

FLYING CYBER-SOLO

We underestimate the influence of social context on our experience and our behaviour. This paper considers how the absence of immediate social presence impacts both individuals and teams in virtual hearings.



The emergency shift to virtual hearings has ejected us from the interactive and multi-sensory drama of the courtroom into the solitary confinement of our front rooms. The real social context has been removed.

It's hard for us to put a finger on the precise impact this has on the way we think, experience and perform in virtual hearings. By nature, we are first and foremost social creatures. In fact, research reveals many hidden social influences on our cognition. How does the physical presence or absence of others impact our performance, and what implications can we draw for virtual hearings?

This paper looks at the significance of gaze, social facilitation and collaborative cognition – three major aspects of social presence adversely affected by flying cyber-solo in virtual hearings – and suggests ways we can try to address them.

DON'T LOOK NOW

The social landscape of virtual hearings differs in important ways from the live context. We see more of some things (close-ups of counsel when they aren't speaking) and less of others (social cues such as gestures and body language). Among the many social cues we're missing, a key component is gaze.

In social interactions, the direction in which someone is looking is an important signal.¹ It can communicate information about what they are thinking or feeling. For example, it's usually pretty clear when our dining partner wants to share our dessert by their longing gaze at our sticky toffee pudding. Gaze is also a Big Red Hand for attention. If you want to test this out for yourself, just stand in the street staring intently up at the sky and you'll soon be joined by a crowd of onlookers intrigued to find out why. We also need gaze cues for certain, more complex forms of social cognition such as empathy and theory of mind (i.e. understanding another person's mental state).

Brain imaging studies and single-cell recording reveal the special status gaze processing occupies in our neural



computer. Gaze it seems is hard-wired into the brain (see **Box 1**).

The ability to follow someone else's gaze is also critical in the high level social-cognitive abilities of shared attention and joint attention. These terms are often used interchangeably in the literature but they actually refer to two slightly different

concepts. Joint attention is where two individuals focus on the same object because one person has noticed and followed the gaze cues of the other. Shared attention is a little more complex. This is where two individuals look at the same object knowing that they are together sharing the same focus.

Box 1. The eyes have it



Eye gaze is an important signal in social interactions. We can infer a great deal from the direction someone is looking, including their focus of attention, immediate future intention and emotional state. Gaze also forms a necessary component of the more complex types of social cognition such as empathy, perspective-taking and deception.

Processing gaze appears to be hard-wired into our system. Tracking someone else's gaze is an ability that develops in infancy (though debate continues over exactly when this starts). Deficits in effective gaze processing (using gaze as a sign for visual attention, for example) is an early hallmark of neurologically diverse conditions, such as autism.² With this in mind, some features of flying cyber-solo may well be less challenging for a neurologically-diverse practitioner.

Research into the neural coding of gaze processing also highlights its platinum status. We have neurons in the visual system that are super-specialised for gaze direction – that is, they only fire when we see eyes pointing forward (or left or right or down).³ We have others that respond selectively to specific head orientations (head on, profile view and all the variations in between) and others that respond only to specific *combinations* of gaze and head orientation.⁴ Gaze-specific brain cells aren't only in the visual cortex. They're also found in significant brain structures in our emotion processing (e.g. amygdala)⁵ and executive function systems (e.g. medial pre-frontal cortex).⁶

All of these converging lines of evidence underline the significance of gaze cues in human communication and understanding. In short, it's a big thing to be without.

Gaze cues are extremely difficult to read (if not entirely absent) in virtual hearings as a result of camera location and screen display. Assuming members of the same team or panel are sitting in physically different locations, exchanging those knowing glances during a critical cross-examination or an oral submission becomes impossible. Co-arbitrators can't be cued into focus by seeing another tribunal member suddenly start underlining their bundle heavily – or pause their note-taking to scrutinize a witness under examination. Similarly, the shared reactions of a counsel team will be obscured. It can be highly useful information when all the lawyers on one side of the room simultaneously sit up and swivel their heads like a mob of meerkats towards the witness on the stand. The absence of gaze cues also impairs counsel's ability to read the tribunal and opposing counsel. Even if we could get accurate eye tracking information for individual participants, different screen configurations mean we can't know who or what has captured their attention.

HEAVEN IS OTHER PEOPLE

This may come as a surprise to some, but it turns out that we are all "people people". Thanks to recent advances in brain recording techniques, we know that simply interacting with another person releases dopamine and activates the ventral tegmental area-to-nucleus accumbens projections.⁷ These are the "reward pathways" in our brain; the ones that respond to sugar, recreational drugs



or finding out we've won a massive case. Even chatting to a stranger has this effect – provided they're no obvious threat. But despite this internal programming, we regularly underestimate the boost we get from socialising.⁸ (We're pretty rubbish at predicting what will make us happy generally, but that's another story).

All of this explains in part why online hearings are far less engaging. Usually we get a buzz not just from the hearing room itself but from the intense reflection-sharing during break-outs and frequent chats over chocolate Hobnobs. Without this regular social stimulation, there's far less to offset the fatigue we

naturally experience from being on alert all day. Tiredness aside, what does the lack of real people alongside us mean for the way teams and individuals perform?

PEOPLE POWER

More than a century of evidence shows that the simple presence of other people changes how we behave.

In many cases, we raise our game in front of an audience, in a phenomenon known as the "social facilitation effect". First observed in 1898, psychology researcher Norman Triplett noticed that cyclists hit better times when they were

Box 2. Clutch or choke

Individuals tend to perform better in the presence of other people. Social presence creates this effect whether it's real, implied or imagined. The phenomenon is called social facilitation and its effects have been researched extensively for over a century. Despite the simple definition though, it's actually quite a nuanced concept.

Even in the earliest studies, scientists noticed conflicting results in the data. While *most* participants performed better in front of other people, a subset either performed worse or the same as without an audience. Researchers reconciled these inconsistencies by reference to the nature of the task. If we're doing something simple or something with which we are well-practiced, we'll likely be lifted by others. Conversely, having an audience while we do something hard or unfamiliar is more likely to make us choke.

Theories abound as to why these effects arise. There are broadly three different factors that contribute to social facilitation and interference. We have physiological factors (increased arousal and drive to perform), cognitive factors (better focus of attention and/or increased distraction) and emotional factors (anxiety and self-presentation). Each of these factors will be modulated by specific aspects of the individual (e.g. their confidence), the task (e.g. complex or simple) and the social context (e.g. size of the audience). The good news is that understanding which factors influence performance means that we can use social facilitation effects to our advantage.

racing against others than solo efforts against the clock.⁹ Fast-forward 100+ years and research shows that the same happens with virtual-reality enhanced exercise bikes¹⁰ – an effect hacked with success by the popular virtual training and racing platform, Zwift.

Social facilitation isn't confined to two wheels. The effect has been found across the spectrum – from soloists performing at the Royal Albert Hall to participants answering simple cognitive tests in the lab.

Researchers suggest a number of reasons for these social facilitation effects including heightened arousal¹¹ and better focusing of attention.¹² There is also some complexity in the effect (see **Box 2**). Ultimately, it's likely that there are multiple factors at play, each contributing to different degrees depending on context. What's clear though, is that advocates and tribunal will perform differently online because of the dramatic shift in social context.

It's not true to say that people are entirely absent from virtual hearings, but

the nature of their presence is radically and fundamentally different. Anecdotally, many counsel describe feeling “flat” after online hearings, though there are exceptions who prefer the environment. Certainly, energy levels are lower across the board, regardless of how well the hearing may be going for either side. In fact, the reduction in social facilitation effects is highly likely to contribute to the dreaded Zoom fatigue (a topic discussed in Paper 1 of this series).

TWO HEADS ARE BETTER THAN ONE

Social facilitation impacts the individual. What about the performance of teams? How does the presence of another person impact the way they operate as a collective?

All things being equal, two (or more) people outperform one. This effect of “collaborative cognition” has been shown across a whole host of tasks from team problem solving¹³ to visual detection¹⁴ to guessing the weight of an ox.¹⁵ It appears that two heads really are better

than one. For counsel teams in particular, this may not bode well for the lonely experience of virtual hearings.

That said, six months in, we are finding that communication between teams is not impossible; we are adapting strategies for the different context. WhatsApp group chats replace Post-it Notes. Comments in the chat bar replace knowing looks. So what precisely do we gain and what do we lose by sitting apart?

A recent study showed that two people working together as a pair were faster and more accurate than either member of the pair operating alone (on a tricky visual search and counting test).¹⁶ Interestingly, the same scientists found that friends collaborated more efficiently than pairs who were unfamiliar with one another – until that is, the friends were separated by a partition. When they could no longer see each other, two-partner teams lost their “friend advantage” so that all pairs performed at more or less the same level.¹⁷



The researchers interpret these results in terms of cognitive load. If you know your team and can see one another, you have the extra channel of communicating through body language. This drains less cognitive capacity than the slower and more complicated comprehension of language, leaving more brain power to focus on the job at hand. In line with this idea, analysis showed a negative

correlation between verbal communication and collaborative success. Basically, chatty players were less efficient.

In other studies, partner visibility produced mixed results. The costs and benefits are likely to depend to some extent on the nature of the task. Being able to see your team-member will be

very valuable where you are dealing with objects or people in different locations in space. Whatever the demands of the particular settings, the way we operate changes qualitatively when we need to coordinate with others. This means it's important to consider the pros and cons of (not) being visible on a case by case basis, and identify mitigating strategies for each context.

PRACTICAL SUGGESTIONS

Clearly, remote hearings herald a radical shake-up of the social context. There is no doubt that this alternative reality has important implications for various dimensions of our performance. However, there are certain steps we may be able to take to mitigate some of the potential downsides.

	<p>Hybrid hearing arrangements</p>	<p>If permitted by social distancing rules, advocates may prefer to have their team sit physically in the room during submissions and cross. The social facilitation effects enabled by real social presence will go some way to reducing the fatigue felt during virtual hearings. Team members will also be able to communicate with the advocate much more effectively and at lower cognitive cost to everyone. Similarly, arbitrators or judges could arrange to sit with the other panel members, if at all possible.</p>
	<p>Shorter hearing days</p>	<p>Missing the 'lift' of real social interaction is a significant factor in Zoom fatigue. Timetabling more frequent breaks throughout the virtual hearing day, and calling for additional breaks if necessary, will help combat this effect.</p>
	<p>Intelligent use of breaks</p>	<p>The most effective break, both in terms of social facilitation and refreshment generally, is social but not screen-based. Hearing participants who cannot be with one another physically may like to call their team members during the break to enable social connection without introducing yet another screen.</p>
	<p>Creative staging for counsel</p>	<p>If advocates must deliver submissions alone, they could remove visual distractions from their visual field so that attention is more effectively focused on the faces on the screen. As for screen size, the larger the better, for magnifying the felt presence of the online participants.</p>

LIVE PERFORMANCE

In the context of virtual hearings, we can mitigate against the absence of social presence to some extent. With today's technology though, it's also important to acknowledge the very real limits. We are adjusting, but personal presence is relational. It simply cannot be fully replicated online. The gravitas of a full sitting in a venue like the Peace Palace could never be simulated on Zoom. There's a reason people pay to see live productions in London's West End or Broadway in New York, rather than settling for another evening of Netflix on the sofa.

NOTES

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