File 20120225.1616: . . . if you want to extend the analogy to encompass thermodynamics, then the cross domain system sanitisation function removal of information in the downgrade operation corresponds to increasing entropy, manifested in the form of heat energy, warming the water on the low side.

Under constant pressure, the change in enthalpy ΔH equals the heat energy Q added to the system. It may be considered a thermodynamic open system. *Shannon entropy* is the amount of information missing at the point of reception.

Jaynes explored in 1957 the link between thermodynamic and information entropy [1, 2].

References

[1] Edwin Thompson Jaynes. Information theory and statistical mechanics. *Phys. Rev.*, 106(4):620–630, 15th May 1957.

[2] Edwin Thompson Jaynes. Information theory and statistical mechanics II. *Phys. Rev.*, 108(2):171–190, 15th October 1957.