



Misinformation about human behaviour: How body language experts undermine global scientific efforts

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NOV 1970

BODY LANGUAGE Julius Fast

78524 • \$1.50



Does her body
say that she's a
loose woman?

Does her body
say that she's a
manipulator?

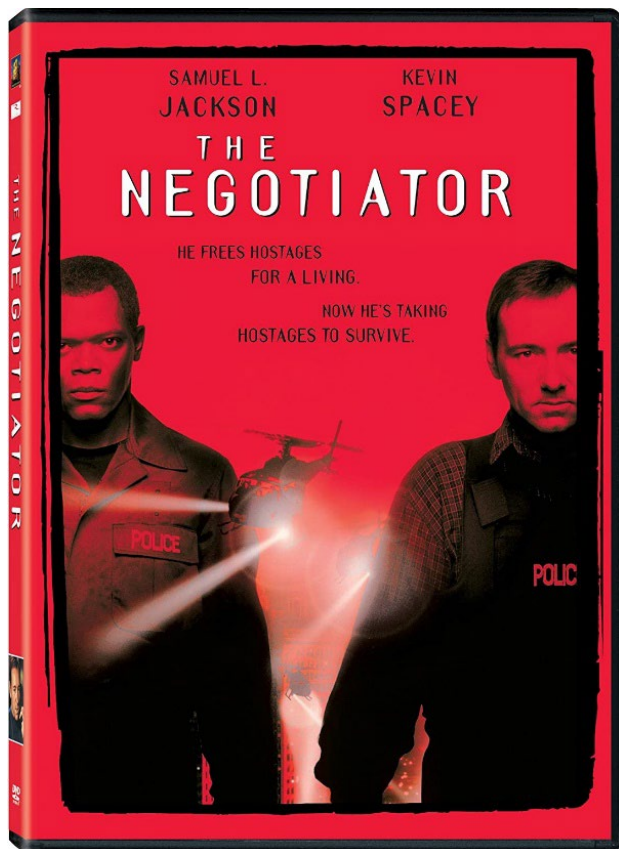
Does her
body say that
she's a phoney?

Does her
body say that
she's lonely?

**Julius
Fast**

Body Language

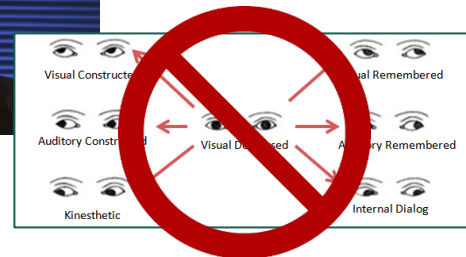
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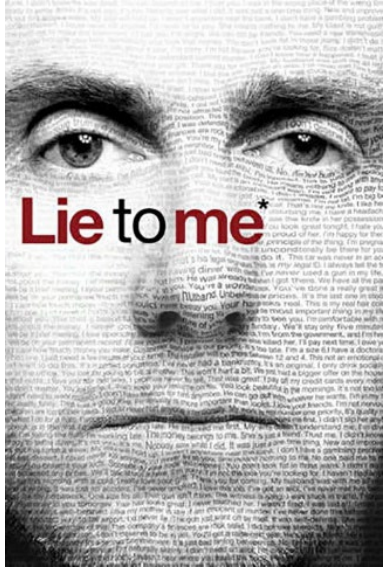


<https://youtu.be/Q0xqrvef07Q>

The Negotiator (1998)

“I’m reading your eyes. The eyes can’t lie. Didn’t you know what I was doing? A quick lesson in lying. See, this is what us real cops do. We study liars. Example. If I ask you a question about something visual, like your favorite color, and your eyes go up and to the left. Well, neurophysiology tells us that your eyes go in that direction because you’re accessing the visual cortex. Therefore, you’re telling the truth. If your eyes go up and right, then you’re accessing the creative centers of the brain and we know you’re full of shit.”





Lie To Me (2009)

“The truth is written on all our faces”



Scarface (1983)

“The eyes, Chico. They never lie”

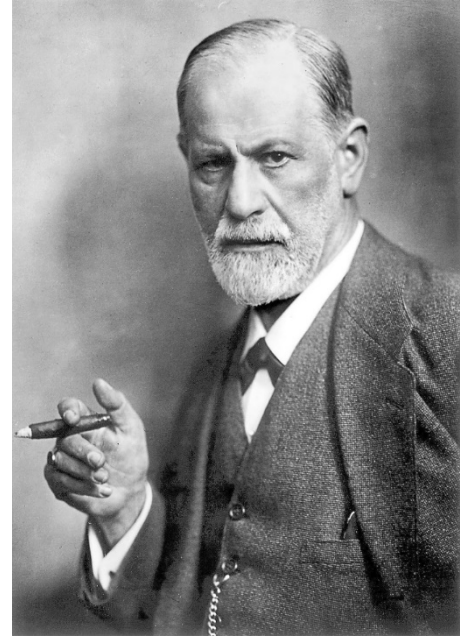


Hitch (2005)

“60% of all human communication is nonverbal. Body language. [...] So that means that 90% of what you’re saying ain’t coming out of your mouth”

Freud (1959, p94)

'He who has eyes to see and ears to hear may convince himself 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'.



Behavioural “cues”

- Speech rate
- High-pitched voice *
- Errors
- Latency period *
- Pause duration *
- Pause frequency
- Gaze
- Smile
- Eye blinking
- Self manipulations
- Illustrators *
- Hand/finger movements *
- Leg/foot movements *
- Trunk movements
- Head movements
- ...





EMOTION THEORY

[Facial Expressions, Concealed Intent, and Deception]

FACIAL EXPRESSIONS OF EMOTION: UNIVERSAL OR SOCIAL

Basic Emotion Theory (BET)

- Universal (same everywhere)
- Require no learning (innate)
- Cross-culturally understood
- Different real and fake expressions
- Vestigial behaviours which need to be “decoded”

Behavioural Ecology View (BECV)

- Communication signals (easily understood)
- Co-evolved to be understood by peers
- Vary from group to group (culture, society, etc.)
- Doesn't assume “genuine” and “fake” expressions differ



Non-Duchenne

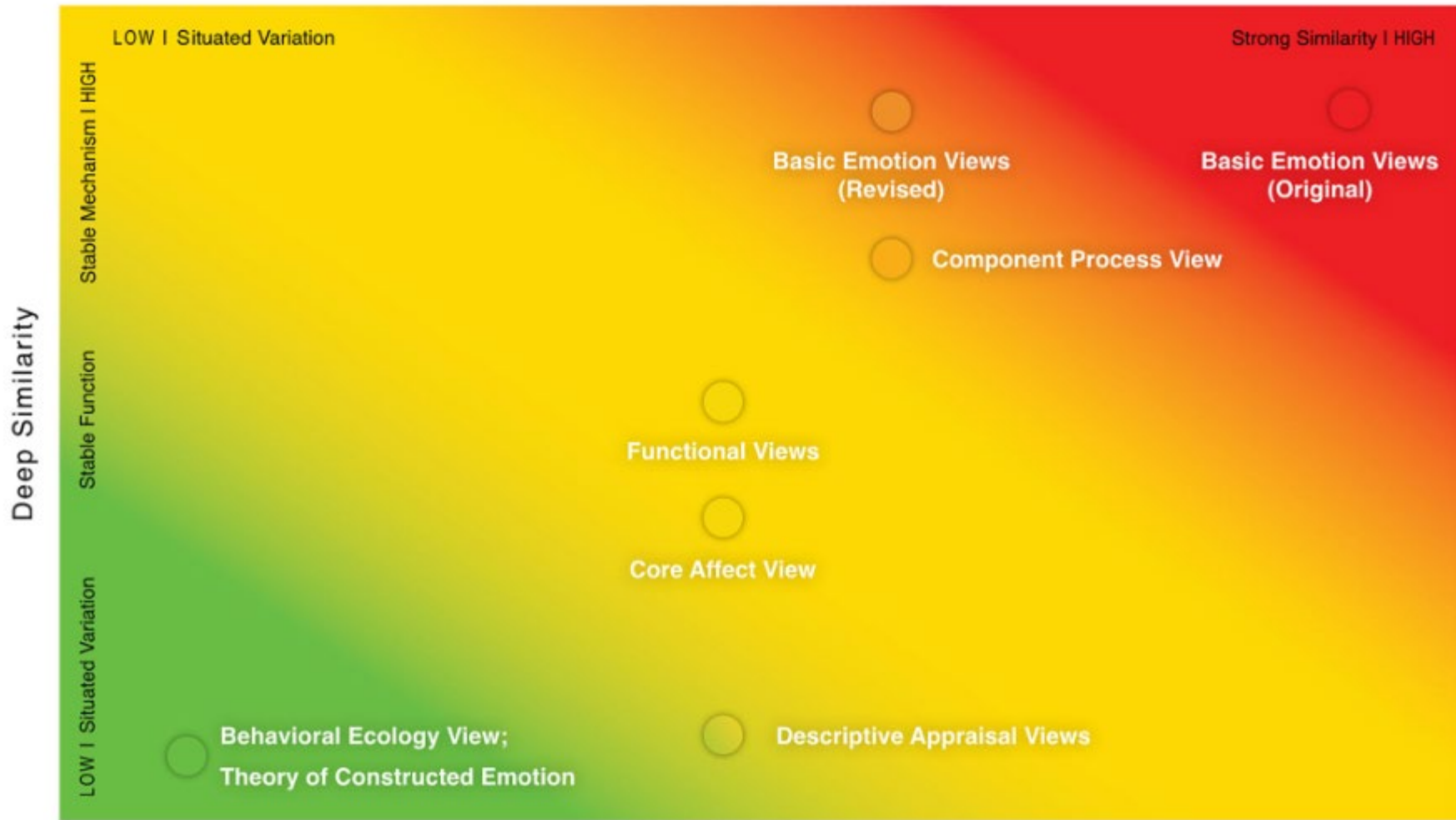


Duchenne





Surface Similarity

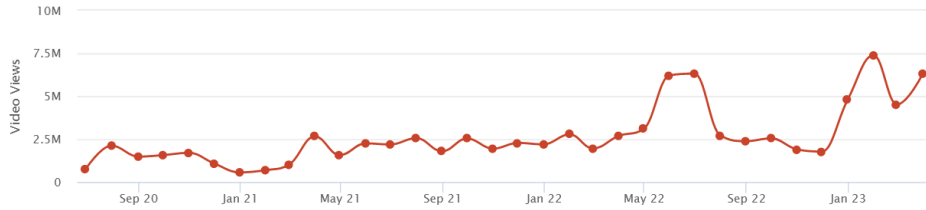


BODY LANGUAGE “EXPERTS”

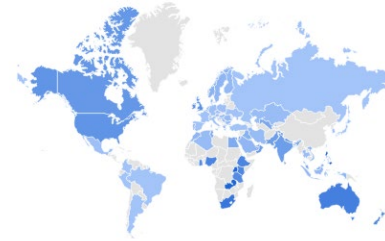
[A problem we cannot continue to ignore]

RECENT BOOM IN BODY LANGUAGE INTEREST

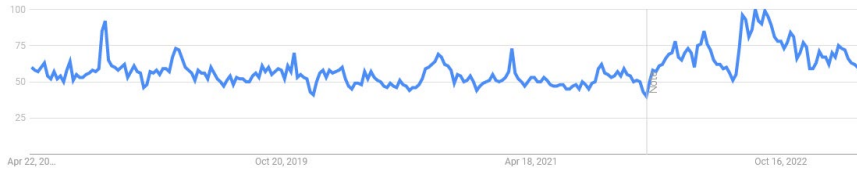
Monthly Gained Video Views for 'The Behavior Panel'



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@TheBehaviorPanel

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The Behavioral Arts

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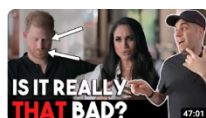
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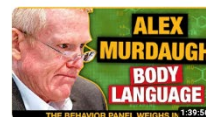
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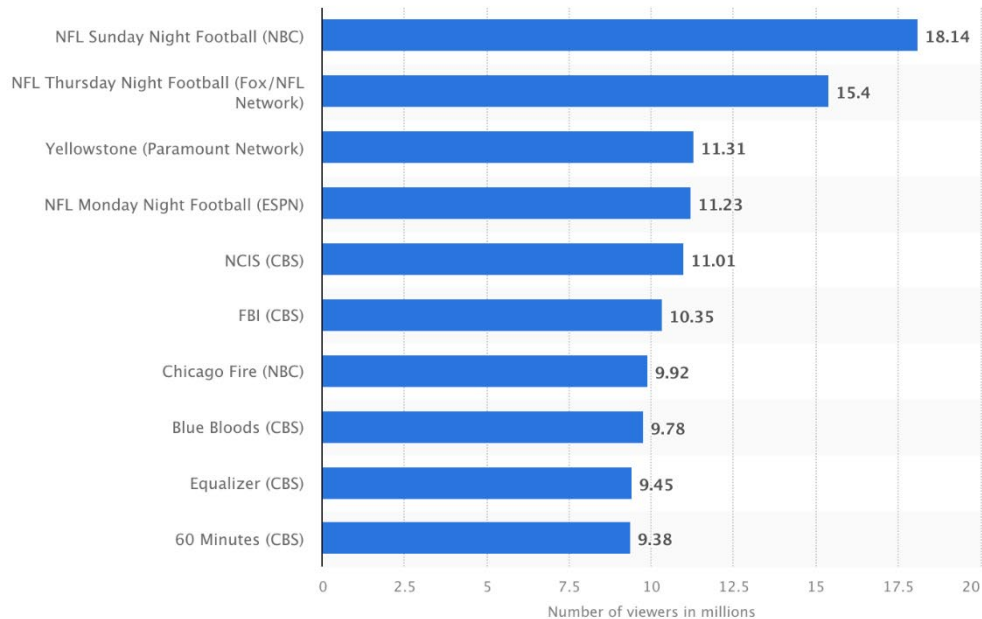
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Total number of viewers of the most watched television shows in the United States in the 2021/2022 season

(in millions)



[Additional Info](#)

Source: <https://www.statista.com/statistics/804812/top-tv-series-usa-2015/>

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May 2022

Region

United States

Survey time period

September 20, 2021 to May 9, 2022

Age group

2 years and older

Special properties

preliminary live +7 day; prime; original telecasts only; programs with 2 or more telecasts

Supplementary notes

Figures have been rounded.

Citation formats

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Perspective

Darwin's illegitimate children: How body language experts undermine Darwin's legacy

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Abstract

The *Expression of the Emotions in Man and Animals* has received and continues to receive much attention from emotion researchers and behavioural scientists. However, the common misconception that Darwin advocated for the universality of emotional function has led to a host of unscientific and discredited claims promoted by 'body language experts' on both traditional and social media. These 'experts' receive unparalleled public attention. Thus, rather than being presented with responsibly supported findings on non-verbal behaviour, the public is exposed to 'body language analysis' of celebrities, politicians and celebrities in criminal trials. In this perspective piece, we address the misinformation surrounding Darwin's work on non-verbal behaviour. We also discuss the nature and scope of statements from body language experts, unpacking the claims of the most viewed YouTube video by a body language expert, comparing their claims with actual research findings, and giving specific evidence to the implications for the justice system. We explain how body language experts use (and misuse) Darwin's legacy and conclude with a call for researchers to name their stance and work towards stopping the spread of misinformation about non-verbal behaviour.

Key words: body language expert; Darwin; emotions; facial expressions; misinformation; nonverbal behaviour

Social media summary: Self-proclaimed 'body language experts' often misinterpret and misuse Darwin's work on emotions and non-verbal behaviour.

The *Expression of the Emotions in Man and Animals* (Darwin, 1872) has received and continues to receive much attention from emotion researchers and behavioural scientists. Since the 1960s, the scientific community has produced tens of thousands of scientific publications on non-verbal behaviour, including facial expressions (Plaqueole & Druvab, 2018). However, a common misconception is that Charles Darwin advocated for the universality of emotional function. In actuality, Darwin fully acknowledged cultural diversity (Darwin, 1871, 1872), and his work was not about emotions per se, but about states of mind – emotions being just one example of such states (e.g. disgust, anger, indignation, preference, affirmation, negation; Fehland & Russell, in press). Hilde (1982) suggested that the title of Darwin's book might have added to this confusion, leading many astray.

More specifically, although he wrote that the same state of mind is expressed throughout the world with remarkable uniformity (Darwin, 1872: 17), Darwin did not posit that facial expressions were universal. This claim was made by Sigmund Freud in the 1900s and 1960s (Freud, 1962, 1963). Darwin also did not assert that facial expressions evolved for a communicative purpose (Russell & Fernandez-Delgado, 1995). Instead, he argued for the opposite position (Barclay-Harris, 1985). According

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Arguments for expertise and credibility (The Behavior Panel, 2021)

“[The first panelist] I’m a body language **expert** and **analyst**, and I **train** law enforcement in the military in interrogation and body language. And I created the number one online body language course Body Language Tactics”



Appeal to Authority

Claiming something is true because an unqualified or untrustworthy 'expert' says it is.

“Over 400 prominent scientists and engineers dispute global warming.”

“[The fourth panelist] I’m a former **army interrogator**, interrogation **instructor**, resistance to interrogation instructor. I have **written 10 books** on body language and behavior, put together this **number one body language course** at bodylanguagetactics.com ... and I spend most of my time on Wall Street in corporate America”

Claims on How to “Read” People (Wired, 2019)

vague

“The **forehead is very interesting** because a lot of times we reveal stress. A lot of the things that we have gone through life are often etched in the forehead.”

“I **look at the eyes** to see if they’re red or not enough sleep (sic). The small area here between the eyes called the **glabella**, it’s one of the first areas that reveals information to us. Most often when we don’t like something, we do that bunny nose of I don’t like. “

Multiple explanations (tired vs annoyed); Scientific terms

What would this look like while talking?

“We don’t really know what our lips look like and we tend to compress them when something bothers us, when something really bothers us, we tend to suck them in. “

“The mandibular I look at the cheeks. We may do something like this. We’ll rub our tongue against the inside of the cheek. But when we try to hide it, then it tells me that this person is trying to do some perception management, and if they are, I want to know why”

A lot is being inferred from something not visible...

Claims on How to “Read” People (The Behavioral Arts, 2022b)

How do you establish baseline?

“The second lie detection technique we’re going to be looking at today is blink rate – the number of times the person is blinking. Now your average human being blinks 16 times per minute. That’s the average. Some people a little more, some people a little less. That’s totally natural. In fact, most of the time an interrogator wants to observe someone before they start asking the tough questions to see their baseline, to see how many times they blink naturally in a minute, but for most people it’s about 16. Now when we’re really interested in something, when something attracts us, interests us, that blink rate slows down because we want to take as much as we can in, so our eyes widen. We’re really staring and that blink rate slows down. But when we’re stressed or anxious, which is usually what happens when we’re being deceptive, our blink rate goes up, way up”

Can you do this while conducting an interrogation?

No scientific basis

Impossible to do face-to-face

Fallacious Calls for Caution

“**Now I spent some, a good amount of time actually, a good couple of days trying to just establish a nonverbal baseline from Amber herself so that I can better get a read on her during this deposition. Because establishing a baseline or where a person’s nonverbal communication is at rest is crucial to be able to understand where their points of friction or their positive or negative spikes are in their baseline. So I’m going to go ahead and show you part of one video that allows you to kind of see where that baseline lies so we can understand kind of who we’re dealing with”** (Observe, 2020)

Source: Observe (2020). Amber Heard’s 2016 Body Language Is Alarming and Telling for 2022 [video]. YouTube. https://www.youtube.com/watch?v=hQFFm_X2lps

“Now always remember when we’re looking for lies or deception, **we’re looking for a cluster of behaviors. There isn’t a single symptom on this planet that a behavior analyst or an interrogator is going to look at and go: “Oh the person’s lying because they did this one thing.”** That’s just a lie that’s mostly spread by movies and Hollywood and TV shows. But in reality, we have to observe multiple things happening at the same time and that raises our confidence that deception is taking place. **We’re never 100% sure.** It just raises our confidence” (The Behavioral Arts, 2022)

Source: The Behavioral Arts (2022b). How to Catch a LIAR! Learn Expert Lie Detection/Body Language Reading! [video]. YouTube. <https://www.youtube.com/watch?v=klqxUXn8JR0>





BECOME
A MEMBER

EXCLUSIVE: TSA'S SECRET BEHAVIOR CHECKLIST TO SPOT TERRORISTS

Fidgeting, whistling, and sweaty palms are just a few of the signs listed in a confidential document to help TSA officers nab would-be terrorists.

“In 2017, the U.S. Government Accountability Office released a scathing report on SPOT. Two analysts independently reviewed the 178 sources that, as of April 2017, the TSA invoked as proving the validity of the list of behavioral indicators. The two independent analysts concluded that 175 of them (98%) did not support the SPOT program.”

Denault, Patterson, Zloteanu, & Talwar, (forthcoming)

The Intercept

17,000 “trained” customs officers, no arrests.

100 million USD wasted

FINAL THOUGHTS

Nonverbal “cues”

- Multiple frameworks
- Need to consider cultural and individual differences, interdynamics, and communication aspects

Detecting deception or concealed intent

- 100 years of emotion and deception research has not produced reliable markers
- Most lab-based studies do not translate to the complexity of organic interactions

Body language “experts”

- **A Practical Approach?** Unpacking and comparing claims with actual research findings, but...
“The amount of energy needed to refute bullshit is an order of magnitude larger than to produce it” (Brandolini, 2013)
- Body language experts often use *ad hoc* manoeuvres to refute any misreadings
- **A Theoretical Approach?**

Thank you!
Questions?

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