Algorithmic decision-making and the control problem

ILANZ Conference 9 May 19

Automation <u>complacency</u>

Automation <u>complacency</u>

• The operator starts to assume that the system is infallible, and so will no longer actively monitor what is happening.

Automation <u>complacency</u>

• The operator starts to assume that the system is infallible, and so will no longer actively monitor what is happening.

• Failure detection deteriorates.

Automation bias

Automation bias

• The operator trusts the automated system so much that they ignore other sources of information, including their own senses.

Automation bias

• The operator trusts the automated system so much that they ignore other sources of information, including their own senses.

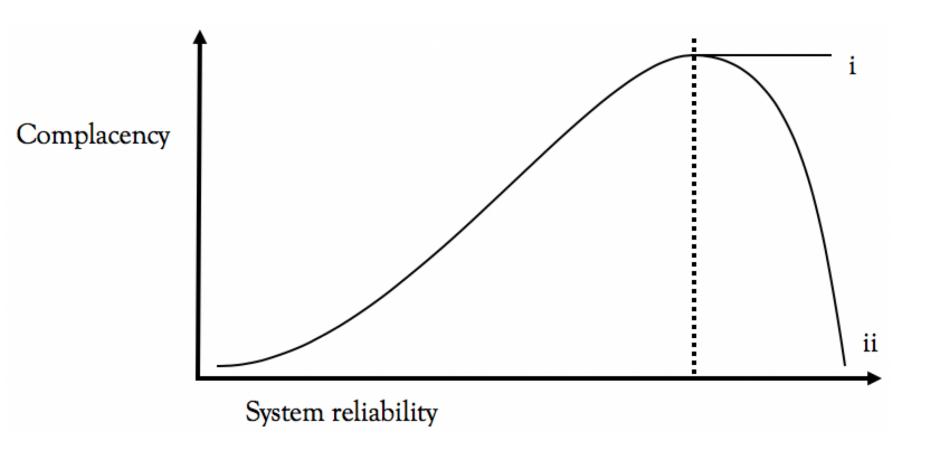
• The operator <u>disregards</u> or <u>fails to search</u> <u>for contradictory information</u> in light of a computer-generated solution, which is simply <u>accepted as correct</u>.

Banks et al. (2018)

Automation is "most dangerous when it behaves in a consistent and reliable manner for most of the time."

Automation complacency

Automation complacency



Implications for public law IMPROPER DELEGATION

IMPROPER DELEGATION

e.g. rubber-stamping others' advice

IMPROPER DELEGATION
e.g. rubber-stamping others' advice

"FETTERING" DISCRETION

IMPROPER DELEGATION e.g. rubber-stamping others' advice

"FETTERING" DISCRETION
e.g. blindly following company policy

Oswald (2018)

"A public body whose staff come to rely unthinkingly upon an algorithmic result in the exercise of discretionary power could be illegally 'fettering its discretion' to an internal 'home-grown' algorithm, or be regarded as delegating decision-making illegally to an externally developed or externally run algorithm, or having predetermined its decision by surrendering its judgment."

General delegation provisions

General delegation provisions

State Sector Act 1988

Crown Entities Act 2004

Local Government Act 2002

General delegation provisions

State Sector Act 1988

Crown Entities Act 2004

Local Government Act 2002

→ obviate entity-specific provisions

s. 495A(1) Migration Act 1958 (Cth)

The Minister may arrange for the use, under the Minister's control, of computer programs for any purposes for which the Minister may, or must, under the designated migration law:

- (a) make a decision; or
- (b) exercise any power, or comply with any obligation; or
- (c) do anything else related to making a decision, exercising a power, or complying with an obligation.

s. 495A(1) Migration Act 1958 (Cth)

The Minister may arrange for the use, under the Minister's control, of computer programs for any purposes for which the Minister may, or must, under the designated migration law:

- (a) make a decision; or
- (b) exercise any power, or comply with any obligation; or
- (c) do anything else related to making a decision, exercising a power, or complying with an obligation.