We have been assimilated: Some principles for thinking about algorithmic systems

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Abstract. This text is an opinion piece motivated by an invited keynote address at the 2018 IFIP 8.2 working conference, 'Living with Monsters?' (San Francisco, CA, 11 December 2018.) It outlines some principles for understanding algorithmic systems and considers their implications for the increasingly algorithm-driven infrastructures we currently inhabit. It advances four principles exhibited by algorithmic systems: (i) radical complexity, (ii) opacity, (iii) radical otherness, and (iv) infrastructuration or Borgian assimilation. These principles may help to guide a more critical appreciation of the emergent world marked by hybrid agency, accelerating feedback loops, and ever-expanding infrastructures to which we have been all too willingly assimilated.

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