispositions consist in nested or multi-layered structures and thus provide for approaching the real events in their complexity.

Dispositions have not fallen into disregard because the concept of disposition is not clear. It is rather the epistemological problems claimed to relate to their very idea that have led to their marginalisation, Hüttemann (1998, pp. 129-130) argues. Disposition is a property of combined system.

Both the real entities and the conditions where their tendencies are either inhibited, materialised or even enhanced are characterised by complexity. Categorical properties describe, and thus also explain, capacities and related propensities, i.e. dispositional properties. Dispositions and their categorical bases are not identical, Vanderbeeken and Weber (2002, p. 46) claim. Other categorical properties can compensate for the respective effect, a disposition can emerge from a variety of categorical bases, while a single basis can constitute several dispositions.

Laboratory conditions in scientific research provide for creating closed conditions that effectively exclude the manifestation of other mechanisms but the one of interest materialising in constant conjunction of observable events. The latter are often rare or even non-existent outside them. ¹² In social sciences, respective circumstances require the constructing ideal conditions conceptually (e.g. Bhaskar 1979). Thus, the world that scientific theories describe is an abstract, conceptually purified world that only in very special conditions or moments matches with the world as experienced by us.

Dispositions as such, Vanderbeeken and Weber (2002, p. 47) argue, are causally inert.¹³ If any dispositional tendency can derive from various categorical structures, though not without one, in other words, if there is no certain one-to-one correspondence between them, then discerning one from the other is all but certain. One solution is set the task for theory construction in identifying as many of them as possible and to leave it to empirical work to ascertain the facticity of each or the way they combine and are triggered in a particular historical situation or in a specific case (cf. Jones 2008).

Explanatory understanding that refers to dispositional tendencies do not need law-like statements, but need to combine the kind of entity characterised by a disposition with a description of the situation. If the police are characterised by a specific disposition, like a tendency to abhor innovations, and are thus likely to go a long way in order to keep the status quo, we need to identify the mechanisms producing the disposition. The more important it is for the police to keep everything

^{&#}x27;To say that laws describe how physical systems would behave in specified situations is to say that laws ascribe dispositions to physical systems. One must distinguish between possessing a disposition and displaying a disposition. A physical system displays a disposition that is ascribed by law just in case relevant conditions are realized, i.e. if the system is isolated. The physical system possesses this disposition whether or not these conditions are realised.' (Hüttemann 1998, p. 129.

For Vanderbeeken and Weber (2002), dispositions refer to types of possible causal relations. They thus avoid the power ontology or, rather the idea of entities, where the causal structures underpinning the dispositional tendencies are grasped as powers typical of entities possessing such a structure. In the latter view, a disposition continuously materialises itself unless prevented.

unchanged, the more numerous and variable are the mechanisms that are responsible for it and the more numerous such mechanisms, the more value is attached to the very phenomenon. Thus, the dynamic becomes overdetermined and the value premises to it more concrete, more solidly expressed. Thus, the challenge is in explaining the emergence of such a disposition itself by either making explicit the internal basis that constitutes it in intentional, cognitive, theoretical or naturalistic terms, or by pointing to historical influences that structure it (Vanderbeeken & Weber 2002, p. 53).

Explanatory understanding that builds upon a metatheory of dispositions and entails explicating their historical emergence becomes necessarily bound to a particular object in certain place and time in history, i.e. it is system- and context-specific, proximal to their effect, or spatio-temporally local, although the powers and dynamics underpinning them are most likely not so. Such dispositions in complex systems emerge as layered and relational structures or constellations.

The task for a theoretician is thus to conceptually enlighten them in their very complexity. This task calls for modelling or mapping. While the complexity makes the existence of magical silver bullets highly unlikely in social sciences, it does not exclude the possibility for systematic improvement based on better theories mapping extensively and in depth a situation and, thus, providing for an explanatory grasp of it, and to use the experiences from it to develop the map of it further. Vanderbeeken and Weber (2002, p. 56) argue for a theory of explanation that supports theoretical pluralism catering for the attribution of several dispositions. All sorts of information may contribute to the explication of their emergence and nature in a specific case. What counts must be discovered rather extrapolated, Petrusz and Turvey (2009, p. 139) emphasise. However, there are several ways of discovering them.

It is possible that the hypothesis of the disposition of the police to systematically and as a system to abhor innovations is a false one. The theoretical model of the relational dynamics explaining the emergence of a disposition, whether it an actual state of affairs or not, nevertheless, hints at how to maintain or further enhance the conditions for, in this case, innovations and innovativeness in the police. Most likely such factors consist in a complex structure of dynamics anchored in various mechanisms at different hierarchical layers, like personality, peer group, division of work, management and leadership processes, culture and institutional features. Complex systems in general exhibit characteristics of self-organising systems, like context-sensitivity, novel constitution, decoupling between inputs and outcomes (Petrusz & Turvey 2009, p. 137).

Institutions appear in daily life as conventional forms or configurations (see Aunger 2020, p. 275), like the ways things are done here, behavioural norms, guidelines, instructions, traditions, forms of speech, collective identities, expectation-related roles, expression and gestures. However, institutions reside not only in the ways that specific games are to be played, but also in the ways new ones can be introduced and the rules for the old ones can be changed. They are never conceptualised in their true complexity in any specific situation due to their complexity, but also because of their fluidity and indeterminacy. Any such specification would remain highly contestable.

Situational realism, as defined by Petocz and Mackay (2013, p. 218), denies the existence of levels of reality as well as philosophically privileged elements of being. There are only complex spatio-temporal situations. 'Reality is a collection of infinitely complex situations. Situations are complex spatio-temporal occurrences that are always in process, always historically and contextually embedded.'

All development efforts that fail to take on board this complexity do so at their own peril. For instance, Wallis (2015) claims that as far as the complexity and systemicity of the theories are concerned, theory development in psychology has gone the way that compromises the usefulness and effectiveness of its theories as psychological practices. Aunger (2020, p. 269) argues that situations as real phenomena and their broader context should be understood better in behavioural science if they are to become more predictive and useful in striving for positive changes. ¹⁵

'...if we want the theory and practice of psychology to experience a scientific revolution, we should encourage and support three efforts. First, psychology may benefit by encouraging theories that have a higher Complexity. Second, psychology may benefit by encouraging the creation of theories that are more Systemic. Third, in seeking Systemicity, we may infer the benefit of rigorously integrating multiple theories because the process of integration tends to lead to the creation of theories with greater Complexity and Systemicity. This way, we will push ourselves and our science toward revolution.' (Wallis 2015, p. 375.)

"...a situation is a complex set of interactions between components. For this reason, the causes of behavior cannot be encapsulated in a single algorithm or equation. This means that without a more explicit statement of how the components interact, the model of a situation cannot predict outcomes from changes to the system with certainty. So, a simple algorithmic model that relates variables measuring aspects of the environment and attributes of the individual to probabilities of different types of behavior is not the form a proper theory of situations is going to take they are rather too complex for that. A descriptive or discriminative model is able to account for differences in outcome types, but is not necessarily able to reproduce the different types through the operation of some guided process. The next important step, then, is to develop a generative theory of situations, which requires the ability to account for how the causes of behavior interact. (...) Generative models introduce hidden variables, representing interactions which are assumed to be the underlying causes producing the observed pattern of outputs' (Aunger 2020, p. 274.)

Aunger (2020) argues that situations are epistemologically complex, naturally occurring phenomena with a specific time-and-space locus. Therefore, it cannot be properly investigated by focusing on some psychological constructs only. 'First, a situation is a meso-level rather than individual level concept. That is, it includes components that exist between the individual and population levels, such as meanings and centrality. Second, it specifies a system of physical, social, and psychological elements, where most behavioral models derive from psychology or biology, and as a consequence are either strictly psychological or environmental in nature. However, it is necessary to include environmental, psychological, and bodily components together as they come together in time and space at the point of behavior, and so are all proximate causes of it (even though these different kinds of factors are usually dealt with by separate disciplines.' (Ibid., p. 271.)

Empirical Observations on Innovations and Their Adoption in the Police

Anything that is warmly welcomed, embraced and rapidly adopted by rank-and file police officers is unlikely to be a true innovation, but, most likely, just another possibly more efficient or user-friendly means in the pursuit of traditional purposes, especially in the fight against crime and criminals.¹⁶

'... efficiency is the lens (or frame) through which officers perceive and use technology.., (...) For example, the term effectiveness was most often defined by officers (and used interchangeably) to mean efficiency or the ability to respond to crime and to quickly identify suspects, victims, witnesses, and other aspects of crimes to resolve cases. Less often did officers define effectiveness in terms of their ability to achieve specific outcomes of interest to the police department, such as preventing crime or improving their relationship with community members. (...) Detectives saw crime analytic technology as effective because it helped them catch offenders and close cases, while patrol officers discussed being able to quickly run information on stopped individuals to see if they were wanted' (Lum, Koper & Willis 2017, p. 149, pp. 151-152.)

A possible indicator for the degree of innovativeness involved in a proposition is the level of resistance it meets within the police. The literature on innovations in the police is unselective when it comes to yielding the innovation label or attaching it to a new technology introduced for policing (see King 2000). Morabito (2008, p. 469) sees that community policing is worth being called an innovation because adopting it to policing requires major organisational and operational changes. Adopting community policing is for the entire jurisdiction and thus, in the United States, up to the chief of police to decide.

'In the majority of localities in the USA, the tenure of the police chief is tied to the approval of the mayor or the city manager. To maintain job security, chiefs may choose to implement policies and strategies such as community policing that promote the agendas of other local officials. In this political environment, the decision to implement community policing may be based on the wishes of actors such as the mayor or city manager rather than solely on an internal police decision-making process.' (Morabito 2008, p. 469.)

^{&#}x27;For mail-order and catalogue retailers, the internet was a sustaining innovation since they could use the internet to make more money in the way they were already structured to make money. (...) ...when technological regimes do not conform to incumbents' prevailing business models (i.e., how they currently generate revenues and profits), organizational inertia results. Thus, technologies and business models go together—disruptive innovations must be evaluated relative to a firm's business model. (...) Experience suggests, however, that incumbents tend to 'cram' what could have otherwise been a disruptive innovation into their existing market, effectively shaping it into a sustaining innovation and neutralizing any disruptive potential. (...) Finally, incumbents... can pursue a technology re-emergence strategy by redefining the meanings and values associated with their legacy technology...' (Christensen et al. 2018, p. 1051, p. 1065.)

'The police are alert to and care about their place in the public bureaucracy. When all is said and done, however, the police do set their own policies and practices without hands-on interference from local politicians. (...) Rather, because of their enthusiasm to increase sometimes waning local public safety budgets, some police executives and elected officials may have rushed to collect the federal funds without much thought about the specific innovation and the changes required to adopt it.' (Morabito 2008, p. 480.)

Adopting an innovation, perhaps any innovation, is a symbolic gesture too and displays motivation and good intentions to tackle a problem, or some of them. Doing otherwise, like saying no to the adoption of CompStat, Pasha (2019) argues, might turn out to be politically fatal, especially for a chief of a small, poorly performing agency, if a particular innovation happens to enjoy popularity among politicians, scholars and citizens. Police officers, Lum et al. (2017, p. 155) observe, tend to evaluate new technologies narrowly from the point of view of their efficiency in the accomplishment of their primary tasks as they define them.

Moreover, diversifying the police department by creating a new function offers a tested co-optation strategy for bureaucracies facing external reform pressures to increase their efficiency and effectiveness. It represents an efficient way to organisationally contain what potentially could be a deeply disruptive change if adopted across the board ('adopt, but insulate').

'Interestingly, the results of the model show that the most innovative police departments exhibited many of the mechanistic attributes of the classical Weberian "ideal type" bureaucracy, which is also characteristic of the professional policing model. (...) Presumably, the mechanistic organisations observed in this study were more invested in crime analysis technologies because they also tend to be more specialised, formalised and professionalised. (...) The finding that greater degrees of functional differentiation (with a larger number of specialised units with personnel dedicated to their functions) were positively associated with crime analysis innovations is consistent with the results of a number of organisational innovation studies.' (Randol 2014, pp. 59-60.)

Establishing a new unit protects police work on the front line, displays a concern for efficiency and effectiveness by adopting new technologies, but keeps the two a distance apart from each other in case of potential mismatch.¹⁷ For any specialised unit, new technology appears to be a means to become even more specialised and strive for an upgraded status among other respectively specialised units within the police. This confirms the bureaucratic logic Weber envisioned as leading to increasingly sophisticated tasks and the emergence of precision tools.

Randol (2014, p. 61) suspects that the high ability in adopting innovations displayed by mechanically structured police organisations might correlate with their inability to apply them effectively. The problems are most likely to emerge between the units engaged in increasingly sophisticated work and in aligning the results of

^{&#}x27;Most police organizations, except for the very smallest, have some person or persons assigned to assist in the development of policy or the adoption of innovation' (Weiss 1997, p. 307).

their work into a smoothly functioning and effective whole. In a larger context, the latter is nothing but another part in a more encompassing law enforcement process.¹⁸

'LPRs [licence plate readers] have been one of the most rapidly diffusing technologies in modern law enforcement. (...) LPRs are believed by law enforcement officials to be a force-multiplier to many crime prevention and homeland security efforts. (...) LPRs are viewed by agencies as most important in assisting in crime prevention and resolution, especially automobile theft and other motor vehicle violations. (Lum et al 2019, pp. 376-377, p. 384.)

The police do appear to adopt new technologies at increasing speed and respond thus to the need of the police management or ambitious, career-oriented senior police officers or administrators to display being modern, forward-looking, technologically savvy, up-to-date and knowledgeable:

'One of the main characteristics of the politics of technology adoption in police organizations is the belief that it is inevitable and irreversible. Certainly this is true for managers, many of whom have built their careers on the 'modernization' of the police organization.' (Tanner & Meyer 2015, p. 389.)

Beside keeping up the appearance of not lagging or falling behind, arguably, an average officer on the street is not only differently, but also better, equipped today than the police officer just few decades ago, but, undoubtedly, relatively poorly equipped in comparison with the generations to come.

'One of the most noticeable characteristics in all of our conversations with our respondents was the unanimous observation that there has been an ongoing technological revolution in police work. All interviewees pointed out that a deep transformation and a frantic acceleration has been taking place for at least two decades.' (Tanner & Meyer 2015, p. 388.)

A new specialised unit implies an increase in organised complexity, but it may well weaken knowledge connectivity and thus diminish the capacity for creative responses. 'When the quality of organized complexity is high, and the knowledge connectivity is strong enough to favour the accumulation of the stock of knowledge, system enters a loop of self-sustained creative reactions, technological and structural changes, generation of both new knowledge externalities and new mismatches that fed further changes. The dynamics of the system can stop when the generation of new knowledge, the introduction of technological and structural changes have negative - rather than positive - effects on the quality of both the composition of the stock of quasi-public knowledge and the organized complexity of the system. (...) The levels of organized complexity of a system are endogenous to the system itself as they depend upon the structure and architecture of knowledge interactions and transactions that take place within the system. (...) The generation of additional technological knowledge and the introduction of innovations may have structural consequences that affect the levels of knowledge connectivity of the system and hence the size and composition of the stock of knowledge affecting the viability and sustainability of the mechanisms of knowledge governance and the institutional set that had been effective until then. The generation of additional technological knowledge and the introduction of innovations may have reduced the levels of knowledge connectivity, the coherence, variety and rarity of the stock of knowledge and the scope of activity of the key sectors, created diseconomies of agglomeration and excess density. The basic mechanisms of knowledge governance may be no longer appropriate to coordinate the division of creative labor and the dissemination of knowledge. With lower levels of knowledge connectivity and a reduction of the rates of accumulation of the stock of quasi-public knowledge, the decline of knowledge externalities, the reaction of each firm may become adaptive. The system is no longer able to support the continual introduction of innovations...' (Antonelli 2017, pp. 703-704.)

The environment for doing police work has been transformed by introduction of increasingly portable ICT. However, innovations that leave police work and prevalent modes of policing largely intact (e.g. Crow & Smykla 2019), perhaps even enhance their nature as 'givens'. Factors, Egnoto et al. (2016, p. 308) remark, that encourage adoption without it being made mandatory, are noticeable by their absence from the literature on innovation in the police.

'The innovations approach suggests that highly structured organizations such as police agencies operate within an authority innovation-decisions framework (Rogers, 2003). Within this framework, choices to adopt or reject an innovation are made by a relatively few individuals in a system, who possess power, high status, or expertise (similar to the command staff of a police organization). The organization's employees are forced to comply—even if it is not in a meaningful way. An authoritative decision to adopt an innovation cannot guarantee that police officers located at lower levels of the hierarchy will fully accept the innovation if it is not considered worthwhile but can indicate basic adoption.' (Morabito 2010, p. 571.)

'...many innovations in policing introduced in the U.S. have been relevant to the enhancement of police accountability and improvement of police-community relationships (...) The federal initiatives coupled with the positive research findings about citizens' perceptions of BWCs [Body-Worn-Cameras] may simultaneously exert pressure on local police agencies to take innovative action with regard to BWC implementation.' (Pyo 2020, p. 4.)

Discussion

All humans, police officers withstanding, are innovative. However, in the police, for some reason, individual innovativeness has not been highly appreciated. In general, it does not appear as a virtue. This does not mean that it is necessarily the opposite of it – a vice. More likely, it is socially highly regulated, constrained and controlled feature of life in the police. This is likely to result partly from the fact that, as an institution, the police stands on its own. This institutional fact reflects into its internal social order and is reproduced by it. Each new member is inclined to adopt and share a disposition that ranks other virtues above innovativeness and channels the latter to specific occasions and forms only.

While each individual member of the police may have what innovativeness takes, as a collective the police are likely to act counterproductively when it comes to successfully travelling the full journey from the generation of ideas, their elaboration, championing them, and implementing them. Most likely, individual innovativeness, if incepted, never makes it into the true cradle. The pursuit of innovativeness in law enforcement, when contrasted with the traditional virtues, stands out as an anomaly or an institutional misfit. This is due to the following:

^{&#}x27;By the mid-1990s, COP appeared poised to permanently alter the landscape of American policing. In practice, however, this is not the case. Despite the flexibility of the approach and its reported widespread adoption, most agencies did not adopt the central elements of COP during the 1990s. Some police agencies, instead, applied the COP label to any and every routine activity...' (Morabito 2010, p. 565.)

- (1) Emphasis is on tight social bonding, trustworthiness, mutual support, and deep solidarity between colleagues, especially within a rank protecting it from external threats and bureaucratic control exercised by senior officers and the public (compliance to group standards and norms).²⁰
- (2) High predictability and reliability as standardisation of methods, procedures, tactics, inclination to reduce uncertainty and the likelihood of misunderstanding, errors and mistakes are most appreciated (conformity to standard work practices, roles and relations).
- (3) Preference is attached to a nostalgic past over an uncertain future, efficiency over effectiveness, scepticism over optimism, conformity over experimenting with anything new (task performance record, evaluated by one's peers, is what matters).
- (4) Hierarchical egalitarianism between experienced peers results in Tall Poppy Syndrome, i.e. cutting down anyone seen to raise above the others by seeking detours or alternatives to the well-trodden conventional paths (learning to yield and suppress own ambitions for the common good).²¹

Strong internal within-group ties, with an emphasis on reliability and the reduction of uncertainty by relying on standard procedures as well as maintaining a shared view of the world, undermine individual innovativeness and truly experimenting with anything unforeseen, untried and not jointly agreed. The innovation cycle requires in the first phase access to new information sources, numerous weak ties and cognitive flexibility, while few strong ties pave the way in the next, elaboration and championing, phase and extensive ties contribute to the implementing of an idea (Perry-Smith & Mannucci 2017). The dilemma lies in how to innovate endogenously without being seen as a tall poppy rocking the boat and threatening those at the helm. In a social environment characterised by tight social ties, the first question is seldom about the quality of the initiative, but about its origin: where did it come from and is the police officer behind it a trustworthy colleague and not a loose cannon known to put forward heretical views?²²

On the street, police work is performed in an environment marked by uncertainty, ambiguity, and danger, in the face of which officers cope by pulling together' (Worden & McLean 2017, p. 155)..

²¹ 'The criminal's world is often unpredictable; criminals take risks and live a socially rich and diversified life' (Høigård 2011, p. 291). Outer Town's employees were lost in memories of the past. Regulatory practices are created through conversation about yesterday's organisational practice. The hegemonic masculinity configuration is 'it was better before'. At Outer Town, they shake their heads about 'today's young people' in the police. Young people want to climb quickly up the career ladder, while Outer Town's policemen had to take the long and painstaking route. In the past, there was stability, solidarity, a confident feeling of 'us'. Back then young colleagues had respect for age and the experience of older men.' (Ibid., p. 297.)

Our research shows the emergence of a distinctive subculture associated with the strong uptake of ILP innovation. The ILP subculture had the following characteristics: a broadly accepted focus on crime reduction as the overarching goal for local police, support for partnerships and problem solving as legitimate policing strategies, tolerance for experimentation and trial of novel approaches, support for ILP, a willingness to follow ILP leadership, openness to learning, and a willingness to participate and contribute to improvement and general innovation.' (Darroch & Mazerolle 2012, pp. 17-18.)

Dispositions evolve historically. A new police officer is motivated to become a trusted colleague and a fully entitled member of the work community. Entering the world of the police requires resocialisation. A prospective candidate is expected to depart from his or her previous engagements in life and to start anew. At the Police University College in Finland, the police students were often referred to as babies still in breast-feeding, despite, in many cases, their age and life experience. Their previous experiences mean nothing from the point of view of the professional competencies they are learning and the group membership they aspire to. Each one appears as a tabula rasa, where the lessons learnt at the college and, especially, the experiences gained from police work, provide the only true substance.

If a newcomer is expected to innovate at all, it is only to meet the expectations of the more experienced colleagues faster, more adequately and more accurately. Each is supposed to start from the absolute bottom and then climb from the darkness of ignorance, lack of trust and unproven potentiality that characterise it to the earned status of a police officer and a colleague by humble and hard work, by keeping a low profile, adopting the role of a newbie, without causing waves or rocking the boat, displaying respect to more experienced colleagues, and, most of all, eagerly displaying initiative in learning from them. Becoming a police officer does not cater for innovativeness or for innovations, but for subjugation, conventionalism, and adopting to the way things have been done.

The hierarchical nature of the police organisation, the difference between ranks, is reproduced by other means within the rank-and-file. The respective institutional position it resembles is life in a cloister. The police officers are innovative unless prohibited to do so or constrained in the possibilities to use and display their innovativeness. Innovations that successfully water down the innovations that are introduced externally and protect the status quo are potential candidates for endeavours in innovativeness that could appear as worthy and valuable pursuits from the point of view of experienced colleagues. Innovating in order to counter innovations would materialise in the very mechanisms that are subjugated at times when there are no external threats needing attention.

Woolgar (1998, p. 444) claims that innovation is a social process that entails a change in a network of social relations. It is 'about changes in some or all of an existing set of identities, expectations, beliefs and language'. Thus, it is not just what the members of the police expect from themselves, but also what the local community as well as society at large expects from the police and their individual members.

From an organisational point of view, the police rely on heavily bureaucratic technology. It is rather oriented to the standardised production of services than customised services in a case-wise manner. This is interpreted as law in action, materialised or congealed law. It is a bureaucratic technology addressed to configure the opponent, i.e. the citizens engaging in the path of crime, the law-breakers, and the police responding by stepping in with the aim of effectively filling all the holes that threaten to sink the ship of society. This concept of the opponent is reflected in the organisation of the police, in the division of police work and in their role in the criminal justice system.

However, the police organisation is not just about efficiency in the fight against the crime. It is also about citizens' concern about their rights and liberties as members of society and their concerns as potential targets for surveillance, control and law enforcement activities by the police. From the point of view of their justifiable concerns, innovative policing sounds partisan, somehow biased or unlawful. Thus, the police organisation mirrors the imagined opponent, the 'customer', and the society, the 'client', also a potential or occasional customer to the police, a critical onlooker, a potential complainer, as well as a grateful receiver of their security services. The respective groups consist in different audiences/publics for any innovation.

There are numerous, often contradictory dispositions, that can emerge to reflect the relationship between the public and the police. Triggering or activating them requires respective concepts, cognisance of them, and the ability to include them in discourses and make discourses out of them. The point is not in explaining the world, but in explaining it in order to become more consciously capable of changing it. Complex systems of historically emerged dispositions, the respective structures as mechanisms and research-based explanatory understanding and awareness of them provide the levers to do so.

References

- Antonelli, Cristiano (2017). Endogenous innovation: the creative response. Economics of Innovation and New Technology 26 (8), pp. 689-718.
- Aunger, Robert (2020). Toward a model of situations and their context. Review of General Psychology 24 (3), pp. 268–283.
- Baregheh, Anahita, Rowley, Jennifer & Sambrook, Sally (2009). Towards a multidisciplinary definition of innovation. Management Decision 47 (8), pp. 1323-1339.
- Baudry, Jérôme (2019). Examining inventions, shaping property: the savants and the French patent system. History of Science 57 (1), pp. 62-80.
- Bhaskar, Roy (1979). The Possibility of Naturalism. London: Routledge.
- Bruce, Scott (2019). Curiosity killed the monk: the history of an early medieval vice. In Janet Burton and Karen Stöber (Eds.) The Journal of Medieval Monastic Studies 8. Turnhout: Brepols, pp. 73-93.
- Christensen, Clayton, McDonald, Rory, Altman Elizabeth & Palmer, Jonathan (2018). Disruptive innovation: an intellectual history and directions for future research. Journal of Management Studies 55 (7), 1043-1078.
- Crow, John & Smykla, John Ortiz (2019). Police body-worn cameras: Research developments on an emerging technology. Criminal Justice Review 44 (3), pp. 257-262
- Dahlin, Eric (2011). There is no "I" in innovation. Contexts 10 (4), pp. 22-27.
- Daigneault, Pierre-Marc & Béland, Daniel (2015). Taking explanation seriously in political science. Political Studies Review 13, pp. 384-392.
- Drewery, Alice (2001). Dispositions and ceteris paribus laws. The British Journal for the Philosophy of Science 52 (4), pp. 723-733.
- Easton, Marleen (2014). Managing innovation in policing. In G. Bruinsma & D. Weisburd (Eds.) Encyclopedia of Criminology and Criminal Justice. New York: Springer.

- Egnoto, Michael, Ackerman, Gary, Iles, Irina, Roberts, Holly, Smith, Daniel, Fisher, Brooke & Behlendorf, Brandon (2017). What motivates the blue line for technology adoption? Insights from a police expert panel and survey. Policing: International Journal of Police Strategies & Management 40 (2), pp. 306-320.
- Fletcher, Garth & Kerr, Patrick (2009). Why dispositions won't go away. Behavior and Philosophy 37, pp. 119-125.
- Garcia-Buades, Maria, Ramis-Palmer, Carmen & Manassero-Mas, Maria (2015). Climate for innovation, performance, and job satisfaction of local police in Spain. Policing: An International Journal of Police Strategies & Management 38 (4), pp. 722-737.
- Griffiths, Paul (2006). The vice of curiosity. Pro Ecclesia 15 (1), pp. 47-63.
- Henderson, David (2010). Explanation and rationality naturalised. Philosophy of the Social Sciences 40 (1), pp. 30-58.
- Hüttemann, Andreas (1997). Laws and dispositions. Philosophy of Science 65, pp. 121-135.
- Jones, Todd (2008). Explanations of social phenomena: competing and complementary accounts. Metaphilosophy 39 (4-5), pp. 621-650.
- Kincaid, Harold (2004). Contextualism, explanation and the social sciences. Philosophical Explorations 7 (3), pp. 201-217.
- King, William (2000). Measuring police innovation: issues and measurement. Policing: An International Journal of Police Strategies & Management 23 (3), pp. 303-317.
- Küpers, Wendelin (2020). Daring of be(com)ing wise: Perspectives on eEmbodied 'sapere aude' en-lightened for today. Integral Review 16 (2), pp. 222-271.
- Léon-Medina, Francisco (2017). Analytical sociology and its 'syntax' for explanation. Social Science Information 56 (4), pp. 502-525.
- Liou, Kuotsai Tom (2019). Technology application and police management: issues and challenges. International Journal of Organization Theory & Behavior 22 (2), pp. 191-208.
- Lum, Cynthia, Koper, Christopher & Willis, James (2017). Understanding the limits of technology's impact on police effectiveness. Police Quarterly 20 (2), pp. 135-163.
- Lum, Cynthia, Koper, Christopher, Willis, James, Happeny, Stephen, Vovak, Heather & Nichols, Jordan (2019). The rapid diffusion of license plate readers in US law enforcement agencies. Policing: An International Journal 42 (3), pp. 376-393.
- Marchionni, Caterina & Ylikoski, Petri (2013). Generative explanation and individualism in agent-based simulation. Philosophy of the Social Sciences 434 (3), pp. 323-340.

- Martínez-Vergara, Sucet Jimena & Valls-Pasola, Jaume (2020). Clarifying the disruptive innovation puzzle: a critical review. European Journal of Innovation Management (electric version).
- Morabito, Melissa (2010). Understanding community policing as an innovation: Patterns of adoption. Crime & Delinquency 56 (4), pp. 564-587.
- Morabito, Melissa (2008). The adoption of police innovation: the role of the political environment. Policing: An International Journal of Police Strategies & Management 31 (3), pp. 466-484.
- Okabe, Ryuji (2014). Police innovation paradigm in the United States and Japan. Police Practice and Research 15 (3), pp. 192-206.
- Pasha, Obed (2019). Does substandard performance encourage innovation adoption? American Review of Public Administration 49 (5), pp. 572-584.
- Peters, Gabriel (2014). Explanation, understanding and determinism in Pierre Bourdieu's sociology. History of the Human Sciences 27 (1), pp. 124-149.
- Petocz, Agnes & Mackay, Nigel (2013). Unifying psychology through situational realism. Review of General Psychology 17 (2), pp. 216–223.
- Petrusz, Stephanie & Turvey, Michael (2009). Dispositioning and the sciences of complexity. Behavior and Philosophy 37, pp. 135-140.
- Phillips, Richard (2015). Curiosity: care, virtue and pleasure in uncovering the new. Theory, Culture & Society 32 (3), pp. 149-161.
- Pyo, Sunyoung (2020). Understanding the adoption and implementation of bodyworn cameras among U.S. local police departments. Urban Affairs Review (forthcoming).
- Randol, Blake (2014). Modelling the influence of organisational structure on crime analysis technology innovations in municipal police departments. International Journal of Police Science and Management 16 (1), pp. 52–64.
- Roth, Paul (2017). Essentially narrative explanations. Studies in History and Philosophy of Science 62, pp. 42-50.
- Sheptycki, James (2019). Technopoly and policing practice: critical reflections on innovations in police control technology. European Law Enforcement Research Bulletin. Special Conference Edition Nr. 4, pp. 133-139.
- Smiley, Ethan (2015). Goddes Pryvetee and a Wyf: Curiositas and the triadic sins in the Miller's and Reeve's Tales. Christianity & Literature 65 (1), pp. 4-26.
- Tanner, Samuel & Meyer, Michaël (2015). Police work and new 'security devices': A tale from the beat. Security Dialogue 46(4), pp. 384-400.
- Vanderbeeken, Rob & Weber, Erik (2002). Dispositional explanations of behaviour. Behavior and Philosophy 30, pp. 43-59.
- Verreault-Julien, Philippe (2019). How could models possibly provide how-possibly explanations? Studies in History and Philosophy of Science 73, pp. 22-33.

- Wallis, Steven (2015). Integrative propositional analysis: a new quantitative method for evaluating theories in psychology. Review of General Psychology 19 (3), pp. 365–380.
- Weiss, Alexander (1997). The communication of innovation in American policing. Policing: An International Journal of Police Strategies & Management 20 (2), pp. 292-310.
- Worden, Robert & McLean, Sarah (2017). Mirage of Police Reform: Procedural Justice and Police Legitimacy. Oakland: University of California Press.
- Woolgar, Steve (1998). A new theory of innovation. Prometheus 16 (4), pp. 441-452.

INNOVATION: THE GHOST IN THE POLICE MACHINE

Vesa Huotari

Introduction

The image of innovation as a ghost in the machine implies a fundamental difference in nature or kind separating the machine as a material thing from a ghost as an imaginary spiritual being. This essay discusses innovations as things that have been domesticated successfully, innovations that are to be domesticated, and innovations that remain beyond domestication. Domestication refers to innovations conceptually and/or practically captured and harnessed for use within an organised, purposefully structured, incrementally improved, and increasingly efficient system that effectively subsumes or incorporates it into itself, and utilises it, eventually, as the standard tool, method or approach. Innovations not yet domesticated represents candidates to become fully integrated in time, while innovations that are undomesticated refer to them as a source of disruptive power, like tropical storms, volcanoes, earthquakes, the coming of which, possibly, can be predicted, but not subsumed under full control. Innovations in general signify the creative powers that are often difficult to tame, require harnessing, but also contain the potential to turn the table and force the organisation to adapt to it.

Innovations, whether already tamed, to be domesticated, or essentially beyond domestication, are worthy objects of our interests. As the main engines for social change and, therefore, for human, social and technological progress, innovations are simply too precious to be left on their own.

Innovation policies represent an attempt to nurture and enhance the creative potentials inhibiting societies, but also to channel them to modes, ways and directions that are deemed beneficial and distant from domains and fields where they could increase harm rather than serve more socially sustainable purposes. Thus, in an organised society dedicated to the pursuit of social and economic progress and the well-being of its members, both innovativeness and innovations need to policed. Criminals innovating new ways to 'liberate' citizens of their valuable possessions, personal identities or sense of security are of constant concern in societies where material wealth and possessions matter.

This essay starts with an excursion into what I would call the standard discourse on innovations in the police or innovations domesticated. It represents the main stream, the common themes and points of view. However, my discussion of it is indicative rather than exhaustive. Nevertheless, it seems to me that something vaguely perplexing emerges from it. Something that is not easy pinpoint or identify exactly appears to be missing from it and, I suspect, that it is not just because of my relatively limited source material. Perhaps there really is an elephant hidden in it and the idea of innovations domesticated, to-be-domesticated and beyond domestication may well be the analytical light that is capable of illuminating the very beast itself. My conjecture is that research literature that enlightens the innovations to-be-domesticated, simply overlooks and devalues innovations that have become fully

domesticated in the police and in policing, and pays far too little or no attention to the innovations that lie beyond domestication.¹

Both police scholars who put forward innovations, and police researchers who evaluate their adoption, are captured, respectively, by an ideological frame, but approach it from different angles. Nevertheless, both groups share the idea of the police needing reforming and the grand narrative that underpins it. Moreover, the role of consultant and the role of evaluator often appear interchangeable. An academic expert can play them both, often at the same time. Within that frame, the blame for failures tends to fall upon the patient, the system under reform, but displays less than full commitment to the requested change and engaged in less than full-hearted and thorough-going co-operation with the consultants.

"Implementation failures" are greater than successes. (...) Yet, these implementation failures cannot justify halting progress. Quite the opposite. Obstacles ought to motivate us to continue exploring new ways of appropriately pushing technology for use in policing. (Ariel 2019, p. 486).

However, the framework and approaches through which it materialises represent another possible culprit for the possible shortcomings. What is missing from the latter is a perspective on innovations in the police that includes both innovation and its academic advocates and evaluators.

The discussion gives an impression of innovations that are always created exogenously to the police. They need introducing to the police and the police need to buy into them. Once at this phase, a firm hand is needed guide the adoption process and, if the innovation turns out to be less significant than expected, the problem is in the shortcomings in the adoption and utilisation processes, not in the innovation itself or in the framework that informs the way it was introduced to the police in the first place.

Standard Discourse on Innovations in the Police

'Not surprisingly, police innovations continue to dominate current policing. (...) In accord with prior police innovation research, police innovation will be defined as something that is new and "state-of-the-art" to the field of policing.' (King 2000, p. 303, p. 309.)

The history of modern law enforcement, Nogala and Schröder (2019, p. 9) claim, could easily be written as an ongoing, though also uneven and multifaceted,

¹ 'Literature examining the change process in policing and police organizations has often focused on either case studies of agency-specific implementation efforts or the broader diffusion of innovative practices and approaches across the profession. This case study approach, while informative, frequently fails to capture whether and how change efforts have affected the larger context of police personnel and/or organizations. As meaningful organizational change is often a long-term process, case studies limited to discrete points in time often fail to explain the bigger picture. The case study approach more often than not tells "success" stories and systematically omits any substantive discussion about failed change efforts. When patterns of innovation are considered, the emphasis is on the decision to innovate, not failed efforts at bringing innovation into organizations. (...) The result is that little is known about the broader experiences police leaders have with change across its life cycle, particularly efforts that fail or do not fully achieve their promised potential.' (Schafer & Varano 2017, p. 393.)

progression of innovations whether in co-operative, organisational, technological or tactical terms. Undoubtedly, writing a historical narrative of policing as an unfolding of innovations and their adoption is possible. However, what would be its raison d'être? Most likely, it would lead the reader astray by painting a picture of the history of policing that would be clearly one-sided (whig-history) and also politically biased.

'Notwithstanding the panoply of accoutrements that adorn an officer's belt and, increasingly, his/her patrol car, police work is now and has always been a human service occupation that is performed through direct interaction with people, and that relies mainly on verbal communication' (Worden & McLean 2017, p. 23).

'The average police station is far more technologically sophisticated than at the turn of the twenty-first century, and a common police vehicle is vastly more equipped than the "black and white panda cars" that roamed the streets in the 1980s or 1990s' (Ariel 2017, p. 485).

However, without innovation, Virta and Gustafsberg (2019, p. 191) suggest, the police are unlikely to succeed in controlling and tackling the interdependent security threats in their ever-increasing complexity. They call for more encouragement in creative thinking and rewarding it too. Innovations and innovativeness, both top-down as well as bottom-up (Sears & Baba 2011), exogenously as well as endogenously initiated, deserve a high place on the police managers' agenda, Virta and Gustafssberg (2019) state.

The police, overwhelmed with pervasive problems calling for solutions, appear to be a ubiquitous target for managerial, tactical and organisational innovations, but is it the police, characterised by self-efficacy and a can-do-attitude, or the public, the customer to their services, or the police scholars with a critical gaze, or the police reformers themselves that most vocally speak for a change, continuous advancement in policing, and the need for new technical gadgets? There is a constant stream of reformers with outstanding and innovative schemes, approaches and toolkits that are more than ready, occasionally well-prepared and experienced to tackle the challenges in policing, to catalyse the police – finally – into this century, or to help them not only to catch up with the fast-moving world of crime and disorder, but to take a step or two ahead of it too. Arguably, innovation adapting to the world and innovation as initiating a profound change to it are two different things (see Antonelli 2017).

Weisburd and Braga (2019) name the following as major innovations in policing: community policing; procedural justice policing, broken windows policing, problem-oriented policing; pulling levers (focused deterrence) policing; third-party policing; hot spots policing; predictive policing; Compstat; evidence-based/risk-focused policing; and technology policing. Three of these were introduced in the second edition of their book, while the rest were already present in the first edition in 2004. Apparently, once put forward as an innovation in policing, it seems to remain an innovation in policing. Perhaps this is because the police have turned out to be incapable of or reluctant to surrender to none of them truly. The police appear as a patient with an uncooperative attitude to everything coming from the outside, while remaining unable to initiate and put forward innovations of its own. Okabe (2014, p. 193) remarks that In the United States, unlike in Japan where the police

appear relatively insulated from all external stakeholders, a key source of policing innovation has been the academic community.

'The most important contribution of American police chiefs, therefore, has not been self-generation of innovation but their openness to outside evaluation which has generated new ideas for policing. (...) Constraints on the managerial freedom of police leaders has hindered the generation of strategic and administrative innovation within police organizations.' (Okabe 2014, pp. 199-200.)

The police, Scheider, Chapman and Shapiro (2009, pp. 712-713) claim, deserve praise for their general openness to ideas and willingness to experiment with new concepts and practices that various interest groups foist upon them.² They expect the innovators and promoters to display a better job of conveying them in a coherent and integrated fashion to the police and suggest the philosophy of community policing as an integrative framework. Introducing innovations within the latter would pave the way towards strategies that are increasingly fair, effective and efficient and reflect the citizens' as well as officers' interests (ibid., p. 713; on incompatibility of intelligence-led and community policing, see Carter & Fox 2019; Innes 2004).

'If these innovations are indeed compatible around general community policing notions, it is preferable to offer a unified version of modern policing that is continually modified and built upon rather than conceptualizing innovations as entirely new ways of doing business. It takes valuable time to understand new innovations, time that can presumably be saved if innovations are developed as coherent parts of an integrated whole and thereby reinforcing the central tenants' (Scheider, Chapman & Shapiro 2009, p. 712.)

'Programmes such as community policing (CP), problem-oriented policing (POP), zero-tolerance policing (ZTP) and intelligence-led policing (ILP) have all imagined and constructed different versions of police service. The former two programmes represent permutations of the policing as security discourse, whilst the latter two are exemplars of a vision of policing as crime management.' (Innes 2004, p. 152.)

From the police's point of view, buying in the whole package with extras added to it continuously may well appear riskier than making incremental adjustments to the prevailing system under its own terms.³ However, innovations, Sears and Baba (2011) claim, should be conceptualised as process, possibly carrying over, being

Police departments, Carter and Fox (2019, p. 55) conclude, do not succumb to selecting elements from multiple philosophies, but are purposive in the selection of the philosophy to implement and, thereby, avoid watering down the effects of any single philosophy as well as distracting from its objective

125

^{3 &#}x27;Community policing is in fact compatible with the work that police do, though not with the crime-fighting emphasis that was incorporated into the professional model, and even as community policing advocates sought to expand the police role, such that its success would not turn on its effect on crime, we are consistently drawn like a moth to flame to ask whether community policing reduces crime. Partly as a consequence, community policing has been a tough sell with the rank-and-file. Insofar as the profound structural changes that community policing requires have not been made, implementation has been shallow.' (Worden & McLean 2017, p. 183.)

influenced by as well as manifesting at numerous levels of analysis ranging from individual creativity, to invention as a group-level phenomenon, to adoption at the organisational level and technological change at the societal level. The struggle for ideas is no different to the struggle for survival witnessed in nature. In both, to pass by the obstacles and navigate through hazardous terrains requires both motivation, task-relevant resources and managerial skills, Sears and Baba (2011) emphasise.

'But in seeking to compensate for the limits of law-enforcement-oriented policing, CP confronts an organisation which is configured primarily to support the law-enforcement approach. (...) Policing organised for law enforcement is formalised, paper-based, rule-oriented and standardised – characteristics reflected in the traditional quasi-military, pyramid structure of the organisation. Its drawbacks in terms of motivation, productivity and ethics are well known. Each tier can be a barrier to communication and encourage job demarcation and inflexibility. Lower ranks' initiatives are inhibited.' (Fielding 2001, pp. 289, 290-291.)

An evaluation of the adoption of community policing in Sweden concluded that it did introduce organisational consequences, but had a limited effect on police practice. To a large degree, it was a name change rather than a new practice. Høigård (2011) argues that in Sweden, Denmark and Norway, renaming has been important in the shift towards community police and as a gesture effectively removing it from the reform agenda.

'To make a difference in the Nordic cities, the scale of community policing would have to be unimaginable. The idea of community police is thus transformed to a much less demanding form of proximity, in which professional police create intimate relationships with other professions through partnerships against crime.' (Høigård 2011, p. 318.)

What makes police departments particularly susceptible to forces in their environments is the fact that their goals are ambiguous and contradictory, their core technologies wanting in several ways and in the absence of a reliable way to measure their effectiveness they find it impossible to draw clear lessons from their past experiences. Thus, their legitimation does not derive from their technical performance or market success, but in their success in adopting structures, logics for action, approaches, procedures and methods deemed modern, efficient, up to date, and necessary in wider society (Worden & McLean 2017, p. 18). When such progressive myths come with extra funding for their adopters (e.g. from federal government, see Okabe 2014), no wonder the police have become, apparently, easy prey to them.⁴

With so much money offered by the Department of Justice to adopt community policing, perhaps many municipalities did not adequately develop a plan to implement activities and strategies that effectively incorporate the core components of community policing before accepting grants. Rather, because of their enthusiasm to increase sometimes waning local public safety budgets, some police executives and elected officials may have rushed to collect the federal funds without much thought about the specific innovation and the changes required to adopt it.' (Morabito 2008, p. 480.)

'When the structures that police departments adopt are incompatible with one another, with previously existing structures that remain in use, or with the technical demands of the work itself, something has to give. Often, the 'technical core' – in policing, that would be the street-level work of patrol officers or detectives – is, in effect, buffered from the structures with which the work is not compatible. We do not doubt that when police executives adopt new structures such as community policing or Compstat, they do so in good faith and for the intended instrumental benefits that they promise in accomplishing the work of the organization. Structural forces are more powerful than the wills and good intentions of police executives, however, and as the complexity of the organization's structure mirrors that of the institutional environment, with features that are incompatible with one another and with the technical core, loose coupling (or decoupling) can result.' (Worden & McLean 2017, pp. 20-21.)

Weisburd and Braga (2019) claim that a period of rapid innovation in policing in the United States in the last decades of the twentieth century emerged as a response to crises in policing, especially the relationship between the police and minority communities, that led to questioning the effectiveness of traditional modes of policing. While the police have publicly pronounced their openness to innovations and to the adoption of new technologies, approaches and tactics – a demonstration of responsiveness to threats to their legitimacy in the eyes of politicians and the public – nevertheless, the standard policing model still prevails, prospers and dominates the big picture.

It seems that the standard model of and for policing has effectively subsumed into itself the innovations that have been introduced to change it for good, perhaps even innovatively so. While the model has been continuously questioned and criticised, it has, more or less, outlived their challenge. As an innovation in itself, it has turned out to be, for the time being, extremely resilient. Radical changes have been watered down by transforming or reducing them into additional tools in the standard toolbox of the police, co-opted by adding a new box in the organisation chart or introducing a new task on top of the traditional ones for someone somewhere in the police department.

Innovations that are put forward as radical innovations and fundamental reforms in the mode, style and identity of the police and policing become neutralised or, rather, naturalised in time. The strategy, it seems, is to welcome innovations openheartedly ('say yes to them and they will go away faster') as their destiny is either to wither away, eventually, or to become assimilated with the standard model. The best strategy for co-optation at a minimum level is to attach a fresh label to what the police already do and to adopt only the new terms when describing it or talking about it. The second best defence is to externalise the change and transform it into a new tool to be added to the toolbox of the police ('yes, we have it') (cf. Braga & Weisburd 2019). The bureaucratic apparatus appears to be good at co-opting structural innovations by simply reorganising the traditional tools into a new order, relabelling them and adopting a new vocabulary when speaking of the work.

Braga and Weisburd (2019) conclude that the innovations that are most readily adopted by the police align with their traditional position, current structure and the standard mode of policing by extending the traditional tactics. This, however, should

not prevent us from pursuing innovations that improve the legitimacy of the police in the eyes of the public, improve relations with various communities, increase collaboration, and enhance the efforts to prevent crimes. Obviously, we need to understand better processes related to continuity in the police and the complexities that determine what works in policing.

A missing link appears to be in finding ways to truly involve the rank-and-file police officers in reform efforts instead of relying on the power of the bureaucratic machine to carry out the changes by introducing methods, new rules and procedures or the power of charismatic police leaders to initiate them. A supportive climate for innovation – still incipient at best, for instance, in the Spanish police (García-Buades, Ramis-Palmer & Manassero-Maswould 2015, p. 733) – encourage it and nurture the ability to innovate that has become increasingly critical in keeping up with the new needs and demands of the police work.

'... promoting a climate for innovation in which officers feel they can contribute with suggestions and ideas on how to improve their work and work methods is a key factor to having satisfied police officers, whereas support among colleagues is a critical contributor to satisfaction in the absence of a climate for innovation' (García-Buades, Ramis-Palmer & Manassero-Maswould 2015, p. 732.)

Due to a lack of training and the fact of discretional autonomy, individual police officers are, partly by necessity and partly by opportunity, likely to innovate when taking new innovations on board in one's work. This phenomenon deserves a formal recognition as an important phase in the adoption of any innovation.5 It is thus important to promote participation in reforms and change initiatives for improving the quality of the decisions made and in creating a favourable climate for innovation that also correlates positively with the levels of satisfaction and perceived performance, García-Buades, Ramis-Palmer & Manassero-Maswould (2015, p. 733) point out.

In the standard view, innovations are put forward as an attempt to domesticate the police, to make them compatible with the demands of its environment, to make them meet the expectations in the air and to come to terms with them. The innovations can be promoted as pure or value-neutral technologies that simply accomplish traditional purposes more effectively, efficiently, and with some added value ('nothing but more precise instruments'). They can be claimed to materialise and authentically reflect the value base of the electorate or the stakeholders ('nothing but what the taxpayers want from the police'). Researchers can also argue that the innovation represents principles distilled from the conduct of the most advanced law enforcement agencies ('Nothing but what is possible for a police department or police work to become'). The innovators and promoters themselves tend to believe that the innovations carry the virtues of being neutral, modern and deserved.

⁵ 'The community constable's first problem is the function's unfamiliarity. Guidance is scarce. Asked if priorities were set when he was assigned a beat, one replied: "None at all. I've started in the last couple of months and nobody said a word about how it was to be done and what was to be looked at ... It was left entirely to me. Nobody said 'this is what we want you to do'. I was just asked to join and, when I joined, left alone." (group discussion 1)' (Fielding 2001, p. 297; see also Burcher & Whelan 2019, p. 148.)

To-be-domesticated Innovations in the Police

"... a second, wider lesson regarding police reform which is the need to embed a theory of change into the reform process. It is clear from the Scottish experience that the strategic aims of reform were only loosely coupled to an understanding of the causal connections between any pre-conditions required to achieve long-term outcomes." (Fyfe 2019, p. 203.)

While Schafer and Varano (2017, p. 394) note that implementing and managing change within policing organisations is often a lengthy and difficult process, they do not say that it is impossible, potentially hazardous, unpredictable and basically uncontrollable. While it is possible to initiate a change and put it in motion, making it really happen along designed, always more or less idealised, lines is another issue. Schafer and Varano (2017) pay attention to methodical problems in deciding whether a reform is a success or a failure as at different points in time experiences may well point in one way or another (ibid. p. 395).

'Is a change effort a success if it only achieves some intended outcomes? Is a change effort a success if it achieves favorable outcomes, yet those outcomes differ from what had been intended at the onset? Is a change effort a success if it is popular with the public, but detested by employees? (Schafer & Varano 2017, p. 397.)

Police organisations, police work and policing stand out as objects of criticism, internally as well as externally. As an institution, its position – on the side of the law – leaves it vulnerable to attacks from all sides. The law is the very locus for political struggles and the means, at least temporally, for collecting fruits from victories in them. There is no shortage of tensions, contradictions, practices from various epochs and high ideals, aspirations, diagnoses for shortcomings and proclaimed problems calling for action. Any solution often appears attachable – at least rhetorically – to more than a specific problem. Problems tend to remain insufficiently analysed, they are simply rephrased using the terms provided by the solution at hand or categorically discharged as 'the traditional way or approach', that is long past its best before date and, therefore, to be finally cast aside.

'Affected personnel want to understand why a change is necessary and what it means; some forms of change are evident, but often agencies ask personnel to change their demeanor or policing strategies in ways that are not entirely self-evident (i.e., what does it mean to "attempt to de-escalate" in a potential use of force situation or how do officers "build legitimacy and trust" with residents of their beat?). They want a voice in how that change is structured and implemented. They want to see those in charge leading by example. As a change unfolds, personnel want to feel their input is valued and respected, and that those in charge of the organization are hearing about the challenges, successes, and experiences of those the change affects.' (Schafer & Varano 2017, p. 405.)

It is evident that the affected police personnel would appreciate participation for the implementation of the change, but perhaps they should also have a larger role in determining whether the problem is properly grasped in the first place, the solution well-formulated and properly designed, warranted in theory and, as far as they can see, likely to work in practice. Why would they be assured of the benefits of the suggested innovation or reform and have the courage to put aside the traditional way that has been tested countless times, and jump into dark without sufficient evidence, proper warrants and a safe environment for testing the innovation and gaining first-hand experiences of it first? ⁶

Innes (2004) argues that the reassurance policing model was adopted on a large scale because it was essentially vague in the first place:

'It was precisely the lack of a tightly structured definition that allowed the idea to gain significant levels of support from different interest groups and thus helped to propel it "up" the political agenda. The malleability inhering in the idea of reassurance meant that different potential supporters were able to interpret it in ways that supported their own agendas and as a consequence a "groundswell" of support rapidly built up around the idea. But as a consequence, there are currently several competing definitions of the term in circulation.' (Innes 2004, p. 157.)

Definitional plasticity, or imprecision, provided for the domestication and domesticated reassurance policing strategy manifested in several forms and versions. Innes (2004) emphasises need to adjust a model to local circumstances:

'Implicit in such an approach is the idea that the production of effective policing solutions cannot be based upon a "one size fits all" model. Rather, what is required is a bespoke approach that ensures that the delivery of policing services is tailored to local conditions and needs.' (Innes 2004, p. 165.)

Ideal-typical models or policing philosophies are essentially logical constructs, not recipes for success. As Darroch and Mazerolle (2012) describe, they formulated a clear definition of ILP and developed an ideal-type model identifying the features of a best-practice ILP (intelligence-led policing) model:

'....ideal-type ILP model was developed representing a well-deployed and high-functioning implementation of ILP. The ideal-type model included features such as clearly defined intelligence structures, sound intelligence processes (including collection and analysis of intelligence, the development of options, and communication of these to decision makers), a well-developed problem-solving process (persistent problems are identified and a systematic problem-solving approach such as Scanning Analysis Response and Assessment is followed), clearly defined evidence-based products

130

Officers at strong uptake sites also believed they had more influence over their job, could contribute more to solving problems at work, and were part of a stronger team environment' (Darroch & Mazerolle 2012, p. 19).

(intelligence products that utilize crime sciences and evidence of effective police practice) with unambiguous recommendations for decision makers, and use of a broad variety of tactics, including prevention, disruption, and enforcement.' (Darroch & Mazerolle 2012, pp. 7-8.)

Such models are always built upon assumptions that hardly ever hold in the real world. Only a fool would keep their eyes in the map only when orienteering through an unfamiliar terrain. However, metaphorically speaking, many police reformers seem ready to do so. Instead of blaming their map, its shortcomings, and the way they are accustomed to read it, they see the culprit in the terrain. When the two do not match, they are not ready to make the necessary adjustments to their map, but instead work hard to make the terrain match with it better. It is like adding make-up to make one look like a portrait in a painting instead of painting it anew.

Innovations that are to be domesticated put more emphasis on the need to make necessary adjustments to the innovation itself. All such conceptual models or paradigms are pure types or abstract models. As such, they only work properly in conditions that are abstract as well, but not in the real world.

Implementing an innovation is always an incremental, give-and-take type of process, where making a change requires negotiations, reinterpretation and reformulation. It is more a question of pedagogics than efficient marketing or selling. The aim is not buy-in, but reciprocal learning, mutual growth and building up a shared understanding and a horizon for the change. Innovation is just a catalyst for the change, not the blueprint for it.

This viewpoint shares the basic optimism of the standard view. However, it resonates more with, and reflects, the lessons from the previous reform attempts and the adoption of innovations by the police. Although the task may be more complex than presumed, it is surmountable. However, walking the walk calls for another, more profound way of proceeding, more oriented towards learning with the police rather than instructing the police in their work.

Innovations beyond Domestication

On the back cover of Worden and McLean's (2017) book, titled *Miracle of Police Reform*, is the following:

'A procedural justice model of policing is likely to be only loosely coupled with police practice, despite the best intentions, and improvements in procedural justice on the part of police are unlikely to result in corresponding improvements in citizens' perceptions of procedural justice.'

^{&#}x27;Crime intelligence or the intelligence process, more broadly, is often conceptualized in terms of ideal models. (...) The most common criticism of the intelligence cycle is that the practice of intelligence is much more fluid than as it is depicted in the model. A further criticism is how it views intelligence in isolation, paying no consideration to the broader law enforcement environment in which it sits, including a failure to articulate how intelligence analysis is linked to decision-making. (...) The 3-I model is not necessarily a representation of how intelligence functions within law enforcement currently, but a depiction of how law enforcement organizations should function if they are to be truly intelligence-led.' (Burcher & Whelan 2019, p. 140.)

It seems that even reforms that can be seen as successful within the police and authentically reflect the best intentions of their developers and originators are not necessarily enough to trigger changes in an external or more encompassing system that provided, to a lesser or greater degree, the very justification for the reform itself. Obviously, something went wrong, not all relevant variables and their respective values were taken on board fully, understood or handled properly. If the police did exactly what they were supposed or prescribed to do, then the theory appears insufficient and one ends up committing a large scale-human experiment, perhaps for good reasons, but actually without the proper warrants.

Worden and McLean (2017, p. 5) argue that the suggested intervention – procedural justice – rests on a misdiagnosis of the fundamental issues.⁸ A social psychological view, where judgements on legitimacy derive from perceptions on the quality, especially the fairness, of individual interactions with the police, is deficient. In an institutional view, legitimacy derives from the opposite direction, i.e. from the conformity with standard structural forms, procedures deemed right, and up-to-date lexicons (Ibid. p. 55). If the legitimacy of the police as an institution derives less from face-to-face interactions at a grassroots level than from relations between institutions and institutionalised beliefs, the police cannot create it, but only adjust to them and thus to echo or mirror them in their structures, forms and proceedings.

'The procedural justice model is long on the forms that procedurally just policing takes at the street level, and its rationale, but rather short on the managerial measures that police departments should take in order to implement the model' (Worden & McLean 2017, p. 8).

'Part of the challenge, we surmise, stems from the fact that the distinctions among the four widely accepted elements of procedural justice—voice/participation, quality of interpersonal treatment,

trustworthy motives, and neutrality—are not as clearly demarcated in forms of police action as they are in citizens' interpretations of their experiences' (Ibid., p. 102.) (...) Disrespect is a form of only procedural injustice, and officers are not respectful by virtue of not being disrespectful; they can be neither disrespectful nor respectful (p. 104). (...) The correlation of subjective procedural justice with the procedural justice with which the primary officer treated the primary (surveyed) citizen is only 0.14. Subjective procedural justice is inversely correlated, at -0.31, with the procedural injustice with which the primary officer acts. (p. 134.) (...) The weak to null effects of officers' procedural justice on citizens' subjective procedural justice probably has to do with the high ratings that citizens tend to give police even when officers' behavior represents low-to-moderate levels of procedural justice. At the margin, better performance in procedural justice terms by the police cannot improve citizens' subjective assessments very much.' (p. 140.) (...)

Their findings, Worden and McLean (2017, p. 12) argue, make them suspicious of the efficacy of the procedural justice model as an approach to police reform: 'Although it is based on voluminous research concerning public perceptions of police, it is based on assumptions about the strength of the connections: between those perceptions and police actions in police-citizen contacts, and between the adoption of a process-based model of policing and officers' practices on the street.'

Given the weak connections between what officers do (and do not do) and what citizens later think about it, we might well see little or no change in survey-based measures of performance with good faith—even herculean—efforts by platoon commanders and field supervisors to manage their officers' behavior in police-citizen encounters. But neither did we see consistent changes in the observation-based measures of officers' procedural justice.' (Worden & McLean 2017, p. 180.)

Worden and McLean (2017, p. 9) note that in most, if not every, large police department, the organisational infrastructure is not conducive to the procedural justice model.

'Organizational innovation is difficult to achieve. It requires agility to innovate almost continuously and a capacity to experiment with everything from new products to fundamental reform of core business. Successful implementation of innovative practice also requires an organizational capacity to embrace and grow from a "healthy" level of resistance while at the same time overcoming deep-seated, pervasive, and counterproductive levels of defiance. By far the most challenging reform is embracing strategic change, with wide-ranging implications for organizational arrangements and external relationships.' (Darroch & Mazerolle 2012, p. 23)

While change is, possibly, a permanent feature, reform remains an illusory, deceptive and delusional mirage that does not refer to a nearby oasis in our world but to the dream world of the aspiring reformer.

Worden and Mclean (2017, p. 193) remark that 'extant research on police behaviour sensitises us to the ways in which officers' behaviour is influenced by the features of the situations in which they interact with citizens'. 'Situations' are inherently ambiguous as their nature is necessarily open-ended, modifiable by the participants' expectations, deeds and actions (cf. Innes 2004). They are inclined to reveal their true nature only afterwards.

Most of us are pragmatists when it comes to making sense of situations and coping with the uncertainty and ambiguity inhering them. As soon as we think that a problematic situation has been successfully solved by doing something, the uncertainty and ambiguity is thus dissolved, and, as far as we are concerned, a case is cleared unless, or until, it is proved otherwise. The criteria for grasping situations is pragmatic or instrumental, not cognitive. However, such a 'ripe to be left behind and ready move on' criteria appears unsatisfactory and wanting from a scientific point of view.

'In general, police may be able to influence, but they do not control, any of the outcomes that really matter—crime, disorder, citizen satisfaction—because these are also influenced by many other social forces. (...) We do not doubt that when police executives adopt community policing, or early intervention systems, or Compstat, for example, they do so in good faith to achieve the instrumental benefits they promise, but structural features of policing and police organizations undermine these measures.' (Worden & McLean 2017, pp. 186-187.)

The standard view of innovations in the police fails to respect and appreciate the prevailing models, methods and approaches in policing as innovations in themselves. The standard view is, thus, very much defined by seeing the prevailing systems, structures and procedures as rules of thumb, inherited practices, and the traditional way. In the absence of anything worthy of the name of the theory or philosophy underpinning them, they appear more like bad habits than proper technologies, traditional practices rather than applied, well-tested and experience-based science, and a system of superstition rather than a rational line of thought. This, in its part, caters for the arrival of the innovator and makes the field vulnerable to all kinds of initiatives putting forward something 'new', 'up to date', 'warranted', 'explicit', or 'well founded'.

The view that emphasises innovations in the police to be understood and, respectfully, conceptualised as a process of reciprocal and mutual learning and growth, where the innovation is just a catalyst for starting the negotiating processes and a shared object for joint modification from the point of view of the current practices, appreciates both the knowledge and expertise possessed by the police, the innovator's lack of understanding of the context and circumstances of their work, and the possibilities the innovation itself provides in bringing them together. An innovation as such is beyond implementation, but it can function as a catalyst for change, reinterpretation and insights.

'Symbolically and substantively this was important in allowing the police to have a strong voice in exploring the options for reform. It suggested a cultural shift in the centre of gravity of the reform process: rather than reform being "done" to the police by government, reform was now being done "with" the police' (Fyfe 2019, p. 198).

The third stance, innovations beyond domestication, turns the tables. Domestication implies an external point of view where the very purpose for it remains exogenous to the one to be domesticated. In this sense, it stands for a relation of domination, or power over something. Whether we see it as including negotiation and co-creation or the pure use of bureaucratic, position-based power, i.e. innovation by command, does not bring with it a change in the fundamentals. While the means may differ, the original impetus for change remains imported. Consequently, the patients, whether they participate in the curing process reluctantly or willingly, remain essentially patients.

The third view acknowledges the fact that police services are becoming increasingly professionalised in academic terms. Thus, the members of the police are increasingly capable, like the mounted Baron Munchausen, who rescued both himself and his horse from a swamp by lifting them both upwards by his own hair, of initiating and implementing the necessary changes in policing and reforming both their work and their methods for it. The prevailing frameworks for innovations in the police are not empowering enough or the ones empowered by them are not the ones needing it.

The domestication perspective enlightens innovation in the police analytically. It appears as an event introduced to the police, a joint pursuit in co-creation of understanding and sense, and as nothing unusual for professional police personnel that have adopted a critical and reflective stance both to its work and the conditions

under which it is exercised in individually and organisationally. Obviously, only the latter stands on a firm bedrock. However, it does not make the first two redundant, but only puts them in a broader perspective.

Discussion – Taking Ghosts More Seriously

'Recent reforms—community policing, public accountability mechanisms, and Compstat—have been superimposed on the existing structures, in spite of the fact that they are themselves not entirely compatible with the technical core, with the existing bureaucratic organization, and/or with one another. (...) Superimposed on existing structures, the procedural justice model is likely to be similarly loosely coupled with police practice.' (Worden & McLean 2017, pp. 182-183.)

'While it is clear that ILP is widely adopted in theory, the extant body of literature illustrates that implementing it in practice is far from straightforward. Each empirical study highlights new challenges that seemingly limit the extent to which police organizations do in fact follow the principles of ILP.' (Burcher & Whelan 2019, p. 143.)

If there is a ghost in the machine, it most likely resides in the relations of the parts of that machine. Neither is it a part in itself nor does it reside in a particular one. In an organised system, like a machine, any of its parts is often a system in itself, possibly a system of systems.

Presumably, it is systems all the way from the very bottom to the most encompassing one. If ghosts are likely to emerge whenever there is a relation, there are ghosts everywhere. Moreover, there are ghosts within ghosts too. Research on innovations and innovativeness in the police has bypassed their facticity and they have haunted it ever since, undermined the very best efforts in introducing a change in the police or policing.

In practice, we need to better understand the prevailing systems and their interrelations, their underlying logic and events that are interpreted as confirming this understanding and the experiences that introduce cracks to it or appear anomalous in terms of it. Instead of introducing innovations developed somewhere outside the police, we should expect them to be increasingly built on-site from indigenous raw materials, ideas, insights and practices. Instead of expecting the police leaders and rank-and-file officers to buy in an innovation, the latter should see themselves as its very builders, owners and critical carers (see Pritchard et al. 2009).

Innovating with the police is, seemingly, a very much missing or an overlooked link in the research literature on police reforms and innovations in the police and policing. We need to fully take on board the fact that a more professional police force needs to be more proficient, self-confident and determined when it comes to innovations and innovativeness and initiating, designing, implementing and developing them, continuously and reflectively, further. What is needed is a perspective of innovations worthy of the name.

As a starting point, a true innovation perspective would recognise the members of the police as innovators living amidst, by and with innovations. The essential compatibility thus presumed would simply level the playing field by granting the police practices, standard procedures, practices, tactics and methods with the very

same status as innovations that have been traditionally seen as the birthright of academic scholars and granted to their theory-induced, research-based and evidence-warranted ideas, models and designs only. Innes (2004) speaks of control hubs.

'These control hubs will be locally based. At the centre will be the police constable, who will be responsible for identifying the problems that are impacting upon levels of neighbourhood security through engagement with residents and other key stakeholders. They will then seek to develop solutions to these problems through engaging the resources of various partners. It is evident that these separate strategies have each formed the basis of a number of the recent innovations in police practice over recent years. If the aim of policing is to deliver enhanced levels of security, then in order to do this in an effective manner it is likely to require the engagement of all of these strategies in an area. It is an approach that, taken together with the hub model of coordinating suppliers of policing services, could form the basis of a "total policing" doctrine. The development of a total policing doctrine is significant in that it recognizes the multi-dimensional nature of policing and the fact that a successful police organization is likely to require a combination of strategic orientations. This is a direct reflection of the diversity of tasks that the police are regularly called upon to perform.' (Innes 2004, pp. 165-166.)

A comprehensive innovation perspective would give full credit to the fact that policing consists in a system of systems, a complex environment in itself as well as existing in such. For any such system, history does matter and it matters for good reasons (Innes 2004).

'The selection of a strategy should be determined according to the particular make-up of the community and the nature of the problem being addressed. Alongside their reassurance strategy, police will also need a crime control strategy, an intelligence strategy, and a problem-solving strategy.' (Innes 2004, p. 166.)

In an interrelated system, a change introduced to one of the elements of the system resonates, reciprocally, with changes in other parts as well. Without the latter, the original change is unlikely to carry far as the system – the very ghosts in the machine – is likely to strike back. Introducing an innovation to one part of a system is, basically, an attempt to change it as a whole.

Presumably, the innovations that make it in the police organisation have a different relation to the whole to those that fail. The more they appear akin to the current ones, perhaps diverging from them rather in degree than in kind, and, therefore, the less they appear as requiring changes or adjustments in other parts of the system, the more they can be claimed to represent a fundamental change in a direction appreciated by the stakeholders, changing the outlook, like in a dress rehearsal, but leaving the daily operations, procedures and mutual relations actually intact under that new cover, and the more they are embraced, made a big fuss of, and celebrated.⁹

^{9 &#}x27;Procedural justice may be celebrated, in ceremonial fashion, as an important consideration in the practice of policing, but it is liable to assume the position of an only symbolic feature of police administration and not a set of principles that are infused into the technical core of police departments and manifested in officers' day-to-day interactions with citizens' (Worden & McLean 2017, p. 32.)

Even if the police co-opt innovation and changes in order to remain the same, underpinning them are indigenous capacities, innovativeness and practical ingenuity that can be harnessed for more reformative purposes too. The standard interpretation is to see it as resistance to change, i.e. taking a stance in opposition to the best scholarly diagnosis of the problem and an up-to-date scientific understanding of what it takes to resolve it. An adequate innovation perspective would identify it as the very – perhaps even the only one truly effective – engine for change and emphasise the need to learn more of it and how it manifests itself or materialises in the case at hand. The first step is thus to transform the perspective we have of innovations and innovativeness in the police, the way we attach value to events and issues related to introducing a change in the police, the mechanisms and sources of power we try to mobilise in overcoming them, and the way we evaluate our success in it.

As in many cases, here too the true change starts nearer to us than we have come to presume. It is not our tools that need sharpening or the toolbox that is short of supplies, but our very framework for the work that calls for rethinking and fundamental modification. There are truly 'ghosts' in the world, but unfortunately they are unlike anything we are accustomed to believe in. Taking them seriously is the next step. The third stage, working with the police as co-innovators, emerges naturally then.

References

- Antonelli, Cristiano (2017). Endogenous innovation: the creative response. Economics of Innovation and New Technology 26 (8), pp. 689-718.
- Ariel, Barak (2019). Technology and policing. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives (2. Edition). Cambridge: Cambridge University Press, pp. 485-516.
- Braga, Anthony & Weisburd, David (2019). Conclusion: Police Innovation and the Future of Policing. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives (2. Edition). Cambridge: Cambridge University Press, pp. 544-563.
- Burcher, Morgan & Whelan, Chad (2019). Intelligence-led policing in practice: reflections from intelligence analysts. Police Quarterly 22 (2), pp. 139-160.
- Cheng-Hua, Tzeng (2009). A review of contemporary innovation literature: a Schumpeterian perspective, Innovation 11 (3), pp. 373-394.
- Darroch, Steve & Mazerolle, Lorraine (2012). Intelligence-led policing: a comparative analysis of organizational factors influencing innovation uptake. Police Quarterly 16 (1), pp. 3-37.
- Fielding, Nigel (2001). Community policing: fighting crime or fighting colleagues? International Journal of Police Science & Management 3 (4), pp. 289-302.
- Fyfe, Nicholas (2019). The challenges of change: exploring the dynamics of police reform in Scotland. International Journal of Police Science & Management 21 (4), pp. 196-205.

- García-Buades, María, Ramis-Palmer, Carmen & Manassero-Mas, María, (2015). Climate for innovation, performance, and job satisfaction of local police in Spain. Policing: An International Journal of Police Strategies & Management 38 (4), pp.722-737.
- Carter, Jeremy & Fox, Bryanna (2019). Community policing and intelligence-led policing: an examination of convergent or discriminant validity. Policing: An International Journal 42 (1), pp. 43-58.
- Høigård, Cecilie (2011). Policing the North. Crime and Justice 40 (1), pp. 265-348.
- Innes, Martin (2004). Reinventing tradition? Reassurance, neighbourhood security and policing. Criminal Justice 4 (2), pp. 151-171.
- King, William (2000). Measuring police innovation: issues and measurement. Policing: An International Journal of Police Strategies & Management 23 (3), pp. 303-317.
- Nogala, Detlef & Schröder, Detlef (2019). Innovations in law enforcement introduction to the special conference edition. European Law Enforcement Research Bulletin. Special Conference Edition Nr. 4, pp. 4-17.
- Morabito, Melissa Schaefer (2008). The adoption of police innovation: the role of the political environment. Policing: An International Journal of Police Strategies & Management 31 (3), pp. 466-484.
- Okabe, Ryuji (2014). Police innovation paradigm in the United States and Japan. Police Practice and Research, 15 (3), pp. 192-206,
- Perry-Smith, Jill & Mannucci Pier (2017). From creativity to innovation: the social network drivers of the four phases of the idea journey. Academy of Management Review 42 (1), pp. 53-79.
- Pritchard, Robert, Culbertson Satoris, Malm, Kenneth & Agrell, Anders (2009). Improving performance in a Swedish police traffic unit: results of an intervention. Journal of Criminal Justice 37, pp. 85-97.
- Randol, Blake (2014). Modelling the influence of organisational structure on crime analysis technology innovations in municipal police departments. International Journal of Police Science and Management 16 (1), pp. 52-64.
- Schafer, Joseph & Varano, Sean (2017). Change in police organizations: perceptions, experiences, and the failure to launch. Journal of Contemporary Criminal Justice 33 (4), pp. 392-410.
- Scheider, Matthew, Chapman, Robert & Schapiro, Amy (2009). Towards the unification of policing innovations under community policing. Policing: An International Journal of Police Strategies & Management 32 (4), pp.694-718.
- Sears Greg & Baba, Vishwanath (2011), Toward a multistage, multilevel theory of innovation. Canadian Journal of Administrative Sciences 28 (4), pp. 357-372.

- Virta, Sirpa & Gustafsberg, Harri (2019). Innovation management in police organisations: exploring the process from scientific innovation to police training. European Law Enforcement Research Bulletin. Special Conference Edition Nr. 4, pp. 189-195.
- Wallis, Steven (2015). Integrative propositional analysis: a new quantitative method for evaluating theories in psychology. Review of General Psychology 19 (3), pp. 365–380.
- Weisburd, David & Braga, Anthony (2019). Introduction Understanding Police Innovation. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives (2. Edition). Cambridge: Cambridge University Press, pp. 1-24.
- Worden, Robert & McLean, Sarah (2017). Mirage of Police Reform: Procedural Justice and Police Legitimacy. Oakland: University of California Press.

DEVELOPMENT OF THE POLICE MACHINE BY INNOVATIONS

Vesa Huotari

Introduction

The police appear increasingly technology-intensive, -centred, -dependent, perhaps also technology-driven. Perhaps, we should scrutinise it as an ensemble of technologies.

We could start by admitting that, as human beings, we are made equally for the machines, tools and technology, as the latter are made for us. From the latter's point of view, what is best or most amazing in us is our adaptability and our natural fitness to become operationally effective, agreeable and compliant technical components for various technical contexts and processes.

Of all the machines and their parts, we must stand out as the most versatile. The police and the policing technologies adopted, most likely, are related to one another in their respective formation.

Arguably, without our unique contribution and our inventiveness, the technical ensembles and the technical objects as their individual parts would not be able to develop further, to become better integrated, more concrete, encompassing and perfect in their own being and mutual relations. We are indispensable elements in the evolution of technological things and in the formation of the ensembles that put them to work for us.

However, technical objects and their ensembles are a source of new problems to us. An increasing number of people spend their days pondering how to make the respective wholes operate better, more smoothly and without unwanted flaws and disruptions. Their inventions bring to the surface new structures as unforeseen synergetic functions, but also unforeseen to tackle the original problem. In our evolution, we owe it to our inherent, intimate and inexhaustible, but misunderstood, misidentified and only partially grasped, relationship with the technical reality.

Much of the research on innovations in the police builds upon a seriously flawed and conceptually impoverished image of our relation to technology. Therefore, it actively promotes the related distortions and misrecognitions. We have become accustomed to thinking that whatever we make ourselves, we also fully understand, or at least better than anything else (Dumouchel 1992, p. 409).

Ariel (2019, p. 502) suggests that technology has remained a relatively neglected area in research on policing, because many scholars have found it difficult to make it fit into their sociological frameworks and theories. However, such a social contextualisation, according to him, is not necessary. He claims that, like in engineering, efficiency, efficacy and cost-effectiveness suffice.

'The prominent discourse if efficiency and cost-effectiveness of operations, as technology is hypothesised to improve the quality of law enforcement on a wide range of outcomes and outputs. Prima facie, technology can revolutionize law enforcement...(...) Clearly, key areas in policing, like data

collation, management, synthesis, and sharing, significantly lag behind other public sector professions... (...) Can anyone imagine a police officer today not linked directly to a computer? The genie is already out of the bottle, so the question of technology in policing is therefore about the how and when, rather than if.' (Ariel 2019, pp. 485-487.)

However, as Koper and Lum (2019, p. 537) remark, the role of researchers is not limited to the interests of an engineer. Though they can help practitioners learn about the most efficient ways of using a tool or technology, they are also capable of informing them of their unintended, both wanted and unwanted, consequences. Moreover, they can assess first-hand whether the theories behind a technology, i.e. the presumed mechanism connecting its use with some purpose for it, are plausible.

The concerns for engineers very much derive from the technical ensemble, the concerns for perfection (i.e. solidifying, getting rid of unwanted disturbances, operational weaknesses, enhances in multi-functionality) and priorities built into it, its prevailing state of the art or phase of development in relation to the new possibilities are becoming available in its wider context. When seen and approached as machines and tools, the only relevant questions are whether they are likely to work and, once put to work, how effective they are once evaluated in a comprehensive way or in relation to their competitors. Their sole purpose is reducible to a single technical dimension as plain instruments.

However, as Piccorelli and Elias (2018, p. 133) point out, the danger is not in our choice to use a particular technology in policing, but instead in how the technology itself begins to shape how we think and act daily. Technologies, Tanner and Meyer (2015, p. 387) claim, should be approached from the life-world perspective of police officers or, as they put it, in the context of their conversations, concerns and hopes and the way they become conceptualised in their day-to-day experiences.

However, this would be only a small step in the right direction. What is actually needed is stepping away from this trodden path altogether by grasping our relationship with technology from a more balanced and encompassing stance. It is not an invitation to abandon technology, but to learn how to re-establish our true relationship with technical objects, to relearn to live better with as well as among them (see Lindberg 2019).

For police officers, personal security and the devices related to it, like a bulletproof vest, gun, tactical baton, etc., consist in a legitimate context for organisational perception, discourse and occupational identity (Tanner & Meyer 2015, p. 390). Such personal tools and gear have become a visible part of being a police officer, like the fact that each individual officer is backed up by an organised, tactically savvy, tightly knit, loyal and powerful collegial force, where other similarly equipped, dedicated and thoroughly rehearsed members exist in an efficient, disciplined, forceful and legitimate machine. For the latter, a single police officer is a point of

^{&#}x27;Independently, technology does not create outcomes in policing. Rather, technology outcomes depend on the way that officers, civilians, and analysts use technology to achieve outcomes. Organizational subcultures, systems, leadership, and officer behavior and cultures might also distort and impede the intended uses (and outcomes) of technologies. Resource limitations, legal concerns, and technical problems can also impede technology's full potential. Technology can therefore have unintended consequences, undermining an agency's broader objectives or the specific goals they have for adopted technologies.' (Lum, Koper & Willis 2017, pp. 136-137.)

materialisation, an embodiment necessary for the realisation of its powers that, as an elementary part in it, is reciprocally related to the larger whole and through it to its other elementary parts. Both this whole and the interchangeable and replaceable components it consists of are real and often in themselves systems of their own too.²

The police as a machine appears to us as a kind of transformer. It aims to serve several purposes, often at the same time. While in one of its forms or modes of being it stands out as an efficient way to combat crimes or events of disorder, it needs another one for building community relations that help in the prevention of crimes. What undermines its efficiency and effectiveness partly reflects the number and character of the purposes it is expected to pursue as a bureaucratic machine.

The police are a technological ensemble that reside in a hodgepodge of technologies, techniques, gadgets and devices that are moving in several, perhaps even opposite, directions and emerge as a tension-prone, indeterminate and incompatible complexity.³ However, as essentially a machine, it is characterised by developmental tendencies that derive from this technological essence and reflect it too. To grasp it we need a more adequate philosophy of technology than the standard one

Although as human beings we have turned out to be technically savvy builders of machines, our understanding of these very works remains superficial. Seeing them as simple or complex tools, as reflections of our intentions and as the fruits of scientific knowledge acquired, represents failure in grasping them truly and properly. Moreover, understanding any of them from an engineering point of view reveals little of their ontogenesis, their long march into being as technical individuals.

Undoubtedly, the more a view of technology deviates from the standard view, i.e. scientific principles ingeniously harnessed to work for us signifying the supremacy of mind over matter and theory over practice, the more difficult it is for us to come to terms with it. Our first nature, it seems, is to see the world from the technological point of view. Coming to terms with the idea that the world, its human inhabitants (us) and technicity in it are not three distinctive things, say, the object of interpretation (nature), the interpreter (culture) and the mediator between

Ideal parts are interchangeable and, thus, standardised. They reflect the perfection of the process that produced them. Interestingly, when it comes to police officers, a common claim is that proper parts are moulded in the furnace of daily police work only, not in police education. It is the machine that makes itself, that best understands what it needs for its working, without flaws and disturbances, and what it is destined to become by realising what is possible for it. Apparently, police officers are, quite literally, an extension of the machine rather than the other way round and understand their situation, to a degree themselves too, as elements, parts or components in a more powerful, lasting whole than they themselves. Obviously, unlike simple tools, they are reflexive to their own functioning.

We are only inclined to see incompatibility of tasks and miss the possible synergy of functions that, for Gilbert Simondon, are signs of the evolution of the system, for its concretisation, its individuation as a system and the respective milieu it is associated with, but in its current phase, relatively far from a flawless or fully concretised one. It provides a field of work for an army of inventors trying to find necessary remedies to various obstacles on the way to well-integrated, harmoniously working whole. The police should be grasped as a technical object, as an ensemble of technical objects, but also as an element in the larger social fabric of institutions, continuously struggling to overcome the tensions or disparities that derive from the incompatibilities between their associate milieus. It transforms as an attempt to accommodate them into its structures and operation and, thereby, becomes more self-sufficient, more entangled with its associate milieu, more disentangled from the environment and more autonomous in its operation.

the two (tools/technology), but that they consist in a tightly interwoven co-formation of agencies co-evolutionarily entangled to each other (Hoel & van der Tuin 2012, p. 188), is very much like learning to breathe or walk again. Why even start with it unless it is absolutely necessary?

Reclaiming Our Relation to Technology

'Technical objects mediate the relationship of the living being and the milieu. (...) The invention of technical objects creates a network relating human needs with natural structures. Technical possibilities meet the natural existence in the nodal points of the network. Here, technical objects embody the topos where information is processed, exchanged and produced in a recursive interplay of cognitive, material, vital and natural features.' (Schick 2017, pp. 68-69.)

Our understanding of tools and machines as such and as parts of larger ensembles, like factories and organised pursuits, is plain, simple and straightforward, remarkable in its functional instrumentalism. We acknowledge that many tools have several potential uses and almost anything can become, purposefully or not, a useful, more or less efficient, but also interchangeable, tool depending on the situation. The natural attitude seems to reveal to us a world that is an open reserve of potential uses waiting for their full exposition and harnessing for some human purpose. What such uses are in essence, their very meaning, appears to be determined by our intentions and the technologies we already possess or control, but also by the problems, needs and challenges that preoccupy us in our daily life.

The way the world appears to us resonates with our understanding of ourselves as well as of others. We, like the tools we use, are made of technical elements functionally arranged and assembled in a stable structure than can become a respective part of larger functional wholes and carry out various tasks that are necessary for their functionality and stability. It is a nested system with several layers. Each of them can be reduced to a challenge, a function or a combination of them and to the respective system responding to it or fulfilling it. Alternatively, we can always ask the function of something and expect to find it by scrutinising the way the larger whole works.

What remains a mystery is their coming into being as complex and layered system wholes that are simultaneously parts in more encompassing wholes, while

The essence of technology, Heidegger (1977, p. 23) argues, lies in Enframing, i.e. the way in which the real reveals itself to us as standing-reserve – as something to be harnessed for human use in a multiple ways, some of which we have been already revealed, but others that are still waiting. It is behind our perspective to the world and to ourselves too and that perspective frames the world and everything in it to us. Our value and worth, like everything else, is reduced to standing reserves. Technology as revealing comes to mediate our view of the world. Rivers become waterways, suppliers of hydropower, source by which to go for the reproduction of human productive powers. Everything appears as waiting to be ordered, on standby before it is usurped under some purpose. It is not seen as such, but only as a perhaps yet undiscovered means to some, perhaps temporarily undecided, end, i.e. as standing-reserve. While the very same object can figure out in different orderings, its nature as a standing-reserve is all but fixed except in its categorical relation to us as standing-reserve. Whatever appears real to us in the world comes in a configuration for use that is continuously renewed or restructured anew. Man as such is no exception to nested system of orderings (Heidegger 1977, p. 19; see also Piccorelli & Elias 2018).

being respectfully constituted in themselves too as well reciprocally related to other such systems. In the case of technology, the genesis of tools, machines and the larger entities are better at hand for philosophical scrutiny that could also valorise the way its larger context has emerged, Gilbert Simondon (1924-1989), a French philosopher, believed.⁵

Simondon explicated the mode of existence of concrete technical objects.⁶ While natural things were concrete from the beginning, technical things are characterised by concretisation and, thus, novel phenomena and a potential source for new knowledge, not just materialisations of particular scientific principles. However, what is scientifically significant is not the outwards aspects or similarities in external structure or form, but the exchanges of energy and information within the technical object or between the technical object and its environment, especially its associated milieu (Simondon 1980, pp. 66-67).

Simondon (1980 [1958], p.1) remarks that the misunderstanding of the tools and machines – things technical reduced to their bare instrumental use – is characteristic to our culture.⁷ He wants to rejuvenate and reclaim the cultural connection lost by exposing the essence of technology as the mediator between the man and nature, an evolving field in itself and an inherent and constitutive part of ourselves.

Machines, Simondon notes, have increasingly usurped man's place as the sole

An inventor, a helpmate to emergence, can bring pieces together, but only caters for the coming of the synergy, i.e. what makes them click and come together in a continuous operational solidarity and as a function of their joint future. This solidarity is not the result of a simple piecemeal adding together of elements, but holistic optical-like effect that adds a new non-decomposable dimension to their existence: 'Invention is the bringing into present operation of future functions that potentialize the present for an energetic leap into the new. The effect is a product of a recursive causality: an action of the future on the present.(...) A technical invention, he [Simondon] says, does not have a historical cause. It has an "absolute origin": an autonomous taking-effect of a futurity; an effective coming into existence that conditions its own potential to be as it comes. Invention is less about cause than it is about self-conditioning emergence (...) At that "critical point", the future effect takes over. It takes care of itself, making the automatic leap to being a self-maintaining system. That moment at which the system makes the leap into operative self-solidarity is the true moment of invention.' (Massumi 2009, pp. 40-41.)

Simondon searched for operations on every level of being beginning from the most basic level and moved gradually from the physical to the biological, to the psychological and finally to the social individuation (Schick 2017, p. 57). He formulated a comprehensive theory of individuation processes in physical, biological, psychological and social systems by synthesising gestalt psychology, information theory and topological models (Schmidgen 2005, p. 13). 'Inversely, the ontology of individuation explains the mode of being of technical objects' (Lindberg 2019, p. 305). 'Technologies are nothing else but life, vital and human motion fixed in the realm of material and informational operative processes. Technical normativity continues vital normativity. Technology does not merely enhance the capacities of organisms. Rather, it embodies their imaginative and active powers.' (Dereclenne 2019, p. 9.

The tool is not made of matter and form only. It is made up of technical elements arranged for a certain system of usage and assembled into a stable structure by the manufacturing process. The tool retains within it the result of the functioning of a technical ensemble. 'The machine is different from the tool in that it is a relay: it has two different entry points, that of energy and that of information. The fabricated product that it yields is the effect of the modulation of this energy through this information, the effect that is practiced on a workable material.' (Simondon 2009a, p. 20.) The production of a good adze requires a technical ensemble of foundry, forge and tempering. The technicality of the object is, therefore, more than a quality of usage. It is that in the object which is added to an initial design determined by the relation of form to matter. It is, as it were, an intermediary between form and matter. (Simondon 1980, p. 84.) 'In order for the craftsman to recognize his equivalent in the industrial modality, the same human being must be inventor, constructor, and operator. However, the effect of this amplification and complication of the industrial world is to spread out the different roles from each other: not only the source of information from the source of energy and the source of primary material, but even the different tasks of information contribution. It is thus a weaker part of the total capacities of the human being that is engaged in the industrial act, both when s/he is operator and in the other roles of information contribution.' (Simondon 2009a, p. 21.)

tool bearer.8 Arguably, the world must contain a real opening for their functioning that is possible to bring into being by inventing forms that are capable to harness them into stable, continuous and controllable events or processes. For Simondon, the essence of technical objects is something that not only remains stable through all subsequent phases of transformations since its invention, but also a source for new tools and machinery by its internal development and progressive saturation by segregation of functions. This dynamism tends to evade our attention. It consists in a common reservoir or a system of virtualities for the possible forms that energise them. However, when we approach technical things in the context of their possibility and becoming, their genesis as technical species, it is less straightforward to reduce them to their extraneous dimensions, as plain instruments that channel nothing but the power, interests and ingenuity of their users rather than a power they could claim as their own. Simondon (1980) argues that the technical object, once invented, exists by virtue of its functioning in exterior devices and by virtue of phenomena of which it itself is the centre. It becomes less dependent on effective external regulatory environment in its persistence by increasing its internal coherence and organisation and the multi-functionality of its parts. For Simondon, a more concrete technical object emerges from a more abstract one. What was originally an isolated and heteronomous object becomes either self-sufficient or associated with other objects that make its functioning possible (Simondon 1980, pp. 41-48).

Simondon (1980) believes that the way a machine or a tool harnesses the virtualities that make its functioning possible is analogous to the manner the dynamisms of their associated milieu condition each causally or they themselves, reciprocally, set the energetic, thermal and chemical conditions for the functioning of their own parts. Individualised technical objects, unlike technical ensembles as their organised collections, are characterised by recurrent causality with their associated milieu as a necessary condition for their functioning. For an ensemble, the creation of a unique associated milieu is undesirable and it comprises a number of devices that prevent it from emerging. While there is a recurrence of causality between the associated milieu and the structures, it is not a symmetrical recurrence. The former plays an informational role as a basis for self-regulations as a vehicle for information or for information controlled energy. Structures connected with one

The machine is a result of organization and information; it resembles life and cooperates with life in its opposition to disorder and to the levelling out all things that tend to deprive the world of its powers of change. The machine is something, which fights against the death of the universe; it slows down, as life does, the degradation of energy, and becomes a stabilizer of the world. (Simondon 1980, p. 9.)

For Simondon, analogy as identity of relations is a methodological tool grounded in allagmatics as the science of genetic operations that modifies the very structures – the results of individuation (Schick 2017, p. 58) – that become the objects for other sciences (Barthélémy 2012, p. 204). With it one can imagine the way individuation occurs in different domains and across them too. One has to individuate knowledge itself in order to to grasp the act of individuation. Knowledge is relative to its conditions of possibility. It needs to become the subject and object of itself simultaneously. Only then the very operation of knowledge is revealed and acted out in its relation to its milieu, Schick (2017, p. 62) emphasises. 'Analogy serves then as a tool that distinguishes and relates epistemological individuation to other forms of individuation' (Ibid., p. 62). 'The application of the method of analogy allows one to describe technical objects in the same terms as living beings' (Schick 2017, p. 55). 'The technical object is analogous to the ontological situation of man. It results from the interplay of life and thought which are the two components of a recursive causality' (Schick 2017, p. 69).

^{&#}x27;Information – Simondon is unambiguous about this – has no content, no structure, and no meaning. In itself, it is but disparity. Its meaning is the coming into existence of the new level that effectively takes off from the disparity and resolves the discontinuity it exhibits into a continuity of operation. Information is redefined in terms of this event.' (Massumi 2009, p. 43.)

single associated milieu should operate synergetically (Simondon 1980, p. 70). 11

Simondon (1980, pp. 74-76) calls infra-individual technical objects technical elements. They have no associated milieu, but can be integrated into an individual and their evolution can have an effect on the evolution of the latter. Their introduction into an individual may modify its characteristics, make possible a progression in technical causality from the level of elements to the level of individuals, and further to the level of ensembles.

In the technical world, Simondon (1980) believes, negativity stands out as an incomplete meeting of the technical world and the natural world, as a flaw in individualisation that spurs us to look for a better solution. However, the resulting change should not be mistaken for progress. What is transmittable from one age to another is not technical ensembles or individuals but the elements that the latter grouped as ensembles were able to produce. Technical ensembles, unlike living beings, are capable of going outside themselves and producing elements different from their own. A technical being, unlike a natural being, cannot produce other technical beings like itself, but it can produce elements that retain a degree of perfection attained by a technical ensemble and can make possible the constitution of new technical beings in the form of individuals. This is through the constitution of elements that have within them a certain degree of technical perfection. For Simondon, natural objects are completely concretised objects: all functional parts are overdetermined in them – a state of relations beyond reach for technological objects (Schmidgen 2009, p. 15). Any living being is a true theatre of individuation and a system that individuates itself simultaneously with its milieu, but also depends on maintaining its metastability as a prerequisite for remaining alive (Schick 2017, p. 65, p. 72; on individuation, see Voss 2018).

'If living beings are theaters of individuation, then technical objects are the props that fill the stage and allow new individuations to take place. The props however also change the status of the actors on stage. They define the paths and possibilities of the actors.' (Schick 2017, p. 67.)

At the element level, technicality is concretisation. It is what makes an element produced by an ensemble really an element rather than an ensemble or individual. It is thus detachable from the ensemble and available thus for the composition of new

An apprentice forms habits, gestures and ways of doing things, which enable one to use the many and various tools demanded by the whole of an operation and leads to technical self-individualisation. One becomes the associated milieu of different tools and learns to use the body to insure the internal distribution and self-regulation of the job. The differentiation of roles in a work process provides a good illustration of the genesis of an ensemble that is composed of men employed more as technical individuals than as human individuals. One guides the machine as a technical individual by attending to the relationship of the machine to its elements and to the ensemble and becomes the organiser of relationships between technical stages, while an artisan is one of those technical stages. The functions to be performed are both higher and lower, tending towards a relationship with elements and towards a relationship with ensembles. The machine-tool is something lacking autonomous internal control and needing man to make it work. Here man intervenes as a living being. Using his own sense of self-regulation he gives the machine self-regulation, without necessarily formulating this consciously. (Simondon 1980, pp. 91-96.) Schick (2017, p. 74) terms Simondon's conception of man as homo coordinans: one is among material and technical objects with a function to coordinate their network.

individuals. The technicality as a quality of a technical element that the technical ensemble has acquired, is what is transmitted into a new period. The possibility of technical progress over and above the apparent discontinuity of forms, fields and kinds of energy used and, occasionally, of systems of functioning, is based on the transmission of technicality by elements. While the individual and the ensemble contain technical reality, they can produce and preserve, but they are not able to transmit it. They, unlike technical elements, do not last. The elements are the carriers of pre-given but historically evolving technicalities. The challenge for an inventor is to figure out an individual being that is not only capable of incorporating them, but to exist in an associated milieu that overcomes their incompatibility. That brings the technicalities together in a form of a stable encompassing system, a technical individual imagined that concretises their characteristics, respective forces or capacities in producing an effect, and their interrelations in the form of an associate milieu and an individualised ensemble (Simondon 1980, pp. 82-88).

The causes for the emergence of the technical object, Simondon (1980) believes, resides in it, especially in the way it causes and conditions itself in its operation by detecting limitations and transcending them, by modifying the internal disposition of functions, incorporating obstacles, incompatibilities and tensions and turning them into new parts, and, as the results, individuating further by concretisation.¹³ The progress of technical objects builds upon the modification of the division of functions in such a way that their synergy increases or the harmful effects of residual oppositions diminishes¹⁴ (Simondon 1980, pp. 32-33, p. 46).

'Specialization is not achieved function by function but synergy by synergy. What constitutes the real system in a technical object is not the individual function but the synergetic group of functions. It is because of the search

^{&#}x27;The more advanced the technicality of an element becomes, the more the margin of indetermination of this force diminishes. This was what I wanted to state when I said that the elementary technical object becomes concrete according as its technicality increases. This force could also be called capacity, as long as it is understood that it is being characterized with reference to a fixed use. Generally speaking, the more advanced the technicality of an element becomes, the larger becomes the scope of its conditions of use, because of the great stability of the element.' (Simondon 1980, p. 88.)

^{&#}x27;If technical objects evolve in the direction of a small number of specific types it is by virtue of internal necessity and not as a consequence of economic influences or requirements of a practical nature. It is not the production-line which produces standardization; rather it is intrinsic standardization which makes the production line possible.' (Simondon 1980, p. 17). 'It is the standardization of the subsets, the industrial possibility of the production of separate pieces that are all alike that allows for the creation of networks' (Simondon 2009, p. 22).

^{&#}x27;...it could be said that minor improvements adversely affect major improvements because they blind us to the real imperfection of a technical object that makes use of non-essential devices, which are not completely integrate, into the functioning of the whole, to compensate for real antagonisms. (...) The course of minor improvements is one of detours; useful as they are in certain cases of practical use, they hardly lead to the evolution of the technical object. Minor improvements conceal the true and essential system of each technical object beneath a pile of complex palliatives; they encourage a false awareness of the continuity of progress in technical objects while, at the same time, diminishing the value of essential transformations and lessening our sense of urgency about them. For this reason, continuous minor improvements provide no clear boundary in relation to the false renovations which commerce requires in order to pretend that a recent object is an improvement on the less recent. (...) the contrary, it is minor improvements which to a certain extent come about by chance and obscure by their incoordinated proliferation the pure lines of the essential technical object. The real stages of improvement of the technical object are achieved by mutations, but by mutations that have meaningful direction...' (Simondon 1980, pp. 36-38.)

for synergies that the concretization of the technical object can be seen as an aspect of simplification. The concrete technical object is one which is no longer divided against itself, one in which no secondary effect either compromises the functioning of the whole or is omitted from that functioning. In this way and for this reason, in a technical object which has become concrete a function can be fulfilled by a number of structures that are associated synergetically, whereas in the primitive and abstract technical object each structure is designed to fulfil a specific function and generally a single one. The essence of the concretization of a technical object is the organizing of functional subsystems into the total functioning.' (Simondon 1980, pp. 30-31.)

Concretisation is essentially the emergence of structures that fulfil a number of functions that are both positive, essential and integrated into the functioning of the whole, i.e. the convergence of functions within a structural unity that reorganise the relation between internal and external environment. For Simondon (1980), the technical objects persist in between. ¹⁵ As inhabitants of two separate, not necessarily fully compatible, worlds, each represents an invention for how to compromise with two surroundings, like in the case of locomotive working at the intersection of the geographic environment and the technical environment (Schmidgen 2005, p. 15), 'a techno-geographic milieu being the simultaneously technological and geographical milieu that the object projects as its condition' (Lindberg 2019, p. 302). They are also constrained by the two, although before their invention, their own environment existed only virtually (Simondon 1980, p. 31).

'Indeed, between man and nature there develops a techno-geographic milieu whose existence is only made possible by man's intelligence. The self-conditioning of a system by virtue of the result of its operation presupposes the use of an anticipatory functioning which is discoverable neither in nature nor in technical objects made up to the present. It is the work of a lifetime to achieve such a leap beyond established reality and its system of actuality towards new forms, which continue to be only because they exist all together as an established system. When a new device appears in the evolving series, it will last only if it becomes part of a systematic and plurifunctional convergence. The new device is the state of its own possibility. It is in this way that the geographical world and the world of already existing technical objects are made to interrelate in an organic concretization that is defined in terms of its relational function.' (Simondon 1980, pp. 59-60.)

The essential condition for technical progress is the individuation of technical beings made possible by the recurrence of causality in the environment which the technical being creates around itself, an environment which it influences and by which it is influenced. This environment that Simondon (1980, p. 60) calls an associated milieu

^{&#}x27;Indeed, if the individual is relation and not merely in relation, as the Simondonian doctrine of the realism of relations proclaims, then the individual can only be relation between orders of magnitude. The individual enables these orders to communicate... These orders of magnitude, to the extent that they only exist relative to each other, are not terms that pre-exist their relation. Therefore, they do not put the realism of relations in question.' (Barthélémy 2012, p. 220.)

conditions the technical being in its operation, and is both natural and technical at the same time. The environment associated with the technical object is a middle term between the natural world and the technical object's fabricated structures (ibid., p. 66).

The technological object does not refer to single beings, but to a series or row of such beings, to the diagram or scheme underpinning a unity of becoming. Simondon is interested in their individuality, not their singularity (Schmidgen 2005, pp. 14-15). For Simondon, the technical object is not a material thing but a functioning one, Lindberg (2019, p. 303) claims.

"...for Simondon, the individuality of technological objects lies in their respective functional diagram and a series of corresponding material concretizations. In other words, technological objects never stand alone. They are always part of a row constituted by earlier and later instances of related objects." (Schmidgen 2005, p. 17.)

Simondon proposes the concept of technical lineages to understand the historical evolution of technical objects. 'The genesis of a technical object is the genesis of an entire lineage through which a 'technical essence' gradually evolves' (Lindberg 2019, p. 303). At their beginning is an invention of a technical function as a possible response to a problem; a principle that can become the ancestor for a family of objects (ibid, p. 304). Bontems (2009) speaks of genetic mechanology. It emphasises establishing a relationship between objects according to their internal functioning instead of their uses, and conceptualising them as subsequent stages or phases in their historical becoming, in terms of their concretisation as progress towards a fully unified technical individual – a process that is both constrained and made possible by their original potentialities. ¹⁶ Inside a lineage, the transformations of the structures and functioning are determined by specific dynamics of self-adaptation, self-regulation and convergence of functions whereby the technical object becomes a system of more and more synergic functions. The more concrete a machine, the better it adapts to every environment, because it has integrated its own associated milieu and so, in fact, it is more natural than artificial, Bontems (2009, p. 9) states. Inventions introduce discontinuities into the historical record (Schmidgen 2005, p. 16).

'From the abstract origin to the final concrete phase, the concretization process shows two types of progress: there is some minor progression, by gradual enhancement and adaptation of each technical element, function by function; and then come major improvements, inventions or reconfigurations of the structure, that do not represent compromise, but rather resolutions of

^{&#}x27;More than a mere transformation of the environment, adaptation refers in Simondon to the co-emergence of the individual and its environment. In order to adapt, the individual does not impose onto the environment the law of its own intrinsic, pregiven, and static tendencies. The so-called 'transductive' (instead of hylomorphic) scheme through which Simondon conceptualizes the dialectical and adaptive relation between the living organism and its environment means that both organisms and the environment co-emerge in a common process of individuation. Transductionrefers to (1) structural amplification (individuation as a process of structuration and amplification), (2) relational co-emerging of non-pregiven terms, and (3) the quantic or inventive nature of individuating operations.' (Dereclenne 2019, pp. 3-4.)

incompatibilities between subsystems, so that they are integrated into the functioning of the entire system' (Bontems 2009, p. 4).

Simondon thinks of technical reality as a mode of the type of relation that a living being has in its milieu (Lindberg 2019, p. 303). Dumouchel (1992, p. 419) speaks of associated niche. Like all other objects, technical objects have a milieu and only make sense in the milieu. Furthermore, they open up the milieu that the human being shares with other human, natural and technical beings. The technical object is a spatial being-with-other-objects (and beings) and cannot be examined in isolation (Lindberg 2019, p. 305). Furthermore, all technical objects contain incompatibilities reflecting the strenuous relations between their heterogeneous elements and their respective associated milieus that materialise in tensions and provide for their overcoming by inventing a new synergetic function as the resolution (Lindberg 2019, p. 305).

"...in Simondon's perspective, imagination is the very transductive and biological process through which living organisms and the world co-emerge. Imagination, at least when technologically mediated, is the embodied schematic process whereby subjectivity and the technological world co-emerge, in the merging and meaningful relation between interiority and exteriority. Meaning denotes both (1) the imaginative and active discovery of an individual-world systematics through which the individual and the environment reveal themselves as constitutive, merging and emerging parts of each other—invention as transduction and adaptation; and (2) the affective and collectively shared (transindividual) resonance of this discovery. Technical objects, additionally, whether invented or manipulated, are nothing but mediations crucially involved in this process of "sense-making," that is, in Simondonian terms, of "signification" as creative individuation and affective valuation.' (Dereclenne 2019, p. 7.)

A Simondonian Perspective on the Police

'When one uses Simondon to study organization, to be consistent, one would have to re-individuate the ideas and oneself. Just borrowing a few terms or concepts are not really to make use of Simondon's thought and method.' (Letiche & Moriceau 2016.)

Perhaps it is not so much a question of yielding Simondonian terms further, but of putting them into use as pure technicalities and technical diagrams in an attempt to develop concepts, principles and frameworks that open up a new level in understanding, turn out to be transductive in building upon an incompatibility, and overcoming it too. The challenge is in trying to grasp the world in terms that are analogous to ones introduced by Simondon, not in repeating what he claimed about it.

For philosophers, the original terms are interesting in themselves or in their relations to the terms used by other philosophers. A methodologist enjoys the way Simondon exposes a mode of operation and succeeds in articulating it in different domains. A police researcher ponders how to utilise them to cast a penetrating light

on the technologies in, of, and for the police and policing, to characterise the police as a type of technical object with the general features and dynamics Simondon envisaged.

For a philosopher it may well suffice to figure out the constitution of the world on an abstract level – 'In order to understand psychic activity within a theory of individuation as the resolution of the conflictual character of a metastable state, we must find veritable ways in which metastable systems are instituted in life' (Simondon 2009, p. 9). However, those abstract forms without historical substance, without specific substantial meaning anchored to a particular place and time, remain a play of thought.

Where to look for the metastabilities or virtualities that define the 'preorganisational', the incompatibilities, potentialities and possibilities that unfold in its becoming, in its continuous development by successfully containing its incompatibilities and thus resolving the dilemmas they pose by introducing a new level, but only to coming face to face with new problematics? Simondon in his philosophy postulated their general significance in the emergence of complex beings, but, most likely, left their identification and putting them on the map to a large degree for empirical research. The problem for us is in capturing a concrete individual in its constant becoming, to make sense of it in its current phase following the previous ones and preceding the forthcoming one, and to figure out both this very object of understanding as well as our understanding of it at one stroke.

Simondon (2009a) proposes, besides presuming the principle of the individuation itself (Simondon 2009b), two postulates. The first suggests the detachability of the parts from the whole and the second emphasises the need to study beings by considering them in their entelechy, not in their inactivity or static state. For technical realities, there exists a threshold – conditions or a regime of functioning – to start up and to maintain their functioning. Below it, they are self-stable and above it, selfdestructive. Their very existence as technical realities, a specific kind of structure, is conditioned by the realisation of their purported effect. The emergence of the latter requires a threshold to be crossed, a structure capable of overcoming it and maintaining or reproducing the very effect in a continuous manner, i.e. regulating itself and adjusting itself to needs of the very effect. When it is applied to the police, it emphasises both the relations that play a constitutive role in its becoming and in informing its current phase as a complex whole and a theatre, a happenstance, for individuation. The very idea of pre-individual offers a searchlight for scrutinising tension as pointing to sources for metastability and the technicalities as potentialised, though perhaps never fully stable, incompatibilities around which the essence of the police as an organisation, its ontogenesis, could potentially revolve.¹⁷

While Simondon formulates a philosophical account of 'how to explain the genesis of a certain incompatibility and indefiniteness associated with the individual that ensures its participation in future individuations' (Keating 2019, p. 2017), the explication remains abstract or genuinely philosophical, not an explanation for the concretisation of a particular case at a specific place and time. Thus, in a figure of

Keating (2019, p. 212) suggests that '...for Simondon, the pre-individual refers to a potentialised system that acts as a source of future individuations. To understand the individual through individuation, as Simondon would have us do, means asserting that it is only ever a partial result within an ongoing process of creative emergence, which is guided in part by certain kinds of affective processes and relations among pre-individual potential.'

speech, Simondon does not give a detailed map of the seabed, but informs us of the anchoring points that are crucial for getting the making of such a map properly organised.

It is quite likely that time as the difference between the past, the now and the future, is a constitutive relation in all becoming involving the human dimension. For me, Heidegger's idea of enframing, our tendency to ponder endlessly about the potential uses of anything, is testimony to us as unavoidably future-oriented beings. Keating (2019, p. 212) argues that affects energise us as impersonal intensity by offering a way to direct our individuated thoughts and sensibilities towards the 'virtual field of what might happen next'. What might be possible now or soon, within reach and available for enhancing or, intentionally or unintentionally, transforming the self, one's metastable inner environment, overcoming the incompatibilities that have come to characterise it in its current phase and thus contributing to the emergence of new layer in it, matters to us. 18 As far as our not-yet-known future is concerned, our relation to it is an affective one. For us, the future is most remarkable in its ever-present non-indifference. 19 According to Keating (2019, p. 2015), the recent attention to the pre-individuality of affect emphasises those singular and virtual potentials that open thought up to becoming different. The idea of individuation is hardly comprehensible without the idea of continuous differentiation or proliferation.

Most likely, the future is approached mainly by looking in the rearview mirror and the path towards it is measured by the distance from problematics resolved so far, the path left behind, the phases dephased previously, by the growth, personal or institutional, rather than engaging with anything truly ahead. Affects, as preindividual system of virtualities, potentials and forces on the way (Keating 2019, p. 213), individuate too, likewise our concept of it, like the sense of personal safety for police officers, as a relation to the development of gear, technologies and tactics, the safety of their relevant others, etc.

As pre-individual qualities, affects play a conditioning function as a structural possibility for the emergence of emotions, but for perceptions and actions too. According to Keating (2019, p. 219), living individuals for Simondon materialise an ontogenetic logic, bridging sensation with action: 'from sensation (individual and pre-individual reality), to affect (individuation of subject(s)), to affection (individualisation of individualised subject(s)), to emotion (individualised signification), and finally action'.

'... just as action is an ontogenetic outcome of an individualising process of perception, emotion is the ontogenetic outcome of an individuating process of affect. Refusing to dissolve the meaning of affect into embodied experience, by asserting the primacy of forces and potentials to the becoming of being, Simondon's affect differs to affection in accounting for the pre-individual processes structuring the genesis of perception as an affective orientation beyond the individual.' (Keating 2019, p. 219.)

While the concept of effectiveness tends to emphasise the economic or engineering point of view, but disregarding the affective side, it could be supplemented by the concept of 'affectiveness' as the ability to affect and be affected (Keating 2019, p. 214) to have a more comprehensive understanding of the pursuit of the first mentioned.

^{&#}x27;Time itself, in this ontogenetic perspective, is considered to be the expression of the dimensionality of being individuating itself' (Simondon 2009b, p. 11).

We must acknowledge, Hui (2018, p. 27) states, that there is a temporal gap between philosophical and scientific thinking and technical realisation, i.e. an incompatibility between the ideal, the possible and the prevailing states of affairs, that creates tension, antagonism, melancholia as well as critique. Affects derive from tensions residing in the incompatibility of ideas. In becoming, lateral, not only hierarchical, relations – differences, incompatibilities – count. It is taking seriously Simondon's (2009b, p. 4) notion that 'anything that can serve as the basis for a relation is already of the same mode of being as the individual, whether it be an atom, an external and indivisible particle, prima materia or form'. Although the reality of the relata can be considered relative to the individuation of each, their relation, when co-determining. along with the associate milieu, introduces a new, ontologically irreducible layer as individual-environment with potential for further individuation. The latter is conditioned by the state of individuation in its environment. Living beings, like the systems they form, are theatres of individuation inhering metastability and deriving their form from its potentialities and virtualities, but also transmitting it.²⁰ In the living, there is an individuation by the individual. Individuals are also agents capable of modifying themselves, but also in establishing systems or external structures dedicated to the modification of the internal structures in order to resolve the tensions and incompatibilities deriving from the pre-individual, from the conflictual character of an inherent metastable state (Simondon 2009b).

'The relation does not spring up from between two terms that would already be individuals; it is an aspect of the internal resonance of a system of individuation, it is part of a system state. This living, which is both more and less than unity, carries an inner problematic and can enter as an element into a problematic that is larger than its own being. Participation, for the individual, is the fact of being an element in a greater individuation, via the intermediary of the charge of preindividual reality that the individual contains, that is, via the potentials that the individual contains.' (Simondon 2009b, p. 9.)

Following Simondon's ideas of individuation effectively keeps the individual as the source of power for social systems and the latter as resolutions to the problematic related to the individual at the centre.

'The machine with superior technicality is an open machine, and the ensemble of open machines assumes man as permanent organizer and as a living interpreter of the interrelationships of machines. Far from being the supervisor of a squad of slaves, man is the permanent organizer of a society of

²⁰ 'Individuation must therefore be considered as a partial and relative resolution that occurs in a system that contains potentials and encloses a certain incompatibility in relation to itself – an incompatibility made of forces of tension as well as of the impossibility of an interaction between the extreme terms of the dimensions (...) The true principle of individuation is mediation, generally supposing an original duality of orders of magnitude and the initial absence of interactive communication between them, followed by communication between orders of magnitude and stabilization. At the same time that a potential energy (the condition of a higher order of magnitude) actualizes itself, a matter organizes and divides itself (the condition of a lower order of magnitude) into individuals structured into an average order of magnitude, developing itself by a mediate process of amplification. (...)The psychic is made of successive individuations that allow the being to resolve the problematic states that correspond to the permanent putting into communication of that which is larger and that which is smaller than it.' (Simondon 2009b, p. 5, p. 7 and p. 9.)

technical objects which need him as much as musicians in an orchestra need a conductor. The conductor can direct his musicians only because, like them, and with a similar intensity, he can interpret the piece of music performed; he determines the tempo of their performance, but as he does so his interpretative decisions are affected by the actual performance of the musicians; in fact, it is through him that the members of the orchestra affect each other's interpretation; for each of them he is the real, inspiring form of the group's existence as group; he is the central focus of interpretation of all of them in relation to each other. This is how man functions as permanent inventor and coordinator of the machines around him. He is among the machines that work with him.' (Simondon 1980, p. 4.)

'Today, technicality tends to reside in ensembles' (Simondon 1980, p. 9).

Individuation feeds further individuation via metastability. In the human world, individuation is accompanied by individualisation. Individualisation, for its part, consists in the formation of identity or personality. The emergence of the latter both results in variance or difference and responds to it. Individualisation creates incompatibility both on the personal, transindividual and institutional levels, resulting in metastability and ontogenesis.

Individuation and the Modern Conditions of Work

The crystallisation of life under rationalised harnesses did not escape Max Weber's attention:

'The Puritan wanted to work in a calling; we are forced to do so. For when asceticism was carried out of monastic cells into everyday life, and began to dominate worldly morality, it did its part in building the tremendous cosmos of the modern economic order. This order is now bound to the technical and economic conditions of machine production which today determine the lives of all the individuals who are born into this mechanism, not only those directly concerned with economic acquisition, with irresistible force. Perhaps it will so determine them until the last ton of fossilized coal is burnt. In Baxter's view the care for external goods should only lie on the shoulders of the 'saint like a light cloak, which can be thrown aside at any moment'. But fate decreed that the cloak should become an iron cage.' (Max Weber, quoted in Baehr 2001, pp. 153-154.)

For Simondon, fate has nothing to do with the emergence of the steely matrices for the ordering of human elements into larger, functionally organised technical ensembles, the bureaucratic confinement amplifying in every direction, consolidating and intensifying in every domain, enhancing their reality, but also transforming their outlook and giving character to their individuation.

Baehr (2001, p. 157) criticises Parsons that he translated stahlhartes Gehäuse ('shell as hard as steel') as the 'iron cage'. From his view, the latter builds upon a

flawed literary analogy that fails to fully capture Weber's nuanced argument.²¹ For Weber, a metastability remains there and, thus, the possibility for the emergence of a new synthesis by inventive new prophets or a return to old ideas and ideals, i.e. to the pre-individual, that provide an opening for avoiding the 'mechanised petrification'. ²²

Modernity stood out for Weber as creative transformation, dephasing the old and the emergence of a new regime and the human being as its authentic citizen. What abhorred him was the inevitable bureaucratic stultification of all sectors and spaces of life, the steely necessity of its unstoppable march forward, that was to last until the energy for it, the last tonne of fossilised coal, was consumed (Baehr 2001). With it, all enchantment – mystery, magic, myth in social and organisational life (e.g. Suddaby, Ganzin & Minkus 2017) – would evaporate from the world eventually or become gradually replaced by calculative rationality in the context of optimisation ('evidence-based').

Herbert Marcuse, a contemporary of Simondon and a reader of his texts exposing capitalism hiding at the back of Simondon's concept of culture that creates the rupture between technology and the needs of man, tried to figure out the connection between science, technology and capitalism as a system of domination, and he spoke of the one-dimensionality of man²³ (Luke 2000; Feenberg 2013). Efficient systems of production, like machines, build upon elements. In the case of machines, the elements reflect the virtues of their production and their mutual relations as parts of a larger whole; or in the case of humans, the virtues of the systems of their management and control, beside the aforementioned.²⁴ Bureaucratic logic, for Weber, tended towards the refinement of tasks, responsibilities and expertise until they resembled precision instruments that displayed a perfect fit with well-circumscribed tasks. Bureaucratisation conditions the growth of professional knowledge and scientific expertise and is made possible or fuelled by it too.

Stahl (steel), unlike iron, is an invention, not an element. It is an alloy of iron, a mixture and a product of human fabrication. 'Just as steel involves the transformation of iron by the mixing of carbon and other elements, so capitalism involves the transformation of labour power into commodities.' (Baehr 2001, pp. 161-162.) A more accurate translation for Gehäuse is shell, as it refers to a living space carried with and the environment within which individual experience is lived out. It is both a shelter and a constraint, an aspect of our existence, but, as such, not a part of us, more like a cloak than a cage (Ibid., pp. 163-164)

Weber may have despaired of some aspects of the modern condition, but his summoning of Nietzsche's Last Man, Baehr (2001) argues, has precisely the opposite thrust: '... one must have chaos in one, to give birth to a dancing star. I tell you: you still have chaos in you.' The Puritans struggled to contain chaos within their doctrines. 'That its eclipse was to be feared more than the inner conflict it provoked was a typical Weberian sentiment', Baehr (2001, p. 160) remarks.

The expulsion of essences through the reduction of things to their measurable aspects leaves thought helpless to criticize ("measure") the world. Science is thus complicit with the system of domination that prevails under capitalism. This complicity involves more than supplying capital with the machines it needs; it also corrupts experience itself through the mediation of the quantifying practices of capitalism in everyday life. Abstract labor and the fetishism of commodities become touchstones of experience, stripping it bare of normative qualities. The elimination of a proper measure of society deprives the individuals of a basis on which to resist conformity to its demands. This is what Marcuse describes as "one-dimensionality".' (Feenberg 2013, p. 609.)

^{&#}x27;Individual, non-quantifiable qualities stand in the way of an organization of men and things in accordance with the measurable power to be extracted from them. But this is a specific, socio-historic project, and the consciousness which undertakes this project is the hidden subject of Galilean science.' (Marcuse, quoted in Feenberg 2013, 606.)

'Bureaucracy is the means of transforming social action into rationally organised action. Therefore, as an instrument of rationally organising authority relations, bureaucracy was and is a power instrument of the first order for one who controls the bureaucratic apparatus.' (Weber 1989, p. 987.)

Like any other instrument, the bureaucratic machine is relatively indifferent to the purposes of its user. The more indifferent, the more pure it is as a tool. Democratisation, Weber claims, did not change the masses from the governed to those that govern, but the way those at the helm are chosen. Beside purely political factors, the demand for a society that is accustomed to absolute pacification for order and protection ('police') across fields drives bureaucratisation (Ibid. p. 972). Bureaucratisation, for its part, as Huotari (2013, p. 108) notes, tends to impose its categorical matrices upon the environment, enact accordingly and transform it as well as being transformed by it.

An engineer and a contemporary to Max Weber but living in the United States, Frederick W. Taylor, the father of scientific management, was mesmerised by the problem of optimising. He was assured that for every conceivable work, whether accomplished by machine, person or animal or a combination of them, there was the one best way for accomplishing it by figuring out the ideal relations between its constituent elements. Engineering them out called for experimentation and research.

For Taylor, every work was governed by impersonal laws, not by the traditions, personal preferences, beliefs or whims of the supervisors or managers. One cannot argue with nature. Therefore, all disagreements are best solved by facts that are equally given to all, Taylor believed. Figuring them out, turning them into rules to be followed at work, helping the worker to follow them and supervising it too was to increase efficiency and reduce waste, but also well-being and democracy.

The age of dictators at factories was to end and the dawn for a new era, where managers played the role of servants, was close, Taylor believed. His aim was to provide a new ground for working life that was based on empirically established and demonstrable scientific facts, where true, generally agreeable laws of nature would replace arbitrary rules of human conduct. What such laws demanded was obedience to them; a willingness follow them and to maintain thus highly standardised conditions of work as a prerequisite for high performance in it.

In the past, Taylor proclaimed, man has been first, but in the future the system must take that position. ²⁵ A system is about fulfilling the necessary functions, whether by machine or man. The source of leadership was to be found residing inside each such functional element. Previously authoritarian, asymmetric and antagonistic systems of relations in the workplaces were to become symmetrical and reciprocal co-operation in the new synergetic order. The commitment to the following of rules – the omission of all creativity – was rewarded by higher salaries and increased free time. The workers could put forward initiatives related to their work, but a rigorous scientific evaluation of them was a prerequisite before their implementation or adoption. Proceeding forward only was deemed essential by Taylor. (For more on Taylor's programme, see Huotari 2016.)

Simondon (1980, pp. 96-97) speaks of functional monism that was necessary at time when man became technical individual. It meant one function per person. Nowadays, he claims, functioning in a technical task meaningfully requires acquaintance with every conceivable aspect of the machine and an understanding of it as well as attention to its elements and its integration into the functional ensemble, i.e. overcoming the care for elements and the care for ensembles in a role for one person.

Max Weber predicts the continuous differentiation of the bureaucratic structure as long as there remains fuel to burn, the transformation of crude functions into a multitude of sophisticated precision instruments, where efficiency is increased by narrowing the scope and effectiveness by fine-tuning the ensemble that is characterised by the respective fragmentation of knowledge and expertise. The result is the emergence of a complex structure where technical efficacy derives from grasping the ever-larger whole increasingly more effectively, but also in smaller and smaller portions.

Weber misses what Simondon calls concretisation, where separate functions are increasingly taken care of by structures that serve more than just one function at the same time, reducing the internal divisions or antagonisms that are inclined to work against each other.²⁷ Frederick Taylor's vision of replacing hierarchical relations with a system build upon co-operation, figuring out joint interests, mutuality in work and learning, and shared leadership, authentically represents Simondon's insight. Perhaps Taylor also envisaged better than Weber the role of popular culture as a necessary counter-balance to the increasingly element-in-a-machine -like life at work.²⁸

Perhaps neither foresaw what it would mean for a person to find out that one is or has become incompatible with the requirements of bureaucratised world and what the costs from it would be for society.²⁹ Moreover, as Suddaby, Ganzin & Minkus (2017) point out, the development has occurred without organised pursuits in countering it and increased awareness of the potential losses.

^{&#}x27;Weber predicted that the rationalizing arc of modernity would be accompanied by an increasing sense of loss as the old "nature-centred" world of myth and magic gave way to the new "human-centred" world of efficiency and control. He understood the emotional consequences of modernity and the increasing loss of meaning that inevitably occurred when craft modes of production gave way to the mechanics of the assembly line, when the courthouse replaced the church and the physician supplanted the midwife.' (Suddaby, Ganzin & Minkus 2017.)

The specialization of each structure is a specialization of positive, functional, synthetic unity which is free of unlooked-for secondary effects that amortize this functioning. The technical object improves through the interior redistribution of functions into compatible unities, eliminating risk or the antagonism of primitive division. Specialization is not achieved function by function but synergy by synergy. What constitutes the real system in a technical object is not the individual function but the synergetic group of functions. It is because of the search for synergies that the concretization of the technical object can be seen as an aspect of simplification. The concrete technical object is one which is no longer divided against itself, one in which no secondary effect either compromises the functioning of the whole or is omitted from that functioning. (...) The essence of the concretization of a technical object is the organizing of functional subsystems into the total functioning. (...) In the concrete object each piece is not merely a thing designed by its maker to perform a determined function; rather, it is part of a system in which a multitude of forces are exercised and in which effects are produced that are independent of the design plan. The concrete technical object is a physicochemical system in which mutual actions take place according to all the laws of science. (...) The ultimate assignment of functions to structures and the exact calculation of structures could only be accomplished if scientific knowledge of all phenomena that could possibly occur in the technical object were fully acquired.' (Simondon 1980, pp. 30-32.)

Weber outlined the ideal type of bureaucratic organisation upon an analogy of a mechanical machine. However, he was not an engineer and he took his source metaphor too 'self-evidently' and did not thoroughly ponder it, its mode of existence and the way it develops, i.e. its ontogenesis. The limits of the analogy condition his grasp of bureaucratic phenomenon and the tendencies that are characteristic to it. Frederick Taylor, an engineer by profession, was more aware of the conditions that characterise the functioning of a machine and condition its efficacy.

Suddaby, Ganzin and Minkus (2017) refer to Sebastian Junger's account of Benjamin Franklin's observation that it was relatively common among European settlers to abandon their own settlements and to move and live with the 'Indians', while very few of the latter voluntarily left their communities to enjoy modern life. Tribal life possessed communal power, like camaraderie, that has evaporated in the modernity.

Populism rejects rational notions of progress and universal values and favours a return to traditional, often religious or otherwise spiritual stances and more local values. It embraces the myths of the past and a mythical past, but curses what it sees as deviations from the natural. Populism celebrates the wisdom of the little people down to earth, depreciates experts and elites, including public officials, medical practitioners and researchers, and appreciates craft modes of production, artisanal things, and sees crowds as a viable source of reason (Suddaby, Ganzin & Minkus 2017).

The cyber-crowds of today, Suddaby, Ganzin & Minkus (2017) argue, undermine the very premise. They resemble tribes, more specifically, as they cogently characterise them, mobs re-enchanted with the support of search algorithms that create recursively-reinforcing, but also Balkanising world-views as cyber-cages (ibid.). Potentiality residing in the pre-individual acts as a recursive resource for inventing ways out of problems that are conceptually only partially grasped, but often personally felt, and are easy prey for suggestive manipulation.

'There are two kinds of improvements, then: those which modify the division of functions, increasing in an essential manner the synergy of functioning, and those which without modifying the division in question diminish the harmful effects of residual oppositions. (...) ...minor improvements adversely affect major improvements because they blind us to the real imperfection of a technical object that makes use of non-essential devices, which are not completely integrated into the functioning of the whole, to compensate for real antagonisms. (...) Minor improvements conceal the true and essential system of each technical object beneath a pile of complex palliatives; they encourage a false awareness of the continuity of progress in technical objects while, at the same time, diminishing the value of essential transformations and lessening our sense of urgency about them. For this reason, continuous minor improvements provide no clear boundary in relation to the false renovations which commerce requires in order to pretend that a recent object is an improvement on the less recent.' (Simondon 1980, pp. 36-37.)

If real improvements are characterised by discontinuity rather than continuity, leaps rather than steps, modification of internal system of structures, mutations with a meaningful direction, as Simondon (1980, p. 38) emphasises, as far as the police are concerned, has there been any yet since their birth?

Methodological Remarks on Technology and the Police

Technological innovations should be scrutinised in relation to their functional predecessors (historical dimension), their conditions of existence and viability in a systemic ensemble (lateral and hierarchical dimension) and conceptualised in terms of the transformation in them they are bringing or require (their signification). The problem, when it comes to the police, is the absence of maps that are complex enough to cover the complexity of milieus associated with police work. Only few of the multiple dimensions are usually taken into consideration, explicated conceptually and scrutinised empirically.

What is absent is a study of the functioning of the police in between various systems and at the crossroads of many institutions, i.e. the reciprocal relations underpinning its very possibility and giving it character both in terms of exchange of information defining its function and enhancing awareness of the differences that give a discernible, continuously evolving identity, its network of participation and the combinations informing it.³⁰

'The study of the systems of functioning in concrete technical objects is valuable scientifically because these objects are not derived from a single principle. They are the evidence of a certain mode of functioning and of compatibility that exists in fact and that was constructed before being foreseen. The compatibility in question was not contained in each of the distant scientific principles, which played their part in the construction of the object; it was empirically discovered. In order to verify this compatibility, we can go back to the separate sciences in order to pose the problem of the correlation of their principles; to do so would be found a science of correlations and transformations, which would be a general technology or mechanology.' (Simondon 1980, p. 48).

In a smoothly functioning ensemble, all technical objects with recurrent causality in their associated milieu are separated from each other and the objects are connected in a way that preserves the mutual independence of their associated milieus and thus ascertains the undisturbed realisation of their respective functions (Simondon 1980, pp. 71-73). In a society, the associated milieus of different systems and subsystems are likely to overlap as there is no technical way to prevent them from mingling with an actual operation and the related decision-making:

'The operational practice of crafting decisions in individual cases is only one practice of many. It has boundaries with five other practices. In order to perform, operators have to cooperate with members of each of these five practices. Their work has to be: monitored by legal advisors; circumscribed by policy designers; steered by middle and senior managers; subjected to appeal procedures in administrative courts; and checked through internal administrative review procedures. The question is: how do these practices work together?' (Jorna & Wagenaar 2007, p. 193.)

In such a delicate system, there is a constant threat for any temporary equilibrium achieved at one point in time and place to return to a state of disequilibrium at the next one, possibly because of a technical innovation. In a systemic picture, scrutiny, say, of the effectiveness of the latter, consists in a conceptual rather than a purely technical issue. Reducing it to the latter represents a system, or rather the respective regime, order, view of the world, discourse or logic, claiming dominance or priority over others in pursuit of transforming them into its image and to its extension. To it,

^{30 &#}x27;However marginal it may always be in terms of our attention, the background is the harbour for dynamisms, and it is what gives existence to the system of forms. Forms interact not with forms but with their background, which is the system of all forms or, better still, the common reservoir of the tendencies of all forms even before they had separate existence or constituted an explicit system.' (Simondon 1980, p. 63.)

the others appear as potential, but currently somewhat flawed or poorly articulated, copies of it.³¹

When technologies and technical devices are approached as potential next phases following their predecessors, their respective milieus and the historical changes in their terms are not the sole objects of analysis. One should also pay attention to the technicity that transmits across time: in the case of ensembles, the elements they were able to produce (Simondon 1980, p. 82).

In the right conditions, organised action is able to make achievements, especially in terms of productivity, that, without it, would be impossible for an individual person. Increases in productivity are responsible for the fact that the Earth is able to provide for the current number of its inhabitants. However, the continuous growth of population is also the main source of pressure for increasing productivity.

The police are, at least, a nexus of information and are informed by it too. Information energises it into action. An ever-greater number of these actions are recorded, at least temporarily. Its core technicality relates to the finding out, recording, storing, retrieving, combining, communicating, transforming and use of information effectively and purposefully, i.e. transforming states of events, affairs or incompatibilities between them, claimed or presumed, into records that provide for its own work, among others. In the future an increasing part of the work will be taken care of and carried out by computers and algorithms, or by AI. One would expect that the laws, rules, procedures and formalities regulating the work on this information and around it are both many and explicit.

Moreover, the police appear as a tool for the rule of law. They are not the rule of law in themselves, but are subject to it too. They thus exist in-between as a mediator between two orders, the ideal or democratically wanted state of affairs as depicted in the law and the state of affairs that, in terms of the former, is depicted to deviate from it, i.e. be incompatible with it. Unless the police in themselves are disposed to the side of the rule of law, this mediation could go either way, i.e. due to their position, the police could effectively undermine the very stance of the statuses or, alternatively, the stance of the state of affairs they aim to maintain, change or prevent.

There is a significant delay in the mediation of the public will that anticipates the laws to come, to the statute books that reflect the willing of the previous generations. Moreover, the laws are expressed in abstract and general language, while the situations in life are both concrete as well as complex in an equivocal way. This being 'in-between' emerges as a stance of its own, in a way more concrete than the other two other, i.e. what is actually policed and enforced in practice.

Perhaps it is driven less by the will to power than the will for the realisation of self from motives that, once seen from the inside, appear purely benevolent, but hostile from the point of view of others. Incompatibilities between cognitive schemes represent a source for potentialities and change as a relation characterised by metastable equilibrium.

There is no police work without true discretion, although the range for it varies from almost none to a profound amount.³² Nevertheless, the police could, and perhaps should, be conceptualised as subsequent attempts to overcome the tensions that derive from the incompatibility of the two aforementioned stances. This consists in the metastability or virtuality that underpins the police and resonates in the follow-up of attempts at inventing better structural ways that contain the tensions deriving from it. It is a force driving the concretisation of the police.

The police as a bureaucratic organisation is inevitably at odds with the scientific knowledge subject to continuous growth, criticism and re-evaluation, but, simultaneously, is also entangled with the pressure to embody it authentically, to become not only thoroughly law- and evidence-based, but also fair, trustworthy, reliable and coherent in its deeds and pursuits. It is to adopt the scientific gaze, to see itself as engaged in experimenting in its daily work and tasked with screening out and forming the true lessons from them. It is to acknowledge that its associated milieu is destined to be at odds with the associated milieus of other institutions in society, to fall from their respective phase of development. Each of them evolves in a way that seems to result in the distances between them growing larger. Each of them individualises by becoming more aware of itself and its constitutive value-orientation and ethics (the difference). Each is also inclined to become increasingly blind to the commensurabilities underpinning this very pursuit as enclosed to a larger, inherently bureaucratic individuation.

It is at the level of institutional field that the very rule (enframing) informs the individuation by giving to its parts compatible means for pursuing their telos and for the concretisation of its result. It informs them in how to detect a potentiality and how to turn it into an asset by incorporating it.

Bureaucracies saturate bureaucratically and are saturated by the respective mentality without end, with the point of saturation in sight yet. Individuation that draws its energy from the underlying incompatibility and draws on its potentialities, provides for individualisation, increased self-awareness and enhancement of identity.

Their technical environment is respectfully organised pursuits characterised by identity-work as forging meaning out of the difference and for it too, solving the tensions deriving from its internal incompatibilities and contributing to the individuation of the respective ethics. Thus, on one level individuation is fuelled by incompatibility between ideas, on another by incompatibility between roles and practices, on another by tensions within the organisation, like tradition, structures and strategies. Moreover, it can be fuelled by divergencies between representatives of a larger institution as well as between the latter, as they become increasingly aware of differences between them and as each tries to resolve the tensions by incorporating them. Becoming should be grasped in its complex relatedness.

Policing can be accomplished by automatons, but only with significant costs as it would not be the one the public are accustomed with. Simply knowing the case-related facts and the respective law or laws is not enough. Policing includes making genuine ethical judgements, taking into consideration the situation, notions related to fairness, being fair and being perceived as fair too, and creating the now restlessly again and again by bridging it case by case with the past and the future. In this sense, policing is mediation, being in between what has been and what is to become. It is about balancing between the letter of the law and genuine attempts to be compliant with it, in disregarding it, and in breaking it intentionally. It is not – despite all the bureaucratic pretensions and disillusions – about other automatons, but real people in unfolding situations uniquely framed by collective, politically debatable pursuits that call for holistic and reflective grasp rather than calculating capacity. (Cf. Picorelli & Elias 2018.)

Conclusion

An attempt to translate philosophical ideas into methodological principles and concrete insights in the police and policing is very much like learning a new language. One can expect a journey that is bumpy, extremely frustrating, riddled with uncertainties, a feeling of not getting it, not being able to make it work ever, and characterised by the need to return to the very point of origin in order to start studying again. However, it is the only way to test the practical value of pure ideas. One may not proceed far or in the right direction, but they may well pave the road for the others in accomplishing the long walk eventually.

Ariel's suggestion that sociologists have found it difficult to fit technology into sociological theories (2019, p. 502), holds water only partially. Well-known sociologists have built their careers trying to make sense and capture the dynamics that result from modernisation characterised by technical development and mass production. I believe the challenge is in finding a middle road between totalising views of technology as an all-encompassing and almost absolute power in society, and a perspective that approaches it as a set of simple, neutral and inherently empty tools.

Scholarly discussion on innovations in the police and on technologies in policing covers everything from body-worn cameras, tactical gear and modes of interaction with citizens to alternative ways of policing and organising police work. This very openness is perhaps its most remarkable feature. It offers a good starting point for the next step towards more encompassing and reflective frameworks and discussions that dive deeper into the premises and presumptions underpinning the prevailing views, conceptualisations and approaches. While this essay hardly succeeds in this task, perhaps it proves that such a dimension or frontier actually exists, there are means for exploring it, even the uninitiated can start mapping it, and better maps are likely to follow on one day.

References

- Ariel, Barak (2019). Technology and policing. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives (2. Edition). Cambridge: Cambridge University Press, pp. 485-516.
- Barthélémy, Jean-Hugues (2012). Fifty key terms in the works of Gilbert Simondon (transl. Arne De BoeverIn) In Arne De Boever, Alex Murray, Jon Roffe and Ashley Woodward (Eds.) Gilbert Simondon: Being and Technology. Edinburgh: Edinburgh University Press, pp. 203-231.
- Baehr, Peter (2001). The "iron cage" and the "shell as hard as steel": Parsons, Weber, and the Stahlhartes Gehäuse metaphor in the Protestant Ethic and the Spirit of Capitalism. History and Theory 40 (2), pp. 153-169.
- Bontems, Vincent (2009). Gilbert Simondon's genetic "mecanology" and the understanding of laws of technical evolution. Techné 13 (1), pp. 1-13.
- Dereclenne, Emilien (2019). Simondon and enaction: the articulation of life, subjectivity, and technics. Adaptive Behaviour. https://journals.sagepub.com/doi/full/10.1177/1059712319861915

- Dumouchel, Paul (1992). Gilbert Simondon's plea for a philosophy of technology. Inquiry 35, pp. 407-421.
- Feenberg, Andrew (2013). Marcuse's phenomenology: reading chapter six of One-Dimensional Man. Constellations 20 (4), pp. 604-614.
- Heidegger, Martin (1977). The Question of Technology and other Essays (transl. William Lovitt). New York: Garland Publishing.
- Hui, Yuk (2018). Preface: the time of execution. In Executing Practices. Data Browser Book Series 6 by Open Humanities Press, pp. 26-32.
- Huotari, Vesa (2016). Johtaminen tosiasiana [Leadership as facticity). Tiedepolitiikka 41 (1), pp. 39-48.
- Huotari, Vesa (2013). Knowledge-based policing in bureaucratic police organisation. In Vesa Huotari (Ed.) Researching the Police in the Nordic Countries. Proceedings from the fourth Nordic Police Research Seminar. Reviews of the Police University College n:o 3, pp. 106-109. <u>Katsauksia3</u> web.pdf (theseus.fi)
- Jorna, Frans & Wagenaar, Pieter (2007). The "iron cage" strengthened? Discretion and digital discipline. Public Administration 85 (1), pp. 189-214.
- Keating, Thomas (2019). Pre-individual affects: Gilbert Simondon and the individuation of relation. Cultural Geographies 26 (2), pp. 211-226.
- Koper, Christopher & Lum, Cynthia (2019). The limits of police technology. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives (2. Edition). Cambridge: Cambridge University Press, pp. 517-543.
- Letiche, Hugo & Moriceau, Jean-Luc (2017). Simondon: Investigating the Pre-Organizational. Culture And Organization 23 (1), pp.1-13.
- Lindberg, Susanna (2019). Being with technique technique as being-with: the technological communities of Gilbert Simondon. Continental Philosophy Review 52, pp. 299-310.
- Luke, Timothy (200 One-Dimensional Man. A systematic critique of human domination and nature-society relations. Organization & Environment 13 (1), pp. 95-101.
- Massumi, Bruno (2009). "Technical mentality" revisited: Brian Massumi on Gilbert Simondon. An interview in by Arne De Boever, Alex Murray and Jon Roffe. Parrhesia 7, pp. 36-45.
- Picorelli, Justin & Elias, Maria Veronica (2018). Integrating video technology and administrative practice in policing: a phenomenological exposé. International Journal of Organization Theory & Behavior 21 (2), pp. 122-136.
- Simondon, Gilbert (2009a). Technical mentality (transl. Arne De Boever). Parrhesia 7, pp. 17-27.

- Simondon, Gilbert (2009b). The position of the problem of ontogenesis (transl. Gregory Flanders). Parrhesia 7, pp. 4-16.
- Simondon, Gilbert (1980 [1958]). On the Mode of Existence of Technical Objects (transl. Ninian Mellamphy). University of Western Ontario.
- Suddaby, Roy, Ganzin, Max & Minkus, Alison (2017). Craft, magic and the reenchantment of the world. European Journal of Management 35 (3), pp. 285-296.
- Schick, Johannes (2017). Theaters of individuation. Gilbert Simondon and the interrelations of ethics, techniques, and ontology. Journal of Badiou Studies 5, pp. 53-84.
- Schmidgen, Henning (2005). Thinking technological and biological beings: Gilbert Simondon's philosophy of machines. Revista do Departamento de Psicologia 17 (2), pp. 11-18.
- Tanner, Samuel & Meyer, Michael (2015). Police work and new "security devices". Security Dialogue 46 (4), pp. 384-400.
- Weber, Max (1978). Economy and Society, vol 2. Berkeley: University of California Press.
- Voss, Daniela (2018). Simondon on the notion of the problem. A genetic schema of individuation. Angelaki 23 (2), pp. 94-112.

INNOVATIONS OF POLICE SCIENCE – REMARKS FROM THE POINT OF VIEW OF CUSTOMER PROTECTION

Vesa Huotari

Introduction

'Scientists who are willing to bridge "science" and "commerce" play an important role in the innovation process' (Sauermann & Roach 2012).

The government's mantra of "doing more with less" challenged police managers – and frontline staff – to innovate and do things differently. Ironically perhaps, the politics of austerity questioned some traditional assumptions within policing about the appropriateness of accepted organisational strategies and opened up the possibility that research might provide possible solutions to intractable problems. Rather than continuing to pursue conventional ways of doing police work, it encouraged some police managers to think about better ways to exploit existing data, assets and resources within organisation, as well as through relationships with partners. Perceptions of police omnicompetence and deeply held assumption that the police could "do it alone" were increasingly challenged by the reductions in police personnel. Innovation and behaviour change became urgent matters in considering response to "managing with less".' (Crawford 2020, p. 179.)

Arguably, police work, very much like research work, is knowledge intensive. Both of them build upon efficient and effective ways in seeking, collecting, collating, processing and utilising information and transforming it into usable knowledge. Thus, when it comes to acquiring knowledge and understanding, the problem situation in police work seems to align with the situation researchers are acquainted with in their own work. In both, our capacities for gathering pieces of data are superior to our capacities for analysing and making sense of all the data at our disposal. In both, pieces of information stand out as an irreplaceable means in the pursuit of the ultimate purpose. In both, the effective ways in separating the wheat from the chaff, i.e. analytical skills and tools for analysis, are highly appreciated and sought after.

However, one could even claim that when it comes to preventing crimes and predictive policing, the work of a police officer and a researcher are fully compatible. No wonder, then, that many scholars believe that they, or the institution they represent, have a valuable lesson or two up their sleeves that could contribute to the quest for better policing by the police. Putting forward procedures, approaches, frameworks, rationalities and methods that are typical to research and introducing them as innovations in policing simply colonialises the latter by making it appear fully continuous with one's academic home base.

While no one is likely to disagree that enhancing professionalism in policing by research-based knowledge is a way forward, the very nature of that professionalism

remains vague. For some, policing as a profession is akin to the medical profession and for others, perhaps more like lawyers, teachers, social workers, priests or even engineers.

'Armed with hundreds or thousands of experiments, police could be far more effective in dealing with people, just as medical practice has been greatly improved by research' (Sherman 1985, p. 460).

Most likely, traditional and new professions include a dimension one could call 'policing'. Potentially, professionalism in policing and police professionalism consist in a type of its own. However, this possibility is likely to be run over as scholars design and put forward analytical tools and knowledge products for the knowledge work at the police that reflect their own disciplinary background and position in their respective professional communities. The resulting tools, methods and approaches are not simple neutral instruments that, in principle, are equally given to all.

Professions are not charities. They need paying customers for their services. Scholars are not to empower the police by equipping them with analytical tools and knowledge products that are typical of their trade, but to establish a new, preferably enduring and mutually beneficial, relationship with the police as a customer to their services or a partner in or a co-producer of their knowledge products.

In a market economy, innovations in policing are not just new ideas, methods, procedures, techniques and approaches. They are essentially paid professional services and purchased goods, consultations and long-term partnerships.

Occasionally, partnership is simply a fig leaf for establishing an institutional hegemony based on a taken-for-granted epistemic hierarchy that attaches an asymmetrical value to respective experiences, and knowledge transactions that resemble exploitation or slave labour (see Crawford 2020).\(^1\) Co-production of knowledge without becoming colonised by academic standards appears impossible. Arguably, fundamental asymmetry derives from the fact that universities may easily jump to new partnerships, leaving the police to tackle their resilient old problems and, possibly, a handful of new ones:

'Scientific knowledge does not simply solve governance problems, but also creates new ones' (Crawford 2020, p. 190).

From the aforementioned perspective, one would suspect a hidden agenda underpinning innovations in the police and policing and the respective discourses, e.g. see Tauri (2013) on authoritarian criminology and Fielding (2020) on prospects for indigenous research in the police. While the new tools and approaches may well empower the police when it comes to the problems related to criminal activities and public order, their adoption makes it dependent on academic expertise, criteria and standards for evaluation. One would thus expect to see an increasing number of psychologists, criminologists, sociologists, statisticians, etc. entering the service of

Facilitating police departments to adopt totally evidenced decision-making presents an enormous task, Sherman (2015, p. 14) remarks: 'It is hard enough to teach one person the key concepts of causal inference, statistical analysis, systematic reviews of the literature, internal versus external validity, and many other tools. It is geometrically more difficult to get most decision makers in a policy agency to master these concepts together, so that they are all on the proverbial "same page".'

law enforcement and feeling at home there too.² It is a real possibility that police officers feel increasingly the opposite as their relationship with the work becomes increasingly mediated by sophisticated, but also, at least initially, foreign forms of academic thought. Naturalisation of the police to the latter looms on the horizon though.

Thus, the challenge has two sides. On the one hand, the scholars are expected to inform the customer of their knowledge products or technologies so that the customer truly understands the product and the terms and conditions for its effective use. On the other hand, scholars should also provide the customer with the critical means that would allow them to be informed, but not becoming overwhelmed or indoctrinated by the innovation.

This essay discusses criticism as an essential but often overlooked element of academic innovations and knowledge products. Our focus is on three models for policing that function under the following labels: evidence-based, intelligence-led and knowledge-based policing.

Contemporary Sirens Singing the Fading Song of Science

"...science alone is not enough to ensure the utilisation of evidence" (Crawford 2020, p. 193).

'What these leaders generally shared...was a loosely articulated but deeply held belief that greater use of research could help transform policing into a more legitimate and respected profession' (Sherman 2013, p. 381).

The view of science as a force for secularisation that eventually succeeded in replacing the 'truths' of religious beliefs by more warranted, increasingly true beliefs and a scientific worldview represents the general narrative on the Enlightenment and the emergence of our modern Western outlook. However, it represents just a half of the story. Societies striving for egalitarianism have played an important role in the secularisation of science (cf. Kalleberg 2010). What is at the stake is the authoritarianism than comes with the claims for epistemic privilege, i.e. access to the objective truth of the world if not to the reality itself. The latter often translates to claims for a monopoly on some royal road to practical success.³

The introduction of a mechanical view by natural philosophers very much dissolved the previous enchantment attached to the world as God's creation and steered by the very same source of power. Seeing the natural phenomena as governed purely by natural laws gradually undermined the traditional position the church had enjoyed. However, the scientific enterprise has become secularised too. It has been

For about the same cost as a patrol officer, the Redlands (Calif.) Police Department hired a Ph.D.-level criminologist to translate existing research findings, help craft new evidence-based strategies and evaluate existing ones. Departments wanting to replicate this effort but lacking the financial resources to do it on their own can form partnerships with other police departments and academic institutions to minimize the costs and maximize the benefits of having a criminologist "embedded" within their organization.' (Bueermann 2012)

Well-functioning scientific communities can each be described as a kind of ideal deliberative democracy, only regulated by the force of better arguments among free, rational, and equal people. (...)

To use the principle of majority in a scientific forum in the same way as it is used in a parliament would be irrational and illegitimate.' (Kalleberg 2010, p. 196).

displayed as an incommensurable bunch of social and professional movements incapable of representing anything worth being called as general interest or eligible to speak for it. The socialisation of the sciences undermines all claims for their general distinctiveness (disinterestedness), levels them and makes them essentially continuous with other social pursuits in society. Knowledge as public good has given way to knowledge for private profit. Today, science for-profit is as respectable as basic science, Fuller (2020, p. 20) claims.

The emphasis on features that make science different to other institutions or practices in society is challenged by authors who point out characteristics that make it continuous with the other institution. The traditional virtues, as explicated by Robert Merton, i.e. universalism, collective ownership of its fruits (communism), disinterestedness and organised scepticism (e.g. Stehr 1978, p. 174), seem very much out of synchronisation with the contemporary world.

'Increasing pressure on profitable appropriation of scientific output in the name of entrepreneurialism since the late twentieth century has made the belief in open science more tenuous' (Kim & Kim 2018, p. 19).

"...contemporary science is subject to pressures for the privatization and commercialization of results, and even for their transformation into "consumption goods" (Bucchi 2015 p. 238).

Remarkably, Merton believed that following the aforementioned norms was behind the very success of science.⁴ Thus, the norms were not just moral prescriptions, but also methodological instructions. Presumably, disregarding them is likely to lead to knowledge products that diverge from traditional ones too.

Public reckoning of the complexity of problems, the disunity of science, and the fragmented view of the world it offers have effectively put the expertise of a discipline or an individual scholar into perspective. Meeting the contemporary challenges, Kalleberg (2007, p. 155) argues, calls for humility from the sciences, mutual popularisation between specialists from different disciplines and a broader public discourse.

It is likely that Mertonian Science 1.0, if it ever existed, has been transformed into commercialised Science 2.0. The latter is characteristically, according to John Ziman, proprietary, local, authoritarian, commissioned and expert (in Bucchi 2015, p. 238). Science is just a way to make money and pursue personal wealth by privatised research results and patentable knowledge products.

Bucchi (2015, p. 239) argues that post-academic Science 2.0 displays contradictory tendencies. It is both proprietary and public, oriented to resolving local problems, but also embedded in global networks, commissioned for the solution of practical problems. Moreover, it is somewhat idealistic in its quest for knowledge.

Merton was passionately interested in the fate of science and science-based technology in an age of increasing totalitarianism, be it Fascism, Nazism, or Communism' (Kalleberg 2010, p. 184). He formulated his politically opaque view of the norms of science in the 1930s, when the public regulation of science for common good and democratic control through planning was both opposed and argued for. Merton saw the ethos of science alien to the democratic public and the latter as a threat to the autonomy of research and the progress resulting from it. 'The new argument was that science did not need outside policing because scientists policed themselves so well already, according to their special ethos' (Turner 2007, p. 175).

'Academic Science 1.0 snubbed the media, regarding it as bad purveyors of scientific ideas to the general public, 'dirty mirrors' which reflected an opaque and distorted image of research. It dismissed communication via non-experts with the scornful epithet of "popularization". After all, why should science bother to talk to public opinion directly when it had such a close relationship with its political representatives in the corridors of power? By contrast, Science 2.0 increasingly views the media as crucial interlocutors.' (Bucchi 2015, pp. 244-245.)

For Gieryn (2010, p. 117), the contradictions inherent in science consist in the very paradigm for the sociology of science: 'Sociological interest in knowledge, however defined, arises in identifiable social conditions, where there is conflict over norms, values, and attitudes'. He outlines a paradigm for the sociology of science that consists of seven irreducible and irresolvable contradictions of principles, that energise the very scholarship, and acknowledges their permanency, while hoping to morph them from causes of war into sources of creative tensions and innovative provocations (Ibid., p. 121). (See table 1.)

Table 1. Paradigmatic view to contradictions in science (cf. Gieryn 2010).

Science 1.0 for Sociologists of Science	Science 2.0 for Sociologists of Science
Body of cognitive claims about the world based on the use of scientific method (system of true beliefs as knowledge)	Joint social pursuit (system of scientists or researchers pursuing to agree on knowledge claims in conditions not of their own making)
Cooperative in building upon the ideas and work of other researchers and relating to them (webs of discourses, mutual criticism and shared points of references).	Competition for rewards, status, prestigious position, recognition, originality, innovativeness, patents, customers, markets, etc.
Institution (representations of science as pursuits emerging from a solid essence).	Emergent cultural space (representations of science as contingent strategies)
About real objects progressively approximated by scientific theories and accounted by science as whole (increasingly truthful view of the world as it would appear to an outsider).	About constructed objects continuously re- and deconstructed as well as informed by that work (expansively empowering, sensible, rationally satisfactory, even usable, interpretations of the world for us).
Autonomous, i.e. historically increasingly able in legitimating its own activities by reference to its own values as the justification for the worth of its accomplishments, governing the research agenda and guiding its accomplishment.	Embedded, i.e. reflects necessarily more encompassing or partisan interests in society (e.g. commercialism) and furthers them too under the ideological camouflage of autonomy, objectivity and disinterestedness, but has become an instrument for groups with financial means for pursuing positional capital, greater influence and power.
Universal (lingua Franca, common logic, standards for truth, criteria for evidence, procedures for making judgements, etc.)	Local (idiosyncratic practices, shared terms, but unequivocal concepts, similarly packed).

Cumulative learning leading towards more encompassing paradigms, comprehensive theories and consolidation of facts. Disruptive learning undermining and shaking up achieved positions in terms of knowledge, pointing out inherent and insolvable contradictions, dilemmas and paradoxes in them that continuously call for starting anew.

'Ambivalence is built into the research agenda of this specialty, so that sociologists of science are expected, for example, to treat scientific objects in the world as both real and constructed, and to treat science itself as irreducibly universal and local. The next sociological research on science will acknowledge these paradigmatic contradictions, revel in their ambivalent expectations, transcend these oppositions in the search for different fault lines of contestation, and, most vitally, never try to resolve or adjudicate them.' (Gieryn 2010, p. 121.)

Anything based on science, called scientific, or advocated by scientists used to carry a specific halo of truthfulness, reliability, validity, neutrality, objectivity, etc. While science has lots of cultural authority and scientists often serve as the legitimate arbiters of factual claims in a wide variety of settings, there are, Gieryn (2010, p. 126) remarks, various interpretations of the very source of their authority. Today the public is less assured about the distinctiveness of its methods, the status of its products or the disinterestedness of the arbiters than yesterday.

'Our society is facing challenges that make evident the need for a social theory capable of reflecting on itself and on its role in the society it addresses...' (Esposito 2017, p. 19).

Science has become secularised. It is both better understood by the public and more openly challenged by members of society. Differences between schools of thought that used to remain within the walls of the academy are increasingly played out in public, entangled with general political disputes, social movements and ways of life that undermine the traditional rational outlook of science and scientists, their independence, non-partisanship and neutrality.

There is a significant overlap in issues, procedures and approaches outlined, put forward and advocated under fancy labels like Evidence-Based Policing (EBP), Intelligence-Led Policing (ILP) and Knowledge-Based Policing (KBP). The forthcoming discussion in this essay fails to do full justice to the doctrines put forward under the respective labels. Moreover, there is more than just one characterisation of each in circulation. It would be relatively difficult to do full justice to any of them. Each one seems to stand for a citadel-in-the-making that attracts numerous architects, none of whom is ready to accept another's grand plan, but want to attach

⁵ 'Remember the good old days when university professors could look down on unsophisticated folks because those hillbillies naïvely believed in church, motherhood, and apple pie? Things have changed a lot, at least in my village. I am now the one who naïvely believes in some facts because I am educated, while the other guys are too unsophisticated to be gullible... (...) Of course, conspiracy theories are an absurd deformation of our own arguments, but, like weapons smuggled through a fuzzy border to the wrong party, these are our weapons nonetheless. In spite of all the deformations, it is easy to recognize, still burnt in the steel, our trademark: Made in Criticalland.' (Latour 2004, p. 228, p. 230.)

their own design or twist on it. It is unclear whether this approach or strategy leads to intellectually coherent, conceptually cogent and practically relevant models or programmes for policing, or just the opposite. The development is possibly steered by an inherent wisdom, a sort of evolutionary selection mechanism $a \, l \dot{a}$ survival of the fittest or a market mechanism $a \, l \dot{a}$ invisible hand, but possibly not.

However, I am interested in the critical means protecting the police as purchasers of knowledge products and their adopters, not a collaborator participating in their refinement into more marketable types. I try to characterise them in a way that enlightens what lies beneath their surface. Following a mode of critical analyses, I try to valorise the margins of the current thinking, to identify absences rather than promote insights, to expose biases and shortcomings rather than scrutinise their true potential and promises. In short, my aim is to pinpoint them as ideologically captive entities in order to raise critical awareness among their producers, developers, advocates and promoters as well as their potential consumers, purchasers and adopters.

The comparison encourages the question of whether they, separately or jointly, are likely pave the way towards true wisdom in policing and help us approximate it. The depth, if there is any, derives from explicating the 'otherness' in each of them and also between them. The antinomy to evidence-based policing appears to be policing based on untested or unverified beliefs or blind tradition, to intelligence-led policing led by coincidences or luck, and to knowledge-based policing, or perhaps policing based on improvisation or conjectures. Curiously, beliefs, coincidences and conjectures play a role in scientific research.

In Mertonian terms, the aim is to foster organised scepticism and extend the ground for it. As customer advice, the article valorises the position of the police as an irreplaceable partner with substantial purchasing or negotiation power and contributes to the understanding of its position. Arguably, the police have a lot at stake here and their role can gradually grow from passive patient to active, well-informed, partner and competent and creative co-developer and, eventually, to fully-fledged innovator.

Evidence-Based Policing (EBP) – Does It Work, Even in Theory?

The dominant policy-making paradigm in the United Kingdom is an evidence-based one (Fleming & Rhodes 2017). Lumsden and Goode (2018, p. 824) speak of the 'EBP industry'. It has, despite its critique, gained a firm foothold in the sphere of policing too (on Cambridge Centre for Evidence-based Policing Ltd, see Holdaway 2020). They claim that the industry and its associated infrastructure and networks demand further academic reflection and critical debate among police and academics alike.

In the UK, EBP has played an integral part in the move from (diminishing) sociology of the police to growing criminology for the police. The idea of informing the police by research done at universities has become commonplace (Holdaway 2020, pp. 15-16).

The College of Policing was established in the UK in 2012. It is dedicated to fostering the growth and dissemination of evidence-based knowledge on what works in policing and partnerships between the police and academic research. The College of Policing has added significant weight and visibility to EBP in both of these fields nationally (Crawford 2020; Holdaway 2020).

Today the evidence-based model, according to Cowen and Cartwright (2020, p. 56), feature three characteristics:

- 1. Randomised-controlled trials⁶ in establishing a clear causal basis for treatment and improved outcomes.
- 2. Systematic reviews and meta-analysis aimed at taking all the evidence on board for concluding the most credible summary result.
- 3. The use of economic models and cost-benefit analyses for recommended policy in treatments.

A more encompassing view of the evidence-based approach emphasises the role of good theory that explicates the mechanism – why something works – as a necessary supplement to empirical, often purely correlational, evidence gathered from the studied populations (Cowen & Cartwright 2020). Modelling potential mechanisms is seen as a necessary step in providing for true increases in understanding the policies and the conditions for their functioning.

'Evidence-based policing involves the police using the highest quality available research evidence on what works best to reduce a specific crime problem and tailoring the intervention to the local context and conditions' (Welsh 2019, p. 439).⁷

Policing is a latecomer in the larger evidence-based movement for betterment in society through scientific evidence on, and evaluation of, what works and what does not. This, Welsh (2019, p. 440) believes, distinguishes EBP from other innovations in policing that aim at crime prevention.

Approaches, tactics, methods and tools that are backed up by rigorous empirical evidence are increasingly seen as the trademark of true academic professions. It is the claimed fact of scientific study underpinning the work of the latter that distinguishes it from charlatans and explains the difference in their respective efficacy. It is not just a question of systematic reviews of what works in policing and synthesising the available research evidence, but about the conditions where it works, when it works, why it works, and what can or needs to be done to make it work better locally. It is a promise for an increased degree of control over processes, events and happenings and their intentional engineering, for all aspiring puppet masters interested in learning the right threads and how to pull them to make their puppets dance synchronically and in tune. The antinomy to evidence-based crime prevention is false, potentially harmful, opinion (Welsh 2019, 441), unwarranted intuition, capricious opinion elevated to institutional power (Cowen & Cartwright 2020),

Innes (2020) notes that there are problems faced by the police, like terrorism and child abuse, that simply exclude the use of randomised trials, are genuinely 'wicked' because of their complexity and, thus, can only be managed better or worse, but not truly resolved.

⁶ 'RCTs are an attempt to accommodate the fact that you cannot conduct a relevant laboratory study in a field environment. (...) It cannot credibly claim to offer a complete set of instructions that will deliver the same result in each individual case. (...) ...we can expect the same average effect only in populations where these others [i.e. causal factors] are distributed similarly, or more precisely, where they have a distribution that yields the same average.' (Cowen & Cartwright 2019).

common sense experience (Holdaway 2020), cultural preferences (Fleming 2020), static doctrine (Sherman 2013), intuition, guesswork, authority based doctrine (Sherman 2015) or ideology.

Evidence-based policing practice matters politically, economically and also in social terms, but also at grassroots level, Fyfe (2017, pp. 10-11) argues. Politically it is central to the governance, accountability and legitimacy of policing. Economically it promises the most sustainability for the police service. Socially it stands for true police professionalism. At the grassroots level, it potentially provides for better community relations, learning at work as well as new, innovative and creative ways to tackle problems both old and new. It also caters for a transition from tacit, intuitively-used. gradually-internalised, continuously-evolving, personally-meaningful, situationallyarticulated, identity-enhancing, emotional, crafted, original, real, bottom-up, taskspecific, site- and person-centred, operational and occupation-anchored control to explicit, standardised, codified, abstractly-conceptualised, structured, 'civilian', certified, top-down, management-bound, instrumentally-applied, mechanistic, rational, formally promoted, and organisation-anchored control over essential resources for police work (Gundhus 2012). In England and Wales, evidence-based policing is an integral constituent in the Police Qualifications Education Framework: 'A modern police officer not only requires practical skills, but also tertiary-level education that integrates the academic theory and knowledge underpinning and contextualizing practice' (Brown et al. 2018, p. 47).

'For sure, barriers will always exist to getting the police to use research evidence on what works best in preventing crime. (...) Indeed, a clear lack of imagination and willingness to break down the culture of resistance to change captures much of the criticism of evidence-based policing.' (Welsh 2019, p. 451.)⁸

Greene (2019) reminds us that in evidence-based medicine, scientific knowledge is just one of three sources, i.e. clinical experience and knowledge of patients, and the emphasis is on their effective integration, not in establishing a hegemony for one of them (see also Cowen & Cartwright 2019). Fyfe (2017, p. 9) prefers the term 'evidence-informed' policing because it recognises that research evidence is only one element in police decision-making, alongside other considerations such as professional judgement and experience.⁹

Sherman (2015, p. 17) argues that EBP is about adding evidence to policing, not about replacing experience or substituting it. However, he also promotes totally evidenced policing and sees affirming research evidence as the source of police effectiveness (Ibid., p. 18). Presumably, the role of the experience of rank-and-file police officers equals the role of the public in science: an audience observing the predicted result emerging from demonstration affirming the unquestioned status of scientific knowledge.

Welsh (2019, p. 451-452) shares Sherman's (2015) idea of evidence cops working in specific EBP units designated to change how all members of the police agency think about their jobs, i.e. introducing an evangelical, but cool, mole into a senior position in a police organisation, who is both a cop and a research scientist detecting evidence gaps, following the accumulation of research evidence on what works, making recommendations, putting them into action and monitoring their utilisation in the field. SIPR in Scotland promotes a shared academic-practitioner infrastructure model; i.e. embedded research and research-based practitioner model ('pracademics', see Holdaway 2020), that assumes professional autonomy and education, where individual practitioners are expected to keep up to date with and apply research (Fyfe 2017, p. 15). In England and Wales, a key development in the College of Policing's promotion of research is that officers are trained to conduct their own research and make use of research evidence (Lumsden & Goode 2018, p. 822). On partnership between universities and the police in the UK for the co-production of knowledge, see Crawford (2020).

Moreover, synthesising knowledge from various bases and sources is required, as issues related to crime and public safety stand out as wicked problems that resist reduction into simple mechanisms or one-sided interpretations. Attaching a specific label upon a situation is not just a possible description, but a contestable interpretation, a hegemonic act, a diagnostic deed, an opening for action and, often, a justification for it as well. It is the world seen through the tools at hand or given access to it by them. As Greene (2019) points out, diagnoses are also burdened by institutionalised myths, expectations, norms and roles. Fleming and Rhodes (2017) emphasise that evidence-based policing should not be accorded priority.

The true nature of the problem can be valorised experimentally by seeing whether the use of a specific tool leads to a positive response or not in terms of it. It is, quite literally, diagnosing by crafting a potential treatment, and, when necessary, varying it so that, in terms of a criteria, it seems to match the situation by alleviating or solving the problem in question that remained inherently ambiguous until it was somehow solved in the particular case. Whether the next one, which appears identical to it, actually represents the return of the previous one or one akin to it, is not necessarily possible to tell before it has been tackled successfully.

"...experience is the inherited knowledge base of much police work and how such knowledge is intrinsically seen as valuable, practical and conducive to problem solving. ... police officers draw on any source of knowledge that helps them do their job... (...) ...the police draw on a variety of knowledge, selecting their knowledge based on whether it makes sense to them and fits in with what they "know" already.' (Fleming & Rhodes 2017.)

'This is because whatever innovations are made on the basis of research, they also need to be subjected to academic and ideally peer-review by academics and policing colleagues from other forces in order to assess their effectiveness. Only through police/academic partnerships, knowledge co-production, and an ability to be critically reflective upon practice, can the policing of football be driven forward...' (Stott et al. 2019, p. 16.)

Cowen and Cartwright (2020) emphasise the role of street-level theories based on experience that describe common tendencies that facilitate learning but accept exceptions and inconsistencies. As theories-in-use, they should be given due credit as proto-theories in evidence-based approaches.

Within the EBP model, policing as a practice should ideally thrive, or be driven to become blatantly, if not thoroughly, based on research-based evidence in its deeds and doings. It should resemble fields like medicine, psychiatry and social work in its approach and relation to research. Decisions on alternative lines of action are to be made on the basis of their probable results and related costs. Furthermore, evidence should cover the lines for action that are possible in a particular situation and the spectre of such situations in policing.

EBP builds on the alliance or partnership between the police and the scientific community. Underpinning it is a vision of police professionalism grasped as a specific technical capability based on a thorough knowledge of what works in policing. The vision emphasises efficiency, effectiveness, the best utilisation of scarce resources in all possible scenarios, and proper understanding of mechanisms behind the events and phenomena.

EBP promotes the use of rigorous empirical tests or integrative literature reviews to single out what actually, really or properly – based on evidence – works in policing. What works designates the best treatments available, the best ways to handle threats, events and incidents that are currently known.

As no single line of action is likely to satisfy all possible criteria that can be used for the evaluation of policing and the respective deeds, the very choice of criterion in determining 'the best' stands out as a political act. The best evidence-based practice in deciding between competing values is called democracy. However, EBP appears to cater for a powerful few rather than the interests of all stakeholders (e.g. Tourish 2012).

'The bald invocation of "what works" often masks deeper issues of entrenched power relationships, and is rarely designated to liberate the voices of actors perceived as being marginal in various social forums' (Tourish 2012, p. 185).

Furthermore, 'the best' implies the presence of alternatives to it. Thus, if there is only one path to be taken and not going along it is not an option, it is the best way despite all its shortcomings. When there are several optional ways to proceed and a thorough knowledge of them all, i.e. ample of evidence of the effort required by each, their respective costs, their likely outcomes, the side-effects in the short and long term, popularity among the ranks and citizens, skills and competencies called for, etc. to choose which one to take becomes impossible by the sheer amount of evidence needed, the cognitive burden from it, and the sheer time, the consultations and discussions required to resolve the latter (c.f. Fielding 2020).

The very idea of evidence, as echoing the core presumption of the power inherent in agreed facts in Taylorism, has been put forward as a silver bullet that could magically resolve the complex problem of trust and legitimacy at the heart of policing:

'Tremendous resources exist today that can help them craft smart policing strategies. Using these resources, they [police chiefs] can point to the evidence about what works to help explain to communities why, for example, they are shifting resources and directing officers to focus on problem places, increasing the number of civilian crime scene technicians, using surveillance cameras, employing foot patrols, or confronting low-level offenders rather than arresting them' (Bueermann 2012).

Arguably, EBP is a fig leaf depicted and sold as full tactical gear set for the police. From the viewpoint of consumer protection, it requires a powerful 'other' as its alternative:

'The greatest threat to police professionalism is that the word 'evidence' will be hijacked to mean what it is intended to replace: intuition, anecdote, and opinion' (Sherman 2013, p. 416).

An alternative name for the static doctrine is gradually-evolved, logically-knitted tradition institutionalised in positional practices. Advocates of the EBP model seem to mess around with something they are likely to misidentify and, therefore, misrepresent and misuse too.

Something taken for granted is something tacitly adopted by participating in it without a reflective relation to this participation, and full awareness of its conditions, kind and nature. It stands out as becoming part of an unarticulated whole, coming to share an understanding, a craft and perspective, learning to see something as an insider before learning to grasp one as an insider. However, such communities of practice are not usually without their relative merits in terms of the evolution of their crafts. What is usually lacking from them are the respective sciences of them. Police researchers should display a real interest in them as potentially real, but theoretically under conceptualised, knowledge. Categorising them as pure opinion, rules of thumb or dogmas without merit stands out as a pivotal shortcoming in the agenda for evidence-based policing. It actually highlights its ideological aspects instead of speaking for their absence in it.

EBP is also an academic response to a public request for a greater accountability in relation to everything the police do, represent and accomplish in society. However, it is neither this request itself nor is it the most authentic expression of it. It is an interpretation of this request from the point of view that has been challenged within the academic community. It is seen as too rigorous, idealised and distanced from practice.

Knaapen (2013, p. 700) speaks of regulatory objectivity as an institutional procedure. It accounts for what counts as evidence, how experts are to act objectively in agreeing about it, and who are called to participate in the process. The very institution in question attaches its worldview, values, standards for rationality, proof and logic upon all others and thereby recruits new supporters, enlarges the market for its products and advances hierarchical divisions in expertise. The central question, Knaapen (2013, 701) reminds us, is who controls the quality control.

'In the foreseeable future, however, many expensive police service will remain untested. The costs of conducting tests are minimal in comparison to the costs of delivering untested services. And every time a police agency contributes a high-quality cost-effectiveness test to the global police literature, the entire world will gain. (...) For the foreseeable future, the best evidence on outcomes police agencies can get will come from conducting their own experiments.' (Sherman 2013, pp. 431-432.)

Naturally, gathering evidence is nothing new to the police. They know from experience what to look for in crime cases ('what was actually done and who most likely did it') and it is up to the court to judge the cases by weighing the evidence against the counter-evidence. The clearest evidence often comes from properly isolating the crime scene. In scientific research it comes from technically closed conditions and test sites, like laboratories, where researchers employ artificially standardised materials and try to figure out the natural mechanisms. Outside such artificial conditions, i.e. in the increasingly open world of daily life, evidence tends to be ambiguous, vague and all but conclusive, effects compromised and conclusions less conclusive.

Learning what works truly from the experiments embedded into police practice appears as a mountain that is too high. EBP in the Cambridge style (Holdaway 2020) builds upon an ontology that is incompatible with the reality of police work, an epistemology that simply closes its eyes from the complexities involved in knowing

anything, and pragmatics that are akin to those applied in conquering former colonies. It is most noteworthy in its artificiality. EBP as an innovation carries with it an ideology burdened by totalitarian aspirations and tendencies. It is essentially increased control that is promised by the most vocal advocates of EBP. Increased control is required by it too.

Sherman (2015) speaks of educating the culture – a request characteristic to all totalitarian regimes. In an increasingly open and fluid world emphasising individual rights, freedoms and diverse ways of life, this very vista appears at best as a pure illusion, and at worst a nostalgic delusion. A raising 'wall' of evidence on what works in policing, proclaimed by Sherman (2015), stands on shaky ground. All the police departments that aim at transforming their operations into a totally evidenced way, sooner rather than later, will have to come to terms with this fact. The sooner it happens, the better. However, failure to acknowledge that the flaw is in the theoretical model, not in the implementation of it, is likely to result in them barking a good while up the wrong tree. The researchers advocating EBP are the last to suspect their very model as flawed.

'Evidence is emergent, fluid, multifaceted, contested and open, rather than definitive, solid, unproblematic and closed' (Tourish 2012, p. 184).

Evidence is essentially a function of the level of control one is able to impose onto the world and in it too. It reflects power, political interests and level of technology. It is thus artificial human achievement, not a direct or otherwise unmediated response from the world external to us. It remains up to us to decide the fate of our hypotheses. The world will not do it for us, as Popper reminded us. Most likely, we need to draw our maps anew as we proceed instead of having the privilege of relying on readymade maps covering all possible purposes, ways for proceeding and directions.

Intelligence-Led Policing – Is It Worth the Pursuit?

'Intelligence is increasingly identified as pivotal to the conduct of effective and efficient policing' (Innes & Sheptycki 2004, p. 5).

'It is evident that the concept of intelligence is fluid, and different definitions prevail in different parts of the police sector' (Innes & Sheptycki 2004, p. 10).

The very idea of intelligence-led policing (ILP) seems to suggest the replacement of the police chief or the chain of command as whole with a pure function. Consequently, the core issue becomes the very location of this function and its role in the police bureaucracy.

Thus, ILP stands for a palace revolution or a new scheme for the proper ordering of the house rather than anything truly new. No wonder then that ILP has also been read as IDP, i.e. intelligence-driven policing (Baker 2011, 4). ILP is essentially dressing the intelligence function anew in the police, to upgrade its status, significance and position in the world of police work (e.g. Alach 2011).

'A greater integration of the intelligence function into the decision-making processes of policing will allow analysts to have the impact their contribution

to crime reduction demands, and permit police leadership to escape the noxious gravitational pull of short-term crises and move towards a more holistic, strategic and, ultimately, successful crime reduction strategy' (Ratcliffe 2009, p. 11).

Apparently, ILP empowers the decision-maker and analysts and offers a holistic and strategic way to success in crime reduction. With it, the centre of gravitation in policing is situated relatively far from the frontline, while it allows the chiefs of police to take even more distance from the mundane in policing, to escape to the Platonic world of abstract ideas.

Gathering intelligence from informants has been an indigenous part of effective detection and prevention of crimes. The investigative work of police detectives has thus been directed by the hints and information gained from the opposite side, from informants mediating the two worlds. Undoubtedly, this long tradition has established a grey zone in policing, where the line between the legal and illegal tends to become obscure, where the very purpose of policing in protecting the health and lives of citizens is often blurred and where transactions take place on a personal level and, thus, are difficult to control and regulate. Consequently, a good deal of crime information has been gathered under the radar of direct supervision. The necessary skills and competencies in it differ vastly from the skills and competencies ILP requires: computer dexterity, analytical ability, database management and reporting skills, as well as an ability to use a relevant and adequate theoretical perspective (Ratcliffe 2008, p. 211).

'As ILP focuses on threats, it becomes essential to identify variables within a community and the surrounding region that support the generation and maturation of crime. (...) It is important that the information collected provide insight on the existence of the conditions, factors that will exacerbate the conditions, and individuals who may be instrumental in exploiting the conditions to commit terrorism or crime.' (Carter & Carter 2009, p. 317)

On one hand, ILP sanitises police work. On the other, as Innes and Sheptycki (2004) argue, it enhances the role of the disruption-directed mode of policing along with its traditional prosecution-directed mode. It puts aside the police detective meeting informants in shady places and replaces the detective with a data analyst or a statistician, who works in a clinical office equipped with computers, masses of data, programs with fancy names speaking of algorithms and statistical tools, and longing for an all-encompassing valid theoretical perspective. Sporadic pieces of hearsay and gossip about a potential suspect for a crime are replaced by objective data patterns, connections and relations between variables that skilful hands and astute minds turn into knowledge products termed as actionable intelligence that facilitate decision-making and, ideally, effective preventive measures. The role of the frontline police officer is reduced to a source of information and executor of intelligence-informed plans built upon actionable knowledge managed in a business-like process (e.g. Phillips 2012; Carter & Carter 2009; Ratcliffe 2008; Ratcliffe & Guidetti 2008).

'The central purpose of creating analytical products then is to provide officers with information to inform the deployment of resources to the "right people"

and the "right places" in order to "catch people red-handed". Hence, analysts create products which seek to illustrate the spatial and temporal organisation of crime and the habits and routines of offenders. (Bullock 2013, p. 138.)

The knowledge traditionally respected and treasured by the police is case-specific, investigative information relevant to solving individual cases. Its locus has been individual detectives who use their intelligence and acquired knowledge to track down and arrest offenders (Ratcliffe 2008, p. 207).

'In patrol cars, canteens and offices across the land, respect fell to those that knew the street, had a feel for villainy, and who had a snout or two who could tell the, what was going on' (Ratcliffe 1998, p. 207).

'The effectiveness of informants is based upon their very often close connections or involvement in the criminal milieu. Consequently, the reliability and validity of any evidence that they present is often legally tainted.' (Innes & Sheptycki 2004, p. 18.)

ILP emphasises analysis, i.e. processing of data into knowledge, though not knowledge in general, but into actionable knowledge or the pieces of knowledge the commanding police officers have requested from the analysts and that they can easily turn into policies, schemes for action, plans and orders. While the presence and prevalence of knowledge has been a fundamental feature in law enforcement, as Ratcliffe (1998, pp. 205-206) acknowledges, he also claims that he sees a difference not only in terms of quantity but also in quality, i.e. between 'old', offender-centred or criminal knowledge and 'new', crime events-focused or crime knowledge. This derives from rapid digitisation, better understanding and demands for accountability. The era of 'new' knowledge, Ratcliffe (1998) claims, culminates in the work of analysts. This era possesses the potential to change the core values and organisational modes of operation in policing.

In ILP, an analyst appears as the decision maker's main partner, collaborator and companion as well as the first servant. As Burcher and Whelan (2018, p. 155) state, influencing decision-makers is one of its key components. However, discretionary decision-making characterises police work at every level, but ILP is inclined to make some more analytically informed than others.

Intelligence appears as a prerequisite for preventative policing, like Colquhoun (1800) argued, in becoming aware of hostile plans of citizens before they are put into action, or, afterwards, coming to terms with who was behind a crime, or, in modern times, acknowledging conditions favourable for unsocial behaviour and public disorder.

'Indeed, the whole movement toward enhancing the intelligence function within policing is implicitly justified by a particular construction of the problem of criminality. Whereas the prosecution-directed mode of crime control is based upon a notion of individual offenders, who can and should be identified and have a case constructed against them, intelligence-led forms of policing tends to understand criminals as being embedded within criminal networks and markets. Disruption is therefore justified on the basis that

the removal or "neutralization" of a target occupying a key position is an effective way of destabilizing the social organization of the rest of the market or network. (...) These practices are justified and legitimated by the implicit criminology maintained by crime analysts.' (Innes & Sheptycki 2004, p. 16.)

The obvious shortcomings of the traditional model are obvious, while its benefits are less so. It builds upon informants with a questionable reputation as citizens compliant with the law. The gathering of information from them requires a close personal relationship that often takes a relatively long time to establish. Hanging around with the criminal elements in society and having close personal relations with them represents a constant threat of information starting to flow the wrong way. Furthermore, a detective is likely to play the role reserved for the judge or the court to prevent informants from being arrested for minor breaches of the law that usually accompany their way of life. Apparently, an alternative approach that reestablishes the divide between the law enforcers and the law-breakers and introduces an approach that is less personal, less dependent on personal ties and mutual trustbuilding, but also more clinical or hygienic, more distanced and neutral, is material for the wish list. What meets the latter is an image of a computer room filled with steady humming, flashes of LED lights, printers and technicians in their white coats taking care of their running, introducing tough tasks for them and turning the results into answers to the original sources of the requested information. The idea of big data covering everything, including crimes, both accomplished and in preparations, and algorithms that have the power to bring them to the surface and analysts that are capable of picking them up, seems like a dream come true. Naturally, the pieces of knowledge revealed thus may be collaborated with knowledge from the streets. However, if it is confirmed by the latter, it is likely to become fully replaced by the former. ILP stands for a neutral, objective, non-political, distanced, morally sustainable and less personally-biased stance. It promises increased effectiveness and efficiency by more targeted, formally coordinated, intentionally led and fit-forpurpose measures.

However, for an established police bureaucracy, it is a massive undertaking: introducing a new unit that is dedicated to intelligence work; recruiting the right people equipped with the right tools to run and operate it; securing the influx of data; specifying the requested knowledge products, formulating the possible ones, and deciding upon their handling and further processing within the police; deciding too, who will need to what, when and it what form; and creating policies that cover the ways the knowledge products are shared with other law enforcement agencies as well as with the wider intelligence community (e.g. Burcher & Whelan 2018; see also Sheptycki 2004 on organisational pathologies impairing police intelligence systems). It is likely to resonate like shockwaves through the police organisation and change or challenge hierarchies of experience, status relations, positional bases, etc. Moreover, the incorporation of the intelligence function is likely to bring with it links to other agencies in society thriving under that label.

"...intelligence-led policing systems tend to disaggregate the police role..." (Innes & Sheptycki 2004, p. 11).

Whether it actually works and pays off often appears less important than simply having it. Its core meaning resides in what it stands for, not what it actually accomplishes. With a reputation that is borrowed from the military, and the purpose the road to which is paved with good intentions and wishful thinking, ILP appears more a recipe for failure than success. It simply is too good to be true, too much driven by fads, promises derived from Hollywood movies and TV series, and the felt need by the police chiefs for re-establishing their position of control in terms of truly grasping what is going on around them.

Enhanced capacity for surveillance and for combining data from different registers – pure power in computation and computerised analysis – is inclined to detract from the fundamental need for selecting, defining and understanding questions before attempting the answer, as Mayo (1985, p. 412) remarked a good while ago. An inherent bias in ILP is the focus on answers without comparable concern for the questions. Therefore, it is likely to provide for enchantment rather than enlightenment.

ILP enhances the division of labour within the police, organisational fragmentation and further bureaucratisation in the provision of police services. It divides the service into those that have access to knowledge, those who know how it comes about, and those who face it as action plans, orders and tasks. An increasing number of police officers will find out that they are to feed the knowledge production system with their observations, perceptions and information gathered from the streets and, then, as the executing hand, to dutifully respond to orders and to implement tactics and operations that are also closely controlled by the very same system they constantly feed. In ILP is likely to make a few more informed and perhaps even insightful, but leave a large mass of police personnel very much out in the open, when it comes to understanding what lies beneath the orders and, consequently, their very work and daily actions.

Knowledge-Based Policing – Is There such?

Knowledge-based policing (KBP) is less discussed than either evidence-based or intelligence-led policing (see Williamson 2008; Huotari 2013). In hindsight, KBP appears as an innovation that could have been, but never got enough air under its wings and, thus, failed to leave the ground. It was perhaps just a convenient term, but without anything real underneath it.

At first sight, KBP, ILP and EBP appear either synonymous or they both display a strong family resemblance. However, there are good analytical reasons to exaggerate their differences rather than emphasise their joint features and to refrain from conflating them. These differences derive from the following:

• The inherent connection between ILP and hierarchical police bureaucracy, where information flows from the bottom to the top, gets turned into true understanding by being included in the big picture and interpreted through

^{&#}x27;The resulting ILP-practices, at least in the Netherlands, are highly focused on the creation of information products (mostly in textual and numerical form) to direct police action. They are either focused on individual cases (reports), or driven (and limited) by statistics based on recorded data, such as criminal trends, hot spots, hot-moments, and social network analysis.' (Schakel, Rienks & Ruissen 2013, p. 173.)

priorities and merged with the analytical knowledge from analysts, and then returned to them as strategies, plans, tactics, hot spots and orders, where the personal power and access to the aforementioned understanding reflects a person's position in the police bureaucracy, and institutional power is essentially monopolistic expertise in the use of categorised information stored in files and registers (a systems that burdens many, but enlightens few);

- Close alignment of ILP with the top-down approach, i.e. convergence with the interests of the police management in terms of increased internal control, supervision and monitoring;
- The dissemination of intelligence restricted to the targeted delivery of it determined by 'the need to know';
- Sources of intelligence, the refinement of information, and persons involved in it tend remain anonymous, and intelligence products become authorised as a function that consists of designated tasks, use of particular programmes as tools, listed knowledge products, and the related operations of the technical staff with an interest in the perfection of the process from technical points of view;
- Intelligence is often more or less warranted claims about individual
 persons, groups, physical sites, vulnerabilities, threats, and possible
 events and their likely impacts. It is compiled within a bureaucraticallygiven perspective, where continuity, conventionality and coherence are
 emphasised more than discontinuity, rupture and divergence.
- The power of analysis is increased by narrowing its scope. Eventually, the intelligence function becomes increasingly capable of providing microscopic details even to questions that call for a lens with a wide angle.

Knowledge-based policing lacks the distinctiveness attached to both EBP and ILP. The last two are formulated as models or programmes and are more discussed in the research literature. However, this conceptual or theoretical weakness of KBP can be seen as its specific strength or asset. Policing based on knowledge is just policing where continuous learning and growth of understanding is appreciated, taken seriously and actively promoted. The question 'how do you know' is simply not answered in the way EBP and ILP feel necessary to respond to it by explicating the technical processes behind their truth claims and accounting for themselves in a mechanical way. They know, because of the way they work or function and unless there is something wrong in the respective processes, that their knowledge products are fully warranted and deserve that label.

KPB seems relatively mundane when compared to EBP and ILP. Is it really worth making an issue of it? Arguably, the police operate in a dynamic environment that is not just a passive source of discernible patterns related to criminal activities and problems related to public order. The latter change too as a response, often as countermeasures, to the deeds and tactics adopted by the police. Thus, the lessons

learnt and knowledge acquired are characterised by a diminishing validity and value. EBP and ILP have their counterparts in 'evidence-based' criminal activity and intelligence gathering to facilitate crimes, especially in smuggling goods:

'Short after the police successfully started to act on the hypothesized pattern, criminals adapted their modus operandi, creating new patterns that were slow to appear through the analysis of

Police Report collections, if at all. Instead, criminal investigations, interrogation of caught drug-traffickers, qualitative analysis of Police Reports (rather than statistical), and common sense (read: experience) led to new understandings of criminal modus operandi.' (Schakel, Rienks & Ruissen 2013, p. 182.)

There is an inherent risk in both EBP and ILP. Whenever their deployment leads to initial success, it is seen as confirming both the theory behind them, their organisational implementation, the analytical tools applied, the form and the substance of the knowledge products, the decisions made upon it, and the tactics deployed. Therefore, the more is invested in them, the less thought is given to any of their potential alternatives.

All the eggs end up in the same basket and few precision instruments come to replace the traditional toolbox with rough but multi-purpose tools. The more totalitarian the change, the more the focus is on increasing the efficiency and cost-effectiveness by introducing new specialised functions streamlined into operational policing, the more likely is the emergence of new vulnerabilities, blind spots and risks of surprises.

The outlook of knowledge-based policing and its inherent modus operandi is different to ILP. Instead of relying on customised, ready-made and actionable knowledge products, KBP emphasises continuous learning across the police organisation. This learning implies seeking new knowledge and continuously suspecting the ones already adopted. It appreciates proactivity in disengaging from old systems of beliefs, when good reasons to do so come up and something better becomes available. In this evaluation, it utilises many criteria and views from different stakeholders in order to fulfil the idea of policing by consent.

Such learning should penetrate all levels, but without any specific locus or centre or essential subject. It should travel in all directions too. Knowledge-based policing is an endless pursuit for better understanding and it stands for an attempt to turn it into warranted accounts, claims, insights, suggestions, etc. The latter designates its social and temporary character. The more shared it becomes, the more it should become subject to critical discussion, personal pondering and, when possible, collective testing in terms of empirical adequacy, but also in terms of its sustainability, i.e. as a claim or proposition with moral, legal, ethical, political and aesthetical consequences. The more knowledge-based an organisation becomes, the more knowing-intensive is its modus operandi.

It is not first and foremost a question of the police becoming a more costeffective precision instrument in crime prevention. The police as an institution needs to evolve continuously in order to be increasingly compatible with other continuously evolving institutions. It needs reflective awareness of itself as one among others, endowed with and carrying out an important role and function from the point of view of the whole. EBP and ILP simply cannot see the forest from the trees. They are one-dimensional, but inclined to proclaim that theirs is the one that counts and they offer privileged access to it too.

'In our opinion, in contemporary society, in which the physical and the virtual world are becoming more and more interwoven, the question is not if the police should engage in augmented reality, but how it can do so in a responsible manner. To ensure that the benefits (catching more criminals through less control actions) outweigh the risks (culminating in public trust decay), this on-going development should be embedded in public debate.' (Schakel, Rienks & Ruissen 2013, p. 185.)

The view that the police are nothing but an instrument of law enforcement and a tool has effectively kept them from fully entering the path to the latter. The police are just a pale shadow of their full potential as an institution. Realising this potential in a democratic society requires mature authenticity, increased involvement and proactivity in terms of learning by critical reflection, active participation and open discussion.

Arguably, to grasp the problems that plague communities on individual, group, organisational and institutional levels and to tackle them effectively is a task that no police department can accomplish on its own. Knowledge-based policing is essentially a collaborative effort in knowing by enhancing public understanding and promoting joint learning. Thus, it calls for sharing of knowledge, not, like ILP, its professionally contained production of understanding.

Shared knowledge derives most effectively from joint, mutual or reciprocal learning. It represents a fusion of horizons or the development of a more encompassing perspective. Truly actionable knowledge is thus build upon a joint understanding and shared sense making that is reducible to an epistemological, professional or organisational criteria. Open discussion at its best is also an analysis, but a very different one to that put forward by EBP and IBP.

There are many ways to interpret the root causes for any criminal activity or social disorder, to conceptualise them and figure out logically sound responses to them. Although the police exist to protect people and their property, thefts and burglaries stand out as complex problems that do not reside solely in its province. The police do not have a monopoly on them as problems, perhaps not even the best ways to tackle them or to prevent them. Thus, an open debate, comparing notes, understandings, observations and evaluations with relevant others should be appreciated as the main form of analysis in knowledge-based policing. The problem is how to make it work, how to invent a joint framework that provides for the participation of each, and the emergence of new understanding.

Enriching the organisation chart of the police by adding a new box to it, like establishing an intelligence unit as a new function, is simply tackling problems of the current world with methods and means from the old one. In a networked society, hierarchical forms of police governance appear less and less fit for policing purposes. In an increasingly networked and global world, hierarchical forms of police governance serve less and less the governance of policing (Williamson 2008, p. 2). In their stead, an atmosphere of learning and establishment of information-

processing processes and procedures that promote the production and use of knowledge thorough the organisation are called for (Lemieux 2008, p. 236). The information and knowledge are no longer confined to the few at the top, but spread through and are generated by all nodes in the network (Brodeur & Dupont 2008). The organisation should be developed in ways that truly provide for problem-solving capacities that inhere in the highly educated police officers on the frontline and effectively further develop their respective capacities.

Networked societies are characterised by collaborative relations and the co-production of public services. Modern communication technology enables increasingly participatory democracy, where power over is replaced by power with and authoritative relations by partnerships and work for communities by work with communities, authority by authenticity, and knowledge as power by knowledge as empowerment. Obviously, this technology can be – and has been – used for the opposite purposes as well.

Knowledge-led policing hardly makes an outstanding business model. Perhaps policing should not be conceptualised as a business or a scientific test site in the first place. The picture KBP paints emphasises our ignorance. All our gains in terms of knowledge are likely to fade away eventually (cf. Tourish 2012). Furthermore, no viable alternative exists to this eternal quest for understanding driven by societies progressively pursuing democratic and egalitarian ideals.

Undoubtedly, in a hierarchical organisation, KBP, as an overwhelming framework, runs against basic instincts and bureaucratic ethos based on a clear division of labour, formal authority and office-based expertise. In EBP, science is simply a quality control mechanism based solely on pre-given technical criteria for screening out the facts and building action plans solely upon them. In KBP, facts are seen as inherently ambivalent, open to discussion and re-evaluation as well as requiring them too. Science is more about learning lessons jointly than it is teaching them to others. In KBP, learning the question of 'what works' is secularised, democratised, and brought back to the mundane.

Why Not Adopt EBP, ILP, KBP and the Others too?

Perhaps EBP is just a narrow-minded vision of society disguised as a true liberation movement after ultimate effectiveness, ILP an entrance ticket for unemployed criminologists into the police service as crime analysts, and KBP a mirage-like vision of what could have been, but never has been and never will be either. Nevertheless, having them all, as well as whatever comes after them or is already available on the market, may appear as a good insurance policy where individual strengths of each seem to protect from their respective flaws and shortcomings. It may not satisfy intellectual purists advocating each, but it may well stand out as the most pragmatic way of dealing with the constant flux of innovations introduced and put forward exogenously. It is just the current way of the world. The police, it seems, can only adapt to it while protecting their core competencies acquired through the years.

Once the police reckon the fact that their operational environment is increasingly complex, their first response is to increase their own complexity to keep in touch with the changing environment and maintain a degree of control over it. Adopting evidence-based, intelligence-led and knowledge-based policing or a version of each, never mind their idealised potential, seems to offer a way to get a better grasp, or a

taste, of what is going on there.

However, the adoption is on the terms of the police and without compromising their own stance. Traditionally, time has always been on the side of the police. Each innovation has its time in the limelight until a new one adopts that spot. It represents effective risk management and a reduction of potential damage that could result in the full adoption of a large-scale innovation or a totally disregarding one. It makes sense to minimise the required compromises by establishing a new unit or a role in the organisation, to isolate it bureaucratically from the operational core, reduce its role thus and try it out in an impoverished, watered-down or co-opted version of the original one.

In many respects, following an innovation policy like the aforementioned significantly reduces opportunities for learning. However, it also provides for it in another respect. It opens an opportunity to compare the innovations from the institution's own perspective and to reflect critically on the very perspective and its underpinning premises too. From this view, it represents an approach that is compatible with KBP, but most likely not utilised to its full potential.

Implementing any idealised model into practice requires translation, and translation requires interpretation. Most likely, what emerges in practice is more or less compatible with many possible models, but not all of them. Questions related to authenticity as well as real identity are doomed to remain without conclusive answers to them. The inventor does not have a privileged grasp over how the invention is to be put into practice in an institutional context. Naturally, in a literal context, one expects any translation to respect the original intention. However, when translating across contexts, say, from a conceptual model into material one, authenticity necessarily becomes blurred. Moreover, the latter can introduce additional value to the original one, enrich the concept and make it more meaningful, but also diminish, misrepresent or distort it. The idealised model can be used to criticise the practice, but, reciprocally, practice can be used to criticise the model.

Each innovation, like EBP, ILP and KBP, is developed and refined continuously by internal criticism. This can materialise in clearer concepts, better exposition of their distinctive features, more articulated relations to other concepts, and reflective valorisation of underpinning presumptions (see Esposito 2017). However, the line between external and internal criticism is a relative one. For instance, the criticism of the Cambridge version of EBP by the sociologist may well appear external to its representatives, while for some others it very much remains within the EBP sandbox. Undoubtedly, there is continuous refinement going on in Cambridge to make their model logically more coherent, less vulnerable to standard criticism and more captivating to potential customers. Moreover, most of the criticism is aimed at

Self-doubting Bruno Latour (2004, p, 227) ponders the following: '... yet entire Ph.D. programs are still running to make sure that good American kids are learning the hard way that facts are made up, that there is no such thing as natural, unmediated, unbiased access to truth, that we are always prisoners of language, that we always speak from a particular standpoint, and so on, while dangerous extremists are using the very same argument of social construction to destroy hard-won evidence that could save our lives. Was I wrong to participate in the invention of this field known as science studies? (...) Isn't this what criticism intended to say: that there is no sure ground anywhere? (...) Or, rather, have we behaved like mad scientists who have let the virus of critique out of the confines of their laboratories and cannot do anything now to limit its deleterious effects; it mutates now, gnawing everything up, even the vessels in which it is contained? (...) The question was never to get away from facts but closer to them, not fighting empiricism but, on the contrary, renewing empiricism.' (Latour 2004, pp.229-231).

improvements and making EBP stronger, not replacing it with another innovation.

A purely critical view from the outside is impossible. There is, pure and simple, not a view from nowhere. One always needs a foothold, a stance or a place to stand. Comparable innovations offer the nearest foothold as well as means – by their otherness – for criticism. Therefore, having them available is not only helpful, but more or less necessary from the point of view of learning and critical understanding. Naturally, one can always be critical in the sense of being more or less sceptical, doubtful, unconvinced, condemning, etc.

However, stronger criticism requires a commensurable stand for well-structured comparisons. As Fassin (2017, p. 8) remarks, critique needs openness, but also consistency. Only then does it become possible to discern the outer and inner limits of an innovation, the presumptions underpinning it, and what the advocates are inclined to accept at face value or without question. Therefore, to have more than one model provides learning deeper lessons about them that go beyond the standard manual for adopters.

'The critic who reveals the blind spot has himself his blind spot that he cannot observe – or can only observe moving to a different perspective with a different blind spot. One cannot overcome the blindness but can be aware of it and take it into account in one's own observation' (Esposito 2017, p. 23).

The purpose of internal critique is to improve something within the limits it sets for itself. External critique is to truly expand the horizons of understanding by stepping outside those limits. Internal critique helps to make a case stronger in its very standing, to strengthen possible weaknesses, to refine the design, to galvanise it against criticism, or to make it more stable, logically watertight, relationally solid and externally more appealing.¹²

External critique serves to select between various models. It relies either on external criteria – ideally equally distanced from a model – in terms of which the strengths and weaknesses of the innovations under comparison are illuminated. Therefore, external critique liberates from the totalitarian claims each is inclined to develop, i.e. perfection by constant improvement, but only by introducing another totalitarian evaluative framework with clear-cut criteria.

The idea of wisdom-governed policing (WGP) stands for or represents a third form of critique, i.e. a dialectic critique. As such, it should genuinely surpass both internal and external criticism, positively contain them, build upon them and thereby also to go beyond them. It aims at progress by syntheses. The very possibility of WGP – and, consequently, dialectic critique – allows for the comparison of EBP, ILP and KBP in relevant and substantial terms. While WGP is a mere possibility, it is a real one too.

'The critic is not the one who debunks, but the one who assembles. The critic is not the one who lifts the rugs from under the feet of the naïve believers, but the one who offers the participants arenas in which to gather. The critic is not the one who alternates haphazardly between antifetishism and positivism

¹² 'There are (at least) two logically distinct forms self-imposed, non-physical constraint on our capacity self-government: being held captive by an ideology (i.e. false consciousness) and being held captive by a picture or perspective... There are therefore two corresponding forms of critique. (...) ...critical theory considers it possible to separate what is true from what is false..., while genealogy is interested in identifying what counts for true and false in a given world at a given moment...' (Fassin 2017, pp. 13-14.)

like the drunk iconoclast drawn by Goya, but the one for whom, if something is constructed, then it means it is fragile and thus in great need of care and caution.' (Latour 2004, p. 246.)

However, any attempt to substantiate WGP in every respect and for all at once would represent a leap to the future and overstepping one's own timeframe. A more incremental approach is needed. For instance, the very nature of WGP can be grasped by understanding EBP, ILP and KBP as true or genuine, though in many ways flawed or undersized, approximations of it. Thus, we can learn from them, but the lessons they offer are not clear or self-evident and, most likely, the ones their advocates or adversaries claim, promote and put forward (see Table 2).

Table 2. Evidence-based, intelligence-led and knowledge-based policing as approximations of wisdom-governed policing

	ЕВР	ILP	КРВ
Antinomy	Opinion, intuition, common sense experience, cultural preferences, static doctrine, guesswork, authority-based doctrine, ideology – basically, everything not first ascertained by rigorous empirical research.	Reactive policing, random practices – anything based on rules of thumb instead of analytically ascertained information turned into a purpose-built and usable knowledge product utilised in decision-making.	Atomised and increasingly task-, role-, tool-, or technology-spesific learning in a continuously fragmenting police bureaucracy, narrow concept of true knowledge and understanding.
Role of science	Does the analysis separate the wheat from the chaff and contribute to decision-making by providing procedure, means and criteria for screening out what really works in policing, promote research-based professionalism in the police and enhance the legitimacy of policing policies, and keep costeffectiveness on the agenda.	Supports the competent analyst who orders chaos into patterns by providing efficient and effective analytical technologies for handling masses of data and linking persons to habits and events, other persons and mapping sites and places with increased risk of crime.	Offers a moral and methodological exemplar for joint learning by open discussion and a model for the growth of knowledge by systematic, organised, publicly articulated and generally appreciated criticism that recognises limits in order to overcome them only, but also acknowledges the impossibility for criticism without some presuppositions.
Scientist	Organises empirical tests, collects evidence, does research reviews and authoritatively certifies what works and what does not.	Professional crime analysts who analyse the data, interpret the result and communicate to the decision-makers the patterns and their meaning.	Exemplar for all learners of the right attitude to knowledge and ignorance, how to let hypotheses die and keep living, and how to distance oneself from beliefs and find ways forward jointly in a socially sustainable ways.

Recipe for salvation	Adopt the practices only that have successfully passed rigorous tests and received approval from the competent certifier-scientists.	Invest in data processing, collaboration with criminologists, the work of analysts, actionable knowledge products, raise their internal status, and become a true player in the intelligence game.	Raise status of learning, provide for systematic doubt, discussion both within the police as well as without it, encourage experimentation and dissemination of learning-relevant practices, reward failures whenever a right lesson is learnt from them.
Blind spot	Evidence is a social accomplishment, not the world talking directly to us. Emphasises the role of decision-maker and neglects the role of police practitioner. Success represents the lack of customer protection rather than fact of making well-informed and warranted choices.	The academy is inclined to exaggerate the usefulness of its tools and the capacity of its products for marketing purposes. It effectively exploits the status of university learning and puts forward an inaccurate picture of the current state of the knowledge and the practical incapacities that result from the division of work in knowledge production.	Knowledge is more valuable for its owner the less of it others already possess. In hierarchical structures, it represents an insurance for its holder. It is also a certifiable good and thus used for recruitment, selection and promotion purposes, not a game all those interested in are free to join.
Interpre- tation of Wisdom	Wisdom is in finding out what really works in policing which cannot be learnt by experience, for instance, because the results materialise only after a long time, are widespread or otherwise go over the individual horizon.	Wisdom resides in patterns and trends that are in hiding in masses of data and call for crime analysts to screen them out, to make sense of them and to turn them into actionable knowledge products in policing.	Wisdom is not an individual attribute, but a joint achievement most likely to result from a type social interaction.

Conclusion

'As in Military tactics, an experienced General will feel his duty to consider well the force and position of an opposing enemy, with respect to the condition, and arrangement of his own strength, so in a warfare upon host of Criminal Delinquents, it becomes equally necessary to estimate their numbers, and the hostile plans they have concerted against the property of the innocent part of the community, before measures of opposition are attempted' (Colquhoun 1800, pp. 198-199).

At the turn of the nineteenth century, Patrick Colquhoun emphasised intelligence and analysis as key elements for effective tactics in policing. However, it took two hundred years until the police services around the world truly bought into it on a large scale. Today intelligence-led and evidence-based policing culminate in discussions on predictive policing.

Innovations in analysis and the systematic pursuit for new knowledge have spread across the world and have captivated, if not the practice, at least the imagination, of police services everywhere. Analytical or scientific knowledge in various guises appears as a pathway to La-La Land where effectiveness, efficiency and legitimacy appear to reside. It seems to link tradition with a prosperous future and provide an endless source from which to draw out new solutions, with which to refresh capacities and build unforeseen new ones. At the top of the wish list for every police chief is professional policing that is truly intelligence-led as well as evidence-and knowledge-based. A necessary companion to policing today or a dimension of it consists of everything that travels under the banner of science or scientific.

However, only a few decades ago, joining the bandwagon of science might have appeared as futile as an attempt to sell bicycles to fish. Today, science seems to designate the only way forward, the true, perhaps only, salvation. In the meantime, the number of people openly sceptical to expertise, in science and in general salvation through them, grows. Perhaps the most endurable feature of science is not the scientific method or the technologies that claim to originate from its highly abstract formulations as the material fruits from them, not the commercialised products of science, but its capacity for overarching criticism, to continuously expand its scope and use it systematically as a means for critical understanding.

The road to wisdom-governed policing is most likely to emerge from adopting the principle of criticism from science and learning to use it in an institutionally adept manner, from learning the value of open dialogue and discussion as an essential form of analysis, and from using that understanding in innovating new ways to formulate and put forward new syntheses.

"...democratic policing is an extremely open system. Far more than any publicly held stockholder corporation, and probably more than any other government agency, policing is always vulnerable to the demands of any vocal constituency." (Sherman 2013, p. 393.)

References

- Alach, Zhivan (2011). The emperor is still naked: how intelligence-led policing has repackaged common sense as transcendental truth. The Police Journal 84 (1), pp. 75-97.
- Baker, Thomas (2011). Intelligence-led Policing. Flushing: Looseleaf.
- Brodeur, Jean-Paul & Dupont, Benolt (2008). Introductory essay: the role knowledge and networks in policing. In Tom Williamson (ed.) The Handbook of Knowledge-based Policing. Current Trends and Challenges. Chichester: John Wiley & Sons, pp. 9-25.
- Brown, Jennifer, Belur, Jyoti, Tompson, Lisa, McDowall, Almuth, Hunter, Gillian & May, Tiggey (2018). Extending the remit of evidence-based policing. International Journal of Police Science & Management 20 (1), pp. 38-51.
- Bucchi, Massimiamo (2015). Norms, competition and visibility in contemporary science: the legacy of Robert K. Merton. Journal of Classical Sociology 15 (3), pp. 233-252.

- Bueermann, Jim (2012). Being smart on crime with evidence-based policing. National Institute of Justice 269, https://nij.gov/journals/269/Pages/evidence.aspx
- Bullock, Karen (2013). Community, intelligence-led policing and crime control. Policing and Society 23 (2), pp. 125-144.
- Burcher, Morgan & Whelan, Chad (2018). Intelligence-led policing in practice: reflections from intelligence analysts. Police Ouarterly 22 (2), pp. 139-160.
- Carter, David & Carter, Jeremy (2009). Intelligence-led policing: conceptual and functional considerations for public policy. Criminal Justice Policy Review 20 (3), pp. 310-325.
- Chainey, Spencer & Chapman, John (2012). A problem-oriented approach to the production of strategic intelligence assessments. Article manuscript.
- Cowen, Nick & Cartwright, Nancy (2020). Street-level theories of change: adapting the medical model of evidence-based practice for policing. In Nigel Fielding, Karen Bullock & Simon Haldaway (Eds.) Critical Reflections on Evidence-Based Policing. Routledge: Milton Park, pp. 52-71.
- Colquhoun, Patrick (1800). Commerce and the police on the river Thames. London: H. Baldwin & Sons.
- Crawford, Adam (2020). Effecting change in policing through police/academic partnership. . In Nigel Fielding, Karen Bullock & Simon Holdaway (Eds.) Critical Reflections on Evidence-Based Policing. Routledge: Milton Park, pp. 175-197.
- Darroch, Steve & Mazerolle, Lorraine (2013). Intelligence-led policing: a comparative analysis of organizational factors influencing innovation uptake. Police Quarterly 16 (1), pp. 3-37.
- Esposito, Elena (2017). Critique without crisis: systems theory as a critical sociology. Thesis Eleven 143 (1), pp. 18-27.
- Fassin, Didier (2017). The endurance of critique. Anthropological Theory 17 (1), 4-29.
- Fielding, Nigel (2020). Evidence-based practice in policing. Future trends. In Nigel Fielding, Karen Bullock & Simon Holdaway (Eds.) Critical Reflections on Evidence-Based Policing. Routledge: Milton Park, pp. 201-213.
- Fleming, Jenny (2020). Changing the narrative. Harnessing culture as evidence. In Nigel Fielding, Karen Bullock & Simon Holdaway (Eds.) Critical Reflections on Evidence-based Policing. Routledge: Milton Park, pp. 155-174.
- Fleming, Jenny & Rhodes, Rod (2017). Can experience be evidence? Craft knowledge and evidence-based policing. Policy & Politics 46 (1), pp. 3-26.
- Fuller, Steve (2020). The autonomy and integrity of science. Issues in Science & Technology 36 (4), pp. 19-20.

- Fyfe, Nick (2017). Evidence-based policing. In Policing 2026 Evidence Report. The Scottish Institute for Policing Research, pp. 9-19.
- Gieryn, Thomas (2010) Paradigms for the sociology of science. In Craig Calhoun (Ed.) Robert K. Merton Sociology of Science and Sociology as Science. New York: Columbia University Press, pp. 113-139.
- Greene, Jack (2019). Which evidence? What Knowledge? Broadening information about the police and their interventions. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives. Cambridge: Cambridge University Press, pp. 457-481.
- Gundhus, Helene (2012). Experience or knowledge? Perspectives on new knowledge regimes and control of police professionalism. Policing 7 (2), 178-194.
- Holdaway, Simon (2020). The development of evidence-based policing in the UK. In Nigel Fielding, Karen Bullock & Simon Haldaway (Eds.) Critical Reflections on Evidence-Based Policing. Routledge: Milton Park, pp. 15-32.
- Innes, Martin (2020). Wicked policing and magical thinking. Evidence for policing problems that cannot be 'solved' in an age of 'alternative facts'. In Nigel Fielding, Karen Bullock & Simon Haldaway (Eds.) Critical Reflections on Evidence-Based Policing. Routledge: Milton Park, pp. 133-151.
- Innes, Martin & Sheptycki, James (2004). From detection to disruption: intelligence and the changing logic of police crime control in the United Kingdom. International Criminal Justice Review 14, pp. 1-24.
- Kalleberg, Ragnvald (2010). The ethos of science and the ethos of democracy. In Craig Calhoun (Ed.) Robert K. Merton Sociology of Science and Sociology as Science. New York: Columbia University Press, pp. 182-213.
- Kalleberg, Ragnvald (2007). A reconstruction of ethos of science. Journal of Classical Sociology 7 (2), pp. 137-160.
- Knaapen, Loes (2013). Being 'evidence-based' in the absence of evidence: the management of non-evidence in guideline development. Social Studies of Science 43 (5), 681-706.
- Kim, So Young & Kim, Yoonhoo (2018). The ethos of science and its correlates: An empirical analysis of scientists' endorsement of Mertonian norms. Science, Technology & Society 23 (1), pp. 1-24.
- Latour, Bruno (2004). Why has critique run out of steam? From matters of fact to matters of concern. Critical Inquiry 30, pp. 225-248.
- Lemieux, Frédérick (2008). A Cross-cultural comparison of intelligence-led policing. In Tom Williamson (ed.) The Handbook of Knowledge-based Policing. Current Trends and Challenges. Chichester: John Wiley & Sons, pp. 221-240.

- Lumsden, Karen & Goode, Jackie (2018). Policing research and the rise of the 'evidence-base': police officer and staff understandings of research, its implementation and 'what works'. Sociology 52 (4), pp. 813-829.
- Mayo, Louis (1985). Leading blindly: as assessment of chief's information about police operations. In W. Geller (ed.) Police Leadership in America. Crises and Opportunity. New York: Praeger pp. 397-417.
- Ratcliffe, Jerry (2009). Intelligence-led policing: anticipating risk and influencing action. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.364.6795&rep=rep1&type=pdf
- Ratcliffe, Jerry (2008). Intelligence-led policing. Portland: Willan. Ratcliffe, Jerry & Guidetti, Ray 2007. State police investigative structure and the adoption of intelligence-led policing. Policig 31 (1), pp. 109-128.
- Reasons, Charles E., Francis, Teresa & Kim, David (2010). The Ideology of Homicide Detectives: A Cross-National Study. Homicide Studies 14 (4), pp. 436-452.
- Sauermann, Henry & Roach Michael (2012). Taste for science, taste for commercialization, and hybrid scientists. Paper presented at the DRUID, Copenhagen, 19-21.6.2012.
- Schakel, Jan-Kees, Rienks, Rutger & Ruissen, Reinier (2013). Knowledge-based policing: augmenting reality with respect for privacy. In Bart Custers, Toon Calders, Bart Schermer & Tal Zarsky (Eds.) Discrimination and Privacy in the Information Society: Data Mining and Profiling in Large Databases. Springer: Heidelberg, pp. 171-189.
- Sheptycki, James (2004). Organisational pathologies in police intelligence systems. Some contributions to the lexicon of intelligence-led policing. European Journal of Criminology 1 (3), pp. 307-332.
- Sherman, Lawrence (2015). A tipping point for 'totally evidenced policing': ten ideas for building an evidence-based police agency. International Criminal Justice Review 25 (1), 11-29.
- Sherman, Lawrence (2013). The rise of evidence-based policing: Targeting, testing, and tracking. pp. 377- 451. http://www.crim.cam.ac.uk/people/academic_research/lawrence_sherman/recent_publications/rise_of_ebp. pdf
- Sherman, Lawrence (1985). The police executive as statesman. In W. Geller (ed.)
 Police Leadership in America. Crises and Opportunity. New York: Praeger pp. 459-466.
- Stehr, Nico (1978). The ethos of science revisited. Sociological Inquiry 48 (3), pp. 172-196.
- Stott, Clifford, Pearson, Geoff & West, Owen (2018). Enabling an evidence-based approach to policing football in the UK. Policing: A Journal of Policy & Practice (forthcoming), pp. 1-18.

- Tauri Juan Marcellus (2013). Indigenous Critique of Authoritarian Criminology. In K. Carrington, M. Ball, E. O'Brien & J.M. Tauri (Eds). Crime, Justice and Social Democracy. Critical Criminological Perspectives. London: Palgrave Macmillan, pp. 217-233.
- Tourish, Dennis (2012). 'Evidence Based Management', or 'Evidence Oriented Organizing'? A critical realist perspective. Organization 20 (2), pp. 173-192.
- Turner, Stephen (2007). Merton's 'norms' in political and intellectual context. Journal of Classical Sociology 7 (2), pp. 161-178.
- Welsh, Brandon (2019). Evidence-based policing for crime prevention. In David Weisburd & Anthony Braga (Eds.) Police Innovation. Contrasting Perspectives. Cambridge: Cambridge University Press, pp. 439-456.
- Williamson, Tom (2008). The Handbook of Knowledge-based Policing. Current Trends and Challenges. Chichester: John Wiley & Sons.



Scholarly discussion on innovations and the police and policing is like a diamond with many bright and shiny facets. Innovations, like diamonds, are forever, the price and the means for eternal progress. Moreover, to tell a real innovation from a false one, like a real diamond from an artificial one, requires expertise. Real things are sold on the market along with fake ones. All innovations are propagated as game-changers, but, on many occasions, are nothing but decent substitutes or just old ones in a new outfit. When it comes to innovations and the police, there are many shiny yet hard facets in them, obstructing the way to their depths.

However, the eight innovative theoretically- and methodologically-oriented essays in this treatise take the issue beneath the surface. None of them is flawless, but together they valorise innovations and innovativeness in the police and policing in an encompassing and novel manner. Most likely, police researchers and educators will find the essays perplexing. They approach conventional issues from unconventional perspectives using atypical concepts. They raise doubts and concerns, and frame issues anew in ways that provide for counterarguments and discussion. It is exactly what the scholarly debate and research on innovations and innovativeness in the police deserves today.

