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Not ‘very English’ On the Use of the Polygraph by the Penal System in England and Wales*

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Abstract

One of the most striking developments in the penal system in England and Wales is the increasing use of the polygraph by probation services. Despite severe criticism from scientific institutions and academic discourse, the legal order increasingly deploys the long-discredited polygraph in order to extract adverse statements from released offenders. Our article is structured as follows: First, we summarise the statutory and regulatory framework for the current use of the polygraph in the monitoring of sex offenders released on licence, and the proposed expansion of the polygraph testing regime as set out in the Domestic Abuse Bill and the Counter-Terrorism and Sentencing Bill respectively. We then review our findings in respect of governing policies and procedures uncovered by our FOI-based research, highlighting the concerning lack of consistency in respect of both practice and procedure. In the subsequent sections we set out the main arguments deployed by polygraph proponents, and posit our view that none of these arguments can withstand scrutiny. We conclude by proposing a moratorium on any further use of the polygraph by the State, in order to thoroughly evaluate its effect on the integrity of the legal order, human rights and, more generally, the Rationalist aspirations of the penal system. In addition, and given already existing law, we propose a process of independent oversight and scrutiny of the use of the polygraph in licence recall decisions and other situations impacting individual rights, especially police investigations triggered by polygraph test results.

* Names alphabetically: both authors have contributed jointly and substantially to this article. We gratefully acknowledge the research assistance of Daniel Robinson. 1

*“The polygraph—or lie detector, to use its more homely name—
is not new, nor to my mind is it very English”
Lord Lloyd of Berwick*

Introduction

Managing to separate –in a reliable way— truth from lies has been a dream of mankind since ancient times. It has shaped mythology, philosophy, literature and fiction. For example, the Greek god Momus criticised Prometheus, i.e. the creator of humans, for not hanging the latter’s heart on the outside so that lies can be detected and thoughts can be read.¹ As a result of his criticism, Momus was, so the myth goes, expelled from the gods. What is more, humans remain to this day opaque, so that others carry on the struggle to rationalise human understanding in relation to truthful/deceptive behaviour. From Mary Poppins who uses an Oral Thermometer to detect naughty behaviour to Wonder Woman whose powerful weapon, i.e. the lasso of truth, can force those bound within it to disclose information, to the polygraph (the prototype of which was designed by the creator of Wonder Woman)², people still feel the need to look into each others’ soul. The aforementioned Momus’ criticism of Prometheus’ handiwork lies at the heart of modern developments in the law of England and Wales as regards the use of the polygraph by police forces and probation services.

It may come as a surprise even to criminal lawyers that the polygraph, alias ‘lie detector’ as it is commonly known and understood by courts in England and Wales,³ has been deployed by the penal system for over a decade in England and Wales. Pursuant to the Offender Management Act 2007, lie-detector tests are currently in use by Her Majesty’s Prison and Probation Service (hereinafter: HMPPS) in order to monitor sex offenders released on licence and manage compliance with their licence conditions. The remit of the polygraph test is expected to expand with similar provisions in the 2020 Domestic Abuse Bill and the Counter-Terrorism and Sentencing Bill respectively. Furthermore, the latter Bill includes polygraph testing as a method of monitoring compliance with Terrorism Prevention and Investigation Measures (TPIM) and leaves open the possibility that statements made in the course of compulsory polygraph testing can be used to secure a TPIM following the end of an offender’s licence, a consequence that the Independent Reviewer of Terrorism Legislation has described as ‘potentially oppressive’.⁴

Now, the question is: How is it even possible for the polygraph to gradually gain traction –*again*? We cannot stress enough that ever since the first deployment of the polygraph, appellate courts,⁵ scientific organisations,⁶ and last but not least academic

¹ See Plato’s dialogue, *Protagoras*, 320D-322A.

² For a concise introduction see Ken Alder, *The Lie Detectors: The History of an American Obsession* (New York: Simon & Schuster, 2007), p. xiii et passim.

³ See e.g. *Corbett v. (1) The Secretary of State for Justice (2) The National Offender Management Service* [2009] EWHC 2671 (Admin), at [8] per LJ Pill.

⁴ Jonathan Hall QC, Independent Reviewer of Terrorism Legislation ‘Note on Counter-Terrorism and Sentencing Bill: Sentencing Reforms (2)’ 4 June 2020, para 25.

⁵ See only *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

⁶ See e.g. National Research Council [USA], Committee to Review the Scientific Evidence on the Polygraph, 2003; see also [U.S. Congress] Office of Technology Assessment, Scientific Validity of

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discourse have continuously and nearly unanimously criticised, and rejected this method as unscientific. What is more, the very research program in psychology (i.e. introspection) which propelled the polygraph into existence has been widely discredited as unscientific due to its lack of methodology, indefensible empirical basis and deficient validity.⁷ Our research into recent developments in the deployment of the polygraph has therefore focused upon three main issues:

1. *For what purposes* is the polygraph deployed by the police and probation services in England and Wales?
2. What *policies and procedures* govern its use?
3. How is the use of polygraph *justified* by its proponents from an inferential and legal perspective?

Our investigation into (1) and (2) has been based on publicly available documentation, enhanced with the results of freedom of information (FOI) requests sent to the Ministry of Justice (in respect of HMPPS), the National Police Chiefs' Council and all UK based police forces, thus providing us with points of comparison between the situation in England and Wales and the other jurisdictions. This investigation has informed our conclusions in respect of (3): the arguments used by proponents and deployers of the polygraph to justify its use by the State, all of which, we contend, fall down (and raise additional concerns) when subjected to detailed critique. These arguments can be broken down into the following five main categories:

- The *utility argument*: the use of the polygraph is only concerned with, and supposedly justified by obtaining more disclosures from offenders;
- The *corroboration-rule argument*: a polygraph-test-result is yet another piece of information to be taken into account;
- The *non-oppression argument*: besides the detection of deception through the polygraph, the interviewee may freely choose to disclose information without being subject to any form of oppressive behaviour;
- The *containment-argument*: concerns around the use of the polygraph from a criminal justice evidential perspective are not applicable to use in probation, investigative or TPIMs contexts;
- The *expertise argument*: polygraph practitioners are highly regulated and trained on a legitimate and valid (scientific) method;
- The *human rights argument*: even if human rights articles may be engaged, any infringements can be justified.

We believe that the creeping 'invasion' of the polygraph into the criminal justice system should not be permitted to proceed any further. Indeed, its use should be

Polygraph Testing: A Research Review and Evaluation, A Technical Memorandum, OTA-TM-H-15 (1983). The Royal Commission on Criminal Procedure of 1981 had considered the introduction of the polygraph test into England and Wales. Their conclusion however was that the polygraph's 'lack of certainty from an evidential point of view told against its introduction in this country for the purpose of court proceedings' (para. 4.76).

⁷ A report from the British Psychological Society (1986: Report of the Working Group on the Use of the Polygraph in Criminal Investigation and Personnel Screening. Bulletin of the British Psychological Society 39, pp. 81-94) argued that the polygraph was unscientific.

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banned because of its invalidity and the dangerousness of pretending that a machine can deduce truth.

While there has been a) extensive discussion on the methodological, technical and professional requirements for forensic areas of expertise –these discussions have inter alia led to new standards of admissibility in English and Welsh criminal courts as regards reliability⁸– and soft law instruments⁹ and b) considerable criticism of algorithmically generated tools which purport to ‘detect’ personality or emotions based on facial features, gait or other physical attributes,¹⁰ the current use of the polygraph in contexts in which fundamental individual rights are at stake has been largely overlooked.¹¹ We can only speculate on possible reasons for this alarming development; perhaps actuarial/utilitarian technological approaches are perceived as more acceptable when applied to sex, domestic violence and terrorism offenders: The acceptability of oppressive and unreliable techniques aiming at the extraction of confession statements might increase when these techniques are applied to people involved in morally reprehensible behaviour. Our overall aim is to demonstrate why we should be concerned about these developments, and to highlight the convincing counter-arguments to those presented by polygraph proponents as set out above.

Our article is structured as follows. First, we summarise the statutory and regulatory framework for the current use of the polygraph in the monitoring of sex offenders released on licence, and the proposed expansion of the polygraph testing regime as set out in the Domestic Abuse Bill and the Counter-Terrorism and Sentencing Bill respectively. We comment upon the initial evaluations of polygraph usage that were conducted alongside the polygraph provisions in the Offender Management Act 2007 (the 2007 Act). We then review our findings in respect of governing policies and procedures uncovered by our FOI-based research, highlighting the concerning lack of consistency in respect of both practice and procedure. The subsequent sections represent the meat of our article, in which we set out the main arguments deployed by polygraph proponents, and posit our view that none of these arguments can withstand scrutiny. We conclude by proposing a moratorium on any further use of the polygraph by the State, in order to thoroughly evaluate its effect on the integrity of the legal order, human rights and, more generally, the Rationalist aspirations of the penal system. In addition, and given already existing law, we propose a process of independent oversight and scrutiny of the use of the polygraph in licence recall decisions and other situations impacting individual rights, especially police investigations triggered by polygraph test results.

⁸ *R v Dlugosz and Others* [2013] EWCA Crim 2, at [11] – emphasis added; see *Tony Ward*, Explaining and trusting expert evidence: What is a ‘sufficiently reliable scientific basis’? In: *E&P* 2020, <https://doi.org/10.1177/1365712720927622>.

⁹ See *The Criminal Practice Directions 2015 V Evidence* 19A.

¹⁰ See the National Research Council Committee on Identifying the Needs of the Forensic Sciences Community, *Strengthening Forensic Science in the United States: A Path Forward*, 2009, for a general introduction to the topic; see also D. Michael Risinger & Michael J. Saks, *Science and Nonscience in the Courts: Daubert Meets Handwriting Identification Expertise*, in: 82 *Iowa L. Rev* (1996), pp. 21-74.

¹¹ For an account of historical and current analogies, see Marion Oswald *Technologies in the twilight zone: early lie detectors, machine learning and reformist legal realism*, 34 *International Review of Law, Computers & Technology* (2020), pp. 214-231, DOI: [10.1080/13600869.2020.1733758](https://doi.org/10.1080/13600869.2020.1733758).

Statutory Framework for the Use of the Polygraph Test in England and Wales

Sections 28–30 of the 2007 Act enable a polygraph condition to be inserted in the release licence of certain adult sexual offenders as specified in the Act. More specifically, s.29 states that a qualifying released person must participate in polygraph sessions with a view to monitoring his compliance with the other conditions of his release; or improving the way in which he is managed on release. These offenders must participate in the aforementioned sessions at times given and must do exactly as they are told throughout the test. S.29(3) adumbrates polygraph examinations and enumerates the latter's procedural elements:

- a) the polygraph operator questions the released person;
- b) the questions and the released person's answers are recorded; and
- c) physiological reactions of the released person while being questioned are measured and recorded by means of equipment of a type approved by the Secretary of State.

S.30(1) of the 2007 Act stipulates that evidence of any matter mentioned during the polygraph session may not be used in any proceedings against the interviewee (i.e. released offender) for an offence. The aforementioned matters could be either:

- a) statements made by the released person while participating in a polygraph session, or
- b) any physiological reactions of the released person while being questioned in the course of a polygraph examination.¹²

Furthermore, according to the 'Polygraph Examination Instructions' (hereafter: *PEI*) an indication of deception (hereafter: *DI*) is not in itself a breach of the licence condition:

'Any statement made or physiological reaction of the released person during the polygraph session would not be evidence that the released person had breached his/her licence condition and should not lead to enforcement proceedings being undertaken'.

Accordingly, enforcement proceedings due to breach of licence may follow, only if the offender 'admits to, or disclose about behaviour that would constitute a breach'.¹³

In addition to use immunity granted to the interviewee by s. 30. we also seem to have a *corroboration rule* at play, according to which the result of the polygraph examination cannot be used as an exclusive basis for decisions on the management of sex offenders.

The legislative framework also includes the Polygraph Rules 2009¹⁴ which govern the qualifications of polygraph operators in this context (specifically, training

¹² s.30(2)(a-b) of the 2007 Act.

¹³ See NOMS [as it then was] - Polygraph Examinations: Instructions for Imposing Licence Conditions for the Polygraph on Sexual Offenders. *Appendix 1 - Polygraph Examinations: Guidance for Offender Managers to ensure appropriate sexual offenders on licence are made subject to the additional licence condition to undergo polygraph examinations*, Appendix ,1 para 2.92 and 2.93, 3.41.

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accredited by the American Polygraph Association), administration and review of the test, and the ways that the results are reported to the offender and the offender manager.

During Parliamentary debate of the Offender Management Bill, Lord Lloyd of Berwick commented that the polygraph was not ‘very English. It has been in use in the United States for a long time, mostly by the CIA in vetting candidates for employment. But even in the USA the polygraph is regarded as controversial, not just because it is highly intrusive on personal privacy, which may matter less in the case of an offender on licence, but because there is no scientific way of establishing the accuracy of the polygraph as an indicator of the truth. In quite a large percentage of cases it will fail to show up those who are lying, resulting in the so-called ‘false negative’, while in another large percentage it will show up people as lying who are not in fact doing so, resulting in the so-called ‘false positive’.¹⁵

This fundamental concern was neatly sidestepped in the evaluation of the pilot program of mandatory polygraph testing carried out in the East and West Midlands regions pursuant to the 2007 Act. The evaluation study focused instead exclusively on whether there had been more ‘clinically significant disclosures’¹⁶ (hereafter: *CSD*) in the polygraph group than in a comparison group, i.e. on the *utility* of the polygraph. Most importantly, the study focused on the sheer number of *CSDs*, not on their truth-conducive, or lawful character. The evaluation concluded that there were more *CSDs* made in the polygraph groups, and that offenders receiving their first polygraph test made more disclosures if their test result was *DI* (although this difference dissipated on subsequent tests when offenders received less *DI* as test results).¹⁷ The report’s authors highlighted at the same time a number of caveats, including the risk that the self-reporting of disclosures by offender managers might mean that those using the polygraph felt expected to report large numbers of disclosures.¹⁸

Despite such caveats, and the critical points expressed in parliamentary debates, to wit, that this pilot should ‘not lay down any preconditions for its use in any other circumstances’,¹⁹ a polygraph licence condition can now be imposed on any eligible sex offender if necessary and proportionate.²⁰ Furthermore, the Domestic Abuse Bill, subject to a 3-year pilot of mandatory polygraph examination of domestic abuse

¹⁴ UK SI 2009 No. 619.

¹⁵ Lord Lloyd of Berwick, HL Deb 12 June 2007, vol. 692, col 1583-<https://hansard.parliament.uk/Lords/2007-06-12/debates/07061259000002/OffenderManagementBill?highlight=polygraph#contribution-07061268000031> (last accessed: 15/07/2020).

¹⁶ Defined in the evaluation as ‘new information that the offender discloses, which leads to a change in how they are managed, supervised or risk assessed, or to a change in the treatment intervention that they receive’: Theresa A Gannon, Jane Wood, Afroditi Pina, Eduardo Vasquez and Iain Fraser ‘The evaluation of the mandatory polygraph pilot’ Ministry of Justice Research Series 14/12, July 2012.

¹⁷ Gannon et al. (n. 16), para 3.3.

¹⁸ Ibid, para 2.3.

¹⁹ Lord Wallace of Saltaire HL Deb 12 June 2007, vol. 692, col 1583-<https://hansard.parliament.uk/Lords/2007-06-12/debates/07061259000002/OffenderManagementBill?highlight=polygraph#contribution-07061268000031> (last accessed: 15/07/2020).

²⁰ NOMS PSI 12/2015, para 1.25.

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perpetrators, proposes a national scheme of mandatory polygraph testing. The Counter-Terrorism and Sentencing Bill proposes the immediate imposition of the option of a polygraph condition for relevant terrorism offenders and, in addition, proposes that the polygraph test be used to assess 'whether any variation of the specified measures is necessary for purposes connected with preventing or restricting the individual's involvement in terrorism-related activity' (clause 41 of the Bill). This suggests that the polygraph's assessment of truthfulness or deceptiveness of the individual subject to the TPIM (in respect of questions related to the other measures imposed) will be used to determine whether measures should be continued, expanded or discontinued.

Rules, Policies and Practices Governing the Use of the Polygraph by Police and Probation Services

In addition to the legislative framework mentioned above, polygraph testing in the probation context is subject to a number of linked Prison Service Instructions (PSIs), setting out guidance on the imposition of polygraph licence conditions.²¹ In respect of police use of polygraphs, a 2014 ACPO (now National Police Chiefs' Council) statement on polygraphs in investigations strongly discourages its use, drawing attention to potential adverse consequences for the investigative interview, the wider investigation and the trial process.²²

The statement provides that if a polygraph has been used, it must be revealed to the Crown Prosecution Service, and therefore it will likely be disclosed to the defence. It sets out three particular sets of circumstances where the investigation could be tarnished:

- i) Where someone has been eliminated from the investigation directly because of the use of a polygraph or on the basis of lines of enquiry following a polygraph test. It could be argued that the whole enquiry was flawed because too much reliance was placed on an invalid technique;
- ii) If a suspect is implicated from polygraphic evidence, it could be argued that the investigation followed lines of enquiry that were heavily influenced by 'confirmation bias' based on a flawed technology;
- iii) If a victim of a crime is seen to be deceptive because of a polygraph, then it would be a mistake merely to drop those enquiries.

The statement concludes by stating, '[t]here are no typical cues to deceit, either through non-verbal behaviour, verbal behaviour, or physiology that can be used within the UK criminal justice system to accurately and consistently discriminate between lies and truth.'

However, use of the polygraph is only discouraged, as forces remain operationally independent. The statement continues, '[i]t is a matter for individual Forces to decide which methods they use in areas of police business that fall outside the investigative

²¹ In particular see NOMS PSI 36/2014 and 12/2015.

²² The document is online available, see <http://library.college.police.uk/docs/APPREF/National-Policing-Position-Statement-use-of-Polygraph-May-2014.pdf> (last accessed on 01/09/2020).

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context or security screening, provided that the information derived from their use does not form part of the evidential chain.’

Furthermore, our FOI research has uncovered considerable inconsistencies within UK police forces in respect of transparency around polygraph use. Of the 46 police forces which replied (94% response rate), 37 used a ‘neither confirm nor deny’ response (justified on the basis of a number of different grounds). 5 forces denied the use of polygraphs, without any further NCND caveat. These responses were commonly quick and to the point, stating that they do not, have never, and do not intend to, use polygraph testing in investigations.²³ This reflects the differences between the Scottish and English jurisdictions, with the Scottish Government stressing that they remain ‘unconvinced’ by the polygraph’s efficacy.²⁴ Contrary to Lord Lloyd’s view, the polygraph is – at least on an empirical level – perhaps not very Scottish rather than not very English!

Some forces stated (after requests for internal review) that they do not use polygraphs in an ‘overt’ capacity – the meaning of ‘overt’ use, or indeed covert use, was not explained. Only 3 responses (one of which came from the Ministry of Justice on behalf of HMPPS) drew attention to the 2014 ACPO statement. We cannot therefore rule out the possibility that the polygraph is currently being used in investigatory work or in some covert context. It should be noted that a pilot of the polygraph with individuals *suspected* of committing an online sexual offence was carried out between 2017-19.²⁵ Our FOI research also highlighted the use by one police force of a polygraph test as a bail condition connected to a community sentence, and this is discussed in the human rights section below.

Scrutinising the Arguments of the Polygraph Proponents

The utility argument

According to the Parliamentary Under Secretary for State for the Home Department, the use of the polygraph is simply seeking ‘to prompt new disclosures that might otherwise not happen, or to elicit an indication that might suggest that further investigation by the relevant authority should be undertaken. The purpose of using polygraphs is nothing more nor less than to achieve those very limited objectives.’²⁶ This has been a familiar refrain since the three year assessment of voluntary polygraph assessment which influenced the passing of the 2007 Act: that testing increased the number of ‘clinically relevant disclosures’ compared to no testing.²⁷ The evaluation of the mandatory testing pilot pursuant to the 2007 Act concluded

²³ Gwent Police; Merseyside Police; Police Scotland; The Port of Dover Police and Wiltshire Police.

²⁴ Joanna Cherry MP comments on the Counter-Terrorism and Sentencing Bill, House of Commons Hansard, Volume 678, Column 2055, 21 July 2020 <https://hansard.parliament.uk/commons/2020-07-21/debates/9161FFEE-DBE1-4722-B048-649F2FC4586B/Counter-TerrorismAndSentencingBill>.

²⁵ Jane L. Wood, Emma Alleyne, Caoilte O Ciardha and Theresa A Gannon, ‘Polygraph Testing by Police to Manage Individuals Convicted or Suspected of Sexual Offending’; online available: https://www.kent.ac.uk/school-of-psychology/downloads/kent_polygraph_report.pdf (last accessed: 01/09/2020).

²⁶ Chris Philip, House of Commons Hansard, Counter-Terrorism and Sentencing Bill (Seventh sitting), Public Bill Committee, 7 July 2020, Column 203.

²⁷ Don Grubin (2010). A trial of voluntary polygraphy testing in 10 English probation areas. *Sexual Abuse: A Journal of Research and Treatment* 22(3):266-278. DOI: 10.1177/1079063210369012.

that the number of clinically significant disclosures made by offenders in the polygraph-tested group was higher than that made by offenders in the comparison group. Following such disclosures, a higher proportion of offender managers in the polygraph group took action to increase preventative supervision measures, including recall to prison.²⁸ There is also a strong suggestion from the pilot evaluation that use of the polygraph changes the nature of the supervision, emphasising compliance with licence conditions, rather than offender needs or intentions.²⁹ As Grubin comments, '[y]ou cannot use polygraph testing as a means of testing intentions. The polygraph is looking specifically at behaviours.'³⁰

The utility claimed for the polygraph is not limited to prompting disclosures, however. Despite the acknowledged invalidity of the 'lie detector' description, the polygraph test is still touted as being able to detect truthfulness or deception, and therefore to guide the decision of the offender manager as to whether or not to trust the offender's statements. The evaluation of the pilot reported that offender managers found the polygraph 'useful' in giving them 'confidence' that the manager was complying with his licence conditions.³¹ If a polygraph indicated deception, further challenges would follow, whereas if the results showed no deception, 'it reassured them of the offender's honesty.'³² This is reflected in guidance for offender managers which describes the polygraph as a device which measures physiological responses, changes in which 'are thought to indicate whether the subject is lying'.³³ This guidance states that 'no deception indicated' results may allow 'an adjustment downwards of the offender's risk of serious harm'.³⁴ Evidence to the recent Counter-Terrorism and Sentencing Bill Committee continued the message that the 'truthful test' with no disclosures can provide 'reassurance'.³⁵

This utilitarian approach to the polygraph is all too familiar in the United States, where the polygraph has been in widespread use to assess evidence and in employee screening since the 1960s: 'Confessions, admissions [...] and additional information of investigative value gained through [...] testing come about due to the *utility* of the polygraph and the determination of the examiner, irrespective of the instrument's reliability or validity.'³⁶ The 2012 evaluation of the English pilot follows this utilitarian model by limiting its aims to evaluation of the polygraph on disclosures and offender management practices, thus allowing any increase in disclosures to be evaluated as a 'success'. We now face a situation where there 'are effectively two systems running in parallel: one in relation to criminal court proceedings, in which expert testimony is admitted only if based upon a scientifically valid foundation

²⁸ Gannon et al. (n. 16),, p. ii.

²⁹ Gannon et al. (n. 16), para 4.2.

³⁰ Don Grubin, Public Bill Committee, Counter-Terrorism and Sentencing Bill (Second sitting) 25 June 2020.

³¹ Gannon et al. (n. 16),para 3.5.

³² Gannon et al. (n. 16), para 4.2.

³³ National Offender Management Service, Polygraph Examinations: Instructions for Imposing Licence Conditions for the Polygraph on Sexual Offenders, PSI36/2014, para 1.4.

³⁴ National Offender Management Service, Polygraph Examinations: Instructions for Imposing Licence Conditions for the Polygraph on Sexual Offenders, PSI36/2014, Appendix 1, para 2.8.7.

³⁵ Don Grubin, Public Bill Committee, Counter-Terrorism and Sentencing Bill (Second sitting) 25 June 2020.

³⁶ Warner, William J. 2005. "Polygraph Testing: A Utilitarian Tool." *FBI L. Enforcement Bull* 74: 10.

relevant to the issue at hand, and one which runs parallel to the court system without such constraints, based on realist and utilitarian principles.³⁷

Proponents would argue that the system ‘works’ if the threat of the polygraph – despite its lack of scientific validity - elicits additional disclosures. Disclosures, however, are not an end in themselves. We face a paradigm shift towards an actuarial approach catalysed by the polygraph³⁸ where the threat of the polygraph to elicit disclosures has become the aim. The purpose of the supervision of offenders under licence is however stated to be a) protection of the public b) the prevention of re-offending and c) securing the successful re-integration of the prisoner into the community.³⁹ Evaluations to date have been extremely limited in their remit and have not addressed the *validity* of the polygraph and its overall impact of the polygraph on supervision objectives and on human rights principles.

Note that if deception is indicated (despite the risk of false positives) and the offender is not ‘forthcoming in offering any explanation’, then a ‘sound guiding principle’ is to ‘address the issue “head on” with the offender and try to verify it’.⁴⁰ The polygraph is thus revealed as an interrogation technique (as discussed further below), designed to extract disclosures by the threat of a ‘failed result’ and the promise of ‘positive feedback’ for a ‘passed’ test.⁴¹ Furthermore, and perhaps even more concerningly, the consequences of false negatives in respect of ‘no deception indicated’ results are not addressed and instead, such a result is described as a measure of truthfulness. Thus, the result of a pseudoscientific method effectively becomes the decision, usurping the role of the authorised legal official qua legitimate (human) decision-maker.

In the context of Terrorism Prevention and Investigation Measures (TPIMs), the proposed inclusion of a polygraph condition creates new and potentially unforeseen risks. This is due to the proposal that the polygraph test be used to assess ‘whether any variation of the specified measures is necessary for purposes connected with preventing or restricting the individual’s involvement in terrorism-related activity’.⁴² This suggests that the polygraph’s assessment of truthfulness or deceptiveness of the individual subject to the TPIM (in respect of questions related to the other measures imposed) will be used to determine whether measures should be continued, expanded or discontinued. This appears to us to be highly dangerous and inappropriate (and of course would not be admissible in criminal proceedings). This provision seems to bring with it an implicit assumption that the polygraph can determine truthfulness or otherwise, and an abdication of the authorised legal officials’ decision-making prerogative to the polygraph, running contrary to the

³⁷ Marion Oswald (2020) Technologies in the twilight zone: early lie detectors, machine learning and reformist legal realism, *International Review of Law, Computers & Technology*, 34:2, 214-231, DOI: [10.1080/13600869.2020.1733758](https://doi.org/10.1080/13600869.2020.1733758).

³⁸ See Mireille Hildebrandt on technological affordances in ‘Proactive Forensic Profiling: Proactive Criminalization?’ in R Antony Duff and others (eds), *The boundaries of the criminal law* (OUP, 2010), 121.

³⁹ s.250(8) Criminal Justice Act 2003.

⁴⁰ National Offender Management Service, *Polygraph Examinations: Instructions for Imposing Licence Conditions for the Polygraph on Sexual Offenders*, PSI36/2014, Appendix 1, para 2.8.5.

⁴¹ PEI (n. 40), Appendix 1, para 2.8.7.

⁴² Clause 41, Counter-Terrorism and Sentencing Bill 2020-21.

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Secretary of State's duties under ss 3(3) & (4) of the Terrorism Prevention and Investigation Measures Act 2011.

It is understandable that those public officials faced with difficult decisions that could have life-threatening consequences will tend to look favourably at a system that purports to offer certainty, comfort and reassurance. As Risinger et al. put it pithily (on a similar occasion, i.e. handwriting identification 'expertise'), this is one of the cases where the 'search for truth' model of our procedural system cannot account for many phenomena in the real world of criminal justice. For the Government finds itself under the stress of 'having to wrestle with important types of facts', indeed with risks threatening the stability of our modern way of life, i.e. terrorism, and invites the 'creation of a proxy for rational knowledge, a form with the appearance of evidence but no rational content'. Such a type of evidence is the polygraph output which the system uses in a 'ritual exorcism of an ignorance' whose presence in the context of terrorism seems unbearable.⁴³ The lack of attention paid to the validity of the polygraph, however, in favour of a focus on its limited 'usefulness', means that we instead end up with a system that produces more uncertainty, as officials come to rely on a system that communicates certainty, but is based on invalid methods and thus significant risk of false results.

Corroboration-rule argument

Among others the Independent Reviewer of Terrorism Legislation has expressed the view that polygraphs should be seen as an additional information source that is sensible to use.⁴⁴ On the face of it, this might appear to be a common-sense and straightforward position. Delve a little further, however, and the position reveals itself as to be anything but straightforward.

In view of the use immunity enshrined in s.30 2007 Act and the instructions for conducting a polygraph test (PEI) one would feel inclined to assign to the polygraph test a low and non-conclusive probative weight compared to information gained during the interview. More specifically, the PEI state that 'if the polygraph examination indicated that the released person was potentially failing to tell the truth this would not, in itself, be a breach of the licence condition'.⁴⁵

This has prompted public officials to stress that a *DI* alone cannot trigger legal effects. As the Parliamentary Under Secretary of State at the Home Office and Ministry of Justice Chris Philp MP put it in the House of Commons: 'If somebody fails one of these polygraph tests on licence, further investigatory work is done by the police or the probation service. It triggers further work, which will then produce a conclusion one way or the other. It does not produce a binding result, but it serves as a trigger.'⁴⁶

⁴³ D. Michael Risinger et al., Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification "Expertise", in: 137 *U. Pa. L. Rev.* (1989), pp. 731-739-51 (1989).

⁴⁴ Transcript of the first sitting of the House of Commons Public Bill Committee on the Counter-Terrorism and Sentencing Bill 2019-21, 25 June 2020.

⁴⁵ PEI para 2.9.2.

⁴⁶ House of Commons. Counter-Terrorism and Sentencing Bill, 2nd Reading – 09 June 2020, vol 677, online available: <https://hansard.parliament.uk/commons/2020-06-09/debates/F2B7F77A-82C4-4232-8901-C426BBFD1BEC/Counter-TerrorismAndSentencingBill> (last accessed: 01/09/2020).

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It seems thus that the legal order goes one step further than granting use immunity in criminal proceedings and, additionally, imposes corroboration requirements for this type of evidence in the probation context: According to the PEI an uncorroborated DI cannot warrant a finding of breach of any licence condition or any other legally relevant behaviour. The problem is however that the PEI try to make a virtue out of necessity for two interrelated reasons:

First, a DI is not based on reliable methodology. It does not indicate anything insofar as it cannot differentiate between competing hypotheses. Simply put, there is no identifiable link between physiological reactions and psychological concepts / truthfulness or deception. As every blue-ribbon committee on (the validity of) the polygraph test confirms, the 'stress response' to be measured can be triggered by a host of factors. There is simply no unique physiological indicator that reflects a single underlying process, let alone deception.⁴⁷ This is obviously a thorn in the flesh of the polygraph insofar, as the epistemological presupposition that 'deception and truthfulness reliably elicit different psychological states across examinees'⁴⁸ and in particular that 'the polygraph is a device that measures certain physiological responses [...] which are thought to indicate whether the subject is lying'⁴⁹ is of pivotal importance for the very existence of the polygraph.

Secondly, and regardless of the invalid underlying methodology, a DI is – we cannot stress this enough – *probabilistic* in nature. As such it does not refer to a specific individual or a specific statement. It cannot prompt any action in the same way that the information that '97 per cent of Italian citizens are catholic' does not tell us whether L., an Italian citizen, is catholic. As the statistician David Lucy put it pithily, it is simply 'ridiculous' to assign base rates to individual cases.⁵⁰ The problem, however, is again much deeper than our inability to use statistical output as a warrant for decisions. For the polygraph 'test' does not generate any *scientific* data insofar as an interview is not a replicable process.⁵¹ In the penal system there is no universe of John Lennon shootings in which we can count how many times he was shot by M.D. Chapman and the number of times that someone else was the culprit. As Fulford LJ put it: 'no two trials are the same, and the type, quantity and quality of the evidence differs greatly between cases.'⁵² What is more, early on in the history of the polygraph it became clear that 'wide divergence' in the structure of the respective interview is inevitable due to the 'widely varying types of questions, examiners, and examinees'.⁵³ The complex interaction between the examiner and the examinee show that lack of standardisation signals a feature, not a bug in the system. The polygraph output or indeed any empirical research on this subject, is thus deprived of any *generality*. Polygraph operators do not, indeed cannot follow any standard

⁴⁷ See e.g. NRC-Report (Fn. 6), p. 78; see also British Psychological Society (2004) A Review of the Current Scientific Status and Fields of Application of Polygraphic Deception Detection, Final Report from the BPS Working Party Leicester, p. 29.

⁴⁸ NRC-Report (Fn. 6), p. 65.

⁴⁹ See e.g. National Offender Management Service (U.K.), Polygraph Examinations: Instructions for Imposing Licence Conditions for the Polygraph on Sexual Offenders, para 1.4 (<https://www.justice.gov.uk/downloads/offenders/psipso/psi-2014/psi-36-2014-polygraph-examinations.pdf>, last accessed 07/06/2020).

⁵⁰ D. Lucy, *Introduction to Statistics for Forensic Scientists* (Wiley, 2005), p. 5.

⁵¹ CPD 2015 V 19A.6.(c).

⁵² *R v PR* [2019] EWCA Crim 1225; [2019] 2 Cr App R 22, at [65].

⁵³ OTA-Report (Fn. 6), p. 11.

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procedure. As the U.K. Ministry of Justice/Probation Service informed us: ‘there are no set questions that come with this [polygraph] test. Each test is created and based on the specific licence conditions of the individual’ – unsurprisingly. What is more, several police forces replying to our FOI requests noted that each test is bespoke to the individual, which is equally unsurprising in view of the complex nature of historical events and human conversation.⁵⁴

Research on the accuracy of polygraph tests utilise mock interviews, which is an experiment with the wrong type of guinea pigs insofar⁵⁵ as the forensic context is wildly dissimilar than the controlled environment in the laboratory. Real people involved in the criminal justice system have real stakes, complex motivations and recollections of events. Empirical research in that area suffers from a lack of realism which is a precondition of validity. The reason for that is what empirical researchers coin the ‘base rate problem’. As Gudjonsson explains, ‘[a]t the most basic level we do not know the proportion of suspects interrogated at police stations who are genuinely guilty of the offence of which they are accused. This makes it impossible to estimate the frequency with which false confessions occur’.⁵⁶

Regarding the polygraph as ‘information gain’⁵⁷ is at its best inaccurate. It is, as we will show below, an *interrogation tool*, another Trojan horse in which the extraction imperative is secreted under the veil of technological progress. Its purpose and sole potential are not to detect truth (the polygraph cannot detect anything), but to enable interviewers to extract confessions statements (CSD).

The non-oppression argument

As outlined above, para 2.9.2. PEI imposes only a quasi-corroboration requirement. For a *DI* qua statistical in nature cannot trigger any legal effect, i.e. any decision about a specific individual. The full scale of the problem becomes visible as soon as we broaden our view and examine the non-oppression argument.

According to the PEI (para 2.9.3) ‘if the offender admits to, or discloses about, behaviour that would constitute a breach either before taking the polygraph test, or afterwards when “explaining” a failed test result, enforcement proceedings may follow’. Again, the devil lies in the details.

First, released offenders are *forced* to undergo polygraph sessions insofar, as ‘failure to attend or comply with the polygraph session as instructed would constitute a breach of the licence condition’.⁵⁸ The PEI sanction thus non-attendance of a pseudo-scientific interview ritual whose output would either way be declared inadmissible in criminal proceedings. Released offenders are forced to subject themselves to unreliable procedures. Once there, the offender must undergo a test

⁵⁴ Data from FOI requests can be made available upon request.

⁵⁵ See already C.D. Lee, *The Instrumental Detection of Deception* (Springfield: Illinois, 1952), p. 25.

⁵⁶ Gisli H. Gudjonsson, *The Psychology of Interrogations and Confessions* (Wiley: Chichester, 2003), p. 173.

⁵⁷ See e.g. Donald Grubin’s Oral Evidence in Parliament. Counter-Terrorism and Sentencing Bill (Second sitting) - 25 June 2020 (Column 53), online available: <https://hansard.parliament.uk/Commons/2020-06-25/debates/480977f0-fac4-4237-8a40-4a5fc5a552c9/details> (last accessed: 02/09/2020).

⁵⁸ PEI, Appendix 1, para 2.94.

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which can of course easily be tricked,⁵⁹ and which cannot detect any unique physiological indication of untruthfulness.

Secondly, according to para 2.7.4 PEI, an offender who has failed the test (*DI*) ‘will be given the opportunity to explain the test result in the post-test phase of the examination’. This is ‘another opportunity’, the PEI stress, to ‘disclose information’. Repetitive use of the term ‘opportunity’, as evidenced above, distracts us from the fact that the polygraph-test is calibrated towards extracting confession statements by instilling fear of detection. For interrogative suggestibility, as research clearly shows, appears to be significantly mediated by anxiety processes.⁶⁰ Remember also that a polygraph test is –unlike a routine visit to the GP— a ‘fairly lengthy process’ which typically lasts ‘two or three hours’.⁶¹ The obligation of the interviewee to provide an explanation for the *DI* is highly informative, for the simple reason that the PEI do not regard –even from within the flawed logic of the polygraph— the very possibility of a false-alarm as relevant. The offender *must* provide an explanation for an indication which, let us repeat, can, on the polygraph’s own terms, be a false positive. What is more, if deception is indicated and the offender is not ‘forthcoming in offering any explanation’, then a ‘sound guiding principle’, according to the PEI, is to ‘address the issue “head on” with the offender and try to verify it’.⁶² But ‘challenging the interviewee head on’ is yet another way to gain leverage based on malleable pseudo-scientific output. This is, we think, the exact point where the *bogus-pipeline effect* kicks in. Because the subject operates on the wrongful basis that the polygraph test a) works independently and b) will reflect their true attitude, and because c) they do not wish (no one does) to be second-guessed by the machine, they will feel pressured to disclose adverse statements.⁶³ This suffices also to explain why the so called stimulation test is considered to be an ‘indispensable’⁶⁴ part of the polygraph interview.⁶⁵

The polygraph test relies thus on a logical fallacy, i.e. on assuming what we need to prove. We conclude that every polygraph operator faces an unpalatable dilemma: *Either* to inform the subject that the polygraph test lacks scientific validity *or* to deploy a psychological procedure (stim test) based on false statements in order to extract a confession. The field of polygraphy choose persistently the latter – among other things through demonstrably false empirical claims. Such is the claim that there is a ‘unique pattern of response for specific emotional states’.⁶⁶

⁵⁹ See NRC-Report, Polygraph (n. 6), p. 139-141.

⁶⁰ Gudjonsson, *Psychology* (n. 56), p. 148.

⁶¹ See Don Grubin’s witness statement in: Parliamentary Debates - House of Commons Official Report General Committees - Public Bill Committee - Counter-Terrorism and Sentencing Bill - First Sitting Thursday 25 June 2020 (Morning). Online available: https://publications.parliament.uk/pa/cm5801/cmpublic/CounterTerrorism/PBC129_Counter-Terrorism_1st-4th_Combined_30_06_2020.pdf (last accessed: 02/07/2020).

⁶² PEI, Appendix 1 para 2.8.5.

⁶³ E.E, Jones / H. Sigall, The bogus pipeline: A new paradigm for measuring affect and attitude, in: 76(5) *Psychological Bulletin* (1971), pp. 349–364.

⁶⁴ OTA-Report (Fn. 6), p. 12.

⁶⁵ According to s5(3) of the Polygraph Rules 2009: “A polygraph session must include a pre-test interview, one or more polygraph examinations and a post-test interview.”

⁶⁶ See e.g. Stanley Abrams, The Utilization and Effectiveness of the Stimulation Test, in: 7 *Polygraph* (1978), pp. 178-181 (178-9).

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There are deep psychological reasons for that approach. As the PEI document openly admits (para 2.8.5) 'Offender Managers sometimes struggle to decide on what to do, if the test result was "deception indicated", if the offender was not forthcoming in offering any explanation'. But herein lies the problem. As Beccaria explained already in the 18th century, it is not the actual events of the alleged crime that are unravelled before the eyes of the oppressive investigator but the strength 'of the will of the accused'. For the 'very means employed to distinguish the innocent from the guilty' will, Beccaria noted, make the difference between them disappear, so that we, ultimately, get information about 'the force of the muscles and the sensibility of the nerves' of the accused person rather than a truth-conducive statement.⁶⁷

In the polygraph context, we are not dealing of course with strictly physical pain, but with *psychological* pressure. We are not operating on the basis of the (false) assumption that 'God will give the defendant the strength to endure'; the explicit assumption though that the device will detect untruthful statements is playing the exact same role. We think, therefore, that the difference between torture and the polygraph is a matter of degree, not category.⁶⁸ Remember also that the main function of the stimulation test is to instil *fear* of detection. In a similar way to torture, suggestibility is not a reliable or legitimate way of conducting an interview as it generates confession statements while, at the same time, it inflates their probative force. So, yes, offenders are, technically, not recalled on the basis of a failed polygraph test. But polygraph examiners and probation officers can, *first*, utilise a 'failed' test (whatever this means) using it as leverage to extract information from mostly vulnerable and under psychological pressure individuals. *Secondly*, they can inform the police about the very fact of a 'failed test' which, let us repeat, is not based on valid methodology. The police then will use this 'failed test' to issue a search warrant on the basis of non-reasonable grounds and secure further evidence.

Furthermore, as regards the legal semantics of the term oppression, we should not forget that the remit of oppression which is partially defined in s.76(8) of PACE,⁶⁹ also includes deception. For example, it was held in *Mason* that a lie told by the police –that the defendant's fingerprints had been found on an article used in the offence— should have resulted in exclusion of his confession under s.78 of PACE. The trial judge had failed to take into account the deception practiced not only on the defendant which, as the Court of Appeal stressed, 'is bad enough', but also upon the latter's solicitor. Had the trial judge included the deceit practiced upon the appellant and his solicitor in his consideration of the matter, the Court of Appeal notes, then they 'have not the slightest doubt that he would have been driven to an opposite conclusion, namely, that the confession be ruled out and the jury not permitted therefore to hear of it'. 'Hoodwinking' the defendant through deception, the Court of Appeal noted, 'was a most reprehensible thing to do'.⁷⁰ *Heron*⁷¹ is another case which dealt with coercive tactics employed by the police. It was held that the use of deliberate deception on a suspect may contribute to a finding of oppression. The court judge excluded the defendant's confession on the grounds both of verballing

⁶⁷ C Beccaria, *An Essay on Crime and Punishment*, ch. XVI.

⁶⁸ See K.N. Kotsoglou, 'Über die „Verständigung“ im Strafverfahren als Aussageerpressung.' In: 12 *ZIS* (2015), pp. 175–199.

⁶⁹ Police and Criminal Evidence Act 1984 c.60.

⁷⁰ *Mason* [1987] 3 All E.R. 481.

⁷¹ *R. v Heron*, *The Times*, 22 November, 1993.

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during the interview and the lies told to the latter that allegedly two witnesses had identified the latter as being at the spot where the murdered girl was last seen alive. It is highly doubtful whether in similar circumstances a direction to the jury about the need for special would remedy the trial judge's failure to exclude the confession under ss.76(2) and 78 of PACE.⁷²

One might argue that the caselaw outlined above is irrelevant insofar, as it does not apply to the *probation* context. It is *contained*, one might think, in the context of the criminal process and its law of evidence. This is, as we will show below, a short-sighted view which seriously neglects the *unity* of the legal order and its underlying principles such as rationality and accountability, salient across different contexts.

The containment argument

The next argument that proponents of the polygraph bring forward is what we will dub the *containment-argument*. It states that concerns around the use of the polygraph from a criminal evidence perspective are not applicable to use in probation, investigative or TPIMs contexts. There are two main problems with this view.

a) *Reasonable Grounds?* The use of the polygraph does not take place in a *jurisprudential black hole*. The polygraph's outcome can, and often does lead to further criminal *investigations*. Let us take a thorough look at one of the examples that are regarded as typical scenarios and with which the UK Government advertises the use of the polygraph in HPPS:

'J is a 47year old sexual offender [...] J was subject to mandatory polygraph testing as part of his release following a nine-year custodial sentence. During the polygraph examination he denied any contact with children under the age of 18 years. The test revealed he was attempting to be deceptive. The test was run a second time and still produced a deceptive result. The polygraph examiner contacted the offender manager who immediately contacted the police. The police were waiting for the offender when he returned to his property and found three young boys and another adult in the house. J was immediately recalled to custody. The police were able to make further investigations'.⁷³

The scenario –whether representative or not— raises serious questions as regards the lawful character of police conduct. *First*, no polygraph results could ever 'reveal' that the interviewee is 'attempting to be deceptive'. No set of physiological data can be reliably associated to specific psychological concepts. Let us stress once again that the key message in scientific literature is that there is simply no unique physiological correlate that reflects deception. The Government's scenario is therefore misleading. *Secondly*, the aforementioned scenario exemplifies that the Government pays lip service to the use immunity enshrined in s.30(1) 2007 Act. For the offender manager can inform the police about the *DI* –remember that there are no clear rules as to what counts as *DI*. The police will thereupon investigate and secure new (admissible) evidence. In absence of a strict exclusionary rule for the

⁷² *R v. Moss* (1990) 91 Cr.App.R. 371.

⁷³ Mandatory Polygraph Tests. Counter Terrorism Bill. Online available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872087/ct-factsheet.pdf (last accessed: 02/07/2020).

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fruit of the poisonous tree police forces seem willing to take their chances with the 'fruit' of the polygraph. The problem, however, is that although investigations and new evidence might be able to bypass the exclusionary rules enshrined in ss.76 and 78 PACE 1984, they cannot distract us from the main issue at this juncture. Police conduct hinges on the existence of *reasonable grounds* for suspecting that an offence may have been committed (PACE Code B, para 2.5 and 3.1). Polygraph evidence is neither based on reliable methodology nor is it individualised due to its probabilistic nature. It is thus a contradiction in terms to base a suspicion for a crime on the output of a device which lacks validity and as a result is inadmissible in criminal courts across the globe. The legitimacy of police conduct fails on the *reasonableness*-requirement salient in PACE, indeed the legal order as a whole.

b) *Integrity*: Obviously, the structural features and normative objectives in the probation context are constituted in a much different way than the set of principles and rules permeating the criminal process. We cannot expect, indeed desire, the same level of procedural and evidential guarantees across the penal system. Differing standards of proof, stratified procedural guarantees and diverging regulatory thickness are a necessary expression of differences between the various parts of the legal system. However, a core minimum should be preserved. By deploying interview rituals masqueraded as technological solutions which on their own terms lack scientific validity, we jeopardise not just the rationality of a legal order, but, most importantly, some of its structural features: its normative cohesion, stability, and integrity. From the premise that integrity is the surface feature of a set of institutional practices and procedures permeated by the same core values, or at least values which are not directly contradicting each other, we can conclude that the use of unreliable methods in allegedly siloed parts of the criminal justice system fragments the *unity* of law. What is more, the abovementioned interview rituals are even among themselves uncoordinated and of varying professional standards. As the U.K. Ministry of Justice/Probation Service put it: 'there are no set questions that come with this [polygraph] test. Each test is created and based on the specific licence conditions of the individual.'⁷⁴

It is highly problematic that the decision-making process for recalling the released offender's licence is not nested in the evidential and procedural framework of guarantees salient in the penal system especially vis-à-vis reliability, prohibition of verballing, and proper assessment of confession statements. This is particularly worrying from the point of view of the *integrity* of the criminal justice system insofar,⁷⁵ as we can only tolerate the use of deception and psychological manipulation for the extraction of confessions at the price of using double inferential standards. Making false representations about the validity of the device especially vis-à-vis its diagnostic potential in order to instil fear and elicit semi-voluntary confessions, is deeply alarming not only vertically, i.e. with regard to the lack of validity of the procedure, but also horizontally, i.e. in view of the operational tensions *within* the penal system. As Dixon explains: 'On a holistic view, integrity implies normative coherence rather than fragmentation or irreconcilable conflicts in fundamental

⁷⁴ Response from Ministry to Justice - 18 March 2020.

⁷⁵ Term is used in *R v C* [2014] EWCA Crim 343, at [6] and [9]; *R v Clayton* [2014] EWCA Crim 1030 at [13].

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commitments.⁷⁶ Such a commitment is the requirement to ground decisions on validated, reliable evidence. Evidence used in the probation context must be reliable not because *Dlugosz* has settled the legal issues in the *criminal process*, but because of the deeper jurisprudential principles salient in the penal system which in turn shaped *Dlugosz*. The relation therefore between the probation context and criminal process is epiphenomenal. Both contexts derive their evidential and inferential standards from core jurisprudential principles (systemic features) such as rationality, normative integrity and accountability.

After all, arbitrariness is not a threat for the rationality of the criminal verdict only. Avoidance of arbitrariness lies at the heart of human rights (Article 5, Article. 8) whose remit includes undoubtedly the probation context. As the Strasburg Court in its Grand Chamber decisions stated, the law must indicate the scope of any such discretion and the manner of its exercise with sufficient clarity to give the individual adequate protection against *arbitrary interference*.⁷⁷ It constitutes an irreconcilable contradiction to exclude unreliable evidence from the criminal process when at the same time these can be used to revoke a released offender's licence –whether the polygraph evidence is the sole evidential basis of the decision or not. The generation and use of disclosures extracted with the use of polygraph exemplifies that fundamental values and principles of the criminal process are not integrated throughout the set of practices within the context of probation. Whereas confession evidence can be ruled (in-)admissible during a *voir dire*, an adverse statement during the polygraph-test may trigger enforcement proceedings, i.e. revoke the offender's licence and send him back to prison without any of the procedural and evidential guarantees of the interview processes set out in PACE and its codes of practice: that a person must be cautioned before being questioned about an alleged offence; that they must be informed of their legal rights; more specifically: that they are entitled to free legal advice; that they have the right not to incriminate themselves. This looks however more like a police state than a *Rechtsstaat*. As Lord Sumption put it in a similar context pithily: 'This is what a police state is like: It's a state in which the Government can issue orders or express preferences with no legal authority and the police will enforce ministers' wishes.'⁷⁸

This disparity catalyses a disintegration process which threatens to break the criminal justice system to its component parts. For it will be increasingly difficult – especially now that other areas of law (domestic abuse, counter-terrorism) are queuing up to deploy the polygraph— to preserve one of the main features of law: its 'characteristic unity and continuity'.⁷⁹ The dissociation of *common* standards of validity through probation practice brings about the *Noah effect* which has become a shorthand term in modern science for discontinuity and disruption. The criminal justice system cannot thus integrate diametrically opposing standards of legal validity. The use of the polygraph proves thus to be more significant than its restricted use: It metastasises. It turns out to open a disconcerting gap between

⁷⁶ See David Dixon, Integrity, Interrogation and Criminal Injustice, in: J. Hunter/P. Roberts/ S.N.M Young/David Dixon (eds.), *The Integrity of Criminal Process: From Theory into Practice* (Oxford: Hart Publishing, 2016), especially, pp. 75-98 (79).

⁷⁷ *Roman Zakharov v. Russia* [GC], Application no. 47143/06 - 4 December 2015, §§ 229-230; *S. and Marper v. The United Kingdom* [GC] (Applications nos. 30562/04 and 30566/04).

⁷⁸ Lord Sumption, Interview on Radio 4 (30 March 2020).

⁷⁹ H.L.A Hart, *The Concept of Law* (Oxford: Clarendon Press, 1961), p. 116.

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procedural rights and probation rights, between the criminal process and a probation system which appears to be by design 'irredeemably flawed'.⁸⁰

The expertise argument

During evidence presented to the Counter-Terrorism and Sentencing Public Bill Committee, it was asserted that:

'the people who administer the polygraph tests are highly trained. The regulations that we already use in relation to sex offenders, and that are likely to form the basis of the regulations here, require high levels of training and quality assurance for those who administer the tests. They are expert people who are selected and trained very carefully, and they use their powers and authority in a carefully managed and circumspect manner.'⁸¹

There is however, little or no transparent and independent data to support this assertion. The Polygraph Rules 2009 require polygraph operators to have completed training accredited by the American Polygraph Association (APA), and carried out a minimum of 20 post-conviction sex offender testing polygraph examinations under the supervision of an APA examiner.⁸² Although the Rules require review of sessions by a 'polygraph supervisor', this person is required to have completed the same APA training and to review the techniques of the operator against the 'standards' of the American Polygraph Association.⁸³

But what is really this rather opaque Association and what are the implications of its 'standards' and training becoming part of the polygraph regime in England and Wales? According to its website, the APA describes itself as the 'leading professional polygraph organization in the world' purporting to govern its members by a number of US focused codes and standards.⁸⁴ Despite this veneer of objectivity, such codes and standards have no legal or regulatory status in the UK, and are the equivalent of the polygraph industry marking its own homework. Notwithstanding that polygraph operators may be public servants, in no way can the insertion of APA processes into the UK criminal justice system be described as providing 'quality assurance' or independent oversight or management, especially when those *benefiting commercially from the training of operators* are responsible for setting the standards and influencing legal developments. As Synnott, Dietzel & Ioannou comment, 'The polygraph industry, by virtue of being an industry, has an inherent interest in the promotion of the polygraph, but is not dependent upon the support of the scientific community, which arguably impedes its interest in scientific advancement and validation.'⁸⁵

⁸⁰ HM Inspectorate of Probation, Report of the Chief Inspector of Probation (March 2019), p. 20.

⁸¹ n 26.

⁸² UKSI 2009 No. 619, Rule 3.

⁸³ UKSI 2009 No. 619, Schedule 1.

⁸⁴ <https://apoa.memberclicks.net/>.

⁸⁵ John Synnott, David Dietzel & Maria Ioannou (2015) A review of the polygraph: history, methodology and current status, *Crime Psychology Review*, 1:1, pp. 59-83, DOI: [10.1080/23744006.2015.1060080](https://doi.org/10.1080/23744006.2015.1060080).

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Historically, we have seen proponents of the polygraph attempting to change rules of evidence to admit polygraph testimony ‘on the basis of arguments around fairness, human unreliability and scientific progress [...] They published articles in legal and criminology academic journals, with press reports of the machine as ‘witness’, or returning verdicts of innocence or guilt, contributing to their cause.’⁸⁶ This overlap between academia, industry and the public sector continues today, justifying a high degree of scepticism and scrutiny of any claims around polygraph use and accuracy.

Most police forces were unwilling to provide detailed answers to our FOI request (and this self-similar lack of transparency is of itself of considerable concern, impacting as it does on the public’s ability to understand and scrutinise the use of the polygraph). There were a few commendable exceptions however, with one force⁸⁷ providing the following information:

a) There are no specific questions asked in the polygraph test as the questions are case specific for each person.

b) The polygraph test operators attend a Behavioural Measures UK (BMUK) training course and are American Polygraph Association (APA) accredited.

c) 166 polygraph tests were completed by the force polygraph team in 2019. The number of individuals deemed to have failed the polygraph test, or assessed to a borderline result, was 72. Even if the number of tests conducted only equated to one per individual, this would mean that 43% of individuals were deemed to have ‘failed’ a test.

d) The interventions or consequences stemming from a test vary case-by-case depending on what the outcome of the test is (such as any pertinent disclosures which need to be acted upon for safeguarding of children/adults) and at the Offender Managers’ and police officers’ discretion. *At present, a failed test will be logged as an intelligence report.*

These responses uphold our grave concerns around consistency of methodology, links with commercial interests, and the potential consequences of a ‘failed’ test. Holding the failed test outcome as intelligence could have serious consequences for an individual, as it could be used to justify further action including intrusive investigatory or surveillance measures, with intelligence subject to dissemination in contexts that may be unforeseen.

The human rights argument

As outlined above, the use of the polygraph can engage Article 5 ECHR (right to liberty and security of the person) insofar as any adverse statement made by the interviewee either during, or after the end of the polygraph session, may lead to enforcement proceedings (licence recall). It is, however, the Government’s view, as

⁸⁶ Marion Oswald (2020) Technologies in the twilight zone: early lie detectors, machine learning and reformist legal realism, *International Review of Law, Computers & Technology*, 34:2, 214-231, DOI: [10.1080/13600869.2020.1733758](https://doi.org/10.1080/13600869.2020.1733758).

⁸⁷ Norfolk Constabulary.

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expressed in the ECHR memorandum (Counter-terrorism and Sentencing Bill 2020) that the polygraph measures do not breach Article 5 'as detention will be in accordance with the sentence of imprisonment as set by the court'.⁸⁸ The Government cites *Whiston*⁸⁹ to support its view, specifically that:

'Where a person is lawfully sentenced to a determinate term of imprisonment by a competent court, there is (at least in the absence of unusual circumstances) no question of his being able to challenge his loss of liberty during that term on the ground that it infringes article 5(4). [right of a detained person to challenge the lawfulness of his detention before a tribunal] [...] the notion that the article is not engaged because of the original sentence appears entirely principled, and the consequence that a person under such a regime has to rely on his domestic remedies, at least unless other Convention rights are engaged, seems to me to be not unreasonable in practice.'⁹⁰ [per Lord Neuberger].

We strongly disagree on both a doctrinal and empirical level with the Government's view. There is much that can be distinguished in the *Whiston* case when one considers the use of the polygraph in the recall process. Despite recent attempts to normalise the polygraph, it would, we would argue, count as 'unusual circumstances' engaging other Convention rights as discussed below, thus permitting a challenge to the requirement of polygraph testing as a licence condition (refusal of which results in recall). The custodial sentence set by the court does not give a carte blanche to Probation officers, nor does the criminal conviction authorise an anything-goes (arbitrary) behaviour. According to the Strasbourg Court's jurisprudence, any deprivation of liberty has to be in keeping with the purpose of protecting the individual from arbitrariness.⁹¹ In the Government's view then, any licence recall is implicitly authorised by the custodial sentence as set by the court. However, the notion of arbitrariness in Article 5(1) ECHR extends *beyond conformity with national law*. The deprivation of liberty may be lawful with regards to domestic law but still arbitrary in view of the Convention rights.⁹² For domestic law has in turn to be compliant with the Convention, which includes general principles salient in English law too, such as the rule of law; legal certainty, and non-arbitrariness.⁹³ Furthermore, and whether or not Article 5 is engaged, common law rules of procedural fairness apply which may require *inter alia* an oral hearing prior to any licence revocation and consideration of whether refusal of a polygraph test is a legally relevant consideration to the recall decision. As Lord Slynn set out in *West*, 'in respect of determinate sentence prisoners the decisions taken (where such revocation has been ordered) can have a serious effect on the liberty of the applicant. If the decision is taken on the basis of a misunderstanding of the law or of

⁸⁸ Ministry of Justice/Home Office, Counter-Terrorism and Sentencing Bill 2020: ECHR Memorandum, May 2020 para 17 <https://www.gov.uk/government/publications/counter-terrorism-and-sentencing-bill> (last accessed: 01/09/2020)

⁸⁹ *R (on the application of Whiston) (Appellant) v Secretary of State for Justice (Respondent)* [2014] UKSC 39.

⁹⁰ *Ibid* paras 38, 40.

⁹¹ *S., V., and A. v. Denmark* App no 35553/12, 36678/12 and 36711/12 (ECtHR 22 Oct 2018 [GC], para 74; *Witold Litwa v. Poland* App no 26629/95 (ECtHR 4 Apr 2000), para 78.

⁹² *A. and Others v. The United Kingdom*, App no 3455/05 (ECtHR 19 Feb 2009) [GC], para 164; *Creang*

ă v. Romania, App no 29226/03 (ECtHR 23 Feb 2012), para 84.

⁹³ *Plesó v Hungary* App no 41242/08 (ECtHR 02 Jan 2013), para 59.

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a failure to appreciate the facts relied on there can be a very serious interference with the prisoner's liberty albeit that liberty is a conditional right.⁹⁴

In its ECHR Memorandum, the Government accepts that Article 6 (right to a fair trial) is engaged by the use of polygraph, in relation to the transfer of information to the police and in the civil context in respect of TPIMs, yet fails to address the issues that we identify in the non-oppression and containment sections above, the 'potentially oppressive' use of polygraph 'evidence' in the application for a TPIM or that refusal to submit to a polygraph examination would become a breach of a TPIM measure and thus an offence.⁹⁵

In respect of Article 8 (right to respect for private life), the Government merely asserts that any interference is 'justified [...] owing to the significant risk to the public potentially posed by this cohort of offenders in the current environment.' Despite this concern with risk, it is irrational, and frankly astonishing from a public protection perspective, for the Government to be relying on the polygraph test to determine if a TPIM subject 'complies with his measures'⁹⁶ i.e. as to whether an individual is telling the truth, and so as a determination of whether TPIM or release conditions can be relaxed. We can easily envisage the claim that could arise pursuant to the positive obligations under Articles 2 and 3 ECHR (right to life and freedom from torture respectively) where death or harm occurs due to the de-prioritisation of protective or investigative measures following a (negative) polygraph output.

Returning to Article 8, in *Corbett*, the claimant challenged his polygraph licence condition imposed as part of the initial pilot as a disproportionate interference with Article 8. The High Court disagreed; although there was an interference, it was justified under Article 8.2 grounds given the seriousness of the initial serious sexual offences and the denial of those offences by the claimant following his release on licence.⁹⁷ While this case appears on the face of it to support the Government's assertion, we would suggest a number of caveats. This case is over a decade old and relates only to the context of the initial polygraph pilot. It is clear from the judgment that the court placed weight on the claimant's offending and apparent failure to take responsibility for his crimes. The court paid no attention to the operation of the polygraph test itself and whether it was necessary for the purposes of offender management in terms of its effectiveness and validity. Nor did the court weigh up proportionality in accordance with the typical four-stage proportionality test.⁹⁸ The second part of such test in particular (are the measures which have been designed to meet the objective rationally connected to it?) would, we would argue, present a considerable hurdle to the proponents of the polygraph.

Finally, in this sub-section, we would highlight our findings from our FOI research discussed above which has established considerable inconsistencies in the attitudes, practices and transparency across police forces in respect of the use of the

⁹⁴ *Regina v. Parole Board (Respondents) ex parte Smith (FC) (Appellant) and Regina v. Parole Board (Respondents) ex parte West (FC) (Appellant) (Conjoined Appeals)* [2005] UKHL 1, para 48.

⁹⁵ Counter-Terrorism and Sentencing Bill 2020: ECHR Memorandum, paras 20 and 21 and 69.

⁹⁶ Counter-Terrorism and Sentencing Bill 2020: ECHR Memorandum, para 70.

⁹⁷ *Corbett v Secretary of State for Justice & Anor*, [2010] HRLR 3, Para 31.

⁹⁸ *Wilson LJ in R. (on the application of Quila) v Secretary of State for the Home Department* [2011] UKSC 45 at 45.

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polygraph. Furthermore, our research has uncovered the use of the polygraph as a bail condition connected to a community sentence known as the C2 programme operated by Hertfordshire Constabulary.⁹⁹ The programme is aimed at ‘prolific offenders’ and is not therefore limited to sex offenders as set out in the 2007 Act. As at the date of writing, there is little publicly available information regarding the use of polygraphs within this programme. Replies to our FOI request stated that some tests are mandatory as they are set as a bail condition, with other tests being ‘voluntary’. We were also informed that ‘use of the testing equipment may extend and be used as part of the assessment stage i.e. asking a candidate if they have been fully honest about their admissions of crimes and motivation to long term change.’¹⁰⁰ This therefore suggests that polygraphs are deployed to assess whether individuals have admitted all offences as part of their continuation in the programme, raising questions around the presumption of innocence and forced self-incrimination. As far as we have been able to establish, there are no statutory provisions permitting or governing the deployment of polygraphs in this manner as part of bail or community sentences. The police force in question stated ‘there is currently no legislation that specifically refers to the police use of polygraph either for sex offenders or for the c2 project.’¹⁰¹

It is debatable therefore whether there can be said to be the necessary quality and accessibility of law governing the use of the polygraph, and therefore whether interference with Article 8 is in accordance with law. The Court of Appeal in *Bridges* accepted the ‘relativist approach’ to the quality of law: that the more intrusive the act complained of, the more precise and specific the law must be to justify it.¹⁰² A polygraph test is both physically and mentally intrusive. As held in *Bridges* in respect of automated live facial recognition, we contend that leaving deployment of the polygraph to the discretion of police forces – potentially expanding usage to bail, sentence and investigation – would not satisfy the required quality of law from a human rights perspective too.

Final Thoughts

No-one would wish to see another fatal attack like the one committed by Usman Khan, a terrorist offender who had been released on licence half-way through a 16 year sentence.¹⁰³ In the aftermath of such terrible events, the temptation to grasp at a solution that promises certainty and truth is an understandable one. Yet – as Lord Lloyd pointed out – the polygraph is not English. Its use upholds none of the standards that our legal order in general and the penal system in particular do – or should – hold dear, and raises considerable concerns around individual rights and the quality of law governing its use. When, inevitably, someone who was polygraphed goes on to commit an offence, awkward (possibly: career-ending) questions to ministers will follow. The promise to provide certainty for decision-makers is – at its best— a false one; as fictional detective Father Brown pointed out,

⁹⁹ <https://www.herts.police.uk/Information-and-services/About-us/C2-Programme>

¹⁰⁰ FOI response from Hertfordshire Constabulary to us – 28 July 2020.

¹⁰¹ FOI response from Hertfordshire Constabulary – 28 August 2020.

¹⁰² [2020] EWCA Civ 1058, para 83.

¹⁰³ ‘London Bridge: What we know about the attack’ BBC News, 3 December 2019 <https://www.bbc.co.uk/news/uk-50594810>.

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a polygraph is as valueless as the medieval idea that blood would issue from a corpse if its murderer touched it: 'no machine can lie [...] nor can it tell the truth.'¹⁰⁴

We therefore call for an urgent moratorium on any further use of the polygraph, together with an independent and public investigation into all current deployments within the police and other public bodies. Thinking realistically and knowing that our criticism, however severe, will not make the law go away, we suggest that its use should, without delay, become subject to regulation, independent oversight and scrutiny based on legal principles, not hypothecated but unproveable utility. We trust that these legal principles, inter alia: rationality, respect for the individual and accountability, will show that the polygraph cannot have legal validity. Lie detectors are the things of spy dramas, sci-fi and children's literature and perhaps after such an investigation, that is where they should be consigned.

¹⁰⁴ G.K. Chesterton, *The Mistake of the Machine* (1914).

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