

Don't sweat demeanour:

Why virtual testimony is no less reliable

Paul Fruitman



to assess and react to witness demeanour. Many judges have themselves written of the need to gauge witnesses in the flesh.

Fortunately, the science shows little correlation between demeanour and witness reliability. A confident witness is not necessarily honest or accurate. Some courts have, to their credit, noted this research and begun to question the value of demeanour evidence. However, centuries of precedent have made reliance on demeanour a hard habit to break.

There may now be no choice. As examinations and trials move online, there will be less demeanour to judge. The challenge of gauging demeanour through a screen should force courts to reckon with whether such evidence is reliable at all.

What we mean by demeanour

Though the lay meaning of demeanour is generally confined to behaviour and appearance, the legal definition is broader. The latter can include tone of voice, gestures, expressions, evasions, glances, the promptness of answers or the reverse, reluctance, silence, and every other visible or audible form of self-expression, whether fixed or variable, voluntary or involuntary, simple or complex.¹

Demeanour's supposed value in the courtroom is twofold: first, as an indicator of honesty (credibility); and, second, as evidence of witness perception and memory.² The confidence with which witnesses tell a story is thought to allow the trier to assess whether they saw what they saw, and are telling the truth about what they saw.

The evidence of a credible (honest) witness may still be unreliable because the witness is mistaken about what happened. Nevertheless, these related but different aspects of reliability can become intertwined in the assessment of a witness who exudes confidence through non-verbal cues.

"Virtually" is not the same

It is true that much of communication is non-verbal and the trial process is largely about "feel" – how the trier feels about the witness, and how the examiner can feel the progress of a set of questions. That feel is tied to a poly-sensory experience. The examiner can use senses of sight and hearing, and maybe an ability to smell fear.³ With a virtual examination, we get sound and vision, but not smell or that elusive feel.

There is also a *ghost in the machine* aspect to a virtual exam, though the duality is not of body and mind, but of a faraway body and a zoomed-in face. Even flawless technology cannot overcome the reality of distance, and we expend more cognitive energy

trying to read non-verbal cues through a computer screen. The medium really is the message. Even as courts have commented favourably on video technology, they have generally viewed virtual examinations as an imperfect substitute, especially for key and party witnesses and with respect to demeanour evidence.⁴ Not coincidentally, the dictionary definition of "virtually" is something that is close, but not quite there.

Indeed, giving evidence in a courtroom is a solemn experience. The procedural rituals and formality of attire say "this is serious." It triggers recall of authority figures, from parents to teachers to religious leaders, impressing the need for honesty. The mood in a private arbitration or administrative hearing is less imposing, but only slightly. The witness is still out of their comfort zone, somewhere they would rather not be, and being *judged*. All eyes are on the witness, assessing every word and every gesture. With a virtual exam, the witness is in a safe space: their own home or their lawyer's office. The prying eyes are unnoticed, the examiner less imposing.

A virtual examination also comes with novel concerns. The witness could have notes just off camera, or a coach – either off-screen or in another room, remotely sending instructions. A witness could not sully a live exam with such cheating and would not even dare try it. But at bottom, the preference for in-person examinations is about a desire to gauge witness demeanour live. It is certainly harder to do that through a screen. The bigger question is whether that matters, whether demeanour – live or online – is a useful guide to witness reliability.

The past is prologue

Witness demeanour was a focus of ancient justice in India⁵ and China,⁶ as well as Athens and Rome. The particular importance of demeanour evidence to the Western adversarial system is evident from historical legal decrees, and from what trials were like without live witness examinations.

When Socrates was tried for impiety and corrupting Athens' youth, he bemoaned the anonymity given to his accusers as having to "fight with shadows." The jury, unmoved, sentenced Socrates to death.⁷ By the time of Cicero's Rome, the demeanour of a witness was "dwelt on as a sign of the trustworthiness of his statements" and live testimony was given far more weight than written evidence.⁸ Hadrian, who ruled Rome from 117 to 138 AD, refused to accept written testimonials – it was vital to assess the demeanour

of witnesses under live examination. This rule did not apply to slaves, who were simply examined under torture.⁹

After Rome fell, justice got downright medieval in the Dark Ages. Ancient systems of witness examination gave way to new methods of "proof": Ordeal, Battle, and Wager of Law. In each, the result turned not on evidence, but what was thought to be divine intervention.

The Ordeal involved exposure to extreme stimuli – dipping an arm in boiling water or holding a red hot iron. If no visible burns resulted, the case was "proved." Litigants could instead submit to Battle, with "champions" often fighting on behalf of the parties, like in "The Mountain and the Viper" episode of *Game of Thrones*. Wager of Law required litigants and their "suits" – character witnesses – to recite elaborate oaths without error. Penalty for a false oath was "eternal damnation." Regardless of the method chosen, failure to "prove" one's case could lead to perjury charges.¹⁰

Wager of Law was rarely chosen because of the complexity of the oaths. Battle lost its lustre during the 13th century (but was not officially banned in England until 1819), and Ordeal all but disappeared after the Lateran Council of 1215 forbade participation of clergy. These medieval adjudications gave way to inquest "by the country" – freemen with no connection to the case, summoned by the local sheriff.¹¹

By the 15th century, juries began to again rely on evidence rather than divine guidance.¹² By the mid-17th century, lawyers regularly called material witnesses to assess their demeanour.¹³ When Sir John Fenwick was charged with treason against the British Crown in 1696, his counsel explained the need for witnesses to "give their testimony 'viva voce'; and we see that their testimony appears credible or not by their very countenances and the manner of their delivery."¹⁴

At the turn of the 19th century, the Supreme Court of the United States emphasized the importance of compelling the witness "to stand face to face with the jury in order that they may look at him, and judge by his demeanor upon the stand and the manner in which he gives testimony whether he is worthy of belief."¹⁵

Back to the future

Modern Canadian jurisprudence has also emphasized witness demeanour.¹⁶ In *R v Belnavis*, Sopinka J stressed deference to trial judges who observe witness "demeanour

on the witness stand and hear the tone of their responses."¹⁷ The Supreme Court in *R v B (KG)* also acknowledged the importance of demeanour, noting that videotaped statements show enough of it to satisfy concerns of evidence reliability.¹⁸

In *R v NS*, McLachlin CJ emphasized the unique ability of facial gestures to reveal deception. Justice McLachlin, writing for the Supreme Court majority, then cited a New Zealand District Court decision that identified the "witness who moves from expressing himself calmly to an excited gabble; the witness who from speaking clearly with good eye contact becomes hesitant and starts looking at his feet; the witness who at a particular point becomes flustered and sweaty." The New Zealand court, and in turn the Supreme Court of Canada, recognized that witness demeanour and facial expressions convey "a message touching credibility" despite cultural and language barriers.¹⁹

Judicial fealty to demeanour evidence echoes traditional scientific views. Charles Darwin believed that certain body movements and facial expressions were involuntary and betrayed human emotions.²⁰ Sigmund Freud wrote that "no mortal can keep a secret. If his lips are silent, he chatters with his finger-tips; betrayal oozes out of him at every pore."²¹

However, when we look to recent literature on "lie spotting," we see that devotion to demeanour is largely misplaced, though facial expressions do prove the best of a bad bunch of non-verbal indicators.

Lie to me

Most of us think we are good at detecting when someone is lying to us. The statistics say more than half of us are wrong. Studies show that the hit rate of both professional lie catchers, such as police, and lay folks is approximately 47 percent.²² This is worse than chance, and about the same as a chimpanzee.²³ This poor success rate is common to live observers and those trying to assess veracity via videotaped statements, even though live observers tend to rate witnesses as more eloquent and pleasant.²⁴

We are more likely to judge deceptive messages as truthful than the reverse, and are better at detecting truthful statements than lies, getting the former right 61 percent of the time.²⁵ There are conflicting explanations for this divergence. Some research suggests the human brain's default is to believe what it hears and that disbelieving is a conscious effort.²⁶ A contrary study suggests the

The best big-screen courtroom scenes show a heroic examiner exposing a wily witness. Joe Pesci on cooking grits. Reese Witherspoon's perm science. Tom Cruise getting the "code red" admission. The truth seeps through the body language and expressions of a witness who comes face to face with skilful counsel.

Now, imagine those exchanges as virtual examinations. Jack Nicholson's "You can't handle the truth" would have far less power through a Zoom call, especially if the internet connection tangles at the wrong time.

Hollywood is its own beast, of course. But if you think virtual trials are also a poor substitute in the real world, you are out of luck. Due to the pandemic and an overtaxed system, voices in our highest judicial offices are warm to the idea. Those opposed will cite the importance of a live examination and, specifically, the right

brain can automatically detect deception, but our conscious efforts lead us astray.²⁷

Our tendency to believe may also be the product of projecting our own morality. We assume that liars feel and show shame and anxiety and we underestimate a liar's capacity for self-rationalization, especially when the stakes are high. In fact, the more important the lie, the better the liar is at rationalizing it.²⁸

In any case, we greatly overestimate our ability to separate fact from fiction. This is especially true for those with high emotional intelligence (EI), a trait often prized by courtroom advocates. High EI correlates with high confidence in spotting deception but a negative ability to actually do so.²⁹

Our poor ability to spot liars is also consistent with our incorrect beliefs about body language. Despite the views of police officers, laypersons, and judges across different countries and cultures, liars are not more likely to avert their gaze, fidget, or groom themselves.³⁰ Importantly, stress alone can cause people to appear deceptive. This response is known as the "Othello error" – Othello having mistaken Desdemona's distress at his accusations of infidelity as proof of that infidelity. It is in fact reasonable to appear stressed when everyone in a courtroom is looking at you. Good liars are also aware of the tics commonly attributed to liars and consciously avoid them. They can do so because those behaviours are not in fact tied to deception.³¹

Face the truth

The one cue even good liars cannot avoid appears to be micro-expressions – facial states that last between 1/5th and 1/30th of a second. The idea that fleeting glances betray a liar's best efforts dates back at least 150 years, to Darwin and Guillaume Duchenne, the French neurologist after whom the true "eye smile" is named. More recent research has looked at expressions across countries and cultures, including isolated tribal societies, to examine which muscular movements are linked to lying.

This research suggests that micro-expressions are a good, but imperfect, predictor of truth. It is easier to fake a neutral expression than a real one, and it is easier to fake a positive emotion than a negative one. Moreover, micro-expressions associated with lying also appear among truth tellers.³² A lie can be accompanied by a host of emotions – anger, contempt, and fear of getting caught – each of which shows in the face. Finally, reading fleeting facial glances in isolation

is different from trying to do so within a heated, real-time examination while also parsing words.

In fact, we would do better simply listening to witnesses than watching them. Despite widespread reliance on demeanour – from fidgeting to fleeting facial states – speech-related cues are better predictors of deception than non-verbal ones. Vocal tone and pitch are instructive, though not determinative.³³ More important are the words witnesses use. In general, liars: tell a less coherent story; are less likely to make spontaneous corrections to their story or admit forgetting details; include fewer reproductions of conversations and fewer sensory and temporal details; include more contradictions in their stories; and, tell their stories more chronologically.³⁴ Non-verbal cues may be more of a distraction than anything else.³⁵

Courts are starting to recognize these realities. In a recent England and Wales Court of Appeal decision, Lord Leggatt noted the science dismissing demeanour as a guide to witness reliability and accepted that reliance on demeanour may diminish, rather than enhance, the accuracy of credibility judgments.³⁶ The Court of Appeal for Ontario has similarly held that demeanour is "of limited value because it can be affected by many factors including the culture of the witness, stereotypical attitudes, and the artificiality of and pressures associated with a courtroom."³⁷ This caution is also reflected in the Canadian Judicial Council's model jury instructions.³⁸ However, despite academic and judicial commentary discounting demeanour's reliability, it remains part of the credibility assessment under Canadian law.³⁹

It is also ironic that our courts defer to demeanour while at the same time rejecting the use of technological truth tellers that are no less accurate. Polygraph accuracy ranges between 50 and 95 percent,⁴⁰ which is certainly no worse than humans (or chimpanzees). Nonetheless, polygraph results are not even admissible in most courts. A modern take on the polygraph is Transdermal Optical Imaging, which relies on facial blood flow patterns to separate fact from fiction. It promises a hit rate of 85 percent.⁴¹

But trying to divine the honesty of witnesses – through their demeanour, their words, or technology – may be a waste of effort in many cases. None of these tools helps with the honest fabricators – witnesses who give false evidence while thinking they are being honest. As George Costanza

explained: "It's not a lie if *you* believe it."

Honesty is not always truth

Compared with honesty, research on demeanour and witness accuracy is limited. However, the results are the same, if not worse. For example, jurors readily trust identifications of confident eyewitnesses, but this confidence does not correlate to identification accuracy.⁴²

Lord Leggatt, then of the England and Wales High Court, recognized these frailties when he held that the value of oral testimony is "to gauge the personality, motivations and working practices of a witness, rather than in testimony of what the witness recalls of particular conversations and events." He added that we must "avoid the fallacy of supposing that, because a witness has confidence in his or her recollection and is honest, evidence based on that recollection provides any reliable guide to the truth."⁴³

Virtual and vice

The virtual examination is far from perfect. The video lags and you can't simultaneously look at the screen and the camera. However, the supposed need to assess witnesses live is not borne out in the science.

The science tells us that demeanour is a poor predictor of reliability. Though the science is largely based on laboratory experiments, the courtroom is, like the lab, a structured, non-spontaneous environment in which the cross-examiner and the examinee are relative strangers.⁴⁴ If anything, the cross-examiner's focus on linguistic precision should further reduce the importance of demeanour in witness assessment.


Whether the examination is live or on-screen, our focus should be on what witnesses say, and how they say it. Non-verbal cues are just as likely to lead us astray as to take us to the truth. The best non-verbal cues – micro-expressions – are in any event more visible on Zoom.

The point is that witness testimony is no less reliable through a screen than in person. Yes, we lose some control and the ability to instill fear when the witness is on the other side of a screen rather than the other side of a podium. But this does not mean the witness will be less honest; only that we will have a harder time getting the witness to say what we want. The pressure of the courtroom may make a witness stray from the truth as much as adhere to it. The weak witness is more likely to crack under cross than the polished liar.

One action that might increase the reliability

of virtual examinations is to expand the oath. The oath for virtual exams should include not only a promise to tell the truth but also confirmation that the witness is alone, is not in communication with anyone off-screen, and has no notes or other aids.

The importance of the oath should not be dismissed. The oath

primes a witness to tell the truth. Studies across different countries and in different forums show that an oath preceding a statement elicits more honest answers than does an affirmation of truth at its conclusion.⁴⁵ One more reason to avoid evidence-in-chief by affidavit. 

Notes

1. Barry R Morrison et al., "The Role of Demeanour in Assessing the Credibility of Witnesses (2007) 33 *Advoc Q* 170 at 179; Jeremy Blumenthal, "A Wipe of the Hands, a Lick of the Lips: The Validity of Demeanor Evidence in Assessing Witness Credibility" (1993) 72(4) *Neb L Rev* 1157 at 1164; Henry S Salm, "Demeanor Evidence: Elusive and Intangible Probables" (1961) 47(6) *ABA Journal* 580 at 580.
2. Olin Guy Wellborn III, "Demeanor" (1991) 76(5) *Cornell L Rev* 1075 at 1078.
3. Alexander Prehn-Kristensen et al., "Induction of Empathy by the Smell of Anxiety" (2009) 4(6) *PLoS One* 1 at 5–8.
4. Amy Salyzyn, "A New Lens: Reframing the Conversation about the Use of Video Conferencing in Civil Trials in Ontario" (2012) 50(2) *Osgoode Hall LJ* 429 at 434–36; *Midland Resources Holding Limited v Shtauf*, 2009 *CarswellOnt* 7617 at para 27; *Wine v Kotzer*, 2017 *CarswellOnt* 12260 at paras 16–18; *Sacks v Ross*, 2015 *ONSC* 6432 at paras 11–12.
5. Ludo Rocher, *Studies in Hindu Law and Dharmaśāstra* (London: Anthem Press, 2012) 375–76.
6. Alison W Conner, "Chinese Confessions Then and Now" in KG Turner et al. (eds), *The Limits of the Rule of Law in China* (Seattle: University of Washington Press, 2000) 132 at 142.
7. FJ Church, *The Trial and Death of Socrates* (London: Macmillan, 1880) 32–43, 68.
8. AHJ Greenidge, *The Legal Procedure of Cicero's Time* (Oxford: Clarendon Press, 1901) 482.
9. AHM Jones, *The Criminal Courts of the Roman Republic and Principate* (Totowa, NJ: Rowman and Littlefield, 1972) 114–15.
10. Ellen E Sward, "Values, Ideology and the Evolution of the Adversary System" (1989) 64(2) *Ind LJ* 301 320–21.
11. Sward, *ibid* at 321–22; Stephen Landsman, "A Brief Survey of the Development of the Adversary System" (1983) 44 *Ohio St LJ* 712 720.
12. Landsman, *ibid* at 720–23.
13. Blumenthal, *supra* note 1 at 1177.
14. Fenwick's Trial (1696) 13 *How St Tr*, 537, 591–92, 638, in *The Founders' Constitution*, Amendments IV and V, Document 5.
15. *Mattox v United States*, 156 U.S. 237(1895) 242–43.
16. Morrison et al. (2007) 183–88.
17. [1997] 3 *SCR* 341 at para 76.
18. [1993] 1 *SCR* 740.
19. 2012 *SCC* 72 at para 26.
20. Charles Darwin, *The Expression of the Emotions in Man and Animals* (New York: D Appleton & Company, 1897) 75, 193.
21. Sigmund Freud, "Fragment of an Analysis of a Case of Hysteria" in *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume VII (1901–1905): A Case of Hysteria, Three Essays on Sexuality and Other Works* 1 77–78.
22. Leanne ten Brinke et al., "Some Evidence for Unconscious Lie Detection" (2014) *Psychol Sci* 1 at 2; Aldert Vrij et al., "Pitfalls and Opportunities in Nonverbal and Verbal Lie Detection" (2010) 11(3) *Psychol Sci Public Interest*, 89 at 101; Charles F Bond et al., "Accuracy of Deception Judgments" (2006) 10(3) *Pers Soc Psychol Rev* 214 at 214, 219, and 230; Glynnis Bogaard et al., "Strong, but Wrong: Lay People's and Police Officers' Beliefs about Verbal and Nonverbal Cues to Deception (June 2016) *PLoS One* 1 at 1–2.
23. Pamela Meyer, *Liespotting* (New York: St. Martin's Press, 2010) at 7.
24. Sara Landström et al., "Witnesses Appearing Live versus One Video: Effects on observers' perception, veracity assessments and memory (2005) 19 *Appl Cognit Psychol* 913 at 923, 928–29.
25. ten Brinke et al., *supra* note 22 at 2; Bond et al., *supra* note 22 at 214, 231.
26. Daniel T Gilbert et al., "You Can't Not Believe Everything You Read" (1993) 65(2) *J Pers Soc Psychol* 221–33.
27. ten Brinke et al., *supra* note 22 at 2.
28. Bond et al., *supra* note 22 at 231.
29. Alysha Baker et al., "Will Get Fooled Again: Emotionally Intelligent People Are Easily Duped by High-Stakes Deceivers" (2013) 18(2) *Leg Criminol Psychol* 300–13.
30. Vrij et al., *supra* note 22 at 93–94, 96; Bogaard et al., *supra* note 22 at 1–2, 13; Stephen Porter and Leanne ten Brinke, "Dangerous Decisions: A Theoretical Framework for Understanding How Judges Assess Credibility in the Courtroom" (2009) 14 *Leg Criminol Psychol* 119 at 123–24.
31. Vrij et al., *supra* note 22 at 94, 98.
32. Stephen Porter and Leanne ten Brinke, "Reading between the Lies: Identifying Concealed and Falsified Emotions in Universal Facial Expressions (2008) 19(5) *Psychol Sci* 508 at 512–13; Vrij et al., *supra* note 22 at 104.
33. Siegfried L Sporer and Barbara Schwandt, "Paraverbal Indicators of Deception: A Meta-analytic Synthesis" (2006) 20 *Appl Cognit Psychol* 421 at 435, 441–42.
34. Vrij et al., *supra* note 22 at 98, 106; Bogaard et al., *supra* note 22 at 2–3, 14.
35. Wellborn, *supra* note 2 at 1082–88.
36. *SS (Sri Lanka) v SSHD*, [2018] *EWCA Civ* 1391 at paras 33–40.
37. *R v Rhayel*, 2015 *ONCA* 377 at para 85. See also *Cavanaugh v Grenville Christina College et al.*, 2020 *ONSC* 1133 at paras 38–40.
38. Canadian Judicial Council, *Model Jury Instructions (Final Instruction)*, s 9.4[10].
39. *R v Pelletier*, 2019 *SKCA* 113 at paras 118–19.
40. Glen Cook and Charles Mitschow, "Beyond the Polygraph: Deception Detection and the Autonomic Nervous System (2019) 36(7) *Fed Prac* 316–21.
41. Kang Lee, "Can you really tell if a kid is lying?" *Ted2016*, online: https://www.ted.com/talks/kang_lee_can_you_really_tell_if_a_kid_is_lying?language=en
42. Wellborn, *supra* note 2 at 1088–90.
43. *Gestmin SGPA SA v Credit Suisse (UK) Limited*, [2013] *EWHC* 3650 (Comm) at paras 15–22.
44. Wellborn, *supra* note 22 at 1079.
45. As explained by Professor Dan Ariely on the *Hidden Brain* podcast "Everybody Lies, and That's Not Always a Bad Thing"; online: <https://www.npr.org/2018/04/09/599930273/everybody-lies-and-thats-not-always-a-bad-thing>