


With great power comes great ambiguity

Coming to terms with AI
in professional education



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"It can feel as though no one truly understands you or your struggles, leaving you feeling like an outsider in your own life. You may try to reach out to others, but find that your attempts at connection fall flat or are met with indifference. This can lead to feelings of hopelessness and despair, as though you are destined to be forever alone."



“Technology is an amplifier of human intention” (Nina Schick).

Intelligence as a Service

- ChatGPT is the 24th most visited website globally.
 - It is providing value of some kind.
 - It is not the only game in town.
 - Data and compute are enough to scale.
- Everything we care about is improved with intelligence.
 - Intelligence doesn't produce language...
- Intelligence on demand.
 - Subscribe to 30 minutes of 160 IQ.
 - What would you do if you could supplement your IQ? (hint: you can)

Good and/or Bad

- Affordance: Properties that dictate how something might be used.
 - AI has the potential (affordance) to transform / disrupt society.
- We want the deus ex machina; a perfect solution.
- But, we like our heroes to be vulnerable, broken, imperfect.
 - We like our heroes to look more like us; it makes them relatable.



*“Education is not neutral” (Paulo Freire).
Political. Power. Utility.*



Generative AI is a mirror

- AI is / human beings are:
 - Biased.
 - Immoral.
 - Unethical.
- AI shows us the parts of ourselves we don't like to face.
- LLMs are the consensus view of humanity.
 - But, human values are diverse and messy.
- What stories might help make sense of this messiness?

"The only thing that can replace one story is another story" (Yuval Harari).

The antihero archetype

- Leading character devoid of heroic qualities (the flawed protagonist).
- Morally ambiguous personality, driven by a complex history.
- On a spectrum between hero and villain.
- Explores themes of redemption.
- Offers a critique of society, which leads to their rejection.



“...maybe we have to break everything to make something better...” (Tyler Durden).

Complex characters



“we create technology and in turn are shaped by it” (Enrico Coiera).

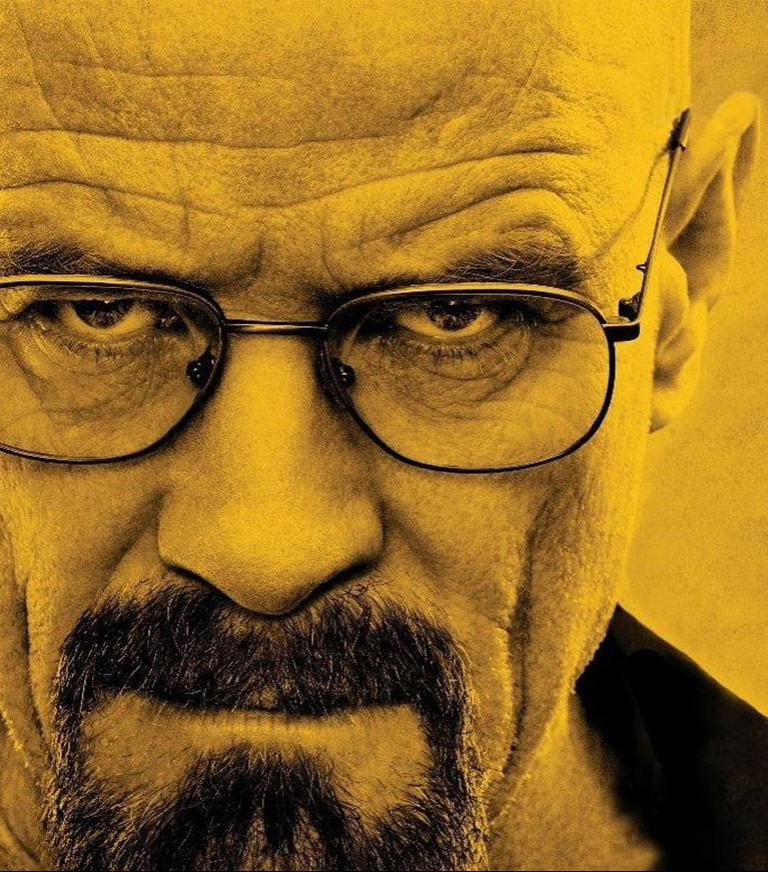
- We like to categorise:
 - Values = good / bad.
 - Computers = neat / correct.
 - But human beings = messy.
- AI is a combination of human-technology (judgement and data).
- It is a socio-technical system that is not easily categorised.
 - But this doesn't stop us from trying.

An unsettling past

- The present of AI is bound to a problematic history (data provenance).
- LLMs include all our human bias and darkness and pain.
- But they also include all our joy and love and hope.
 - They are the best, and worst, of us.
- We must find a way to live with its demons (and our own).



“ChatGPT is never reasoning about right and wrong” (Gary Marcus).



“Knowledge is power” (Francis Bacon).

Fascination and fear

- We are fascinated with AI competence in *other* domains.
 - We fear AI competence in our own domains.
- AI has strengths (fascination) alongside deep flaws (fear).
- Technology gets in the way.
 - Comes between us and patients.
- Interferes with our identity.
 - If I’m not helping the patient (or student), then what am I?

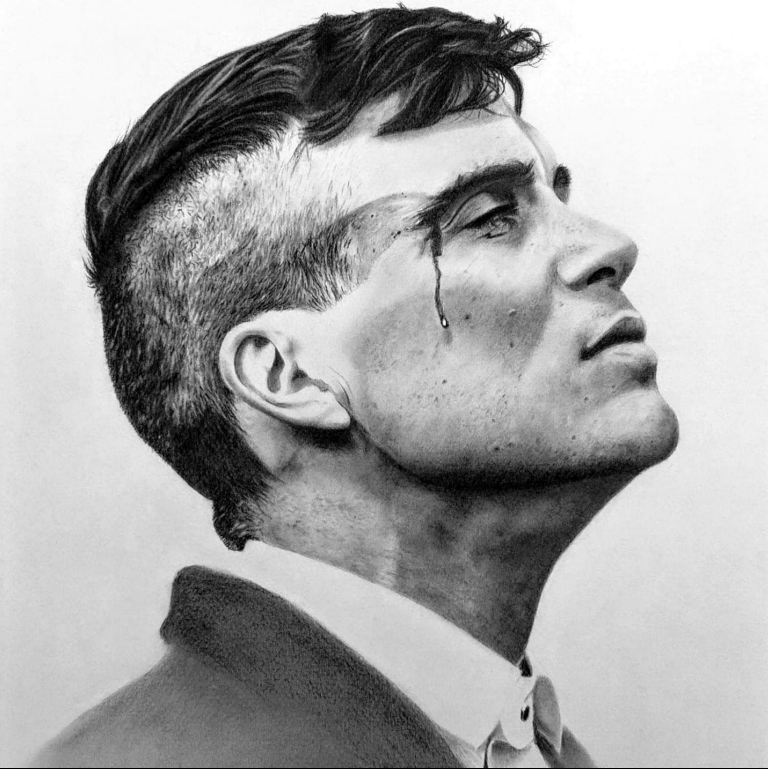
Progress and power

- Dual nature of general purpose technology (*good and bad*).
- Power to disrupt / break things.
- Even the wise adoption of AI in HE will not be a panacea.
 - Technology problems are really people problems.
- Power shifts when patients (and students) talk to someone else.
 - *Why should they talk to us?*
 - Can we honestly answer this?



“Science gathers knowledge faster than wisdom” (Isaac Asimov).

Defiance of norms



“A space of cognition, not information” (Jesse Stommel).

- Generative AI has created a space of defiance.
 - Pushing against our boundaries.
- Unsettling when norms are disrupted; conventions defied.
- Politics, economics, ethics. And education.
- Our discomfort may be a sign that something needs to change.
 - Sometimes rules have reasons. But sometimes they’re just rules.

Ambiguous morality

- AI's bias and morality is *our* bias and morality.
- Morality is deeply associated with assessment in HE.
 - Is it cheating? It depends.
- What if using AI leads to 'better' healthcare professionals?
 - And 'better' teachers.
- Maybe we need to focus less on cheating, and more on learning.
 - Learning how to use AI?



"...temper this optimism with a healthy dose of realism and caution"
(Om Malik).



“Knowledge is for cutting” (Michel Foucault).

Rogue nature

- Generative AI is subversive.
 - Makes it easy to break the rules.
 - Which (assessment) rules are worth keeping?
- Challenges existing paradigms and assumptions in HE.
 - What is true?
 - What is evidence?
 - What counts?
- Encourages (forces?) us to ask, “What if?”

Resisting status quo

- Value of AI may be that it exists outside of established norms.
- Will generative AI be less useful if we force it to ‘behave’? Would we:
 - Stifle innovation.
 - Reinforce bias.
 - Limit application.
 - Sanitise ideas.
- We should retain it’s defiance, rebellion, and complexity.
 - Maybe this is what creativity is?



“Education systems domesticate technology” (Justin Reich).

Coming to terms with AI



“Education as the practice of freedom” (bell hooks).

- Embrace it’s complexity.
- Question status quo; values.
- Balance our fear with curiosity; our fascination with ethics.
 - Avoid control and compliance.
- Move from artificial intelligence to artificial *wisdom*.
- How do we use AI to become better versions of ourselves?

Conclusion

- Start with humility, compassion, and empathy.
 - For us, and for AI.
- Foster human-machine teams; socio-technical systems.
- An opportunity to challenge the status quo; subversive agent; insightful rogue.
- Teach our tools as they teach us.



“...entangled pedagogy encapsulating the mutual shaping of technology, methods, purposes, values and context” (Tim Fawns).



Thank you

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Batman / Wednesday / Loki / Joker / Severus Snape /
Rorschach / Dexter / Walter White / Wolverine /
Tommy Shelby / John Wick / Deadpool / Cersei Lannister
/ Lisbeth Salander / Harley Quinn / Arya Stark