




Hacking the stress system: the stress response as an adaptive trait that can work for or against you

VII - On the psychology of lying, deceit, and how stress makes it all much worse



What does it mean to be human?

- ▶ Are people naturally good, but situationally bad?
 - ▶ Soul
 - ▶ Rooted in traditional religious perceptions of human nature
 - ▶ Are people naturally geared towards their perceived optimisation of returns on investment? This may mean:
 - ▶ Selfishness, dishonesty and betrayal
 - ▶ But it may just as well mean in-group loyalty, friendship, altruism and kindness
 - ▶ Moreover, sometimes lies serve the in-group, ethics and humanity
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What does it mean to be human?

I: The traditional view

- ▶ People are naturally good, but situationally bad?
 - ▶ Mind – body division
 - ▶ Soul, higher self, etc.
- ▶ Rooted in traditional religious perceptions of human nature



What does it mean to be human?

II: The evolutionary perspective

- ▶ A behaviour, regardless of value judgements on its morality, must advance, or in the very least not hamper, the proliferation of the organisms genes in the next generation.
 - ▶ Promoting survival
 - ▶ Promoting reproduction
 - ▶ Promoting the survival of offspring
- ▶ Lying, and other forms of questionable behaviour, can thus be highly adaptive, if it furthers these evolutionary aims.



Ekman. (2009). *Telling lies*. New York, London: W W - Norton & Company.

So, why would we lie?

- ▶ To conceal unpleasant information about ourselves
 - ▶ Misbehaviour
 - ▶ Stigmatisation
 - ▶ Dyadic cooperation
 - ▶ Parasite avoidance
 - ▶ Coalitional exploitation
- ▶ For material or social benefit
- ▶ To avoid discomfort in others (white lies)



Piazza, J., & Bering, J. M. (2010). The Coevolution of Secrecy and Stigmatization. *Human Nature*, 21(3), 290–308.

<https://doi.org/10.1007/s12110-010-9090-4>

Mac Gillavry, D. W. (2018). Rethinking Secrecy in Religion: Cognition and the Intimacy of Secrecy. *Method & Theory in the Study of Religion*, 30(4–5), 301–320. <https://doi.org/10.1163/15700682-12341430>



Types of deceit

- ▶ **Fabrication**
- ▶ Omitting information (not providing crucial information)
- ▶ Secrecy (concealing information while not concealing its existence)
- ▶ Self-concealment (concealing both the information and its existence)

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Two competing theories

- ▶ Truth Default Theory
 - ▶ We speak the truth because it is harder to lie.
- ▶ Information Manipulation Theory 2
 - ▶ It is only easier to be truthful under neutral circumstances.
 - ▶ Once you enter in a stressor, deceit may be the easier option




McCornack, S. A., Morrison, K., Paik, J. E., Wisner, A. M., & Zhu, X. (2014). Information Manipulation Theory 2: A Propositional Theory of Deceptive Discourse Production. *Journal of Language and Social Psychology*, 33(4), 348–377.

<https://doi.org/10.1177/0261927X14534656>

Levine, T. R. (2014). Truth-Default Theory (TDT): A Theory of Human Deception and Deception Detection. *Journal of Language and Social Psychology*, 33(4), 378–392. <https://doi.org/10.1177/0261927X14535916>

What happened here?



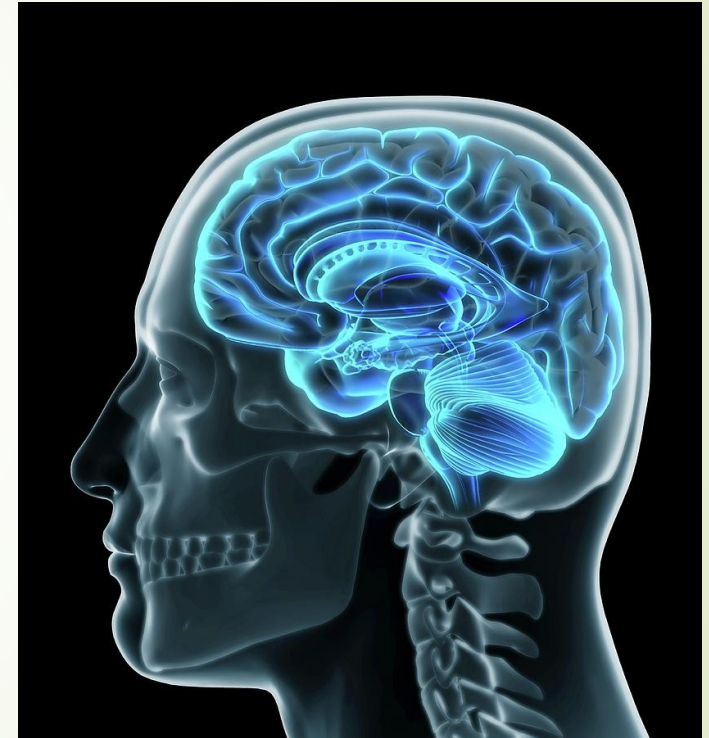


It is all about perception! The ad hoc decision on the better choice. When stressed, tired, hungry, etc. we are more likely to opt for solutions which provide immediate relief.

Speed over accuracy!

Processing stress stimuli: the hardware

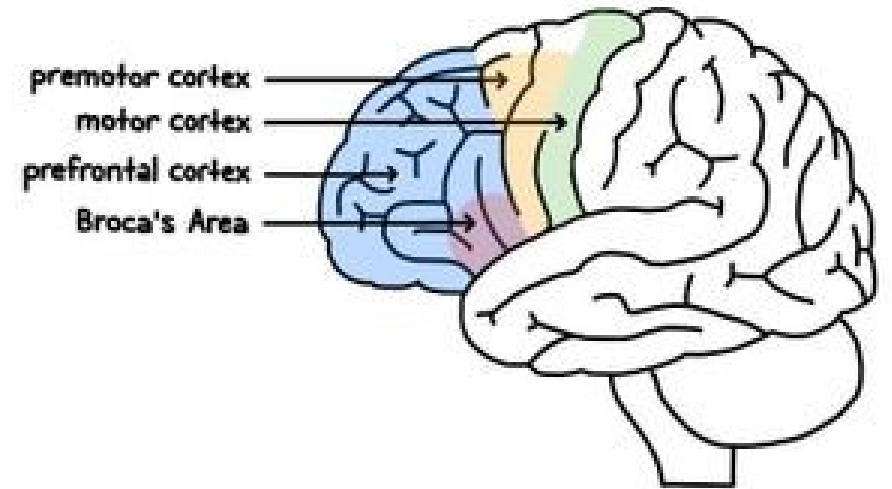
- ▶ A stimulus is detected by one of our senses
- ▶ The amygdala relays signals if the stimulus is threatening
 - ▶ Locus coeruleus (Norepinephrine)
 - ▶ Hypothalamic adrenal axis (Cortisol)
 - ▶ Ventral tegmental area (Dopamine)
 - ▶ Medial prefrontal cortex




The frontal cortex and lying

- Stress makes people lie (avoid confrontation / focus at personal needs)
- Your frontal cortex keeps you from doing so, but when you do, it will make sure you will do so well.


FRONTAL LOBE SUBSTRUCTURES





However, if lying does take effort (even if it may seem less than facing up to the truth) ...

- ▶ There should be observable physical and psychological signs of deceit
 - ▶ Stress related indicators
 - ▶ Increased heart-rate
 - ▶ Increased skin conductivity
 - ▶ Calming behaviours (signifiers)
 - ▶ Masking behaviours
 - ▶ Micro-expressions
 - ▶ Freudian slips



Careful though: Many tells are stress related and, consequently, they may indicate deceit. They may however also be indicative of the stressful stimuli (being interrogated, being disbelieved, etc.)