

Utopia and Intellectual Humility: More, Bacon and Swift Appraising Law and Technology

Karen Schultz

Griffith University, Australia

Abstract

Law and frontier technologies have been variously perceived in Western literature's early classic utopias. Utopias' diverse narratives and commentaries have applauded law's interplay with technology or admonished it – utopias have variously imagined technological progress or pitfalls. Recently, given frontier technologies' risk profiles, it has been suggested that a counter of intellectual humility should accompany their operation. Yet, intellectual humility is not a new awareness – its value, connecting with law and technology's interplay, is illustrated in select utopias in the early Western literary tradition. This article's consideration of a trilogy of select utopias proceeds in three big-picture strokes. First, it considers the interplay and intertextual connections of law and technology in three of the earliest British fictions in utopia's 'imagined travellers' mode: Thomas More's *Utopia* (1516); Francis Bacon's *New Atlantis* (1626); and Jonathan Swift's *Gulliver's Travels* (1726). Second, this article recollects recent calls for 'intellectual humility' to accompany the development and operation of frontier technologies. However, intellectual humility lacks consensus – it can generally be expressed as reflecting approaches to measuring a sceptical mind that recognise fallibility and reject over-confidence. Third, each of the select utopias concerning law and technology's interplay with intellectual humility is briefly considered. The texts are not straightforward: More, Bacon and Swift variously correlate the potential of human capacities with technological futures and offer various messages. While they extend optimistic reassurance that good judgment can exist, they offer pessimistic cautions – poor judgment on matters technological can bear terrible consequences. This article's purpose is to deepen the discourse.

Keywords: *Utopia*; law and technology; Thomas More; Francis Bacon; Jonathan Swift; intellectual humility.

1. Introduction

Law and frontier technologies have been variously anticipated or perceived in Western literature's classic utopias¹ from the time of the earliest iconic 'Ur-paradigm' utopias.² Utopias' diverse narratives and commentaries can both applaud or admonish. For instance, utopias can applaud the beneficent prospects of law's interplay with technology to imagine technological progress and better futures; alternatively, they can admonish technology's pitfalls to problematise assumptions of technology's necessarily progressive 'good'. Recently, frontier technologies have been promoted in non-fiction and news media for their unalloyed 'good' and technological 'progress'. Yet, given the risk profiles of frontier technologies, it has been suggested that a counter of intellectual humility should usefully accompany their operation. Intellectual humility is not a new awareness – its value in connecting with law and technology is illustrated in select utopias in the early Western literary tradition. Equally, its connection to past literature has relevance to present frontier issues.

This article proceeds with three big-picture strokes. First, to consider law and technology's interplay and the focus on frontier technologies, it cherry-picks select utopias, including two Western Ur-paradigm utopias by More and Bacon. Specifically, it considers a trilogy of iconic British fictions in the 'imagined travellers' mode, situated within the wider literature of law and utopia (and/or dystopia): Thomas More's *Utopia* (1516), Francis Bacon's *New Atlantis* (1626) and Jonathan Swift's *Gulliver's*

¹ The use of 'utopia' broadly includes 'dystopia': Samaan, "Death and the Death-Penalty," 5.

² O'Har, "Technology and its Discontents," 479.



Except where otherwise noted, content in this journal is licensed under a [Creative Commons Attribution 4.0 International Licence](https://creativecommons.org/licenses/by/4.0/). As an open access journal, articles are free to use with proper attribution. ISSN: 2652-4074 (Online)

Travels (1726). Aspects of each text's treatment of law and technology are canvassed, including their intertextual connections: Bacon apparently draws on More's template; and Swift positively references More but satirises Bacon's disciples.

Second, this article recollects recent calls for 'intellectual humility' to accompany the trajectory of frontier technologies. Intellectual humility lacks consensus as a concept but reflects approaches to measuring a sceptical mind that recognise fallibility and reject over-confidence. Yet what is this intellectual humility?

Third, the select utopias' messages concerning law and technology's interplay with intellectual humility are briefly considered. Each iconic text can be understood as a complex thought experiment problematising the limits of human judgment, understanding and counsel. More, Bacon and Swift variously correlate the potential of human capacities with technological futures. While the select utopias' treatment of frontier technologies is complicated by each text's wordplay or puzzles, various messages emerge concerning approaches to appraise law and technology. For instance, there are messages of optimism or reassurance that good judgment can exist; alternatively, there are messages of pessimism, caution or admonition that poor judgment can perpetuate, and humans may degenerate. This article cannot do justice to each author's prolific and complex oeuvre, but its purpose is to deepen the discourse.

2. Select Utopias in Imagined Travellers Mode

To introduce this article's trilogy of select utopias within the imagined travellers mode, an initial word is appropriate on the wider literature of 'law and utopia'. Following this, broad and specific reasons for cherry-picking the three utopias will be briefly canvassed, together with initial prefatory points that underline both the capacious use of 'utopia' and the expanding 'law and technology' literature.

The wider literature on law and utopia (and/or dystopia)³ continues its growth in the twenty-first century with new applications and framings. Coined by More in 1516, the concept and terminology of utopia have been variously applied⁴ – for instance, to comprehensive, all-encompassing visions in fictional and non-fictional texts from Plato to Marx⁵ and to less-comprehensive, targeted perspectives, including 'specific (feminist, libertarian, ecological ...)' contexts.⁶ Equally, utopian literature has been variously framed and periodised – for instance, from early classical utopias to critical utopias (and/or dystopias).⁷ The concept of utopia, together with its relevance to and interface with law, has experienced cycles of favour versus disfavour. However, in recent decades, and despite the utopian imagination's 'hostility to legal forms and processes' and liberal legality's critique of the utopian 'blueprint',⁸ the vocabulary of utopia and utopianism has been resuscitated, reimagined and revitalised.⁹ This imaginative utopianism has a 'close synergy with law and legal reform' and a 'role ... in law and politics';¹⁰ 'possible positive functions' for the 'rule of law as utopia and as ideology' are, not least, 'to criticise the current order and to imagine an alternative order'.¹¹ Moving to the select utopias considered in this article, the focus is on what are frequently described as early classical utopias (and/or dystopias).

Broadly, this article's select utopias have been cherry-picked for their formal literary characteristics (relevantly, composition date or historical position, literary mode or derivation, and intertextual connections or engagement) combined with their substantive scientific-technological focus (whether technological enthusiasm or technological criticism).¹² The Ur-paradigm utopias of More and Bacon¹³ exhibit senses of optimism that contrast with Swift's distinct degrees of pessimism concerning the 'human prospect ... married to science and technology, the twin horsemen of the modern-day apocalypse'.¹⁴ Yet all three texts contribute to answering two key methodological questions: first, can reflecting on 'ancient stories' enrich or 'deepen our

³ Travis, "Dystopian Jurisprudence," 45, 50ff; Tranter, "Terror in the Texts"; Sargisson, *Fool's Gold*, 6–40.

⁴ van Klink, "Introduction," 2–3; Sargisson, *Fool's Gold*, 6–40.

⁵ Schultz, "Schmitt's Roman Links" and "Schmitt's Satire", for Schmitt's fictional and non-fictional works inflected with utopian references; Schultz, "Sir Samuel Griffith" and "Griffith the Utopian", for Griffith's reading of fictional and non-fictional utopias that influenced his law reforms.

⁶ van Klink, "Introduction," 3; Lancaster, "Instantiating Critical Utopia," 111; Cooper, *Everyday Utopias*.

⁷ Sargisson, *Fool's Gold*, 6–40; Lancaster, "Instantiating Critical Utopia"; Moylan, *Demand the Impossible*, 10–11 (on critical utopia).

⁸ Douglas, "Law," 4, 6; van Klink, "The Rule of Law," 40ff.

⁹ Douglas, "Law," 2; van Klink, "Introduction," 4ff; Moylan, "Transgressive," 311.

¹⁰ Houghton and O'Donoghue, "Utopia as 'No-Place'," 205; van Klink, "Introduction," 7.

¹¹ van Klink, "The Rule of Law," 56.

¹² Kadar, "Critique of Technology," 54, 55.

¹³ O'Har, "Technology and its Discontents," 479, 480.

¹⁴ O'Har, "Technology and its Discontents," 479.

understanding of the techno-utopian impulses driv[ing] contemporary times;¹⁵ and second, can ‘ancient stories’, despite representing neither ‘grand futuristic dreams’ nor ‘techno-nightmares’,¹⁶ be characterised as drawing on shifting moral perspectives or ‘technological capacity’?¹⁷ For narratives assist in navigating ‘why’ questions – that is, questions that seek answers ‘in terms of technical or legal “solutions”, or in terms of deficits of civic, moral, and religious education’.¹⁸

Specifically, three formal criteria are relevant to this article’s trilogy of select utopias. First, in terms of composition date, three early iconic British utopias have been selected within a 200-year span from the Renaissance to the Restoration – More’s earliest text coins the neologism ‘utopia’. Second, in terms of literary mode, this trilogy instances the ‘imagined travellers’ mode, where utopian societies are located on isolated islands visited by a traveller-narrator who offers a travelogue of customs and experiences. The select utopias variously critique contemporary social conditions or institutions, although More’s and Bacon’s use of ironic or satiric critique is less intense than Swift’s withering denunciations and savage parodies. Third, in terms of intertextual connections, the later authors were well aware of the earlier authors’ contributions, so Bacon draws on More’s utopian blueprint and Swift expressly applauds More,¹⁹ but Swift attacks and parodies the experiments and technologies of Bacon’s disciples in the Royal Society.

As a prefatory point concerning the terminology used in this article when describing the select utopias with their ambiguities, ‘utopia’ is employed capaciously to include ‘dystopia’. This use is not unusual – More himself, with his ‘mixture of the ideal and the satiric’,²⁰ equates ‘utopia’ with ‘nowhere’, and not with a ‘somewhere’ that is necessarily good. A utopia’s message depends on the narrator’s expressed or implied perspectives and the reader’s interpretations and judgment. Each of the select utopias has enigmatic, nebulous elements. For instance, *Gulliver’s Travels*’ third voyage particularly displays dystopian/anti-utopian elements, but this is a realisation that only partially unfolds for, and largely eludes, its narrator. Moreover, this capacious use of ‘utopia’ not only recognises that dystopian elements in an ostensible utopia may be revealed where the text deploys various narrative standpoints or irony, but this use intersects with the concept of a ‘critical utopia’. Coined by Moylan to capture the ‘transgressive, totalizing, transformative’ power of late twentieth-century utopian impulses and utopianism,²¹ critical utopias do not represent ideal or perfect political blueprints but express societal aspirations, envisage alternative futures and engender utopian dreams.²² To varying degrees, the select utopias can be understood as bearing a ‘related critical utopian quality’.²³

Finally, as a prefatory point concerning this article’s substantive criteria, the select utopias exhibit diverse treatments of law and technology, and offer messages relevant to recent discourse in intellectual humility. From the Renaissance, the imagined travellers mode launched the ‘ship of modern progress’²⁴ to incite not only the ‘machinery and navigational techniques’ of the “‘new” science”, but ‘the humanistic concept of utopia’.²⁵ The select utopias imaginatively and diversely express intellectual and ethical limits in dealing with ‘new science’. Moreover, utopianism and utopias, including the select utopias here, can connect with a contemporary call of ‘technology law scholarship’.²⁶ This clarion call for law to ‘re-imagine the relations between humanity and technology’²⁷ offers a utopian analogy – that is, the exploration of ‘two alternative technological futures, cornucopian and dystopian’ and their ‘complex and multi-layered’ relationship, where cornucopia not only ‘resists but ... suppresses dystopia’.²⁸ Charting this relationship and its ethics recognises that ‘technical legality’ can enhance human ‘becoming’ as ‘responsibility for becoming is technically possible for technological Being-in-the-world’.²⁹ Hence, as utopia continues its reimagining, so too does ‘law and technology’.

Turning to consider each text’s focus on law and technology, this article begins with More’s *Utopia*.

¹⁵ Rubin, “Ancients’ Tech Anxiety,” 80.

¹⁶ Rubin, “Ancients’ Tech Anxiety,” 81.

¹⁷ Rubin, “Ancients’ Tech Anxiety,” 81.

¹⁸ Rubin, “Ancients’ Tech Anxiety,” 86.

¹⁹ Swift, *Gulliver’s Travels*, 182–183.

²⁰ Samaan, “Death and the Death-Penalty,” 5.

²¹ Moylan, “Transgressive,” 309 (Title, Abstract), 311; Lancaster, “Instantiating Critical Utopia,” 111.

²² Lancaster, “Instantiating Critical Utopia,” 111; van Klink, “Introduction,” 6; Moylan, *Demand the Impossible*, 10–11.

²³ Moylan, “Introduction,” xxii.

²⁴ Adams, “Social Responsibilities of Science,” 374.

²⁵ Adams, “Social Responsibilities of Science,” 374–375.

²⁶ Tranter, “The Magnitudes,” 17.

²⁷ Tranter, “Terror in the Texts,” 75, 76.

²⁸ Tranter, “Terror in the Texts,” 75, 82, respectively.

²⁹ Tranter, “Living in Technical Legality,” 193, 191, respectively.

2.1 First, *Thomas More's Utopia* (1516)

More's neologism, 'Utopia', describes his two-book imagined commonwealth, celebrated for its provocations and striking contemporaneity.³⁰ Using *Utopia's* mythical New World island of 54 cities as a point of departure, More problematises European and English society – Utopia has no private property, debilitating unemployment, excessive work, or lawyers. The text telegraphs the benefits of practical communal technology practices and the disadvantages of obscure laws.

The narrative begins in Antwerp where, in 1515, Thomas More was actually serving as an ambassador for Henry VIII in negotiations with a Flemish commission investigating the English wool trade. More was introduced to Peter Giles, Erasmus's pupil, and commenced writing *Utopia's* Book 2, a travelogue apparently inspired by the widely circulated accounts of the new world travels of Amerigo Vespucci, Christopher Columbus and Angelo Poliziano.³¹ This real-world setting transitions to the fictional – 'character More'³² is introduced by character Giles to *Utopia's* fictional Portuguese sailor-narrator, Raphael Hythloday, whose back-story includes travels with Vespucci. The three repair to More's Antwerp garden where Hythloday recounts Book 1's "Dialogue on Counsel", and Book 2's "Discourse on Utopia".³³ In Book 1, Hythloday engages in table-talk (concerning discourse and satire on justice, punishment, governance, social conditions and standing armies) with a Socratic-style coterie that includes character Morton – that is, Cardinal Morton, the famous Tudor ecclesiastical lawyer and statesman who had actually been More's mentor and patron.³⁴ Then, in Book 2, Hythloday outlines Utopia's institutions and infrastructure, including aspects of law and technology.

Yet 'Utopia is intentionally enigmatic'.³⁵ The text's wordplay clouds its messages – for instance, the narrator's name means both 'healing of God' (Raphael)³⁶ and 'peddler of nonsense' (Hythloday).³⁷ Moreover, the notion of 'utopia' is interpretable – not all utopias are necessarily good eutopias and may include dystopic tones. For instance, *Utopia's* six-verse/stanza poem, 'On Utopia', distinguishes 'utopia' from More's second neologism,³⁸ 'eutopia' (meaning 'Happy Land',³⁹ a good 'topos') – the island, Utopia, applauds itself as being so good, and with the 'best laws', that its name ought to be 'Eutopia'!⁴⁰ Equally, the text's word-play, or glossopoeia,⁴¹ introduces interpretable layers of oxymorons. Utopia (meaning 'nowhere') is a constructed island with a river 'Anydrus' ('no water'), city 'Amaurote' ('shadow-city'), ruler 'Ademus' ('no people') and neighbouring people 'Achorians' ('no country').⁴² In addition, *Utopia's* longer title has a satiric edge – it describes itself as a 'truly golden handbook, no less beneficial than entertaining',⁴³ – but Utopia clearly devalues gold, associating it 'with disgrace' or a lesser status, as Utopians use gold for chamber pots, shackles and children's 'trinkets'.⁴⁴

Equally, substantive uncertainties and standpoint obscurities appear in *Utopia's* 'most vexing question' – that is, the attitude to the 'common ownership of property'.⁴⁵ Character More is mainly non-committal concerning Utopia's good⁴⁶ but denies that Utopia's communistic practices are a 'social panacea'.⁴⁷ For he identifies the 'principal foundation of their whole social structure, namely their common life and subsistence with no exchange of money' as 'absurd'⁴⁸ – it 'entirely undermines all nobility, magnificence, splendor, and majesty' that are '(in the popular view) the true adornments and ornaments of a commonwealth'.⁴⁹ This instances the text's multi-vocal nature⁵⁰ and the lack of clear equation between the real and fictional Mores. One cannot simply attribute to author More the apparent beliefs of character More; the fictional More apparently rejects

³⁰ Eagleton, "Utopias, Past and Present."

³¹ Vieira, "Concept of Utopia," 4; Davis, "Thomas More's Utopia."

³² Harp, "Afterward," 154.

³³ Davis, "Thomas More's Utopia," 29; Book 1 (1516, London); Book 2 (1515, Netherlands).

³⁴ Davis, "More, Morton," 40–41.

³⁵ Paul, "Beyond Utopia," 353.

³⁶ Sargent, "Five Hundred Years," 185; Noletto, "Glossopoesis," 361–362.

³⁷ Miller, "Introduction," viii; Noletto, "Glossopoesis," 361–362.

³⁸ Vieira, "Concept of Utopia," 5: "lexical neologism (utopia) and a derivation neologism (eutopia)".

³⁹ Sargent, "Five Hundred Years," 185.

⁴⁰ Vieira, "Concept of Utopia," 5.

⁴¹ Noletto, "Glossopoesis," 358.

⁴² Noletto, "Glossopoesis," 362–363; Amaurote ("invisible city").

⁴³ That is, "*libellus vere aureus, nec minus salutaris quam festivus*".

⁴⁴ More, *Utopia*, 76–78.

⁴⁵ Harp, "Afterward," 154–155.

⁴⁶ Miller, "Introduction," ix.

⁴⁷ Miller, "Introduction," ix.

⁴⁸ More, *Utopia*, 134.

⁴⁹ More, *Utopia*, 134; Harp, "Afterward," 155.

⁵⁰ Simon, "In Search."

the communal approach as ‘absurd’ but the real More apparently perceived that a communal approach and humility could bridle pride.

In terms of law, *Utopia*’s conceit is that law is notable by its absence. Hythloday’s ‘afternoon discourse’ is recorded as concerning the ‘Laws and Institutions of the Little-known Island of Utopia’,⁵¹ despite laws barely existing. For, while the Utopians have criminal offences and sentences,⁵² they have ‘very few laws’ and no lawyers⁵³ because laws ‘so numerous ... or so obscure’ are unjust and lawyers, as ‘clever practitioners and sly interpreters of the law’, offend practicality, clarity and truth.⁵⁴ In addition, the lawyers’ ‘absence is meaningful’ and notable – it instances the historically repeated ‘regularly identified negative turn in the public’s opinion and confidence in the legal profession’.⁵⁵ Lawyers are not only a symptom of ‘dark humanity’ but ‘active agents to violence, greed, and corruption’.⁵⁶ This underlines the ‘unhealthy effect of legal wrangling on society’.⁵⁷ Utopia eschews ‘incredibly intricate laws’ or interpretations – ‘everyone is knowledgeable of the law’ and the judge ‘protects simple souls from the false accusations of crafty litigants’.⁵⁸ Yet, in this highly ordered, but imperfect, society that includes slavery,⁵⁹ law exists as a social control mechanism and guarantee of order, sub silentio, in moral, religious and political networks.

Finally, in terms of technology, the text abounds in ‘discussion of technology and applied science’,⁶⁰ and instances how the Utopians are ‘marvellously effective in inventing techniques’ – ‘in intellectual pursuits they are indefatigable’.⁶¹ For instance, they pursue specific pragmatic technologies in animal husbandry (to ‘tend a great number of eggs’ for ‘hatching ... in constant warmth’),⁶² hydrology (to ensure ‘water cannot be diverted or contaminated ... and is channelled in tile conduits’),⁶³ medicine (‘to investigate the secrets of nature using the resources of science’),⁶⁴ agronomy (‘to remedy the defects of the soil’),⁶⁵ ‘printing and papermaking’ (to ‘invent[] techniques’ for ‘contribution to a comfortable life’),⁶⁶ and astronomy (‘to understand very accurately the movements and positions’).⁶⁷ Utopian society and technology are not static or unchanging: Utopians converted to Christianity,⁶⁸ devoured the newly presented ancients’ books⁶⁹ and embraced print technology. Printing is an interesting inclusion – its European invention signified ‘seismic shifts in thinking and sensibility’, assisted ‘more cosmopolitan and mobile ways of imagining and conducting intellectual life’⁷⁰ and was momentous historically for critical thinking and dissent. Hence, while the textual references to technology are undeveloped and technology is practical, as opposed to ‘fantastic’, the takeaway is that Utopia is not an epistemologically nor technologically closed society. *Utopia*’s commonwealth is the template for Bacon’s point of departure in *New Atlantis* (1626).

2.2 Next, Francis Bacon’s *New Atlantis* (1626)

In the century following *Utopia*, Bacon’s *New Atlantis* emerged as a technology-heavy, but inchoate ‘early contribution to the tradition of utopian fiction’.⁷¹ It marks a pivotal point where ‘science and technology emerged as a way of transforming society’.⁷² Written in 1624⁷³ but published posthumously,⁷⁴ *New Atlantis* is Bacon’s ‘most prophetic text’.⁷⁵ It offers a

⁵¹ More, *Utopia*, 135.

⁵² Query a criminal code: Brink, “Utopians to the Yahoos,” 59–60.

⁵³ More, *Utopia*, 101, 102.

⁵⁴ More, *Utopia*, 101–102.

⁵⁵ Travis and Tranter, “Interrogating Absence,” 34, 25, respectively.

⁵⁶ Travis and Tranter, “Interrogating Absence,” 26.

⁵⁷ Sargent, “A Note,” 91.

⁵⁸ More, *Utopia*, 102.

⁵⁹ More, *Utopia*, 95–96.

⁶⁰ Frietzsche, “Impact of Applied Science,” 36.

⁶¹ More, *Utopia*, 94, 92, respectively.

⁶² More, *Utopia*, 86.

⁶³ More, *Utopia*, 57.

⁶⁴ More, *Utopia*, 94.

⁶⁵ More, *Utopia*, 92.

⁶⁶ More, *Utopia*, 94.

⁶⁷ More, *Utopia*, 80.

⁶⁸ More, *Utopia*, 117; Sargent, “Five Hundred Years,” 186–187.

⁶⁹ More, *Utopia*, 93–94, supplied by Hythloday.

⁷⁰ Harp, “Afterward,” 158.

⁷¹ Lucas, “Bacon’s *New Atlantis*,” 115.

⁷² Sargent, “Five Hundred Years,” 187.

⁷³ Weinberger, “Introduction,” xix–xx.

⁷⁴ Bacon died on 9 April 1626, and William Rawley published *New Atlantis*: Lucas, “Bacon’s *New Atlantis*,” 115.

⁷⁵ Lucas, “Bacon’s *New Atlantis*,” 115.

fragmentary plan of the ideal commonwealth and mythical island of Bensalem⁷⁶ and its fantastic pursuit of empirical science and prosperity via its scientific foundation, Salomon's House.

The narrative details how European sailors, lost when exploring uncharted seas, are permitted to enter Bensalem. Selected sailors are drip-fed knowledge of its technological wealth. Ultimately, the sailor-narrator receives the honour of an in-depth outline of Salomon's House, with its 'new science' and technological directions – the Father of Salomon's House exhaustively recites the foundation's 'end' and purpose, its 'preparations and instruments', its 'employments and functions' and its 'ordinances and rites'.⁷⁷ Like Utopia, Bensalem had converted to Christianity – Salomon's House is otherwise named the 'College of the Six Days' Works'. Unlike Utopia however, religious and scientific principles are separated, not 'interfused';⁷⁸ More's *Utopia*⁷⁹ appears to be the 'Feigned Commonwealth'⁸⁰ referenced by *New Atlantis*'s Jewish merchant, Joabin.⁸¹ Bacon offers new science as the apparent means to the practical end of increasing human control of nature and pursuing peace and prosperity. But the science is fabulous, and its pursuit is relentless. *New Atlantis*'s so-called prophetic vision of human knowledge's scientific-technological future comprises not only Salomon's House's manifold inventions and discoveries, but its institutional plan and organisation, similar to the modern research university's focus on pure and applied science. For instance, its zodiacal and Trinitarian structure of imaginatively named workers in scientific service has strict numbers of Merchants of Light, Depredators, Mystery-Men, Pioneers or Miners, Compilers, Dowry-Men or Benefactors, Lamps, Inoculators and Interpreters of Nature.⁸² However, this awesome array of scientists and technicians, and the 'glittering spectacle'⁸³ of a scientist's dress, gestures to 'endless, ever-increasing torrents of usable inventions and luxuries'⁸⁴ for a populace constructed as a 'consumer' ...[:] a belly capable of ... infinite distention'.⁸⁵ This insatiability prompts an applied science that is 'increasing without fixed limits the material goods and sensual luxuries available'.⁸⁶ Unlike Utopia, Bensalem upholds its private property, individual splendour and dizzying array of scientific and frontier technologies.

There is contention concerning *New Atlantis*'s messages. While Weinberger considers that *New Atlantis* 'depicts the world to be produced by [Bacon's] famous project for modern science and technology',⁸⁷ Liebeskind denies that this is Bacon's claim.⁸⁸ Commentators recognise Bacon's focus on applied, not theoretical, science;⁸⁹ he eschewed pure metaphysics and abstract thinking that neglected practical outcomes. Yet doubts exist as to whether Bacon endorsed the extremes of the Salomon's House agenda. Frietzsche and Adams argue that Bensalem's 'applied science is being manipulated' to supply insatiable material wants⁹⁰ in this society clearly nested within a Christian ethical context. Moreover, Liebeskind characterises Salomon's House's illusion-creating 'machines' as a 'troublesome development',⁹¹ potentially responsible for a 'successful religious fraud' on the 'sheep-natured' Renfusans,⁹² or for 'displays of human power' comporting as angelic miracles.⁹³ She considers that Bacon 'blurs the distinction between divine and human power' and may be orchestrating an 'unlimited field for suspicion'.⁹⁴

In terms of law, *New Atlantis* has been variously interpreted and understood. It may signal that 'modern science could easily sink modern society beneath the seas, leaving only a cautionary tale',⁹⁵ whereby political society requires not only the rule of scientists, but a 'strong commitment to liberal principles and philosophical questioning'.⁹⁶ For while Bensalem's lawgiver created laws of secrecy, an espionage system and a scientific foundation, God's law ostensibly bases Bensalem's political order. Hence, unlike the 'drive to expand' of Plato's Atlantis, Bensalem embodies the 'cardinal Christian virtues of faith, charity,

⁷⁶ "Son of Peace": Liebeskind, "If Scientists Were Angels," 74.

⁷⁷ Bacon, *New Atlantis*, 98ff; 'functions' otherwise appears as 'offices' (108).

⁷⁸ Adams, "Social Responsibilities of Science," 386.

⁷⁹ Less probably, Plato: Weinberger, "On Bacon's New Atlantis," 148; Weinberger, "On the Miracles," 109.

⁸⁰ Bacon, *New Atlantis*, 95 (emphasis in original).

⁸¹ Queried (Weinberger, "On the Miracles," 109) and adopted (Salzman, "Narrative Contexts," 28).

⁸² Bacon, *New Atlantis*, 108–109.

⁸³ Adams, "Social Responsibilities of Science," 382.

⁸⁴ Adams, "Social Responsibilities of Science," 386.

⁸⁵ Adams, "Social Responsibilities of Science," 387.

⁸⁶ Adams, "Social Responsibilities of Science," 387.

⁸⁷ Weinberger, "On the Miracles," 106.

⁸⁸ Liebeskind, "If Scientists Were Angels," 76.

⁸⁹ Frietzsche, "Impact of Applied Science," 37.

⁹⁰ Frietzsche, "Impact of Applied Science," 38; Adams, "Social Responsibilities of Science," 387.

⁹¹ Liebeskind, "If Scientists Were Angels," 80.

⁹² Weinberger, "On the Miracles," 107.

⁹³ Liebeskind, "If Scientists Were Angels," 80.

⁹⁴ Liebeskind, "If Scientists Were Angels," 81.

⁹⁵ Hale, "Francis Bacon's New Atlantis," 4.

⁹⁶ Hale, "Francis Bacon's New Atlantis," 11.

peace, and justice'.⁹⁷ Moreover, Bensalem's economy discounts the gold standard but, unlike Utopia, 'maintain[s] a trade ... for God's first creature ... Light'.⁹⁸ Liebeskind describes this as 'no ordinary human economy ... but an angelic economy subsisting on the light of knowledge'.⁹⁹

Finally, in terms of technology, Bensalem's fabulous armoury of inventions, as outlined by the Father of Salomon's House, includes 'new artificial metals', 'high towers ... half a mile in height', 'engines for multiplying and enforcing of winds', 'Water of Paradise', 'perspective-houses' and 'houses of deceits ... illusions[] and their fallacies'.¹⁰⁰ Particularly striking are the military 'engine-houses': the invention of 'swifter motions' of 'muskets or any engine' to ratchet up their strength and violence, 'exceeding your greatest cannons and basilisks'; and the innovations of 'instruments of war ... new mixtures and compositions of gun-powder, wild-fires burning in water, and unquenchable'. This 'breathtaking'¹⁰¹ list continues with flying vehicles imitating bird-flight, submersibles, 'divers curious clocks' with their 'motions of return, and ... perpetual motions', and imitations of 'living creatures, by images'.¹⁰² Like Utopia, Bensalem is not static or unchanging – the Bensalemites were interested in scientific evolution and change, and received Christianity and envoys.¹⁰³ Unlike Utopia, however, the scale is ratcheted up with the vertiginous versions of inventions – it is a 'sumptuous vision of science's power',¹⁰⁴ ostensibly of improvement. This template is integral to what Swift derided in the third voyage of *Gulliver's Travels* (1726).

2.3 Finally, Jonathan Swift's *Gulliver's Travels* (1726)

A century after *New Atlantis*, Swift's misanthropic four-voyage satire, *Gulliver's Travels*, targeted contemporary science and technology in its third voyage. Here, the fictional sailor-narrator, Lemuel Gulliver, hijacked by pirates and forsaken as a castaway, leapfrogs to four extraordinary islands peopled by pseudo-scientists and magicians 'rendering metaphors physical' and exhibiting the 'abuses of Modern learning'.¹⁰⁵ This third voyage is 'devoted, particularly, to satire on the sources of intellectual pride' and develops critiques of human 'intellectual inadequacies'.¹⁰⁶ The four islands of this third voyage offer multiple lenses on abusive law and inflated science and technology.¹⁰⁷

First, Laputa, the circular 'flying or floating island'¹⁰⁸ with its adamant base, instances fanatical, fantastical mathematicians, musicians and theoreticians with twisted bodies and crooked eyes – one eye pointing inward, one upward.¹⁰⁹ In Swift's representation, this distortion represents their error-ridden calculations, ignorance of the world and solipsistic focus on contemplation and abstraction.¹¹⁰ The Laputans' heads are metaphorically in the clouds – they despise practical geometry as 'Vulgar and Mechanic'¹¹¹ and neglect 'Laws, Government, History, Religion, or Manners of Countries'.¹¹² Their focus on pure mathematics and music¹¹³ extends even to degustation – for instance, they present their first course of mutton as an 'Equilateral Triangle', beef as a 'Rhomboid' and pudding as a 'Cycloid', and their second course of ducks as 'Fiddles', sausages and puddings as 'Flutes and Hautboys', and veal as a 'Harp'!¹¹⁴ Yet their geometrical and astronomical calculations trigger their catastrophising – they are 'perpetually alarmed with the Apprehensions of ... impending Dangers' of 'Celestial Bodies' and 'Destruction of this Earth'.¹¹⁵

⁹⁷ McKnight, "Francis Bacon's God," 85.

⁹⁸ Bacon, *New Atlantis*, 86.

⁹⁹ Liebeskind, "If Scientists Were Angels," 83.

¹⁰⁰ Bacon, *New Atlantis*, 108.

¹⁰¹ Lucas, "Bacon's New Atlantis," 116.

¹⁰² Bacon, *New Atlantis*, 107, and n 323.

¹⁰³ Sargent, "Five Hundred Years," 186-187.

¹⁰⁴ Adams, "Social Responsibilities of Science," 376.

¹⁰⁵ Benedict, "A Voyage," 151, 150.

¹⁰⁶ Sutherland, "A Reconsideration," 46.

¹⁰⁷ Sutherland, "A Reconsideration," 47.

¹⁰⁸ Swift, *Gulliver's Travels*, 150, 155.

¹⁰⁹ Swift, *Gulliver's Travels*, 148.

¹¹⁰ Swift, *Gulliver's Travels*, 152.

¹¹¹ Swift, *Gulliver's Travels*, 152.

¹¹² Swift, *Gulliver's Travels*, 155.

¹¹³ Swift, *Gulliver's Travels*, 148-149.

¹¹⁴ Swift, *Gulliver's Travels*, 150; "Hautboys" (oboes) n 11.

¹¹⁵ Swift, *Gulliver's Travels*, 153.

Second, the larger island, Balnibarbi, is governed by Laputa – it is literally located beneath and overshadowed by it.¹¹⁶ Balnibarbi exhibits a wasteland of ruined crops, squalid living conditions and dilapidated, ‘ill-contrived’ buildings.¹¹⁷ Its Grand Academy of Projectors, located in its metropolis Lagado, follows Laputan science and technology. Housed in decrepit buildings, the Academy is the record of a failure. Its impractical and destructive experiments, technology and projects are juxtaposed with the practical and beneficial outputs of Swift’s foil to the absurdity – Lord Munodi, Laputa’s former Governor.¹¹⁸ Predictably, in typical Swiftian moves, the ill-conceived Laputan mores brand the sensible Munodi with ‘low contemptible Understanding’,¹¹⁹ notwithstanding his voice of reason, his ‘Magnificent, Regular and Polite’ comportment and his estates exemplifying the ‘best Rules of Ancient Architecture’.¹²⁰ By contrast, Gulliver self-identifies as a ‘great Admirer of Projects’ and as an actual Projector in his ‘younger Days’.¹²¹ Yet the Projectors’ technology is demonstrated to be useless and, similarly, Gulliver’s understanding is distorted or deficient. Visiting the Academy, he reports on absurd experiments, including an eight-year ‘Project for extracting Sunbeams out of Cucumbers’,¹²² an experiment for creating dyed silk from spiders’ webs tintured by consumption of ‘beautifully coloured’ flies¹²³ and a project anticipating computers by a Professor in ‘language modelling’,¹²⁴ who constructs an extremely labour-intensive ‘Engine’. The latter project produces only meagre outputs by means of its ‘Iron Handle[s]’ and enslaved pupil-readers and ‘Scribes’, instead of its anticipated compositions of ‘Books in Philosophy, Poetry, Politicks, Law, Mathematics and Theology, without the least assistance from Genius or Study’.¹²⁵ This roll-call of absurd, impractical, ineffective experiments concludes with Gulliver characterising an excrement project for forecasting political conspiracies as bearing ‘great Acuteness’¹²⁶ – Benedict summarises Swift’s target here as the ‘absurdity of mankind’s pride’.¹²⁷

Third, the little island of sorcerers and magicians,¹²⁸ Glubbudubdrib, with its ghost-summoning Governor and his magic technology, facilitates Gulliver’s comparison of the ancients and moderns. As a ‘natural extension of a satire on the intellectual pretensions of eighteenth century scientists’¹²⁹ and on ‘Wit and Learning’,¹³⁰ Gulliver requests that the Governor summon the spirits not only of ancient heroes and classic authors, but of corrupt modern commentators of classical texts and non-virtuous ancestors of modern aristocrats. A ‘sextumvirate’ of the most virtuous historical political figures appears, including More as the only ‘Modern’ – ‘Junius, Socrates, Epaminodas, Cato the younger, Sir Thomas More and [Brutus]’.¹³¹ This highlights Swift’s respect for More as the ‘ideal English politician’ – ‘Swift is closest to More’s Utopian perspective in his pragmatism and social criticism’.¹³² Equally, the great philosopher Aristotle is summoned and reconsiders his now-exploded theories, as highlights Swift’s critique of the new sciences. For Aristotle predicts that the new sciences would be ‘equally exploded’ on the basis that ‘new systems of Nature were but new Fashions’, referencing doctrines of ‘Attraction’ (meaning Newtonian-inspired gravity) together with Gassendi’s and Descartes’s doctrines.¹³³ Here, Swift upholds what he considers to be Aristotle’s acute perception and rejects the restricted vision of flawed scientists whose ‘excessive pride’ impedes their recognition and admission of errors, and whose hubris blinds their ‘historical sense’.¹³⁴

Fourth and finally, Luggnagg’s island, with its miserable race of immortals – the Struldbruggs – is a final illustration of the limits of the human intellect and progress. To demonstrate the delusion that intellect can control nature, Swift focusses on the so-called immortals’ decay and their increasingly quarrelsome, discontented and senile existence. Equally, Gulliver’s self-delusion and intellectual vanity are evidenced in his encounter with the Struldbruggs. He careers from ‘inexpressible delight’ at immortality’s prospect,¹³⁵ where he envisions the potential discoveries that immortality could experience (‘the Longitude,

¹¹⁶ Swift, *Gulliver’s Travels*, 163.

¹¹⁷ Swift, *Gulliver’s Travels*, 164.

¹¹⁸ Swift, *Gulliver’s Travels*, 164.

¹¹⁹ Swift, *Gulliver’s Travels*, 164.

¹²⁰ Swift, *Gulliver’s Travels*, 164–165.

¹²¹ Swift, *Gulliver’s Travels*, 167.

¹²² Swift, *Gulliver’s Travels*, 167–168.

¹²³ Swift, *Gulliver’s Travels*, 169.

¹²⁴ Falk, “Artificial Stupidity,” 44.

¹²⁵ Swift, *Gulliver’s Travels*, 171 (original).

¹²⁶ Swift, *Gulliver’s Travels*, 179.

¹²⁷ Benedict, “A Voyage,” 155.

¹²⁸ Swift, *Gulliver’s Travels*, 180.

¹²⁹ Sutherland, “A Reconsideration,” 47.

¹³⁰ Swift, *Gulliver’s Travels*, 183.

¹³¹ Swift, *Gulliver’s Travels*, 182–183.

¹³² Brink, “Utopians to the Yahoos,” 63, 66.

¹³³ Swift, *Gulliver’s Travels*, 184; Sutherland, “A Reconsideration,” 47–48.

¹³⁴ Goodwin, “Volatile Spirits,” 70–71.

¹³⁵ Swift, *Gulliver’s Travels*, 192.

the perpetual Motions, the Universal Medicine'),¹³⁶ to deep disillusion at immortality's ominous reality. For the 'follies and infirmities' of this long-lived race are only magnified by the 'dreadful prospect of never dying';¹³⁷ the Struldbruggs ultimately lose their sense and capacity and are accounted legally dead. Here, technology is impotent.

Yet Swift's construction and conception of Gulliver's third voyage has been variably understood. Commentators have critiqued it as 'episodic and miscellaneous',¹³⁸ with 'overly topical, ill-organised, and intemperate' literary credentials.¹³⁹ Alternatively, commentators have recognised its cohesion as each episode's thematic connection 'represents an error-filled aspect of Modern learning'¹⁴⁰ that contributes to the 'over-all fictional structure'.¹⁴¹ This article adopts the latter position as the most apposite reading of the third voyage's satire of intellectual pride inflating law and technology.

In terms of law, the third voyage overall is technology focused but each island presents as an absolutist legal system. For instance, Laputa is characterised by its tunnel vision: the Laputan King is ostensibly disinterested in the 'Laws, Government, History, Religion, or Manners of the Countries' that Gulliver has visited; and the Laputans display 'Faith in Judicial Astrology'.¹⁴² Government by literal top-down force is illustrated by the threat of the flying island's typical dual response to Balnibarbian rebellions – the island hovers and blots out sunlight and rainfall, then descends and literally crushes the city beneath with its adamant base.¹⁴³ Yet the proactive actions of Balnibarbi's second city, Lindalino, countermand this in staging a rebellion and thwarting Laputa's tyrannous force. The message is that absolutist rule and technology's violence cannot guarantee successful dominion – good governance and legal decency are required.

Finally, in terms of technology, Swift was clearly not an 'uninformed critic'.¹⁴⁴ The contemporary accuracy of his third voyage's scientific examples' has been recognised and extensively researched.¹⁴⁵ Balnibarbi's Grand Academy of Projectors has been identified with, variously, London's Royal Society, Dublin's Philosophical Society, Paris's Royal Observatory, and the Netherlands' University of Leiden; and the Projectors' fantastic experiments recall, but distort, actual Royal Society experiments.¹⁴⁶ Swift identified experimental science's modernism with the Royal Society and rejected its intellectual pride and 'intellectual autonomy divorced from any dependence on religion or humanistic tradition'.¹⁴⁷ For he despaired that frontier technologies would trump the Ancients' wisdom and values, and scientists would 'overrate their inventions, downplay nature's complexity, and devalue the intelligence and autonomy of individuals'.¹⁴⁸

Hence, this concern with, and promotion of, a general sense of intellectual humility features in each select utopia, whether in its foreground or background. Next, this article considers the relation to intellectual humility of law and technology, particularly given the developments of frontier technologies.

3. Frontier Technologies and Intellectual Humility

Frontier technologies are described by the World Intellectual Property Organisation (WIPO) as emerging or operating 'at the intersection of radical scientific breakthrough and real-world implementation'.¹⁴⁹ They refer to diverse technologies that, at particular historic moments, are in the vanguard of scientific research and effectively advance developments in human interactions and communications. Today, for instance, they include artificial intelligence, big data, nanotechnology, bioprinting and quantum computing. Yet, as frontier technologies continue to evolve, so do the theorisations of their anticipated or appropriate methods of operation. Given concerns with the uncontrolled direction, trajectory or explosion of frontier technologies, suggestions have emerged for 'intellectual humility' to accompany their operation.

¹³⁶ Swift, *Gulliver's Travels*, 194.

¹³⁷ Swift, *Gulliver's Travels*, 196.

¹³⁸ Higgins, "Why Jonathan Swift."

¹³⁹ Frietzsch, "Impact of Applied Science," 39.

¹⁴⁰ Benedict, "A Voyage," 162.

¹⁴¹ Sutherland, "A Reconsideration," 45.

¹⁴² Swift, *Gulliver's Travels*, 155, 152.

¹⁴³ Swift, *Gulliver's Travels*, 159–160.

¹⁴⁴ Goodwin, "Volatile Spirits," 68.

¹⁴⁵ Nicholson and Mohler, "Scientific Background"; Nicholson and Mohler, "Swift's 'Flying Island'"; Knowles, "Gulliver's Travels," 103ff.

¹⁴⁶ Nicholson and Mohler, "Scientific Background"; Nicholson and Mohler, "Swift's 'Flying Island'."

¹⁴⁷ Knowles, "Gulliver's Travels," 100.

¹⁴⁸ Falk, "Artificial Stupidity," 45.

¹⁴⁹ WIPO, "Frontier Technologies."

Recent news media and literature have proposed an ‘emerging relationship between artificial intelligence, technology, and intellectual humility’, whereby artificial intelligence (AI) tools are not a replacement for human intelligence or reasoning, but a complement characterised by ‘engagement, discernment, and oversight’, and by being ‘inclusive and considerate of the full tapestry of human experience’.¹⁵⁰ AI itself has been characterised both as a field of scientific research and a highly successful ‘collection of technologies’ to ‘*simulate* human intelligence’.¹⁵¹ Yet, coincidentally, a regulatory reflexive turn for ‘grappling with the risks and opportunities’ of AI¹⁵² has been recognised – transformative and emerging technologies may ‘contribute to human flourishing’, but they may equally trigger ‘serious ethical questions’ concerning freedom, dignity and human existence.¹⁵³ Hence, as generative AI emerges and the dizzying potential application of AI ‘demands careful moral reflection and political deliberation’,¹⁵⁴ a ‘holistic and humanistic approach’¹⁵⁵ has been counselled that presumably includes considerations of intellectual humility.

Admittedly, intellectual humility lacks consensus as a concept. It has diverse ethical and epistemic antecedents, but its appearance in recent news media and literature focuses on its general definition, not its specific theorisations.¹⁵⁶ Recent general definitions include an approach that measures one’s sceptical mind, recognises one’s fallibility and rejects one’s over-confidence. At its core, ‘intellectual humility’ has been described as owning one’s limitations, or as being alive to the possibility that one’s judgment may be wrong.¹⁵⁷ It has otherwise been characterised as key to the open-mindedness¹⁵⁸ that bases the exploratory drive for appropriate knowledge for community flourishing, and that grounds the scientific quest for information, not misinformation. Hence, to distil this, intellectual humility can be identified as one of scientific progress’s key ingredients.¹⁵⁹

So, what are the applications of this intellectual humility for law and technology? Speaking generally, potential applications may include a recognition that one’s legal or technological judgment, reasoning or understanding could be fallible. There is a critical future question concerning who should exhibit this intellectual humility – humans or computers. Envisaging potentially neuromorphic frontier technologies suggests a new frontier of intellectual humility. But turning to consider the select utopias, the next question concerns how this general sense of intellectual humility is implicated in their appraisals of law and technology.

4. Interplay of Law, Technology and Intellectual Humility

Each of the select utopias – commencing with More’s literary sensation, moving to Bacon’s technocratic utopian dream and concluding with Swift’s dystopian confabulations – engages differently with law and technology, and with intellectual humility. In their different approaches to the significance of intellectual humility, the texts illustrate the ‘modern predicament’ of vacillating between ‘innermost hopes and ... outward accomplishments’ or, put differently, that ‘[s]cientific prophet has since alternated with moralist’.¹⁶⁰ Swift’s premises in *Gulliver’s Travels*’ third voyage resonate with More’s virtues and ethics in *Utopia* and ‘counter-attack’ the experimental science of Bacon’s *New Atlantis*.¹⁶¹ The different approaches within, or readings of, the texts reveal diverse ethical limits to science and technology, including More’s religious humanism (whether Christian or Erasmian), Bacon’s use of angelic iconography and Swift’s adoption of the Ancients’ learning and virtues. Hence, the select utopias offer – or can be the vehicles for – diverse perspectives on emergent, transformative frontier technologies and intellectual humility.

Effectively, the select utopias are complex thought experiments: they problematise technology’s relation to humanity and nature; they support pathways of ‘good’ judgment and values; and they reinforce intellectual humility by recognising how scepticism and doubt contribute to judgment’s critical capacities. Relevantly, they recognise the importance of law that aligns with justice – More underlined the culling of obscure or superfluous laws, the reduction of overt legal institutions and the dispensing with lawyers. Yet the select utopias were written in times of societal innovation and historical inflection or change-points, and do not construct untrammelled visions of necessarily good ‘eutopia’. Instead, they pique questions – for instance,

¹⁵⁰ JSTOR Editors, “What if AI Operated.” Interview/Podcast paragraph [5], Heng Li Response.

¹⁵¹ Mills, “President’s Council,” 102 (original).

¹⁵² Mills, “President’s Council,” 100.

¹⁵³ Mills, “President’s Council,” 102.

¹⁵⁴ Mills, “President’s Council,” 103.

¹⁵⁵ Mills, “President’s Council,” 102, 105.

¹⁵⁶ JSTOR Editors, “What if AI Operated.”

¹⁵⁷ Carpenter, “9 Ways.”

¹⁵⁸ Dickson, “Intellectual Humility.”

¹⁵⁹ Dickson, “Intellectual Humility.”

¹⁶⁰ Frietzsch, “Impact of Applied Science,” 41.

¹⁶¹ Frietzsch, “Impact of Applied Science,” 41.

will an ‘inexorable slide from Eldorado to Helldorado’ occur?¹⁶² Or does an abundance of technology improve society? While each text ultimately represents a quest for flourishing and prosperity, its interpretation is complicated by wordplay, irony or satire. Equally, each text’s interpretation can be affected by diverse agendas, motivations and historical contexts. So, what are the select utopias’ messages for law and technology’s interplay?

More’s *Utopia* combines an appreciation of effective law with practical technology, where intellectual humility includes eradicating pride. Frontier technologies are not More’s focus, but ethical limits are, as signalled by the interfusion of religious humanism (whether Christian or Erasmian) with science. Commentators observe that *Utopia* typifies central themes in More’s oeuvre – in particular, equality and ‘abhorrence of pride’.¹⁶³ Frontier technologies are integrated within Utopia’s institutions of communal living and common property – this commonality bridles pride. For the fictional narrator Hythloday, common property is the ‘single most important institution for regulating pride, forestalling social evil, and fostering the common good’.¹⁶⁴ For the author More, pride and pageantry generate the world’s sin and foster inequality;¹⁶⁵ humility derives particularly from religious humanism, and supports equality. To avoid tyranny, political power is held in common, discussed in public assemblies, and designed for the public welfare;¹⁶⁶ for More, pride is the ‘monster, the prince and parent of all plagues’ and so is ignored, as are sartorial ‘splendour’ and ‘imagined nobility’.¹⁶⁷ *Utopia*’s obscurities, mixed messages and wordplay not only offered More a degree of protection from the real perils of publication (given the text’s trenchant and dangerous critique of English institutions)¹⁶⁸ but signalled to the contemporary reader the importance of prudence in judgment – that is, one should not be over-confident in appraising the world. Moreover, More’s Utopians can be ‘untrustworthy’, as recognised by the law against, and punishment for, impure action¹⁶⁹ – the Utopians are ‘not significantly better by nature; they are better because their social institutions are better’.¹⁷⁰

Bacon’s *New Atlantis* is loosely modelled on More’s *Utopia* – it is a technocratic ‘instructive fable’ concerning the boundary between human and divine wisdom.¹⁷¹ Yet, unlike *Utopia*, *New Atlantis* notably retains the institution of private property. A usual reading is that *New Atlantis* is ‘irradiate[d]’ by an ‘unguarded optimism’ for contemporary frontier technologies,¹⁷² while nevertheless presenting obscurities and mixed messages. Characterised as a materialist *par excellence*, Bacon separates his temple of science from religion.¹⁷³ He showcases the Bensalemites’ generosity, enlightenment, dignity, splendour, piety and public spirit, representing the ideal or desired qualities in a Baconian statesman. Coincidentally, the usual reading suggests that Bacon offers a ‘belief in the over-all beneficence of scientifically produced power’,¹⁷⁴ and an ‘unbounded faith in human rationality, human goodness and in the beneficence of scientific power’¹⁷⁵ – it is, essentially, a power for progress. Yet alternate readings exist that express caution or uneasiness with Bensalem’s secret laws, with Salomon’s House’s maximal control,¹⁷⁶ with ‘Bacon’s failure’ to analyse how to safeguard society from the ‘anti-social use of power’¹⁷⁷ and with the iconography of angels and light, where Salomon’s House is the kingdom’s ultimate ‘lanthorn’.¹⁷⁸ For instance, for Weinberger, the inhabitants of the sole identified Bensalemite city, Renfusa (meaning ‘sheep-natured’), appear to be ‘orderliness lobotomised’ – they are ‘denatured’ with ‘super-flat souls’.¹⁷⁹ Weinberger articulates concerns too with the ‘lawless use of technological power’ and the ‘limits of the conquest of nature’ – Bensalem’s laws of secrecy and the absence of safeguards of freedom offer a ‘decidedly mixed Baconian message’.¹⁸⁰ Similarly, for Liebeskind, the sailors’ identification of Bensalem with a ‘land of angels’, and the iconography of ‘angelic’ qualities and cherubim, have darker implications. Liebeskind articulates concerns that Bensalem’s quest for knowledge and power, together with science and technology, is ‘totally without internal direction’.¹⁸¹ As a ‘terrible

¹⁶² Martiny, “Helldorado,” 388.

¹⁶³ Paul, “Beyond Utopia,” 355.

¹⁶⁴ White, “Pride and the Public Good,” 343.

¹⁶⁵ Paul, “Nothing is Private,” 93–95.

¹⁶⁶ Paul, “Nothing is Private,” 97–98.

¹⁶⁷ More, *Utopia*, 68, 77, 85, 133.

¹⁶⁸ Caudle, “Sir Thomas More’s *Utopia*,” 168.

¹⁶⁹ Sargent, “A Note,” 90.

¹⁷⁰ Sargent, “A Note,” 89.

¹⁷¹ Liebeskind, “If Scientists Were Angels,” 74.

¹⁷² Adams, “Social Responsibilities of Science,” 391.

¹⁷³ Adams, “Social Responsibilities of Science,” 391–392.

¹⁷⁴ Adams, “Social Responsibilities of Science,” 391.

¹⁷⁵ Adams, “Social Responsibilities of Science,” 390.

¹⁷⁶ Adams, “Social Responsibilities of Science,” 390–391.

¹⁷⁷ Adams, “Social Responsibilities of Science,” 393.

¹⁷⁸ Bacon, *New Atlantis*, 84.

¹⁷⁹ Weinberger, “On the Miracles,” 107.

¹⁸⁰ Weinberger, “On the Miracles,” 110.

¹⁸¹ Liebeskind, “If Scientists Were Angels,” 88.

revealing image' of 'awesome and terrifying' technological power, Bensalem is not a model for imitation.¹⁸² Instead, intellectual humility and prudence in judgment is a pathway to recognising the distinction between human and divine power.

Finally, Swift's third voyage of *Gulliver's Travels* offers a savage parody of law and technology – it excoriates 'human pride'¹⁸³ and lambasts the 'new science'. Shortsightedness and excessive pride characterise the new science and go hand in hand in Swift's depiction of the 'scientist as poor practical reasoner' – if flawed scientists are 'invested with cultural authority or political power', the message is that epistemic failures can have devastating social repercussions.¹⁸⁴ Like More, Swift's sense of humility is strongly coloured by his Christian belief – his concern is with derailing human pride and vice.¹⁸⁵ As a 'well-grounded, sceptical and pessimistic churchman, with his philosophical roots well in the seventeenth century', Swift is no advocate for what he perceives to be eighteenth-century 'pseudo-rational optimism'.¹⁸⁶ He presents the science that he deprecates as bearing no sufficient practicality, nor morality or ethics. He scathingly attacks abstract science and frontier technologies for grounding the follies of London's Royal Society natural philosophers who were identified as following Bacon's scientific method and experimental science precepts. To underline, Swift is not rejecting scientific knowledge *per se*¹⁸⁷ – he is expressing a backward-looking longing for the Ancients' wisdom and virtues (including intellectual humility and prudence in judgment) to underpin science.

5. Conclusion

In light of the select utopias' discourse, where to from here? Frontier technologies may present the extremes of unalloyed good or apocalyptic consequences, yet the 'powers of frontier technologies do not offer unreserved comfort, never mind visions of utopia'.¹⁸⁸ The select utopias of More, Bacon and Swift suggest that intellectual humility can assist the operation of law and technology. Notably, More, Bacon and Swift were not ivory-tower writers – each was a well-informed, multi-disciplinary individual with a public presence that was variously political, legal or religious. Their select utopias offer examples of thought-provoking correctives to the notion that law and technology is necessarily good and risk-free, and reminders that technological visions can be deficient. For frontier technologies may be propelled by agendas that lack balance or judgment – they may intend to promote unalloyed good but may ignore risks and dangers.

Recent calls for intellectual humility to accompany the growth of law and technology have antecedents in the select utopias considered in this article – each text considers what comprises human judgment. More and Swift clearly abhor excessive pride and uphold social virtues and prudence in judgment. Bacon's temple of science lacks overt articulation of the 'guiding principles of the technological project' but is grounded in a landscape of Christian values¹⁸⁹ and, again, prudence in judgment. Ostensibly, what *New Atlantis* may present as utopia is repackaged and distorted in *Gulliver's Travels* third voyage as dystopia¹⁹⁰ – for Swift, the excessive 'spirit of experimentation' is 'contrary to a sense of decency and humanity' and so undermines the 'true sense of community'. Yet the problems sketched in *Gulliver's Travels* may not be anomalies but may be 'typical of ... modern progress'.¹⁹¹ In addition, Bacon's temple of science with its dizzying frontier technologies may present warnings of the potential danger of a project lacking limits and not heeding intellectual humility.

For all the variable interpretations of the select utopias canvassed here, perhaps More's *Utopia* best summarises an approach that encapsulates the interplay of law and technologies with intellectual humility.¹⁹² At *Utopia*'s conclusion, character More admits, via an aside to the reader, that he retains objections to Utopian life but, to accommodate, extends his hand to Hythloday in a 'gesture of friendship and a prospective note'.¹⁹³ This instances an openness to understanding and an accommodation of frontier perspectives. Moreover, not only does it instance an iteration of intellectual humility by one who may not be a visionary, it is a gesture to future hope.

¹⁸² Liebeskind, "If Scientists Were Angels," 88-89.

¹⁸³ Kearney, "Swift's Critique," 104.

¹⁸⁴ Goodwin, "Volatile Spirits," 70-71.

¹⁸⁵ Kearney, "Swift's Critique," 103-104.

¹⁸⁶ Sutherland, "A Reconsideration," 50.

¹⁸⁷ Kearney, "Swift's Critique," 104.

¹⁸⁸ Niezen, #Human Rights, 2.

¹⁸⁹ Weinberger, "On the Miracles," 110.

¹⁹⁰ Robertson, Political Philosophy, 4.

¹⁹¹ Robertson, Political Philosophy, 4.

¹⁹² More, *Utopia*, 134.

¹⁹³ Harp, "Afterward," 159-160.

Acknowledgements

My sincere thanks to the Narratives, Frontier Technologies, and the Law Conference organisers, to the *Law, Technology and Humans* team, and to the peer reviewers for their valuable comments.

Bibliography

- Adams, Robert P. "The Social Responsibilities of Science in Utopia, New Atlantis and After." *Journal of the History of Ideas* 10, no 3 (1949): 374–398.
- Bacon, Francis. *New Atlantis and The Great Instauration*. Edited by Jerry Weinberger. Chichester: John Wiley & Sons, 2017.
- Benedict, Barbara M. "A Voyage to Laputa, Balnibarbi, Luggnagg, &c." In *The Cambridge Companion to Gulliver's Travels*, edited by Daniel Cook and Nicholas Seager, 150–163. Cambridge: Cambridge University Press, 2023.
- Brink, J.R. "From the Utopians to the Yahoos: Thomas More and Jonathan Swift." *The Journal of the Rutgers University Libraries* 42, no 2 (1980): 59–66.
- Carpenter, Rob. "9 Ways to Create an 'Intellectually Humble' Classroom." *JSTOR*, April 9, 2024, <https://daily.jstor.org/9-ways-to-create-an-intellectually-humble-classroom/>.
- Caudle, Mildred Witt. "Sir Thomas More's Utopia: Origins and Purposes." *Social Science* 45, no 3 (1970): 163–169.
- Cooper, Davina. *Everyday Utopias: The Conceptual Life of Promising Spaces*. Durham, NC: Duke University Press, 2014.
- Davis, J.C. "More, Morton, and the Politics of Accommodation." *Journal of British Studies* 9, no 2 (1970): 27–40.
- Davis, J.C. "Thomas More's *Utopia*: Sources, Legacy and Interpretation. In *The Cambridge Companion to Utopian Literature*, edited by Gregory Claeys, 28–50. Cambridge: Cambridge University Press, 2010.
- Dickson, Michael. "Intellectual Humility is a Key Ingredient for Scientific Progress." *The Conversation*, December 7, 2023, <https://theconversation.com/intellectual-humility-is-a-key-ingredient-for-scientific-progress-211410>.
- Douglas, Laurence, Austin Sarat and Martha Merrill Umphrey. "Law and the Utopian Imagination: An Introduction." In *Law and the Utopian Imagination*, edited by Austin Sarat, Laurence Douglas and Martha Merrill Umphrey, 1–22. Stanford, CA: Stanford University Press, 2014.
- Eagleton, Terry. "Utopias, Past and Present: Why Thomas More Remains Astonishingly Radical." *The Guardian*, October 16, 2015, <https://www.theguardian.com/books/2015/oct/16/utopias-past-present-thomas-more-terry-eagleton>.
- Falk, Michael. "Artificial Stupidity." *Interdisciplinary Science Reviews* 46, nos 1–2 (2021): 36–52.
- Frietsche, Arthur. "The Impact of Applied Science Upon the Utopian Ideal." *Brigham Young University Studies* 3, nos 3–4 (1961): 35–42.
- Goodwin, William. "Volatile Spirits: Scientists and Society in Gulliver's Third Voyage." In *Jonathan Swift and Philosophy*, edited by Janelle Potzsch, 67–83. Lanham, MD: Lexington Books, 2017.
- Hale, Kimberly Hurd. *Francis Bacon's New Atlantis in the Foundation of Modern Political Thought*. Lanham, MD: Rowman & Littlefield, 2013.
- Harp, Jerry. "Afterword." In *Utopia* by Thomas More, translated by Clarence H Miller, 141–160. New Haven, CT: Yale University Press, 2014.
- Higgins, Ian. "Why Jonathan Swift Wanted to 'Vex the World' with Gulliver's Travels." *The Guardian*, May 9, 2018, <https://theconversation.com/why-jonathan-swift-wanted-to-vex-the-world-with-gullivers-travels-94972>.
- Houghton, Ruth and Aoife O'Donoghue. "Utopia as 'No-Place': Utopias, Colonialism and International Law." *Law Text Culture* 27 (2023): 204–227.
- JSTOR Editors. "What if AI Operated with Intellectual Humility?" *JSTOR*, January 24, 2024, <https://daily.jstor.org/what-if-ai-operated-with-intellectual-humility/>.
- Kadar, Zoltan and Janos I Toth. "The Critique of Technology in 20th Century Philosophy and Dystopias." *Procedia* 71 (2013): 53–60. <https://doi.org/10.1016/j.sbspro.2013.01.008>.
- Kearney, Dutton B. "Swift's Critique of Philosophical Materialism." In *Jonathan Swift and Philosophy*, edited by Janelle Potzsch, 103–129. Lanham, MD: Lexington Books, 2017.
- Knowles, Ronald. *Gulliver's Travels: The Politics of Satire*. New York: Twayne, 1996.
- Lancaster, Ashlie. "Instantiating Critical Utopia." *Utopian Studies* 11, no 1 (2000): 109–119.
- Liebeskind, Louise. "If Scientists Were Angels." *The New Atlantis* 74 (2023): 72–89.
- Lucas, Peter. "Bacon's *New Atlantis* and the Fictional Origins of Organised Science." *Open Cultural Studies* 2 (2018): 114–121.
- Martiny, Erik. "Helldorado." *The Cambridge Quarterly* 40, no 4 (2011): 384–388.
- McKnight, Stephen A. "Reconsideration: Francis Bacon's God: The Religious Foundations of the 'New Atlantis'." *New Atlantis* 10 (2005): 73–100.
- Miller, Clarence H. "Introduction." In *Utopia*, by Thomas More, translated by Clarence H Miller, vii–xxiii. New Haven, CT: Yale University Press, 2014.

- Mills, M Anthony. "A President's Council on Artificial Intelligence." *New Atlantis* 75 (2024): 100–107.
- More, Thomas. *Utopia*. Translated by Clarence H Miller. New Haven, CT: Yale University Press, 2014.
- Moylan, Tom. *Demand the Impossible: Science Fiction and the Utopian Imagination*. Edited by Raffaella Baccolini. Bern: Peter Lang, 2014.
- Moylan, Tom. "Introduction to the Classics Edition." In *Demand the Impossible: Science Fiction and the Utopian Imagination*, edited by Raffaella Baccolini, ix–xxviii. Bern: Peter Lang, 2014.
- Moylan, Tom. "Transgressive, Totalizing, Transformative: Utopia's Utopian Surplus." *Utopian Studies* 29, no 3 (2018): 309–324.
- Nicholson, Marjorie and Nora M Mohler. "The Scientific Background of Swift's 'Voyage to Laputa'." *Annals of Science* 2 (1937): 299–334.
- Nicholson, Marjorie and Nora M Mohler. "Swift's 'Flying Island' in the 'Voyage to Laputa'." *Annals of Science* 2, no 4 (1937): 405–430.
- Niezen, Ronald. *#Human Rights: The Technologies and Politics of Justice Claims in Practice*. Stanford, CA: Stanford University Press, 2020.
- Noletto, Israel AC, and Sebastião Alves Teixeira Lopes. "Glossopoesis in Thomas More's Utopia: Beyond a Representation of Foreignness." *Semiotica* 230 (2019): 357–368.
- O'Har, George. "Technology and its Discontents." *Technology and Culture* 45, no 2 (2004): 479–485.
- Paul, Joanne. "'Nothing is Private Anywhere': Utopia in the Context of More's Thought." In *The Oxford Handbook of Thomas More's Utopia*, edited by Cathy Shrank and Phil Withington, 89–104. Oxford: Oxford University Press, 2023.
- Paul, Joanne. "Beyond Utopia: Thomas More as a Political Thinker." *History of European Ideas* 50, no 3 (2024): 353–369.
- Robertson, Lloyd W. *Political Philosophy in Gulliver's Travels: Shocked by The Just Society*. Basingstoke: Palgrave Macmillan, 2022.
- Rubin, Charles T. "The Ancients' Tech Anxiety." *The New Atlantis* 60 (2019): 80–86.
- Salzman, Paul. "Narrative Contexts for Bacon's New Atlantis." In *Francis Bacon's New Atlantis: New Interdisciplinary Essays*, edited by Jeff Wallace, John Whale and Bronwen Price, 28–47. Manchester: Manchester University Press, 2003.
- Samaan, Angele B. "Death and the Death-Penalty in More's Utopia and Some Utopian Novels." *Moreana* 23, no 90 (1986): 5–15.
- Sargent, Lyman Tower. "Five Hundred Years of Thomas More's Utopia and Utopianism." *Utopian Studies* 27, no 2 (2016): 184–192.
- Sargent, Lyman Tower. "A Note on the Other Side of Human Nature in the Utopian Novel." *Political Theory* 3, no 1 (1975): 88–97.
- Sargisson, Lucy. *Fool's Gold? Utopianism in the Twenty-First Century*. London: Palgrave Macmillan, 2012.
- Schultz, Karen. "Griffith the Utopian." In *The Many Hats of Sir Samuel Griffith*. Exhibition. Brisbane: Supreme Court Library Queensland, 2020. <https://www.sclqld.org.au/services/public-programs/exhibitions/the-many-hats-of-sir-samuel-griffith>.
- Schultz, Karen. "Schmitt's Roman Links in *The Buribunks*: Enriching the Satire." In *Carl Schmitt and The Buribunks: Technology, Law, Literature*, edited by Kieran Tranter and Edwin Bikundo, 254–278. London: Routledge, 2022.
- Schultz, Karen. "Schmitt's Satire in *The Buribunks*: Intertextual Links in Diary-writing's Dystopia." *Griffith Law Review* 28, no 2 (2019): 206–230. <https://doi.org/10.1080/10383441.2019.1672253>.
- Schultz, Karen. "Sir Samuel Griffith and Utopia: Characterising the Politician." In *Cultural Legal Studies of Science Fiction*, edited by Alex Green, Mitchell Travis and Kieran Tranter, 174–194. London: Routledge, 2024.
- Simon, Ed. "In Search of Thomas More's Utopia." *Tribune*, 13 October 2020, <https://tribunemag.co.uk/2020/10/in-search-of-thomas-mores-utopia>.
- Sutherland, John H. "A Reconsideration of Gulliver's Third Voyage." *Studies in Philology* 54, no 1 (1957): 45–52.
- Swift, Jonathan. *Gulliver's Travels*. Edited by Robert DeMaria Jr. Harmondsworth: Penguin, 2003.
- Tranter, Kieran. *Living in Technical Legality: Science Fiction and Law as Technology*. Edinburgh: Edinburgh University Press, 2018.
- Tranter, Kieran. "Terror in the Texts: Technology – Law – Future." *Law and Critique* 13 (2002): 75–99.
- Tranter, Kieran. "The Magnitudes of Law and Science Fiction." In *Cultural Legal Studies of Science Fiction*, edited by Alex Green, Mitchell Travis and Kieran Tranter, 17–41. London: Routledge, 2024.
- Travis, Mitchell and Kieran Tranter. "Interrogating Absence: The Lawyer in Science Fiction." *International Journal of the Legal Profession* 21, no 1 (2014): 23–37. <https://doi.org/10.1080/09695958.2014.946932>.
- Travis, Mitchell. "Dystopian Jurisprudence." In *Cultural Legal Studies of Science Fiction*, edited by Alex Green, Mitchell Travis and Kieran Tranter, 45–61. London: Routledge, 2024.
- van Klink, Bart. "The Rule of Law: Between Ideology and Utopia." In *Utopian Thinking in Law, Politics, Architecture and Technology: Hope in a Hopeless World*, edited by Bart van Klink, Marta Soniewicka and Leon van den Broeke, 38–58. Cheltenham: Edward Edgar, 2022.

- van Klink, Bart, Marta Soniewicka and Leon van den Broeke. "Introduction: A Return to Utopia." In *Utopian Thinking in Law, Politics, Architecture and Technology: Hope in a Hopeless World*, edited by Bart van Klink, Marta Soniewicka and Leon van den Broeke, 2–18. Cheltenham: Edward Edgar, 2022.
- Vieira, Fatima. "The Concept of Utopia." In *The Cambridge Companion to Utopian Literature*, edited by Gregory Claeys, 3–27. Cambridge: Cambridge University Press, 2010.
- Weinberger, Jerry. "On the Miracles in Bacon's New Atlantis." In *Francis Bacon's New Atlantis: New Interdisciplinary Essays*, edited by Jeff Wallace, John Whale and Bronwen Price, 106–128. Manchester: Manchester University Press, 2003.
- Weinberger, Jerry. "Introduction to the Second Edition." In *New Atlantis and The Great Instauration*, edited by Francis Bacon and Jerry Weinberger, xv–xxi. Chichester: John Wiley & Sons, 2017.
- Weinberger, Jerry. "On Bacon's New Atlantis." In *New Atlantis and The Great Instauration*, edited by Francis Bacon and Jerry Weinberger, 133–157. Chichester: John Wiley & Sons, 2017.
- White, Thomas I. "Pride and the Public Good: Thomas More's Use of Plato in Utopia." *Journal of the History of Philosophy* 20, no 4 (1982): 329–354.
- WIPO. "Frontier Technologies." https://www.wipo.int/export/sites/www/about-ip/en/frontier_technologies/pdf/frontier-tech-6th-factsheet.pdf.
- WIPO. "Intellectual Property and Frontier Technologies." https://www.wipo.int/about-ip/en/frontier_technologies.