

## VIRTUAL WITNESS

Testifying over video link is contentious but not uncommon. We consider how virtual hearings may influence the assessment of witness credibility, bearing in mind judicial views on demeanour evidence and scientific research on lie detection.



Witnesses have been beamed into courtrooms around the world for many years. Defendants and vulnerable witnesses often testify in criminal cases via live link, as do witnesses giving evidence in courts outside their home jurisdiction (under the Hague Evidence Convention). Remote testimony is not without its critics however: despite its prevalence, questions are still raised about its use.

This paper looks at the way virtual presentation influences the assessment of credibility, bringing together international case law with psychological research. Here we focus particularly on fact witnesses in civil disputes. The special category of expert witnesses will be considered in another paper.

## READING BETWEEN THE LIES

A great deal can ride on the testimony of a fact witness. Personal reputations hang in the balance and their performance can make or break a side's case. It comes as no surprise then that parties, counsel and witnesses themselves worry whether appearing by video will harm their credibility – especially where the fact evidence is critical. Would they be more believable in person? Can they persuade a judge or tribunal as effectively with just their head and shoulders appearing on screen in two dimensions and the size of a postage stamp?

Before we consider the accuracy of credibility assessments in the virtual environment, it is worth considering our level of skill in detecting deception in real life.

Courts have said that judging credibility is a matter of common sense and something which is fully within the layperson's ability to determine.<sup>1</sup> But, to paraphrase Voltaire (and many others before and since), common sense is really not all that common. And while we may *think* we're pretty good at spotting a liar, our insight into our own abilities is notoriously faulty (according to research, most of us think we're 'better than average' drivers<sup>2</sup>).



An impressive global study revealed that diverse populations across 75 different countries all share the common belief that liars tend to avert their gaze when they are trying to deceive.<sup>3</sup> Other common stereotypes are that liars fidget a lot, speak quickly and shift their feet about. Unfortunately, experimental research into deception behaviour shows that diverse populations across 75 countries are wrong. Experts in lie and truth detection agree that there is no single non-verbal cue that reliably signals deception. Science has not found Pinocchio's nose.

In spite of the scientific consensus, and of particular relevance here, professional lie catchers like police officers and judges often share these popular misconceptions about guilty behaviour.<sup>4</sup>

This is not to say that the human body reveals nothing about our state of mind and hence our attempts to deceive. Clues to deception do exist (see **Box 1**). The problem is that we're very good at misinterpreting those signals. We apply our faulty stereotypes about what constitutes crafty behaviour and leap swiftly to the wrong conclusion. According to several decades of research on deception detection, and in spite of judicial commentary, accurately catching deceit is something few of us reliably do well. Across hundreds of controlled lie-detection experiments, lay people have a hit rate of around 50% (i.e. no better than chance).<sup>8</sup>

In fact, to read a witness accurately, we need to amalgamate all sources of information (verbal, non-verbal, situational), cross-reference those sources against their normal baseline, and dig into the reason behind any concealed emotion. This is a skill we can develop with practice. A US study found that specialists in lie detection at the CIA and other federal law-enforcement agencies are significantly better at catching liars (73% accuracy) than regular law-enforcement officers (51% accuracy) and federal judges (62% accuracy).<sup>9</sup> As these data make clear,

### BOX 1. Lie to me

How can you tell when someone is lying? This question has drawn much attention from researchers over recent decades, but identifying red flags for deception is tricky business.

Certain behaviours have been found to correlate reliably with lying, such as changes in breathing pattern or tone of voice, swallowing, pauses in speaking.<sup>5</sup> However, according to large-scale meta-analyses, these tell-tale behavioural cues are not *strong* predictors of veracity and they vary with situational variables.<sup>6</sup>

*Micro expressions* are another potentially useful source of information. These are fleeting facial expressions (lasting only a fraction of a second) which we cannot control and which reveal our true emotion (before we adopt any masking expression).<sup>7</sup> We can increase our sensitivity to detect this involuntary "leakage" of emotion but it is not generally something we are skilled at noticing without special training.

The final step of interpreting deception cues is also far from straightforward. We are easily confused by these signals because there is no straight line between correlation and causation. The absence of these clues does not mean someone is being truthful; some people are just very good at lying. Similarly, the presence of a "tell" does not on its own prove deceit; there could be many reasons for the emotions we have observed.





however, even expert lie detectors miss expert liars.

When weighing the pros and cons of virtual testimony, it bears remembering how (in)effective we usually are at spotting fibs in person. Moreover, deliberately seeking to mislead is a very specific element of human behaviour. Certainly not every case features a witness intending to deceive. Many others factors contribute to our overall impression of a witness and their credibility.

## THE IMPORTANCE OF BEING EARNEST

Related to the topic of deception detection is the use of demeanour and other nonverbal information when assessing witness evidence. The term 'demeanour' covers a multitude of sins. It includes a witness's manner, behaviour, facial expression, tone of voice, attitude and appearance (including dress). In his essay "Demeanor Credibility", and

quoting a 1949 decision, the Honorable James P. Timony of the US Federal Trade Commission describes it well as covering "*all matters which 'cold print does not preserve'*".<sup>10</sup> Demeanour therefore captures the complete vocabulary of nonverbal communication – basically, any information transmitted other than by words. The scientific study of nonverbal communication is vast. The Wikipedia page attempting to summarise the literature is 28 pages in print. In short, the scope of nonverbal communication is broader and more complex than simple reflection would suggest. Unsurprising then that counsel before the Supreme Court of Canada argued (successfully) that: "*Non-verbal communication can provide the cross-examiner with valuable insights that may uncover uncertainty or deception, and assist in getting at the truth*", in *R. v N. S.* [2012].<sup>11</sup> In that case, as in other jurisdictions, the Court concluded that wearing a niqab may impede cross-examination and credibility assessment because the face is concealed.

In virtual hearings, we lose many - though not all - channels of nonverbal communication. We don't see the witness walking into the courtroom for example, or interacting with other hearing participants; instead witnesses appear and disappear suddenly on screen. Video cameras often show a head-only or head-and-shoulders only view of the witness, so we miss important hand or arm gestures. Certainly, the majority of body language is obscured from view. Important social cues are also missing from virtual hearings, notably accurate gaze cues and eye contact. Given the stereotypes many people carry about the meaning of gaze aversion, this difference in particular has significant implications in the context of credibility evaluation.

Despite judicial approaches to demeanour evidence (see **Box 2**), research shows that nonverbal behaviour influences interpersonal

communication, with knock-on consequences for our judgments of credibility. For instance, leaning forward, using hand gestures and making eye contact are important components of nonverbal communication that enhance perceived conversational involvement. In a public speaking setting, researchers found that people who were more interactive were rated as more honest and more persuasive than those who were less interactive.<sup>14</sup>

Some parties therefore resist virtual hearings on the basis that the online environment will compromise their witness's ability to communicate nonverbally with the judge. For example, in *SC v University Hospital Southampton* (2020), a clinician facing a fully-virtual negligence trial felt that he would not be able to give "*as full and rounded and effective an account of his actions by video-link*" (among other concerns).<sup>15</sup> Others have expressed the opposite view – that virtual hearings afford a superior window through which to appraise a witness. In virtual hearings, facial expressions are arguably more visible than in-person hearings because everyone sees the same close-up head-on view of the witness. While some emotional "tells" may be obscured therefore, others may be magnified by appearing on screen.

These issues aside, what is clear is that changing the mode of presenting testimony is likely to influence the way decision-makers evaluate credibility. This fact alone, however, is unlikely to militate against virtual hearings. There are several factors that contribute to the overall assessment of a witness's

## BOX 2. It's not what you say

Judicial approaches to demeanour and credibility have evolved with reflection, experience and scientific development.

In the English Courts, the modern approach is to place very little weight on witness demeanour when assessing credibility (to the extent judges are capable of controlling this aspect of their decision-making). Instead, judges focus on the content of the testimony and its consistency (or otherwise) with the other evidence and with known or probable facts.<sup>12</sup> English authorities are therefore robust in their support of video link: remote testimony is certainly not an "exceptional circumstances" only measure.<sup>13</sup>

Difficulties in interpreting demeanour evidence are magnified all the more where a witness is speaking in their non-native tongue or through an interpreter. This is a frequent feature of international disputes and adds another layer of complexity to the perception of fact witnesses.

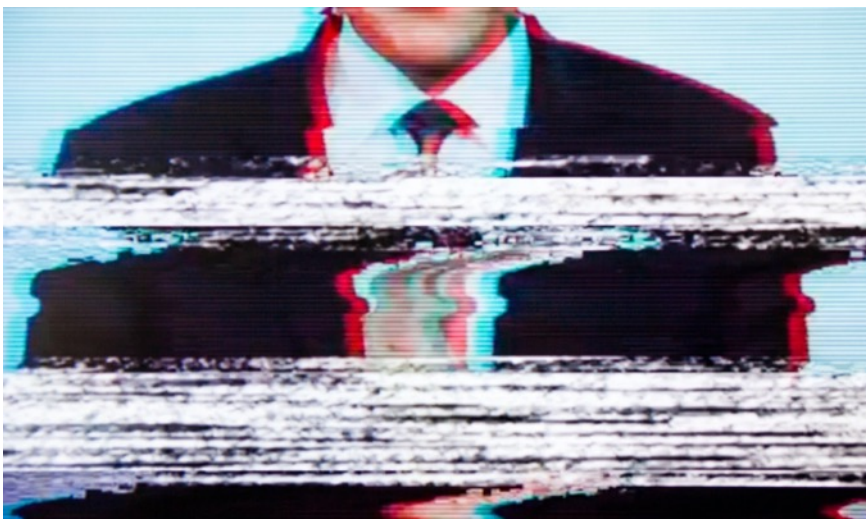
credibility, including consistency with previous statements, internal contradiction or corroboration, plausibility and apparent bias in relation to a particular party. The art of cross-examination is aimed at identifying these features within a witness's testimony – all of which a virtual hearing preserves. Indeed, courts have accepted video link testimony in different contexts for many years. The practice is so common within international proceedings, the Hague Conference on Private International Law (HCCH) published a Good Practice Guide in April 2020 on the use of video link under the Hague Evidence Convention.<sup>16</sup>

In the context of the sorts of fully virtual hearings compelled by the pandemic, the analysis is perhaps more complex. In *Southampton*, while the judge dismissed the defendant's arguments for adjourning the virtual hearing, he ordered that the case should proceed in person instead

(and he gave careful case management directions in the event the physical courts were re-closed). On the other side of the globe, the Supreme Court in New South Wales vacated a fraud trial because the defendants' witnesses (who were based in China) could not appear in person due to travel restrictions. The Court held that it would be unfair to hear the witnesses' evidence by video-link, citing difficulties with assessing credibility as one of several reasons.<sup>17</sup> The Court did stress that this was an "exceptional" case because the entire case essentially hinged on the evidence (and credibility assessments) of the overseas witnesses. It does, however, bear out the concerns of many commentators that fully virtual hearings are not suited to complex cases involving important fact witnesses where credibility is at stake.

## TRUTH OR DARE?

How does our perception of a witness change when they give evidence virtually versus testifying live? Several studies have looked directly at the evaluation of witnesses appearing over video-link in criminal cases, compared with face-to-face appearances. In the majority of these studies, witnesses testifying live in court are rated as more likeable and more credible than those testifying over video.<sup>18</sup> This *presentation mode effect* generalises across children and adults, witnesses and victims and different types of events. It also supports previous research finding that child witnesses testifying live are perceived as more confident, intelligent and honest than those giving evidence remotely.<sup>19</sup>







The precise mechanisms underlying the presentation mode effect are still being elucidated but a number of factors are likely to contribute. Evidence from memory research tells us that testimony is generally paid more attention, remembered more easily and perceived to be more credible, when it is more “vivid” (the *vividness effect*).<sup>20</sup> From this perspective, live witnesses will have an advantage over video mode because they are likely to be more interesting on an emotional level as well as being closer in physical proximity to observers.

Research also reveals an important link between likability and credibility. Individuals who create a positive impression (appearing friendly, pleasant and cooperative) are generally regarded as more credible and more truthful than those who come across less positively.<sup>21</sup> Relevant to the virtual context, several studies show that communicators are more likeable when they use gestures and are more expressive when they speak.<sup>22</sup> Because video link distorts or deletes certain nonverbal channels of communication, it is harder to make a

positive impression over video than it is when we are face-to-face.

But all is not lost. There are important caveats to bear in mind when we evaluate the utility of virtual testimony. First of all, while remote testimony may detrimentally impact credibility judgments, it appears to have little effect on observers’ ability to ascertain veracity correctly.<sup>23</sup> We’re no better at distinguishing truth from lies in person or on video. Related to this point, while research suggests that jurors prefer child witnesses to testify face-to-face, early studies evaluating the use of video-recorded evidence in the English Courts found little impact on conviction rates.<sup>24</sup> Second, witnesses may be perceived as less likeable over video because the opportunity to be influenced by nonverbal (demeanour) evidence is reduced. In a virtual hearing, it may be easier for an observer to adopt an objective read of a witness. According to the commentary, this is what judges should be doing anyway. In this way, perhaps the switch to remote testimony assists the effective determination of disputes.

It should also be noted that the research on this issue has so far focused on a specific subset of criminal cases (usually those involving abuse or sexual assault). In these contexts, there are very particular considerations that impinge on the evaluation of vulnerable witnesses, including the importance of engendering empathy and sympathy with the victim.<sup>25</sup> Complex civil cases are completely different. Not every fact witness is suspected of deliberate deceit and their role in the proceedings is often far broader than resolving he-said-she-said debates (such as providing context or explanation for a particular decision).

It is also hard to draw definitive conclusions from the existing body of research. While it is possible to discern general trends, there are inconsistencies in the data and variations in design and methodology. In short, we need urgent research on the impact of remote testimony on the perception and evaluation of witnesses in civil settings, where testimony is typically more neutral and less emotionally charged.

## PRACTICAL RECOMMENDATIONS FOR PREPARING FACT WITNESSES

There are a number of practical measures and adjustments to the technology we can make to enhance the evidence of remote fact witnesses, based on the research discussed above as well as recent pilots virtual trials.<sup>26</sup>

### Optimise connections



Assess a witness's computer hardware and internet capacity in advance of the hearing to ensure that their connection is optimised for the virtual hearing (e.g. use an ethernet cable or sit as close to the router as possible, minimise other use of the bandwidth, close all other programmes and browser tabs).

### Camera view



Adjust the angle and scope of the witness's camera. Position the camera at a sufficient distance away so that that hand and arm gestures are visible in addition to a clear head shot. Locate the camera centrally above the witness's computer screen to provide the best read of eye gaze.

### Audio equipment



Consider the quality of the witness's audio output. If necessary, use specialised microphones to minimise distraction from any background noise (e.g. computer-compatible lavalier/lapel microphones).

### Background



Ensure that the witness appears against a plain background, without distracting objects creating visual clutter on the screen. Use a digital background if necessary, or a plain white sheet to cover any household objects.

### Lighting



Test the lighting of the witness at the time of day they are due to testify. Ensure the witness's facial features are fully visible, particularly if translators will be used. The light source should not be visible on screen and should illuminate the background as well as the witness.

### Training & rehearsal



Brief the witness on the video platform and provide practice sessions in advance of the hearing to familiarise them with the systems. The witness may appreciate seeing how they appear to others when they are looking at different locations (e.g. their camera, the centre of the computer screen).

## THE TIGHTROPE

There are several factors that change the way we perceive witnesses when they testify remotely. This much is undeniable. Camera view (in particular the extent to which important nonverbal information like gestures are restricted), transmission delays (causing awkward pauses between cross examiner and witness; see **Paper 1** in this series) and other features of the online environment all feed into our assessment of a witness consciously or unconsciously.

That said, commonly expressed fears about remote testimony may be overstated. Our current technology preserves the ability to cross-examine and witnesses have been giving evidence remotely in different contexts for many years.

As ever, decisions about how to handle fact witnesses require us to strike a careful balance between the pros and the cons of virtual hearings (e.g. having the case heard this side of a global vaccine vs. loss of certain expressive channels of communication like eye contact). Where cases are likely to turn on the credibility of key fact witnesses, that balance may fall in favour of waiting. For many other cases, however, the right answer may be to push on with intelligent adaptations to the technology reflecting what we know from scientific research.



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## NOTES

<sup>1</sup> *William Gage v Her Majesty's Advocate* [2011] HCJAC 40 (Court of Appeal in Scotland); *R v Marquard*, [1993] 4 S.C.R. 223 (Supreme Court of Canada); Friedland, S. I. (1989). On common sense and the evaluation of credibility. *Case Western Reserve Law Review*, 40(1), 165-225.

<sup>2</sup> Williams, A. F. (2003). Views of U.S. drivers about driving safety. *Journal of Safety Research*, 34(5), 491-494.

<sup>3</sup> The Global Deception Research Team (2006). A World of Lies. *Journal of Cross-Cultural Psychology*, 37(1): 60-74.

<sup>4</sup> Strömwall, L. A. & Granhag, P. A. (2003). How to detect deception? Arresting the beliefs of police officers, prosecutors and judges. *Psychology, Crime and Law*, 9, 19-36.

<sup>5</sup> Ekman, P. (1988). Self-Deception and Detection of Misinformation. In Lockhard, J. S. & Paulhus, D. L. (Eds.), *Self-Deception: An Adaptive Mechanism?* Englewood Cliffs, NJ: Prentice-Hall.

<sup>6</sup> DePaulo, B., Lindsay, J. J., Malone, B., Muhlenbruck, L., Charlton, K. & Cooper, H. (2003). Cues to Deception. *Psychological Bulletin*, 129, 74-118.

<sup>7</sup> First discovered by Ernest Haggard and Kenneth Isaacs in 1966 and later popularised by Paul Ekman; Ekman, P. (2009). *Telling Lies* (2<sup>nd</sup> ed.). Norton.

<sup>8</sup> For a meta-analysis of over 200 studies, see Bond, C. F. Jr, & DePaulo, B. M. (2006). Accuracy of deception judgments. *Personality and Social Psychology Review*, 10(3), 214-234.

<sup>9</sup> Ekman, P., O'Sullivan, M. & Frank, M. G. (1999). A Few Can Catch A Liar. *Psychological Science*, 10(3), 263-266.

<sup>10</sup> Timony, J. P. (2000). Demeanor Credibility. *Catholic University Law Review*, 49(4), 903-943 quoting *Broadcast Music, Inc. v. Havana Madrid Restaurant Corp.*, 175 F.2d 77, 80 (2d Cir. 1949).

<sup>11</sup> *R. v. N. S.* [2012], SCC 72 at [743-744] (Supreme Court of Canada).

<sup>12</sup> See *SS (Sri Lanka) v DDHS* [2018] EWCA Civ 1391 per Leggatt LJ at [41] (English Court of Appeal).

<sup>13</sup> See *McGlenn v Waltham Contractors Ltd and others (No 2)* [2006] EWHC 2322 (TCC) (English High Court).

<sup>14</sup> Burgoon, J. K., Birk, T. & Pfau, M. (1999). Nonverbal Behaviors, Persuasion, and Credibility. *Human Communication Research*, 17(1), 140-169.

<sup>15</sup> *SC (A Child) v University Hospital Southampton NHS Foundation Trust* [2020] EWHC 1445 (QB) (English High Court).

<sup>16</sup> Guide to Good Practice on the Use of Video-Link under the Convention of 18 March 1970 on the Taking of Evidence Abroad in Civil or Commercial Matters (Hague Evidence Convention), 16 April 2020.

<sup>17</sup> *Haiye Developments Pty Ltd v The Commercial Business Centre Pty Ltd* [2020] NSWSC 732 (Supreme Court of New South Wales).

<sup>18</sup> For example, Landström, S., Granhag, P. A. & Hartwig, M. (2005). Witnesses appearing live versus on video: Effects on observers' perception, veracity assessments and memory. *Applied Cognitive Psychology*, 19, 913-933. There have, however, been notable exceptions, such as Taylor, N. & Joudo, J. (2005). The Impact of Pre-Recorded Video and Closed Circuit Television Testimony by Adult Sexual Assault Complainants on Jury Decision-Making: An Experimental Study. *Australian Institute of Criminology Research and Public Policy Series* (No. 68). Canberra: AIC.

<sup>19</sup> Orcutt, H. K., Goodman, G. S., Tobey, A. E., Batterman-Faunce, J. M. & Thomas, S. (2001). Detecting deception in children's testimony: Factfinders' abilities to reach the truth in open court and closed-circuit trials. *Law and Human Behavior*, 25, 339-372; Goodman, G. S., Tobey, A., Batterman-Faunce, J., Orcutt, H., Thomas, S., Shapiro, C. & Sachsenmaier, T. (1998). Face-to-face confrontation: Effects of closed-circuit technology on children's eyewitness testimony and jurors' decisions. *Law and Human Behavior*, 22, 165-203.

<sup>20</sup> Bell, B. E. & Loftus, E. (1985). Vivid persuasion in the courtroom. *Journal of Personality Assessment*, 49, 659-664; Nisbett, R. & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.

<sup>21</sup> Hartwig, M. & Bond, C. F. (2011). Why do lie-catchers fail? A lens model meta-analysis of human lie judgments. *Psychological Bulletin*, 137, 643-659.

<sup>22</sup> For example, Kelly, S. D. & Goldsmith, L. H. (2004). Gesture and right hemisphere involvement in evaluating lecture material. *Gesture*, 4(1), 25-42.

<sup>23</sup> Landström et al (2005) at note 18.

<sup>24</sup> For example, Wilson, J. & Davies, G. (1999). An Evaluation of the Use of Videotaped Evidence for Juvenile Witnesses in Criminal Courts in England and Wales. *European Journal on Criminal Policy and Research*, 7, 81-96.

<sup>25</sup> Some have expressed concerns that the physical absence of the victim together with the effect of the live link may create a distance between the victim and the jury, and that this in turn will make it harder to incite sympathy or be believed. See, for example, Council of HM Circuit Judges (2006). *Convicting Rapists and Protecting Victims: A Consultation Response of the Council of Her Majesty's Circuit Judges*. London: Council of HM Circuit Judges; Hamlyn, B., Phelps, A., Turtle, J. & Sattar, G. (2004) 'Are Special Measures Working? Evidence From Surveys of Vulnerable and Intimidated Witnesses', London: Home Office Research Study 283.

<sup>26</sup> Mulcahy, L., Rowden, E. & Teeder, W. (2020). Exploring the case for Virtual Jury Trials during the COVID-19 crisis.