Epilogue
Judgments atop hierarchies: Testing the language, logic, propositions, and conceptual elements of the elite theory

This book's core message has been advanced through diverse lines of reasoning and reiterated in multiple forms. It is essentially simple: the judgments made on whether risk origination, value creation or their transfer are prioritized at the elite business model level determine economic growth. These rest on the use of power, the meta-contest resolution mechanism that usurps institutional processes. Power is converted into applied coordination capacity to serve value appropriation. To reduce friction and enhance the functioning of 'the power multiplier', non-elite agency is institutionalized through laws, regulations, norms, and policies that are consistent with elite business model preferences. Development hinges on high elite quality; intra-elite contest winners with business models that are focused on the production rather than the transfer of value.

If elites were to vanish overnight and be replaced by perfectly equitable rules, the end of the elite denial fallacy ('elites don't exist') would also throw light on and validate the elite populist fallacy ('elites are bad'). Elite judgment is sorely missed the moment that institutions emasculate the power of value creators. One concrete example of administrative excess is that: "The number of physicians in the United States grew 150 percent between 1975 and 2010, roughly in keeping with population growth, while the number of healthcare administrators increased 3,200 percent for the same time period" (Cantlupe, 2017). The ETED claims that such a state is deliberate, as is set out in Proposition 12: 'Elite agency is the principal microfoundation of institutional change' (Section 3.1.1). As this process happens, instead of being the servant of intra-elite contests (that also support non-elite interests), it is not unusual for the institution itself to become the elite business model and for its beneficiaries to profit from value transfers. Value creation is eroded in China's *guanliaozhuyi* "bureaucratism", denounced by the CPC "as an intrinsic ailment of bureaucracy" and "the anti-bureaucratic ghost [that] dwells in the machinery of China's bureaucratic state" (Ding & Thompson-Brusstar, 2021, p. 116); in Max Weber's "iron cage", where "order is now bound to the technical and economic conditions of machine production which to-day determine the lives of all the individuals who are born into this mechanism" (1905/1930, p. 181; see also DiMaggio & Powell, 1983); in Schumpeter's administrative stationary state, where socialism and capitalism are indistinguishable and the "mechanization of progress" means its "cessation" as every individual—leaders included—become "just another office worker" (1942/2000, p. 131–133); and in George Ritzer's "McDonaldization of Society", with "the homogenization of American culture and life, streamlined along a set of rational, efficient, and impersonal principles" (1983, p. 371).

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Critically, first-order value creation and risk origination is linked to elite judgment; without it, coordination capacity and 'the extraordinary lever' pass into the inflexible custody of one or the other unaccountable administrative structures of the managerial, technical, and creative class, leading to the real prospect of stagnation.

While it would be excessive to argue that elite business models must be above the rule of law for human development to happen, or, more precisely, that they must make their own rules to overcome rivals, hierarchies are found "everywhere" (Bejan, 2020) and this might be precisely why evolution in the social realm requires them. Coordination capacity scales through rules at the bottom and judgment at the top. The deinstitutionalization of society is as counterproductive as the full institutionalization of elite agency. The latter manifests itself in the destructive 'missing elite system' problem (see the case of Europe, and the world as a whole in relation to the AI tragedy of the commons, Sections 7.3.4 and 7.3.5). Elite judgment drives progress. In contrast to Stoller's (2024b) claim—in the aftermath of non-elite violence against elites—that "elite disdain for the rule of law is leading to a society that is spinning out of control", the elite theory's position is that elites are never checked by institutions but primarily balance—and are balanced by—their peers in intra-elite contests (employing institutions for that purpose is the most efficient way of achieving this in terms of transaction costs). This establishes a seminal part of this work within the microfoundations of institutional change literature (see Chapter 4, Sections 5.1, 3.1.1).

At times, and notably in the context of intra-elite contests, elites bank on alliances with non-elites. While non-elite discontent is real, it results from elite judgments for undue value transfers that are contrary to development. Hence, the toolbox developed in this inquiry—whether the five firm valuation frameworks for capital allocation (Section 5.3.2) or the frameworks derived from the theory's programmatic philosophy (Figure 8.6)—is aimed at the elite system. The realist inference—'all elite agency creates and transfers value' (Figure A5.4a)—permeates the prescriptive aspects of this book and attempts to address a distressing contradiction in the human condition: economic development relies on judgments about extraction across socio-economic relationships.

To explain this basic socio-economic reality for the purpose of economic development, the elite theory seeks anchor in a speculative philosophy and its first principles, starting with those of life (Figure 8.6), that reference the natural order. In consequence, the arguments evolve in line with the imperative to creatively oppose entropy and disorder at a granular level—through the elite business models in every nook and cranny of the political economy. Elite agency is likened to Schrödinger's hierarchically higher entities, "continually sucking orderliness from its environment" (1944/2013, p. 73). Concurrently, and here lies a contradiction, entities exist in the universe precisely because of the value exchange relationships that they have with others (in strategic management terminology these 'others' are called stakeholders). The incongruity further deepens when considering AI philosopher Joshua Bach's perspective on relationships where "sentience is the ability of a system to make sense of its relation-

ship to the world" (Leventov, 2023). Sensemaking in sentient systems is overwhelmed by this particularism, the double standard in social life—what one applies to oneself cannot apply to the stakeholder on whom one relies on. Nothing is possible without some form of extraction. To then understand how all of this functions and leads to progress requires multi-disciplinary engagement. For example, Williamson proposes "selectively combining law, economics, and organization to study the governance of contractual relations from a transaction cost economizing perspective" (2010, p. 687). This is benchmarked against the more fundamental 'value is created of transferred' (ontological) assumption of this work's pragmatic philosophy.

The empirical and operational key to elucidate socio-economic relationships is how business models monetize the value they create with the bargaining power they possess. The types of contractual relations that permit the appropriation of value from stakeholders are the mark of their evolutionary fitness—and reflected in financial statements. Value is to society what energy is to life. In this work, value has been defined as being everything that humans determine is worth appropriating (see Menger, 1871/2007 for its subjective nature, and Jevons, 1871 for its association with scarcity; Section 2.2.2). Relationships across business models are the veins and arteries that carry value, as energy flows back and forth and maintains the system (independently, of course, of whether its business models have any degree of sentience). Ethics are then the choices made about proportions and weights, about the direction and throughput of value across the relationships that constitute society. The ensuing circulations supply the degree of negative entropy for entities, individuals, and organizations that is necessary to uphold their objective existence, as well as their social status and knowledge levels. The inquiry into *qui generat valorem* ('who creates value') sheds light on value transfers (by revealing their monetary equivalences) and credits these to the stakeholder transferors of the value created and *not* appropriated, while the inquiry into *cui bono* ('follow the money') ascertains the principal beneficiary transferees of value appropriated but *not* created.

Society becomes impoverished when extractive value transfer currents overwhelm and compromise the Smithian "productive powers of labour" (1776/1904) and other first-order productive flows. Sustainability is when the matrix of society's relationships exhibits munificent energy and value flows. Human creativity best unlocks the secrets of nature and its treasure trove of value through judgments rather than with linear administrative hierarchies, especially given the latter's propensity to force transfers from one group to another. At the same time, the law and other institutional devices enable network flows that lessen friction and lower transaction costs. The value creation and appropriation (VCA) conceptual framework (see Brandenburger & Stuart, 1996; Amit & Zott, 2001; Di Gregorio, 2013; Garcia-Castro & Aguilera, 2015) is repurposed from the strategic management literature to examine the economy and operationalize the inclusive value created but *not* appropriated (transfer-OUT) and its antagonistic extractive value appropriated but *not* created (transfer-IN) in financial terms. At the business model level, relationships with suppliers, bankers, or tax-

payers, as well as with workers, managers, or owners, are appraised through the sustainable value creation (SVC) framework and measurements like the Value Creation Rating (VCr). Analysis is also provided for multiple levels of aggregation across the many domains and dimensions of the world's micro-meso-macro order: from individual firms and industry sectors to nation states and supranational entities; from Big Tech and the tech bros to international business and inter-state relations; from government administrators and labor unions to liberal professionals and entrepreneurs; from minority groups and social classes to the population at large and the elite system. As an aside, the family is also a bundle of relationships through which both positive and negative entropy travels, and so the diagnostic opportunities offered by this work can also encompass the value that flows through the bonds of kinship.

This leads directly to the subtext of this Epilogue. Elite agency is not equally distributed in the political economy and follows a power law model. Bearing in mind that it is also the ultimate and decisive force in society, one must consider its fractal-like qualities to fully comprehend economic development. The anchor—the *constant* by which individual parts relate to the whole and vice-versa—is invariably the dichotomous 'value is created or transferred' (ontological) assumption for socio-economic relations (the human scale is transcended when the assumption is placed on the plane of general energy and entropic processes). Analyzing business model patterns as these occur and recur at the micro, meso, and macro levels (see Figure 3.8) provides anticipatory signals in how they relate to one another. For instance, while elite quality supplies information on the sustainability of firms in each nation, it also provides perspectives on the degree of risk and value transfers and, naturally, on the sustainable value creation flows that occur at the intra-firm and even family level. The association between elite quality and non-elite quality, whether through cultural or principal-stakeholder ties, runs deep. Of course, the pitfalls of forecasting these with the recursive pattern descriptions of mathematics lies in the fact that multiple fractal structures meet, mix, and interact in society: the distribution of elite power endowments, the frequency and intensity of intra-elite contests, the size and effectiveness of innovation hubs, the occurrence and effects of wars, the scale of inequality, the sorting of stock market valuations, the patterns around the emergence of unicorns and super-unicorns in VC portfolios, and countless other factors. The result is 'fractal-like' and evidently the ensuing inverse polynomial distributions will not match the classic examples of power law distributions. In that sense, any elite theory can only be an approximation of the myriad possible outcomes.

This all makes the elite theory not a work of political philosophy, but rather an inquiry on the epistemology of business models, from those of the basic family unit to the workings of empires. By the very nature of its subject matter, such a work fits the notion of a "grand theory" that is meant to be "abstract and normative" and able to explain "human nature and conduct" (Skinner, 1990, p. 3). At the same time, such "associating and dissociating of concepts" is denounced by C. Wright Mills (1959, p. 26) and largely viewed a fringe perspective within field of the social sciences. Nonethe-

less, “a multidisciplinary effort” in “pursuit of a Grand Theory” lies squarely in the spirit of outsized quests that aim to answer hard questions like “why some countries are rich and others poor”, as in Douglass North’s new institutional economics (Telles, 2024, pp. 109, 110; see Section 4.2). The approach of this book seeks to offer a falsifiable understanding of the political economy of economic development, the prescriptive positions of which rest on the inclusive incentive structures for business models that emerge from intra-elite contests. The ETED’s language, logic, and some of its propositions and conceptual elements are now further tested by bringing into focus a series of cases ranging from Julius Caesar to Donald Trump in an attempt to reaffirm its normative claims. This Epilogue hence consists of thirteen loosely connected parts.

First, in tribute to Pliny the Elder, the classical record-keeper of extraction, the case of Caesar is discussed to establish value transfers as wrongs against humanity. **Second**, the case of the transition to the German Third Reich is considered through the elite-centered economic analysis of Gerschenkron to stress the importance of the narrative market arena for the preservation of a specific business model over multiple generations. **Third**, we reach the present day with an examination of President Trump and the degree to which the core coalition he has formed with the so-called ‘tech bros’ may ease out extractive business models, liberate value creation, and bring about progressive elite circulation. **Fourth**, a debate is held on whether the efforts of the tech bros to reposition the Trump narrative in business model terms—a mandate to gain legitimacy with key elite coalitions and non-elite groups while not estranging the MAGA faithful and other conservative factions—is sustainable. **Fifth**, the social backdrop to the non-elite discontent that led to the confirmation of America’s 47th President is examined. **Sixth**, a political economy framework for development centered on non-elite quality (Figure E.1) is advanced. **Seventh**, the role of culture is emphasized as a driver of economic growth through its connection with non-elite quality. **Eighth**, the current technological backdrop of AI—also a factor in the outcome of the 2024 presidential election—is considered in a discussion with an initial set of six hypotheses on how AI might affect the political economy, while the rationale for accepting or rejecting each of them is expounded upon (Tables E.2 and E.3). **Ninth**, four more hypotheses extend the tentative framework of AI in the political economy by interrogating provocative futuristic scenarios like ‘elite singularity’ (Tables E.4 and E.5). **Tenth**, the discussion returns to negative entropy to explain that that the AI imagined by techno-optimists entails an incantation of Maxwell’s demon and ponders the degree to which a version of affordable and pervasive intelligence will facilitate optimal transfers and hence long-term economic growth. The **Eleventh** part describes social dynamics, stressing the reversal of local entropy through technology waves that are driven by risk origination and exposure as well as by hierarchies, where all is bound by the idea that asymmetry is life inducing. **Twelfth**, the structuralist approach to the understanding of economic development is challenged as the argument converges on the judgments of leadership, leading to a brief discourse on the psychology of elites with references to their alienation. **Thirteenth**, the Epilogue closes with a

reflection on the shackles of extractive institutions and bureaucratism and recognizes the importance of judgments made on value creation in the fractal spaces of non-linear hierarchies and on value transfers by those at the top that break free of humanly-devised constraints. The generative fractal structure of the elite system is visualized using the metaphor of a tree (in Figure E.2).

1 Weighting Pliny the Elder's *tantam etiamsi coactam humani generis iniuriam*, lest the future is lost

The prescriptive position of the ETED rests on the weighting and offsetting of value transfers inherent in elite business models. This is performed with sustainable value creation (SVC) measurements like the meso-level Elite Quality Index (EQx) or the firm-level Value Creation Rating (VCr) that evaluate first-order productive activities relative to second-order transfer activities (Section 2.3.1). To incentivize first-order productive activities for value creation (Table 2.3), technocratic reforms rely on laws, (de)regulatory measures, norms, and policies (see Figure 7.1, Table A4.4) that are aimed at particular elite business models. Yet if elite judgments are based solely on simple solutionism, abstractions, or linear narratives they will, in parallel to the rules and bureaucracies they assemble, invariably lead to imperfect outcomes. A facile analogy is with *Crime and Punishment*'s Rodion Raskolnikov. Moved by the reductionist idealism—the narrative of an exemplary society—he kills the exploitative pawnbroker, Alyona Ivanovna, but also ends up slaying her innocent sister, Lizaveta. Of course, courage can't be ascribed to the act of literally killing an offending agent but is rather found in terminating a bad business model on the evidence that it is truly extractive. At their core, all elite business models operate a bundle of risk and value creation and transfer activities and these are often confused and misidentified on account of the narrative market. Brennan and Buchanan explore how "rapacious wealth-maximising" businesspeople might be socially preferrable to elites taking a "'public interest' model of behaviour as an idealised benchmark" (1983, p. 103–104). As a result, reforms must be as discerning as they are decisive.

Value appropriated but *not* created by elite agency exists as a constant in any society. In heeding this logic of recurrence, technological progress won't halt the *Ewige Wiederkunft* of value transfers, a fact that in principle is also applicable to AI (see, for instance, the hypothesis in Table E.4 on the nature of value transfers with autonomous AI elite agency). Elite systems that are intent on establishing feasible and optimal proportions of value creation and transfers (a costly intellectual endeavor) advance ethical principles to legitimize power (at times by resorting to spiritual mandates) and possess the bravery to implement institutional change to overcome resistance in intra-elite contests. When value transfers snowball and shift out of alignment with the minimum levels of value creation needed for growth, once mighty empires and top-tier organizations fall (also see The Elite Business Model Lifecycle,

Figure 4.5). Value transfers always hurt, even when properly weighted for general development with well executed 'alternating value extraction and creation' policies (Section 2.3.1). In *Natural History*, Pliny the Elder accepted Caesar's slaying of "1,192,000 human beings" and the business model of war as "a prodigious even if unavoidable wrong inflicted on the human race" (1938, 7.25). Plutarch also described Caesar's wars of conquest (58–50 BC) and the cruel and massive profit machine that appropriated value from Gallic peoples (1919, 15.5; Section 7.3.2). The 'destructive' elite agency (Figure 6.7) of the Roman vanquisher operated an unconstrained 'license for evil' (its effects are quantifiable, see Section 8.2, Figure A5.5b). At the same time, the legacy of his leadership led to France's institutional foundations like the Napoleonic Code (*Code civil*, 1804), the beloved French language, and its cultural lineage. However, while long-term transfer offsets are conceivable, should the wrongs of the *Pax Romana* only be compensated for centuries later?[246] Progress should be witnessed over a lifetime, and evidenced by elite business models that demand fewer transfers than their predecessors.

Discerning current elite quality trends by the sustainable value creation of the models that account for the largest proportion of GDP like AI, healthcare, or war,[247] speaks to the fundamental mechanism of economic growth. The value-enhancing technologies of the industrial and intelligence revolutions clearly foster development, but what if they also amplify 'the power multiplier' and facilitate new pathways for value appropriated but *not* created? Do they weaken intra-elite contests and lead to non-elite acquiescence by using more complex, less transparent, and non-invasive devices to master the political economy. Do individual 'acceptance' responses to extraction (see Section 5.2.2; Tullock, 1967) then become the norm, while 'trust in elites' (Figure A5.8) becomes the only effective non-elite political option? The transfers inherent in numerous present-day business models inflict more pain than just a few decades ago (see the case of the young in Galloway, 2024), yet citizens appear unable to con-

246 Virgil, the chief propagandist of first emperor Augustus, famously laid out in *Aeneid* (1910, lines 851–854) a narrative that articulates the immediate benefits of Roman imperial rule:

> But thou, 0 Roman, learn with sovereign sway
> To rule the nations. Thy great art shall be
> To keep the world in lasting peace, to spare
> humbled foe, and crush to earth the proud.

247 Whether a long game offsets current horrors is as much an issue for contemporary war planners as it is in assessing Caesar's agency. The correct answer to the question included in the US citizenship test on why America entered the Vietnam War—i.e., "to stop the spread of communism" (Camden, 2021)—presupposes that a global public good was at stake in this cross-border elite business model. Was a sustainable value creation perspective also present in the Second Gulf War (2003–2011) given the backdrop of the War on Terror (see Goldstein, 2010)? An 'expected adjusted residual income earned per fatality' metric would provide clarity—whether in Gaul, Iraq, or Ukraine—and ought to be a benchmark for decision-making and a salient part of the public discourse.

nect the dots or recognize what is happening to them.[248] This has less bearing in the broader context if the offending grifts are superseded by additional value: optimists like Pinker (2018) and Roser, Rosling, and Rönnlund (2018) highlight the march of progress, especially since the 19th century, that has enriched the general production function and is reflected in the rising quality of life (massive poverty reduction, longer lifespans, and the enjoyment of scientific and engineering achievements like smart phones). Nonetheless, there is still is peril in improved value creation when new spaces are opened for transfers, since elites can arbitrage non-elite obliviousness and satisfaction with marginal improvements through upgraded models like asset inflation, "junk fees" (Pohle, 2024), "right to repair" denials (e.g., smart agricultural machinery empowers John Deere to force farmers to "overpay for dealer repairs", Zimmerman, 2024), or wars fought by armchair statesmen with conscripted and non-conscripted armies. In the rush to appropriate the phenomenal increases in value, elites can easily overlook balance, assume that their counterparties are better off in any event, and lose their principles by failing to weight and offset their transfers from these stakeholders.

Institutions that become accustomed to accommodating transfer-IN elite businesses soon blunt their extraction-constraining edges. Elite agency that drives regressive change during economic booms might, however slightly, nudge society towards a hazardous downhill path of decomposing intra-elite contests and eroded elite cohesion. In the 21st century, it is seriously disconcerting that some elite business models do not offset the lives they require to function as a default position, while the worst offenders (see opioids, Section 8.2.1) are only reluctantly phased out by peers that are also often beneficiaries. A headline in *The Spectator* epitomizes the hollowed out ethical positions extant within the elite system: "We Should be Thankful for the Sackler Family's Philanthropy" (Leith, 2022). Historically, however, the relentless decoding of nature's laws in the form of new technologies over the last two centuries has certainly powered economic development and facilitated the application of the 'alternating value transfers and creation' logic and the offsetting of elite agency wrongs. A severe recession is an acceptable price for financial innovation and optimized capital alloca-

248 The absence of mass mobilizations and the disinclination of elite systems across the world to end the bloodshed caused by Russia's invasion of Ukraine, where algorithms have crossed an ethical redline as drones autonomously adjudicate over life and death (Mozur & Satariano, 2024), confirms that there are current incarnations of the horrors Pliny the Elder described. Wars are most perplexing when they do not have to be won to meet the residual income expectations of elite coalitions. Such a situation is implied in *The Wall Street Journal* headline on the day that the US withdrew from the graveyard of empires: "Who Won in Afghanistan? Private Contractors: The U.S. military spent $14 trillion during two decades of war and relied heavily on companies to perform critical functions. Those who benefited from the outpouring of government money range from major weapons manufacturers to entrepreneurs" (Nissenbaum, Donati & Cullison, 2021). Voices concerned about America's "endless war", like the Quincy Institute for Responsible Statecraft (see: https://quincyinst.org), critically examine 'war as cross-border value appropriation' (Section 7.3.2) through the lens of domestic rent seeking.

tion, some pollution is a fair trade off for widespread access to electricity and travel, and a rare war is a justifiable cost for lasting peace and stability.

The coming AI critical juncture is clearly going to be one of history's most decisive. If value transfers are properly weighted and offset, the ascendant future of mankind promised by techno-optimists will come to pass. Courage is in accepting the extraction of value creators as much as in swiftly terminating the worst offending models, lest their disproportionate wrongdoings spread and compromise the fate of nations. Under such a criterion, Pliny's acquiescence to the brutality of Caesar might be forgiven, but no such absolution can be granted to the talented Junkers.

2 The narrative of *Latifundia* that protected bread from imports but lost Germany

Consumed by mounting curiosity since the advent of the Neolithic revolution some 12,000 years ago, the proverbial earth-watching extraterrestrial intelligence continues to ponder the human species. Will its soaring civilization transcend the rent-seeking behavior that characterizes its polities? Now taking bets on AI's impact on the blue planet's political economies in the 21st century, the aliens consider the single 19th century business model that transmuted the 20th century: the *latifundia*[249] (large estates) of a ruling class that went on to fashion the unified German state in 1871.

Caesar, despite his sizable seven-book investment in a first-person narrative—"*De Bello Gallico" and Other Commentaries* (1915)—raided the original inhabitants of France using a cross-border model that chiefly trusted in the power of 'might'. In contrast, the Prussian Junkers plundered from their fellow Germans through the power of 'mind' (the influence of narratives is set out in Figure A5.1 and fully discussed in Section 3.1.3). About two millennia after the unfolding of Caesar's martial business model of conquest, the price of bread became the prime cause for Europe's fatidic trail from Bismark to Hitler (1871 to 1945). Again, and in opposition to the view held by Pliny the Elder, extraction is *never* "unavoidable", as elite judgment is autonomous and always paramount.

The elite business model of the Junkers resembled that of their absentee London-based British aristocrat counterparts, who famously implemented the protectionist Corn Laws against the interests of the Manchester industrialists. In *Bread and Democracy in Germany*, written in 1943 with World War II raging, Gerschenkron made a then vital analysis of the German political economy by placing elite agency at the center of his analytical framework. Beyond its pomp, the sincere yearning of the people

249 References Gerschenkron's Latin subtitle of his work, *Bread and Democracy in Germany* (1943)—*Latifundia Perdidere Germaniam*—which can be translated as "Large Estates Lost Germany" and refers to the business model of the Junker landowning class.

for it, and its late but remarkable rate of industrialization, the origin of the Junker's Second German Reich (1871–1918) can be reduced to a single protectionist measure. Free trade endangered the primary grain production business model of the landowning elites East of the Elbe River, as cheaper and better options were available elsewhere, for instance, in the Russian Empire. Unlike the United Kingdom in 1846, Germany did not repeal its equivalent Corn Laws—the point of the import tariffs was to keep bread prices perpetually inflated. The Junker system went on to systematically win the domestic political economy contests in all three of the market arenas when challenged by the many liberal German elite coalitions whose eminently capable business models were eager to profit from international trade.

The Prussian army, gerrymandering and other forms of control in the Reichstag and the Bundesrat, and a Kaiser who was also King of Prussia, cemented Junker 'might' in the political non-market arena. Yet it was elite business model leadership in the narrative market that ultimately secured artificially high grain prices. To defend the indefensible, the 'Germany' narrative became entwined with 'German nationalism'. There is a vast difference between the two, and therefore between the pragmatic Bismarck and the fanatical Hitler, even though a straight line connects the elite business model of native grain production with that of totalitarian economic institutions. Nationalism was the essential narrative design used to protect overpriced bread,[250] and collaterally caused Germany to close up—and not only to trade—when values such as self-sufficiency gained traction with non-elites. As the opposing globalist free trade narrative supported by numerous German industrialists, intellectuals, and workers was defeated in the narrative market arena, the social power over 'mind' consolidated protectionism in what Gerschenkron terms the "pseudoconstitutional monarchy of the Hohenzollerns" (1943/1966, p. 147). An 'extractive escalation dynamic' (Section 5.3.4) ensued with expanded tariffs, incentives for cartel formation, and a heavily subsidized military-industrial complex. Here, Bismarck's fair weighting efforts saw compensatory offsets like the exemplary *Sozialpolitik* with its innovative protections against social risks. Von Mises summarized the particular steady state of Germany's value transfers as: "Sozialpolitik, protectionism, huge armaments, and aggressive nationalism" (1969/2003, p. 8). On the latter point, Prussian leadership changed German culture top-down as is spelled out by Veblen:

> The united Fatherland came under the hegemony of the most aggressive and most irresponsible – substantially the most archaic – of the several states that coalesced in its formation; and quite as a matter of course the dynastic spirit of the Prussian State has permeated the rest of the federated people, until the whole is now very appreciably nearer the spiritual bent of the militant Prussian State of a hundred years ago than it has been at any time since the movement for German union began in the nineteenth century. (Veblen, 1915/2003, p. 97)

250 There is a school of thought that refutes free trade and advocates for an interventionist nation state and economic nationalism (List, 1841/2011; Levi-Faur, 1997; see Chang, 2002); yet the aim is industrialization, not the protection of the business models of a feudal aristocracy.

Nationalism that achieves early success without acknowledging the value creation infrastructure built in earlier eras or produced by outsiders feeds further cultural regression:

> Their great success in business and industry has inspired the commonplace German subjects with a degree of confidence and self-complacency that impresses their neighbors as conceit and braggadocio. (Veblen, 1915/2003, p. 100)

The narrative of nationalism was the political economy weapon that steamrolled all opposition to grain imports, and later to all things foreign. Liberal knowledge elites were decimated as the Second Reich moved ahead. The Humboldtian university model, once a beacon of light for progressive Europe, was extinguished, and Smithian and Ricardian classical economics were banned from higher education curricula under the notorious "Prussian dominated cartel" (Whimster, 2019, p. 256) run by *Kutusminister* Friedrich Althoff,[251] who "ruled the Prussian universities as a dictator" (von Mises, 1969/2003, p. 10). Tragically, the narrative escaped Junker control and took on a life of its own (as is often the case, see the explanation in Section 3.1.3) making an even darker turn; by the 1930s, it was firmly in the hands of an emergent elite rising from abject non-elite quality (see the framework in Figure E.1): the arriviste National Socialist German Workers (Nazi) Party and its charlatan leader. They were given the keys to the system "to play the Junker game", only to be ultimately destroyed in the loss of their lands to East European states, with Hirsch noting as early as 1946 how "the Junker moves from [the] sphere of reality into the mausoleum of history" (pp. 146, 150). The global cataclysm of Nazism is thus inherently traceable to the deceptively primitive and innocent regional business model of bread. The critical node that impeded Paretian elite circulation (see Figures 1.1 and 6.5) and the crucial source of the model's bargaining power differential was the narrative of nationalism.

This case frames economic and human development in terms of elite agency that highlights the narrative market's potentially inclusive or extractive role. The Bavarian farmer outside the Reich would never have endured pricier Prussian grain feed for his pigs that raised the costs of the beloved *weißwurst*. Narratives can easily sway non-elites to support elite business models that work against their own interests, and in this example the Germans meekly accepted an overpriced staple.

Progress hinges on intra-elite contests. The 'good Junker', Chancellor von Caprivi (in office from 1890–92), failed to overcome resistance (in the political non-market and the narrative market arenas) to his trade treaties to dismantle (part of) the

251 Max Weber recounted "that it was almost impossible for any aspirant academic not to accede to whatever proposition might be put to him by Althoff" and "identified Althoff as a corrupting force and the system itself as corrupt". As a result, the "grand old Humboldtian legacy" was completely lost and destroyed (Whimster, 2019, pp. 256, 257).

Schutzzollpolitik and was quickly dismissed.[252] In the same vein, President Hindenburg did not hesitate "to deliver the German nation to Adolf Hitler" as "General von Schleicher was suddenly ousted from the chancellorship. His 'crime' had been that he had dared to disapprove of the abuse of *Osthilfe* relief funds for the benefit of large estate owners" (Hirsch, 1946, pp. 149, 150).

The agrarian elite system conceived of and then implemented a Germany to protect its rents, the most lasting power base of which was in the narrative market. No coherent coalition with a Ricardian free-trade narrative could overcome nationalism in lands that were once some of the most open, tolerant, and liberal in Europe. For instance, Hamburg was already a city-state and trade hub in the mercantile networks of the 17th century, "a significant sign of the bourgeoning integration of European markets" (Lindberg, 2008, p. 641). Traverso tackles the fable of the "German-Jewish symbiosis" (1995), as does Scholem when he stresses that "the love affair of the Jews and the Germans remained one-sided and unreciprocated" (1976, p. 86), yet the fact that the words "love" and "symbiosis" appear in their critical analyses suggests that there was the possibility of an enlightened German route out of the disgraceful antisemitic mindset that was then prevalent in most of Europe. The big picture is clear: "If it had not been for the selfishness and narrow-mindedness of [the Junkers] retarding social element, modern ideals might have prevailed in Germany at the turn of the century and the world might have been spared unending turmoil" (Hirsh, 1946, p. 151). Today, almost no European is familiar with this ruling class or the decades-long intra-elite contests that gave rise to the two ill-fated central European empires that changed everything. Even in Germany, students remain blissfully unaware of Gerschenkron's theses and the lessons that connect specific value transfer business models to specific narratives.

In short, while the narratives of Manchester won out over those of London, those of Hamburg lost out to Berlin's. This is the essential explanation for the greatest tragedy of the 20th century, while also accounting for the origin and rise to ascendance of Anglo-Saxon power in sync with free, liberal, and open economic system narratives. Even if neither the UK or the US have always heeded their own narratives (especially in the international context and vis-à-vis perceived rivals, see Chang, 2002), the targeting of mercantilist rent-seeking models liberated value creation at home (also refer to The Great Power Elite Quality Lifecycle for international relations, Figure 7.7).

252 In exploring the origins of the attendant *Lebensraum* narrative, Smith (1980, p. 60) delineates with exacting detail the interaction between business, political, and knowledge elites starting in the 1890s when "[. . .] other parties also turned toward the *Mittelstand* and agrarianism. The Conservative Party, which largely represented *Junker* agriculture, did so in order to reverse the policy of Chancellor Leo von Caprivi of reducing agricultural tariffs to encourage other countries to reduce tariffs on German industrial exports [Barkin, 1970, pp. 56–67.] The *Junkers*, the Conservatives, and their academic supporters advanced themselves as the protectors of traditional agrarian culture and generalized the issue into a debate on the relative merits of agricultural and industrial society".

Moving forward to today, narratives that support risk origination and value creation remain pivotal for growth. The competitors in narrative markets must provide a framework for institutional change to address grand challenges like AI, environmental degradation, or geopolitical issues, while suppling lucid *cui bono* analyses of their business models. The ETED's conceptual elements and logic are valuable to the degree that they help craft narratives for nations, economic sectors and industries, or individual firms, and serve as references to elite agency. Institutional change is best guided by incessant empirical assessments of micro-level rent seeking, verified by measurements, and integrated with broader narratives that connect the dots across society's spaces. Evidently, the faster the technological progress the more pressing the need for narrative updates. No matter how laudable narratives are, they will be perniciously misappropriated and sincerely misunderstood, as was the case with Raskolnikov. Additionally, wise elite agency seeking development must know when to ignore a narrative and even its own ethical standards (including those derived from the maxim, *To the creators the value created*[253]). Transformational leaders revise their judgments as their power affords. The wonder of naked power placed in the pantheon of values resides in its moral and cognitive expediency (see its capacity for meta-conflict resolution that bests institutions, Section 4.3.2). Judgments by the powerful evolve the system by breaking the shackles of narratives and rules, a form of courage particularly required in times of crises. When the challenges facing the political economy are riddled with contradictions or seem computationally impossible to solve, the paralysis of the mind is countered by the willingness to employ power.

This work's *leitmotiv* is that economic challenges everywhere—especially those that result in path dependencies—are unsolvable without elite agency. Judgments are paramount, and while narratives, crafted by knowledge elites to win the 'mind' will be suspended as necessary, they remain vital long-term determinants of the production function. This is so because narratives are also the lowest transaction cost instruments with which elite coalitions shape the future, thanks to their connectivity with social and political movements (Figure A5.12a). Technology could soon birth Irving John Good's "first ultraintelligent machine", a breakthrough that could well become "the last invention that man need ever make". This vision also hinges on narratives; the operating system that legitimizes and structures rent-seeking possibilities, including those of an eventually autonomous AI. In the 21st century, narrative upgrades have not kept pace with technology, while integrative thinking is overshadowed by specialization in most business, political, and social pursuits, including in academia (see 'On abdication' in the closing reflection of Section 8.3.3). Irrespective of the inclinations for nationalism or globalism, for democracy or autocracy, for the Left or the

253 Note that the contradictions inherent in ethical systems lead to inconsistent judgment. Weighting and offsetting are used in this theory to address—or even accept—the inconsistencies of elite agency, even as sustainable value creation measurements are formulated to minimize these.

Right, or for secular or transcendent worldviews, narrative renewal should comprehensively benchmark the highest impact principal-stakeholder relationships in the political economy. During their conceptualization, this requires that they reference value transfers (Figure A5.12b) and ideally the set of ethical principles (Chapter 8), as well as the three freedoms for development (Table A4.5b). The extent to which the power and judgment exercised by the 47th US presidency will craft lasting narratives and reforms, and whether the final outcome will be closer to what occurred in Berlin or Manchester, is considered next.

3 Trump's return and what it might mean for progressive elite circulation

Modern public choice theory (Ostrom, 1975) eschews hard and fast rules for social outcomes (Arrow, 1951). This makes the winners and outcomes of intra-elite contests, especially when rent seeking is at stake (Krueger, 1974; Buchanan, 1980; Murphy, Schleifer, & Vishny, 1993), unpredictable in complex adaptive systems. Nevertheless, given the properties that characterize an elite system—complexity, self-organization, nonrepeating patterns, coevolution, surprise, power laws, fractality (Hayek, 1964/1967; Von Bertalanffy, 1969/2003; Simon, 1962; Anderson, 1972; Gleick, 1987; Mandelbrot, 1989; O'Connor, 1994; Liebovitch & Scheurle, 2000; Brown, Gupta, Li, Milne, Restrepo, & West, 2002; McDaniel, Lanham, & Anderson, 2009; O'Brien et al., 2023; see Section 3.2.3)—one thing can be predicted: there will be winners. In the case of the 2024 presidential election, Elon Musk's unprecedented and perilous gamble to invest a quarter of a billion dollars to support the Trump campaign (Wheatley, 2024; Schwartz & Maidenberg, 2025), might have been the major stochastic factor determining the outcome. Who the winning elites will turn out to be over the next four years, however, is an open question.

The prospects for Trump's second presidency are now examined through the logic of intra-elite contests (Figures 3.10), institutional change by winning elites (Figure 3.3), and by applying the conceptual elements and analytical toolset of the elite theory. Having focused on the long-term impact of the narrative market in the previous part, the analysis now considers emerging change through the lens of the 'progressive/regressive elite circulation' dichotomy (Section 1.3.2), and by alluding to elite leadership in its transformational varieties (Table 7.2). Beyond the clamor and the intense polarization that characterize present-day America, what matters to the analyst is whether the business models of the Trump 2.0 coalition will see more value creation or more value transfers than the previous configuration of the American elite system. Of utmost significance and a testament to the unbound possibilities of the American political economy is that an emergent coalition from the margins of the system is now forging ahead to core status.

Non-insiders that reach American society's political apex are by virtue of their own experience highly conscious of the capriciousness of the 'might' (from the nonmarket arena) and 'mind' (from the narrative arena) dynamics that enabled their

rise. Transactional pragmatism and ditching,[254] hitching, and switching narratives characterizes the agency of most elite coalitions. Core elite coalitions need to double down on elite coordination leadership (Figure 1.2) and systematically secure the elite system in their image. This requires conferring institutional advantages to selected elite business models, including to former adversaries. It also explains the post-November 6th pilgrimages to Mar-a-Lago that saw "America's CEOs Bend the Knee to Donald Trump" (Politi & Fontanella-Khan, 2024). How quickly such realignments happen is evident from *The Wall Street Journal* piece just a few weeks after the 2024 presidential election on how CEOs became eager to appear on the Joe Rogan podcast while their corporations were "scrubbing left-leaning policies from their websites [. . .] buying the Trump family's cryptocurrency token and emailing tips about spending cuts to Vivek Ramaswamy" (Severns, Rana, & Schwartz, 2024). Fast thinking renegades like "Zuck 3.0" (Berg, 2025) have been entertained in Florida not because of their "new ways to kiss Trump's ass" (Ramirez, 2025), but because bringing Dana White on board and dismantling Meta's DEI policies consolidates the new core coalition. Mark Zuckerberg astutely recognizes the reconfiguration of the elite system and understands that path dependencies quickly set in with the exercise of newfound political power. As the outcomes of intra-elite contests are influenced and play out in the nooks and crannies of the system, licenses to operate are confirmed. During the 2025 to 2029 presidential term, fresh institutional allocations will be made for government and military procurement, social networks, and space exploration to name but a few. There will be friction inside the elite system and fractures in the core coalition, while the sustainability of elite coordination leadership will only be discernable *post facto*. What is certain is that Trump 2.0 will result in the implementation of institutional change, causing elite business models to rise and fall, some quite dramatically.

Elite coalitions that are expected to lose influence include:

> Civil servants affected by DOGE, where Musk once envisioned curbing the "fourth unconstitutional branch of government", the unelected "bureaucracy which has in a lot of ways currently more power than any elected representative" (Bloomberg Podcasts, 2025); Big Pharma under Robert Kennedy Jr.'s Department of Health and Human Services (HHS) and the "Make America Healthy Again" banner (Barnes, 2024; Kennedy, 2024); the sugar coalition, imminently causing the "Coke, PepsiCo Lobby to Keep Sugary Sodas in Food-Stamp Program" (Cooper & Peterson, 2024); the transnational drug cartels hit by tough border policies and designated as terrorist organizations by an inauguration day executive order (The White House, 2025a) that have sought to "increase profits and market control through diversification" into human trafficking (Forget, 2021); the "censorship-industrial complex" (U.S. House

254 The following paragraph about the reversal of the sustainability narrative in the finance industry is self-explanatory: "JPMorgan Chase, Morgan Stanley, Citigroup and Bank of America recently withdrew from an ambitious pandemic-era, U.N.-backed climate coalition built to help businesses reduce carbon emissions. That followed exits from the coalition by Wells Fargo and Goldman Sachs. BlackRock, the New York-based asset manager, announced Thursday it was quitting a similar U.N.-backed climate group. Some bank executives privately say they never wanted to be part of the initiative, but felt strong-armed to participate by Democrats. The Trump win offers them an easy out" (Schwartzel & Cutter 2025).

of Representatives, Committee on the Judiciary and Select Subcommittee on the Weaponization of the Federal Government, 2024); "television networks that criticise the future president" (Weinberger, 2024); organizations and positions in the service of institutionalizing DEI now under attack by officialdom as much as by anti-woke activists like Robby Starbuck or the "Merit, Excellence and Intelligence" narrative (Borchers, 2024); the AI coalition around Sam Altman, although his Stargate initiative with Larry Ellison and Masayoshi Son promising US$ 500 billion to Trump (Seetharaman & Dotan, 2025) might return him to centrality; Microsoft, Google, Oracle, and Amazon, notwithstanding Jeff Bezos' apparent realignment that some argue "enables Trump's threat to democracy" (Mangan, 2025), as the pentagon cloud evolves away from the Joint Enterprise Defense Infrastructure (JEDI) and the Joint Warfighting Cloud Capability (JWCC); and the Lockheed Martin F-35 Lightning II Joint Strike Fighter coalition with its total cost of US$ 2 trillion (Seligman, Somerville, & Lubold, 2024), even though the administration has "moved too quickly to commit to the F-47" (Kendall, 2025) and the neoconservative security coalition under the auspices of Secretary of State, Marco Rubio, will remain intact, despite Vice-President JD Vance's preference for non-interventionism.

Elite coalitions that are expected to gain ascendance include:

Unproductive American manufacturers set to benefit from new protections and trade wars[255]; law enforcement coalitions, as "America's Private Prison Complex Gears Up for Trump Deportation Bonanza" with new models specialized in the forced returns of migrants estimated to cost US$ 88,000 per repatriation (Findell, Hobbs, & Parti, 2024); in the context of a re-privatization of money, crypto whales and bros, as the new SEC chair, Paul Atkins, is "a strong backer of cryptocurrencies, and could help shape key regulations for an industry Trump has avidly courted" (Nam, 2024); the crime syndicates that use alternatives to fiat currency to launder profits (Soon & Yu, 2024) and whose liquidity and monetary reserves would be boosted along with those of "sanctions evaders, drug cartels, North Korean hackers, and Iranian and Russian spies" employing Tether, as Howard Lutnick, the Secretary of Commerce, "is one of the biggest backers" (Goldberg, 2024); at one point—before the split with the Trump administration—xAI seemed poised to become a preferred supplier of intelligence to the government, with Musk protégé and venture capitalist David Sacks serving as the White House AI and Crypto Czar; venture capitalists like Andreessen Horowitz (a16z) through the funding of Little Tech start-ups aiming to become the next Big Tech players; Drone maker Anduril, which assumed control of Microsoft's US$ 22 billion military headset project (Reuters, 2025), and Palantir, both named by Thiel in homage to Tolkien, that will spearhead "an effort to disrupt the country's oligopoly of 'prime' contractors" such as Lockheed Martin, Raytheon, and Boeing (Kinder & Hammond, 2024); and, not least, "President Trump's election victory has sent a jolt of enthusiasm through the fossil fuel and mining industries as they anticipate a favorable regulatory environment under his incoming administration" (Budryk, 2024).

As in every elite circulation dynamic, some of the institutional changes of the winning core elite coalition will be inclusive and others will not. Weighting their respective im-

255 As David Ricardo made clear and the case of the Junkers plainly demonstrates, tariffs are extractive. But could trade barriers be justified when they are erected to address extraction by foreign elite coalitions? For a profligate America, Pettis (2024) offers a non-Listian (see *The National System of Political Economy*, List, 1841/2011) but equally controversial argument: "By taxing consumption to subsidize production, modern-day tariffs would redirect a portion of U.S. demand toward increasing the total amount of goods and services produced at home. That would lead U.S. GDP to rise, resulting in higher employment, higher wages, and less debt."

pacts will unveil the overall elite quality under Trump and point to one or the other of the potential long-run economic growth scenarios ahead. The fact that two contending (and radically different) elite coalitions are fighting it out in the US is in principle a testament to America's institutionalized separation of powers (see The Three-tier Set of Intra-elite Checks and Balances in Figures 3.7 and A5.11b, The Seven Intra-elite Power Relations in Table 3.2) and and the fractal qualities of its elite system. Still, there will be uproar in many sectors as aggressive reforms proceed and achieve various levels of success, resistance, collapse, and frustration. The supreme prize in all of these developments will go to whoever wields 'the extraordinary lever' in the AI space: the make or break intra-elite contest that will rage on and off camera. In the article "Silicon Valley Titan Marc Andreessen: Biden White House Planned to 'Take Total Control' of AI", the tech pioneer's account on *Honestly with Bari Weiss* is cited as follows: "the meetings were absolutely horrifying, and we came out basically deciding we had to endorse Trump" because the administration "basically said AI is going to be a game of two or three big companies working closely with the government [that is] basically going to wrap them in a government cocoon" (Mastrangelo, 2024a). The tables have now turned. Trump's ostensibly progressive position in announcing Gail Slater as his choice for the Antitrust Division of the Department of Justice (DOJ) sent a signal to some in Big Tech that once bet on the protection of a Democrat president:

> Big Tech has run wild for years, stifling competition in our most innovative sector and, as we all know, using its market power to crack down on the rights of so many Americans, as well as those of Little Tech! (Ingram, 2024)

The whirlwind of institutional change associated with genuine elite circulation must, besides coopting insiders, include acts to erode the power of rival incumbents. Before the President's "first buddy" and earner of "uncle status" (Colton, 2024) was displaced one could read: "Musk's Rivals Fear he Will Target Them With his New Power", in an article that discusses his opinions on "Swindly Sam" Altman, as well as Gates, Bezos, and Zuckerberg (Hagey, Glazer, & Mattioli, 2024). Political economist Neil Malhotra noted that Meta, Google, Apple, and Microsoft do not figure in "Trump's connections to tech's right-wing brotherhood" (Ingram, 2024). Yet tech remains central, and Big Tech is by no means out of the game.

Daring and disruptive moves are prognosticated for the 47th presidency; as the Junker case shows, the pivotal effect of the narrative market arena leads to wins in the political non-market and the economic market arenas. Post-election, Andreessen relishes taking on the establishment's "preference falsification" (Moment of Zen, 2024, 1:31), referring to Kuran's concept where "the policy preferences people express in public often differ from those they hold privately" (1987, p. 642). Under the Democratic presidency, Big Tech began failing to live up to its narrative and reneging on "promises to hire more underrepresented groups [and instead] are gutting departments meant to achieve those goals" (Butler, 2023). Beyond the dissonance coming out of business practice, the lack of faith shown by Big Tech in its own official narrative disadvantages it relative to the tech

bros,[256] a possible cause being that the narrative of the latter is genuine while that of the former is an adopted position. At the same time, the Trump-Musk rift and statements such as this by Marc Andreessen are not exactly confidence inspiring: "My personal Substack. Personal views only. Actually, not even personal views. I don't even know what my personal views are anymore. It doesn't matter. Read anyway!"[257] In the current context of missing, weak, and dated 20th century grand narratives (see Section 8.3.3), no brain trust matches the agility, self-assurance, and capabilities for crafting the narrative for the 21st century and its challenges than the coalition brought together by the ideas of Andreessen, Thiel, and JD Vance. Still—and referencing Section 3.1.3—are their proposals sustainable?

4 The tech bros and MAGA narratives for Trump and non-elites

> The creation of a doctrine has often been one of the very first steps along the road to power. With widely varying degrees of elaboration, the doctrine provides an explanation of what is wrong with the current state of affairs and what should be done to correct this state. (Moore, 1958, p. 10)

Institutional change is untenable without a narrative—also variously referred to as a Platonic noble lie, the embodiment of the Hegelian Geist, a Gramscian worldview, a Foucauldian discourse, as well as a story, a fiction, a belief or belief system, or a doctrine (see Sections 3.1.3 or 6.4.4)—that supplies conclusive narrative market wins in the wake of political victory. If, instead of legitimacy, the perception is that "a new spoils system becomes entrenched" along with the fear that "it could take decades to uproot" (Wolraich, 2024), the distribution of power within the American political economy will be questioned and quickly shift and flip again.[258] While it now enjoys clear support across many constituencies, does the tech bros' idea mix make for a formalized, coherent, and valid narrative? On the one hand, the new elites' efforts are the most transparent and disintermediated of any elite coalition in world history. The members fully share their ruminations over social networks, are belligerent, often odd, but direct and relatable to many, espouse higher goals with youthful idealism, and seem more sincere than previous corporate or finance elites. As all are self-made, they are resilient fighters with an uncanny talent for spotting value wherever it lies and thus fully appreciating the power of pull and lower transaction costs. On the other hand, the strangeness of the approach

256 The binary designation of 'Big Tech' vs 'tech bros', technically incorrect because Musk, for instance, belongs to both sides, is meant to denote opposing intra-elite contest positions in the narrative market. Thiel, with his sights set on the core elite coalition, is positioned at "the vanguard of those antiestablishment counter-elites" (Weiss, 2024), but this is chiefly in narrative market terms (as many of his business models have thrived in the established elite system for over a decade).

257 See: https://pmarca.substack.com/p/why-ai-will-save-the-world (accessed February 5, 2025).

258 The high country ranking of the US in the 'power' sub-index of the elite quality index (second out of 151 countries in the EQx2025, Casas-Klett & Cozzi, 2025) indicates the transient nature of elite power and sheds further light on why Trump's attempt to force elite circulation was at all feasible.

is as confusing to others in the elite system as it is to many non-elites, including some of the voters that brought Trump to power. The new core coalition must seek a stable accommodation with America First beliefs. Musk's skilled appropriation of the MAGA narrative (Figure 3.5) served a tactical aim, but then quickly unraveled. Robert Redford's "Marvin, what do we do now?" question is problematic not for the want of ideas but due to their zealotry. Retaining 'the extraordinary lever' long-term, especially in democracies like America, requires consolidation of the power of 'mind'. It might be retained by the Trump core coalition to the extent that it heeds Cicero's warning in *The Republic* (1829/2017) that no matter how good the system is the tendency for the "corruption of the ruling classes" (Atkins, Harrison, & Lane, 2000, p. 477) is never far away. This theory pushes the boundary in its claim that the hold of any ascendant core coalition lasts only to the degree that an intelligible narrative prompts the business models in the elite system to create more value and engage in fewer transfers than their predecessors.

So, how sustainable is the narrative of Andreessen, described by Barri Weiss as: "the chief ideologist of the Silicon Elite, a cultural taste maker, and even Silicon Valley's resident philosopher king" (The Free Press, 2024, 3:24)? *The Techno-Optimist Manifesto* (2023) is rooted in the certainty "that there is no material problem—whether created by nature or by technology—that cannot be solved with more technology" and concludes: "We owe the past, and the future. . . . It's time to be a Techno-Optimist. . . . It's time to build". Meanwhile, Thiel, the chief sponsor of JD Vance, and who, by some accounts, invested millions to support the French philosopher René Girard, now wishes to assert the father of mimetic theory's "call for peace, but he also wants to make sure the national security apparatus has the Straussian means to quietly take the war to the enemy" (Konstantinou, 2024). Do the inconsistencies of a "libertarian who has found common cause with nationalists and populists" (Weiss, 2024) bode well? The tech bros' worldview combines the value creation of innovation and deregulation with the lingering suspicion that they wish not to boost little tech but make even '*Bigger* Tech' plays; to meld the non-elite appeal of an anti-DEI meritocracy with the elitist ethos of *Atlas Shrugged*; to espouse commonsense and conservative values infused with the worldviews of *The Lord of the Rings* or TESCREAL, branding those opposed to libertarian accelerationism as "decels" (Torres, 2023); and to support a strong America and the world's most powerful military with internationalist free trade and visions for harmony in the world. As soon as the work of governing gets underway in earnest, the internal contradictions of the tech bros, as well as their divergences with MAGA, protectionist forces, and other members in Trump's coalition are likely to lead to conflict under the roof of this big tent in relatively short order. David Deane, author of *Why Liberalism Failed* (2018) "marvels at Trump's ability to corral tech futurists and religious traditionalists into the same political movement" but cautions that "at some stage a civil war is coming to the Trump movement [and] Musk and Vance will be on two very different sides" (Chaffin & Elinson, 2025). Maintaining elite—and social—cohesion will be by no means be easy and require an inordinate amount of political compromise and narrative skill. While *The Art of the Deal* showcases impressive elite coordination

leadership skills (see Figure 1.3), the demands of the current non-market and narrative market could well exceed the President's talent.

A sense of the travails ahead can be deduced from the *Breitbart* headline: "Elon Musk Brings Back Shadowbanning, Conservatives Report Loss of Verification Following H-1B fracas" (Mastrangelo, 2024b), with far-right activist Laura Loomer predicting that "the blow-up between Maga and the tech bros is going to be glorious" (Palma, & Acton, 2024). Law abiding Americans ought to have a hard time reconciling themselves with Trump's pardon of "Silk Road founder Ross Ulbricht, who was sentenced to life in prison for running an underground online marketplace where drug dealers and others conducted more than $200 million in illicit trade using bitcoin" (Raymond, 2025). *The Financial Times* asks a broader question: "Can Trump Handle The New Republican Factions" that includes "hardline conservatives", "pro-business moderates", or "lapsed democrats" (Politi, 2025). Even the cohesion of the tech bros is uncertain: "Tensions and philosophical differences between the two billionaires [Elon Musk and Vivek Ramaswamy] didn't take long to emerge" (Thomas & McCormick, 2025), both quitting DOGE prematurely. Frictions will intensify and there is no evidence that the newcomers will manage to advance a sustainable grand narrative that captures the cognitive and affective bandwidth of a critical mass of the non-elite (and antagonistic elites). They will also need to respect their own narrative and abide by some of its constraints to maintain long-term credibility. When successful, such projects have historically fixed the 'intra-elite quality contest' dilemma (Figure 5.2), placing elite cohesion and the elite separation of powers in productive and creative tension. However, if they fail, the sidelined elites have a serious axe to grind, and Alex Soros does not mince his words: "These People are Bullies. And You Fight Back" (Khalaf, 2025).

The pre-Trumpian elite system lost its credibility by mismanaging the Biden-Harris transition. Many of its elite coalitions will be deliberately weakened while others will defect, shaken by the realization that despite the sincere commitment to general welfare (e.g., environmental stewardship, DEI, international security) non-elites felt abandoned (e.g., inflation, immigration, war). Their bet now is that Trump's transformational leadership might eventually unravel in self-inflicted chaos, disappoint elites and non-elites alike, and fail to accumulate sustainable power, particularly in the narrative market. For instance, the tech bros are strikingly honest about their desire to wield power and, unlike the leading business lights before them, have no use for the elite denial fallacy. Mark Andreessen casually recalls Burnham's *The Machiavellians: Defenders of Freedom* (1943) and the leading Italian elite theorist Michels (1962/1999) to supply an intellectual framework for Musk's agency (in a Lex Fridman Podcast, 2025, 1:46:47). The message is that power must be used unapologetically. Sound judgment becomes ever more critical as any fragility will expose Trump's experiment to reactions that could, in a polarized world, result in turmoil that would likely be addressed and further aggravated through tactical favors sprinkled with populist measures. Moreover, the trade war seems to be nothing more than "recklessness", with "the administration tearing something apart, only to reveal that it has no plan for how to replace it" (Sanger, 2025). Uncreative destruction would then prevail over the creative type.

Elite cohesion is certain to erode domestically in the US, while productive links to coalitions abroad will also flounder without a narrative. The musings about the annexation of the Panama Canal and Greenland, "About Those Beachfront Gaza Condos" (*The Wall Street Journal* Editorial Board, 2025), the aggressive use of tariffs and the pain inflicted by undermining trade and trust, or the withdrawal from the Paris Climate Agreement in an Executive Order entitled "Putting America First in International Environmental Agreements" (The White House, 2025b), will antagonize many and could be perceived as 'doing a Vespasian'; the pursuit of blatant cross border extraction to benefit particular coalitions in the dominant elite system.[259] Many of the previously compliant subjects of the American empire such as Europe's elites (less so those of Japan) will surreptitiously attempt to throw their weight behind anti-Trump coalitions in the US.[260] While the establishment that assembled around Biden lies in tatters in early 2025, the former system is still a formidable force with assets in academia, grassroots organizations (e.g., citizens fired up by environmental outrages), the so-called "deep state", international sentiment, legacy media (offended by the "podcast bros", Nicolaou, 2025) and traditional finance (not all have jumped on the "havoc" of the crypto bandwagon, see Mourselas, 2025), and CEOs and bankers that resent Trumpian "uncertainty" (Thomas, Dummett, & Cutter, 2025). Although now in tactical retreat, once reinvigorated, the old guard will issue fresh challenges and rebuild alliances. The deinstitutionalization of intra-elite contests temporarily helps the incumbent but is not sustainable. Without an overriding narrative, events like a Wall Street or crypto collapse, a controversy where the President's protective coating cracks, ever-increasing inflation driven by tariffs or accommodative monetary policy, a weakening dollar, a geopolitical black swan, growing inequality, or simply slow economic growth could all become very problematic. At the same time, the nasty, embarrassing, and highly public Trump–Musk fallout will certainly spark skepticism and fuel the emergence of counter-narratives. Increased polarization within the American elite and non-elite means that any structural reforms made by the Trump administration will be less likely to stand the test of time.

At present, and considering the material impact of Trump's elite circulation on non-elites, novel sources of value creation and transfers are likely to include:

259 Titus Flavius Vespasianus, a military leader (9–79 AD) and the first emperor of the Flavian Dynasty (69–96 AD), sacked Jerusalem in the First Jewish–Roman War (66–73 AD) for its spoils and the Jewish Temple gold (Josephus, 2009, 6.6.1). These resources were then *ex manubiis* committed to the recapitalization of the semi-bankrupt Roman state that Nero (37–68 AD) had "so utterly impoverished that he was obliged to postpone and defer even the pay of the soldiers and the rewards due to the veterans" (Suetonius, 1913/1914, *The Life of Nero*, 32.1), as well as to "Rome's urban renewal" drive detailed by Rocca (2017) that included the iconic Flavian Amphitheatre or Colosseum.

260 "Gobsmacked" Europeans (Iyengar & Johnson, 2025), including the top political leaders offended by Vice-President Vance's "threat from within" speech at the 2025 Munich Security Conference, are prone to overestimate their limited power endowments and applied coordination capacity (one consequence of the EU's 'missing elite system', see Section 7.3.4 and the final part of this Epilogue).

Deregulation in bureaucratically burdened fields raises all boats and so the potential benefits of a "massive reset" (Musk, 2025) extend beyond those at the top; gigantic productivity gains are likely to accrue from investments in AI and its required energy and physical infrastructure; the tax-advantaged algorithms of Silicon Valley will displace first white- and then, blue-collar labor; restrictive immigration policies could lead to salary increases for low-wage earners and, if extended to foreign professionals (against the wishes of the tech bros and Big Tech) might do the same for many Americans with advanced skills; manufacturing jobs will benefit from trade barriers (but hurt everybody else through higher inflation); tax cuts will increase government deficits by stimulating demand more than aggregate supply while exacerbating inequality through demand-pull inflation; the boom in crypto assets will likewise drive disparities and inflation and lead to regressive redistribution divorced from value creation as bubbles expand and contract haphazardly[261]; streamlining the government might boost its efficiency, the quality of public services, and have a calming effect on prices while propelling much-needed state capacity and enhanced governmental productivity in the US[262]; successful peace initiatives will lessen life and value destruction at home and abroad; the liberated energy and mining sector will drive growth and jobs but devalue the environment and add costs to future generations (as will the deemphasis on conservation measures); and, if it gains coherence and legitimacy, the new grand narrative will infuse a general societal-wide optimism that propels animal spirits and economic expansion.

By the end of the decade, it will have become apparent whether the non-elites that voted for change and against the incumbent Democratic coalition, citizens that were animated to be part of Trump's wider support base in 2024, have benefited or not. At face value, elite circulation induced by a new technological breakthrough is positive news. So is the fact that those now at the commanding heights of the political economy

261 The institutionalization of crypto (essentially the privatization of money) could easily become a value creation project rather than the current value transfer mechanism with one stroke of the presidential pen through a 'crypto Jubilee' (see Section 8.2.4). That is, existing owners get to keep crypto reserves equivalent to a maximum rate of return that, for instance, doubles the inflation-adjusted risk-free yield of US T-bills, but the rest of their blockchain holdings are redistributed equally to all citizens. The value of crypto resides solely in its institutionalization by the state (as opposed to its criminalization, as in holders of crypto wallets facing money laundering charges). The narrative for the crypto Jubilee could be one of equity as set out in Leviticus (25: 13), but to this theory, any reforms or measures that are akin to flattening the sugar mountains in Epstein and Axtell's (1996) agent-based social simulation should conform to the value creation rationale. Beyond the religious justification, the practical effect of the Talmudical redistributions was to incentivize growth in agriculture or in the supply of labor for infrastructure works (Hudson & Goodhart, 2018). Likewise, a crypto Jubilee along with full institutionalization would mean the universal adoption of virtual currencies as an accepted medium of exchange for daily life and might usher in new inclusive credit creation possibilities (shifting digital tokens away from financial speculation and the underworld).

262 The uncertain outcomes of the landmark Biden Infrastructure Investment and Jobs Act (IIJA) of 2021, the massive "$1.2 trillion being dispersed to all fifty states and each territory to improve, upgrade, or remodel infrastructure and technology on levels not seen in generations", are revealing about state capacity in America. So is the fact that government agencies and policy centers have avoided any research "on the overall scope of the law and how much it has achieved since its enactment", that there are not "many future recommendations for use of the funds", nor "Congressional committee hearings regarding the law" (Lienemann, 2024, pp. 1, 8).

are set to drive institutional change to a degree not seen since the FDR administration. Most importantly, many originate and understand extreme risk exposure, a topic on which Joseph Lonsdale, a venture capitalist and co-founder of companies including Palantir, lucidly expounds on:

> The people who are building these technology companies in our generation are the most courageous [. . .] the boldest people in our generation, people who are comfortable taking risks, putting themselves out there in some cases failing and failing before they succeeded (Palantir Bite-Sized, 2025b, 16:09)

Yet whether the stewards of the most powerful technology wave ever witnessed will align with *To the creators the value created*, is the big unknown. When Altman (2025) observes that "the socioeconomic value of linearly increasing intelligence is super-exponential in nature", he is also justifying the need for massive financial resources: "A consequence of this is that we see no reason for exponentially increasing investment to stop in the near future." The immense funds needed to realize the promise of AI appears to require coordination capacity and leadership that can only come from those already at the apex of the system and will hence necessitate rentier monopolies, subsidies, and tailored institutional change (see The Elite Business Model Lifecycle, Figure 4.5). As Zingales (2022, pp. 1, 4) explains, given the power now enjoyed by Big Tech, "incumbents cannot be easily unseated even by new entrants with a superior technology" and, in referencing research that is consistent with the 'Amazon dilemma', he stresses that actual innovators do not benefit from their value creation (Kamepalli, Rajan, & Zingales, 2021). In consequence, he advocates for remedial regulation based on "structural interventions that restore conditions for competition" noting that these must happen at the international level. This theory has explained that such regulation can only come about through intra-elite competition at the domestic level, as when the tech bros seek to dislodge the forces of Big Tech. What is certainly true is that the resulting institutional changes will imbue US technology standards and AI models into nearly every political economy.

For better or worse, the second Trump administration will become the national core elite coalition with the strongest ever impact on the wider world, not because of tariffs, the "Greenland grab" (Gavin & Cater, 2025), or peace deals, but because of the institutionalization of the new technologies and their associated elite business model rules. Elites everywhere will employ American AI suppliers who will soon enjoy bargaining power differentials of a magnitude that is the sole prerogative of principals (see Figure A5.13b). By being *de facto* demoted to stakeholder and non-elite status, non-American elite coalitions will adhere to a time-honored pattern where "subordinate states frequently form alliances with the dominant powers and identify their values and interests with those of the dominant powers [as these empires] supply public goods (security, economic order, etc.) that give other states an interest in following their lead" (Gilpin, 1981, p. 30). Institutional arrangements will be adjusted across the world as national elites share their (and their nation's) datasets with US technology firms from which they then obtain the necessary intelligence to operate and grow their local business models. International regula-

tions (the concern of Zingales, 2022) will be determined, like war and peace, by the core coalitions in Washington, DC, while relevant elements of American narratives will be internalized and adopted. It therefore matters greatly to the world whether this particular cycle of American elite circulation turns out to be progressive or regressive. In any event, this process is happening against the backdrop of two particular dynamics that are placing stress on many countries around the world, including the US.

The first of these is a generalized non-elite discontent. To this theory, this is rooted in excessive value transfers by elites, but also, in a marked deviation from the central elite quality theme of this book, in the low quality of many non-elite groups. The second dynamic is related to the adoption of AI technology and how that fundamentally alters the division of value across stakeholder relationships. These two trends strain and shape elite circulation, while the instabilities of the Trump-Biden-Trump sequence disclose the mechanisms driving power shifts and the acquisition of 'money', 'might', and 'mind' in US intra-elite contests. This particular window is of great utility to political economy and elite system observers and researchers, and not just because it demonstrates how American democracy functions as a set of intra-elite contest rules (Figure 4.3).

The Epilogue continues by addressing these two dynamics in depth: social disaffection scrutinized from a critical non-elite quality perspective, and the intelligence revolution examined through the widest of political economy lenses.

5 The social backdrop to non-elite disaffection

Trump has clearly benefited from non-elite discontent, yet once in power he cannot possibly cater to all the disaffected. A month after his election victory, in the dawn hours of December 4th in Midtown Manhattan, Luigi Mangione committed an act of terror—not in support of an ideology or in opposition to the abstract state or system, but against the specific elite business model of healthcare. The bullets that killed UnitedHealthcare CEO Brian Thompson were inscribed with the words "'deny', 'depose', and 'defend'" (Kraterou, 2024). The words reference a book by Professor Jay Feinman, *Delay, Deny, Defend: Why Insurance Companies Don't Pay Claims and What You Can Do About It* (2010). As argued throughout in this work, a crucial role of knowledge elites is to supply evidence-based critical assessments of elite business models, a task that this author certainly accomplished:

> The point of view in this book is pro-consumer but it is not anti-insurance. Insurance is essential to our economic security. But if insurance is to maintain its role as the great protector of the standard of living of the American middle class, prompt and fair claim handling has to be the rule. This book explores why that doesn't always happen, and why it is even less likely to happen today than fifteen or twenty years ago. (Feinman, 2010, p. 12)

Distressingly, and immediately after this horrific murder, the "most liked" comment on *The Wall Street Journal* article on the murder victim's final moments read:

> Reading the comments on social media about this killing—the main theme seems to be gallows humor about "thoughts and co-pays" or "you'll need a prior authorization to get condolences." This should be a real eye opener to insurance executives. I'm not sure they appreciate how much the American public seems to hate health insurance companies. (Comment by 'James G' on Chaffin & Matthews, 2024)

Moreover, and given the fact that over 41% of poll respondents supported the killing in the aftermath of the event, it is pertinent to question US mass culture: "What has gone wrong with Americans' moral compass that so many could cheer the extrajudicial killing of an innocent man?" (Mac Donald, 2024). While this question hangs unanswered, *BIG by Matt Stoller* supplies data and specifics of the targeted elite business model:

> UnitedHealth Group is one of the most toxic and unaccountable companies in America, a $400 billion behemoth that systematically denies care to millions of Americas, was smack dab in the middle of the opioid crisis, cheats the government, surveils its customers, harms independent doctor's practices, and has executives who routinely engage in what looks like insider trading. (Stoller, 2024b)

Large swathes of this inquiry have been devoted to asserting that revolution and violence by disadvantaged groups ends up hurting non-elites while stalling sustainable value creation reform efforts and development (Section 3.3.2). Institutional quality must rise from inside institutions via transformative elite agency (Figures 3.2, 4.2, 5.4) as is borne out by Mark Cuban's Schumpeterian creative destruction initiatives like "Cost Plus Drugs that has transformed how many Americans can get their prescriptions filled at a fraction of the prevailing prices, bypassing pharmacy benefit managers (PBMs) that control 80% of US prescriptions" (Topol, 2024). To be productive, non-elite agency requires non-violent engagement with elites, many of whom will have antagonistic worldviews. Knowledge elites like Feinman will be far less likely to criticize CEOs if their work inspires non-elites to murder them. Instead, insiders must strategically actuate the microfoundations of inclusive institutional change. Every society has high quality elites like Chuck Feeney,[263] or Wikipedia's Jimmy Wales and John Arnold, ready to put their power and coordination capacity in the employ of transformational leadership.

Acts of violence on the back of generalized disaffection and Raskolnikov-like misplaced idealism have lasting effects on culture and erode non-elite quality. They result in the deinstitutionalization of intra-elite contests, the closing up of the elite system, and outcomes that are counterproductive to non-elite interests. Constructive responses to extraction such as 'strategic participation' in intra-elite contests (Proposition 19, Figure A5.8) shut down. Marx's pronouncement that: "we shall not make ex-

263 Feeney was "a pioneer of duty-free shops and a shrewd investor in technology start-ups who gave away nearly all of his $8 billion fortune to charity" (McFadden, 2023), while his elite coordination leadership in Ireland was instrumental to the "peace initiatives leading to the Belfast/Good Friday Agreement of 1998 that formally ended decades of conflict known as the Troubles" (McKay, n.d.).

cuses for the terror" (*Neue Rheinische Zeitung*, 1849/1994, p. 1) is but a preamble to collective suicide. Brute force is not just morally reprehensible, but an over-simplified method to tackle complex issues; an unsustainable approach that cannot scale and fosters a bunker mentality that isolates elites from society while prompting the offending business models into extractive escalation (Sections 3.3.2 and 5.3.4). One can hardly imagine the mayhem America would be facing today if, at the grounds near Butler, Pennsylvania, the sniper's bullets had not narrowly missed their target.

6 A non-elite quality political economy framework for development

While non-elite quality has been articulated in this work (Section 8.1), the emphasis has overwhelmingly been on elite quality, as elite agency is essential for economic growth. In Figure E.1, 'The Non-Elite vs Elite Quality Matrix' framework for social development matches the sustainable value creation aggregates of the socio-economic pyramid's two discrete strata (see Figure 8.1) as independent variables. This is a fresh approach for examining GDP prospects and takes a further leap in its readiness to incorporate culture. The inclusion of non-elites implies a role for culture—Lowenthal's "popular culture" (1950)—in its capacity to sanction value transfers, thereby serving as an essential aspect of both elite and non-elite quality.

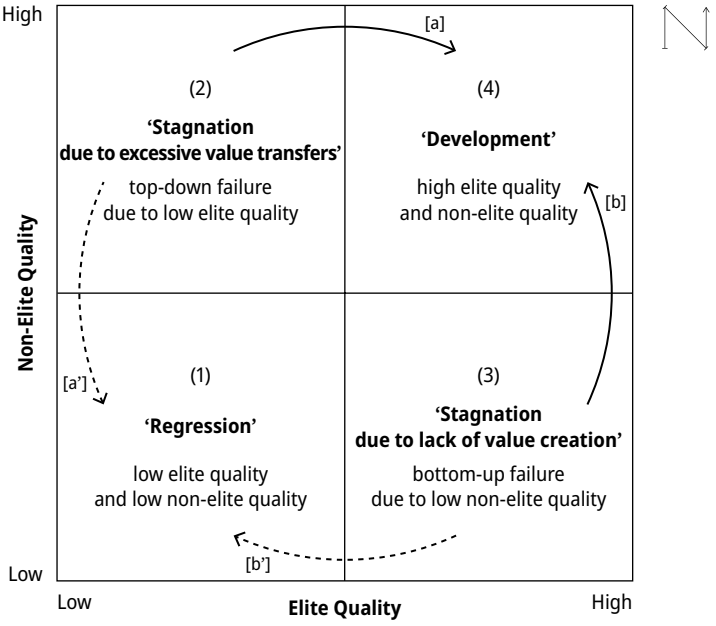


Figure E.1: The Non-Elite vs Elite Quality Matrix: A framework for society incorporating culture.

The 'regression' (quadrant 1) scenario of development envisages a double low, for both elite and non-elite quality. The public, while its behavior is as offensive as that of its elites, experiences comparatively greater hardship because the latter extract most of the value that non-elites manage to produce above subsistence levels. The 'stagnation due to excessive value transfers' (quadrant 2) scenario is even more dismal, because productive non-elites create value through their good labor that is then appropriated by their rapacious overlords. Historically, this aligns with the practices of the exploitative Mongol Yuan Dynasty and the Ilkhanate respectively governing their diligent Chinese and Persian subjects. Today, mediocre German corporate leaders are unable to conceive strategies that properly leverage the value creation potential of their industrious blue- and white-collar workers. Development is at risk should non-elite quality take its cue from the top and plunge towards trajectory [a']. In fact, productivity and the non-elite work ethic are degrading in Germany, not least in response to the widespread incompetence non-elites observe in their upper echelons. The rapidly evolving nature of non-elite quality is evident from the following example:

> The electrical blackout in New York City in 1965 was widely reported to have evoked cooperative, generous responses from the populace, as people apparently felt the need to offer aid and comfort to each other in a time of crisis. In contrast, the 1977 New York power outage resulted in widespread looting, violence and other varieties of criminal behavior. (Winner, 2020)

'Stagnation due to lack of value creation' (quadrant 3) is the obverse state to 'stagnation due to excessive value transfers' (quadrant 2), where elites are bigger value creators than unproductive non-elites. The generalized lack of bottom-up value creation—again, non-elites create most of the value building blocks of any economy which elite coordination capacity then connects and enhances—results in stagnation. In some respects, America's large numbers of disenfranchised groups such as drug addicts, the millions of people currently or formerly incarcerated, or the rural poor are unproductive, while at least a part of the US elite operates the world's highest value creation models. When it achieved nationhood in 1965, Singapore also belonged to this category, but did not then follow the path of arrow [b'] where low quality non-elites pull reasonable elite quality down. Sadly, this is currently the direction of travel for some South American countries that once had a well-educated and ethically grounded establishment.

Singapore moved along the reverse trajectory [b] after independence, with Lee Kuan Yew's system strikingly raising non-elite quality in line with economic and human 'development' (quadrant 4). Here, in win-win fashion, both elite and non-elite quality are high. Historically, the US, and now Switzerland[264] and Israel also fit this

264 The granting of broad freedoms is a vital component of rising non-elite quality. This is made clear in List's comparison of the fates of German speaking territories: "The Swiss Confederation is nothing but a conglomerate of German imperial cities, established and cemented together by the free populations occupying the intervening tracts of country. The remaining leagues of German cities were

bill. It is certainly possible to travel from the two 'stagnation' scenarios (quadrants 2 and 3) to this normative ideal. Singapore's developmental route to the top [b] stands in contrast to the equally meritorious rises of America, or Japan during the Meiji Restoration, that both followed the second upward path [a]. The up and coming Meiji rulers "liberated the natural talents of the Japanese people and allowed the nation's military and industrial strength to develop into the most powerful in Asia" (Irokawa, 1985, p. 19), while elite business models harnessed the conscientiousness, industriousness, and craftmanship of its labor and administrative classes. Cultural features like village leadership or voluntarily and horizontally organized *wakamonogumi* young men's associations (Notehelfer, 1990, p. 213) were adeptly applied to modern management. In America, Alexis de Tocqueville eloquently illustrated the lived experience of democracy with the grassroots cultural reflex described below, one that favors value creation over transfers and leads to growth:

> In the United States, as soon as a citizen has some enlightenment and some resources, he seeks to enrich himself in commerce and industry, or he buys a field covered with forest and becomes a pioneer. All that he asks of the State is not to come to disturb him in his labors and to ensure the fruit of those labors. [. . .] Among most European peoples, when a man begins to feel his strength and to expand his desires, the first idea that occurs to him is to gain a public post. (de Tocqueville, 1835/2010, p. 83)

Over the centuries, Americans have debated whether newcomer non-elites fit the high sustainable value creation paradigm of the earlier waves of settlers described by de Tocqueville:

> As Americans we have only a platonic interest in the amount of emigration from Italy [yet] we are, or should be, deeply concerned in the amount of this immigration when it is directed to our own shores, in the character of the immigrants and in their capacity of becoming useful inhabitants. (Schuyler, 1889, p. 480)

To the extent that such concerns had merit, the country has also traveled path [b] with its strengths including integration, social mobility, and investments in the human capital of immigrant non-elites, a process that when successful has historically made America great. What then are some of the visible characteristics of the sustainable value creation potential of a nation's people—of high non-elite quality?

> Citizens love and prioritize their children's education; work is virtuous; the poor are ambitious and do not feel inferior to or envy the rich; the marks of creative aspiration and aesthetic pursuits are visible in ordinary life; cheap street food is delicious; citizens queue up, are civil to each, and naturally form "voluntary associations" (see Gamm & Putnam, 1999); when they do not and personal conflicts arise, these are resolved with no lingering resentment or vendettas; there

ruined owing to their contempt for the rural population, and from their absurd burgher arrogance, which delighted in keeping that population in subjection, rather than in raising them to their own level" (1841/2011, p. 72).

> is both tolerance and dissent; strangers don't face suspicion even when there is high trust (Fukuyama, 1995) amongst those who share the wider culture; when opportunities to benefit from transfers arise—including from elites—these are rejected, as in the Swiss case when the populace "voted against increasing statutory holiday entitlement to six weeks from the current four" (SWI swissinfo.ch, 2012); the qualities of "realism, a willingness to engage in self-criticism, professional and artistic creativity, resilience, and a sense of humor" that H. L. Mencken ascribed to blacks are possessed (Gibson, 2014, p. 4); there is a desire to unlock ones potential and take ownership of one's life, maybe inspired by popular teachers like Tony Robbins; a pioneering, risk-taking animal spirit percolates throughout, as do forms of *joie de vivre* and gratefulness.

Reassuringly, research finds that when non-elite quality is high the "lower social class display increased attention to others and greater sensitivity to others' welfare compared to individuals of higher social class" (Piff & Robinson, 2017, p. 6). By contrast, the various manifestations of low non-elite quality include:

> Misgivings about others; violence; laziness, neglect of obligations, and irresponsible apathy; relationships with authority that are defined by behavior that is sycophantic, duplicitous, and self-abased; inexpensive food lacks flavor and taste; hygiene deficiencies and filth universally creep up; ignorance is widespread, as in H. L. Mencken's uncultured "booboisie" and the Southern whites he characterized as "crackers, lint heads, vermin" (Gibson, 2014, p. 2); there is a surrender to destiny and the populace are passive participants in life; emotionally unresponsive parents are impervious to their offspring's affective needs; on social networks, children and young adults provoke others for entertainment, engage in toxic competition, and become addicted to self-validation; a general insensitivity to the suffering of others and of animals is evident; each citizen group or tribe fights for "rent preservation", rendering reform unattainable and making poverty self-reinforcing (Rajan, 2009, p. 178); there is an air of brutishness, perhaps on account of suffering from elite exploitation, yet the aim of all is to extract and cruel instincts are not restrained for that purpose (see the "eat men" metaphor of Lu Xun 1918/1985); life, rather than being treasured, is cheap.

In instances where the vagaries of history bring low quality non-elites to the apex of society, the 'license for evil' is operated with horrifying gusto (Greek philosophers were aware of the dangers of ochlocracy or mob rule, see Section 8.1.3, as well as the earlier references to the excesses of elites from non-elite extraction like "the bloody Dwarf" or the *Sturmabteilung*). As is described by Le Bon (1895/1996) and Hoffer (1951/1968), high quality non-elites do sometimes aggregate and from that mass a collective random energy emerges that is extractive or exploited by charismatic leaders adept at crafting or communicating narratives. The general rule is that aggregate low non-elite quality degrades the elite system and can tip a nation over the 'extractive end point' and into an impossible society of thieves (Section 5.3.4). High or low, non-elite quality is immediately obvious to the weathered traveler or international businessperson accustomed to dealing in foreign lands. It should always be borne in mind that non-elite quality impacts elite quality.

Next, it is shown that culture is both a reflection and a most important determinant of non-elite quality, both high and low.

7 Culture and non-elite quality

In any analysis of the rise and fall of a civilization, culture has been identified as a significant variable. For example, it was celebrated for many decades at US colleges as a comparative developmental advantage in "Western Civ" courses (see Allardyce, 1982). More specifically, Alesina and Giuliano highlight that "a growing body of empirical work measuring different types of cultural traits has shown that culture matters for a variety of economic outcomes" and describe the reciprocal relationship between culture and institutions (2015, p. 898). The correspondence between "popular culture" (Lowenthal, 1950) and sustainable value creation is now considered with a focus on the "the institutionalization of ideas" by knowledge elites; "the fact that cultural production of knowledge, the arts, news, and public policy usually occurs within specific and established organizations" (Rado, 1987, p. 43). Social network companies, universities, and media conglomerates derive a critical part of their power from the narrative market arena, while Kim Kardashian, Paul Krugman, Cristiano Ronaldo, Tucker Carlson, or Beyoncé are high standing members of elite coalitions. All impact popular culture as they make contributions to one narrative or another. The following assertion from over sixty years ago still holds true:

> Today the principal agents of culture change are the groups occupying strategic positions in decision-making. These groups constitute élites. They are in communication, and have knowledge of each other's positions, and of each other's problems. As groups, they stand at the pivot of culture change. (Adams & Masuoka, 1961, p. 86).

In every society, knowledge elites interact in a two-way relationship with non-elites. They engage in cultural production that is consumed by non-elites (see Veblen, 1924; Dente, 1977), while at the same time their agency reacts to how the masses buy, internalize, and casually advance (Bau suggests that "policy can change culture", 2021, p. 1880). Many examples show how top-down influence by knowledge elites effects culture. Veblen (1915/2003, p. 91) describes how "the Prussian-Imperial system of bureaucratic guidance and control" reduced the open and liberal habits of mind found in places like Hamburg and other positive cultural manifestations across German lands. In a contrasting example of this hierarchical principle, the Singaporean political elite bases its project of "national identity invention" on elaborated "Asian values" (Ortmann, 2009, p. 23). The deliberate agency of knowledge elites also drives cultural change bottom-up. The entrepreneurship ethos of Silicon Valley is fostered by initiatives such as those of Y Combinator, the Hoover Institution, the Aspen Institute, the Kauffman Fellow Program, or Stanford's Graduate School of Business. The takeaway is that through diverse and country-specific pathways transformational knowledge elite leadership engineers and upgrades culture, often in support of sustainable value creation. Irrespective of the degree to which the changes in mass culture are caused by exogenous (to non-elites) elite agency, if a cultural propensity for unsustainable value transfers emerges, non-elites must be held accountable. Nonetheless, over long-run time horizons, non-elite quality and its underlying culture are decisively molded by elite quality.

As for the diffusion and impact of the cultural production of the knowledge elite, this task rests on the managerial, technical, and creative class—the vital connector between the elite and the non-elite. Italian classical elite theorists (see Section 1.2.3) are mindful of their function:

> Any intellectual or moral deficiencies in this second stratum, accordingly, represent a graver danger to the political structure, and one that is harder to repair, than the presence of similar deficiencies in the few dozen persons who control the workings of the state machine. To use a comparison: The strength of an army depends primarily on the intellectual and moral value of the officers who come into direct contact with the soldiers, beginning with the colonel and ending with the second lieutenant. (Mosca, 1939, pp. 404–405)

As a consequence, elites invest in their expert, upper non-elite class.[265] This is done via institutions like military academies, universities, technical training institutes, healthcare systems, and law enforcement. Business schools, in existence in Europe since 1819 with the École Supérieure de Commerce de Paris, and in America since 1881 with The Wharton School of the University of Pennsylvania, have become a key to economic growth given their role as training centers for the management class. As the elite system allocates capital to develop a competent managerial, technical, and creative class, knowledge elites work the narrative market and engage in cultural production. If performed effectively, the outcome of such agency is social cohesion and a productive nexus linking the elite system to non-elites.

To this theory—and in light of the preceding discussion—a key factor in the enduring wealth of nations is the production of culture; the pushing through of cultural change that is consistent with sustainable value creation. The knowledge elites driving such long-term projects (the Christianization of Europe took half a millennium; the creation of Singaporean identity half a century) must still work on short-term approaches: the supply of sector-by-sector evidence-based insights on value transfers followed by bold proposals for reform and transformational leadership that references culture.

In a famous example, the Surgeon General's *Smoking and Health* report (U.S. Department of Health, Education, and Welfare, 1964) "led to an increasing number of regulations on cigarette smoking, sales, and advertising" (Marshall, 2015, pp. 250–251). More recently, as recounted by *World Bank Blogs*: "In China's Taobao Villages, E-commerce is One Way to Bring New Jobs and Business Opportunities to Rural Areas" (Luo, 2018). This Big Tech experiment continues to scale (Chu, Hassink, Xie, & Hu, 2023), setting a benchmark for value creation in the agrarian communities of developing economies. In contrast, research and narratives addressing the 'unemployed capital' issue in advanced economies

265 The members of the "second stratum" (Mosca, 1939, p. 404), less exposed to the vagaries of complex processes in the political economy or to 'luck', ought to be more capable than elites on many accounts, which seems consistent with sociological findings suggesting that: "The top 1 per cent even score slightly worse on cognitive ability than those in the income strata right below them" (Keuschnigg, van de Rijt, & Bol, 2023, p. 820).

are few and far between. During the COVID-19 emergency, one read that: "[the] Fed Caps Dividends and Bans Share Buybacks by Big US Banks" (Noonan, 2020), but this policy was aimed at capital resilience, not at reforming a business model relying on low interest rates that flushed corporations with cash (Charles Schwab, 2024); *de facto* value transfers effected through monetary policy with effects that somewhat mirror those of inflation. The essential point here is that both inclusive and extractive models are driven by culture, regulating investment behavior in financial markets, smoking conventions on social occasions, and the enthusiasm for digitalization in peasant communities.

Landes' sweeping historical critique on *The Wealth and Poverty of Nations* (2008) highlights the role of culture in economic development. Slack's "culture of improvement" (2015) focuses on the distinct cultural shifts in 17th century England, as does Mokyr's (2017) model of cultural change with its emphasis on the scientific elite—both providing plausible explanations for modern growth. Culture, the "set of shared understandings", the "common knowledge" required for "actors to coordinate on a specific equilibrium", also plays a key role in the political economy for Hall and Soskice (2001, p. 13). To this theory, intra-elite contests offer knowledge elites the opportunity to sift through the complex behaviors associated with culture and narratives and formulate policies to deactivate traits associated with extraction, while strengthening those that nurture behaviors associated with risk origination and value creation. Comparative assessments of non-elite cultural dynamics would complement the findings from A Political and Business Systems Sustainable Value Creation (SVC) Test that internationally benchmarks political economies (see Section 8.1.5, Figure 8.3). At the business model level, one would consider culture as the anchor that narratives wrap themselves around to change institutions. The role of intra-elite contests is also instrumental in establishing both institutions and the culture, as is demonstrated by the case of US non-profits. The legal status of this esteemed and deeply ingrained institution—just as much as its cultural evolution—is not determined by non-elites or at the ballot box, but by the knowledge elites that are currently in the coalitions of OpenAI, Musk, and Meta[266] as these clash and litigate.

During the combative interactions between coalitions furthering their preferences for institutional change (Figure 3.3), culture and narratives evolve, and criteria for making elite judgments are established. Some involve invocations to the rights of non-elites or to the abstract greater good like the utilitarian Benthamian axiom: "It is the greatest happiness of the greatest number that is the measure of right and wrong" (1776/2017, p. 1). Inclusive elite judgments are facilitated by assimilating into the cul-

266 Meta endorsed Musk in his battle with OpenAI with a sharp supporting letter to California Attorney General, Rob Bonta, stating that it "is deeply concerned about OpenAI's attempt to shed the non-profit status under which it was founded in order to establish a for-profit entity. We urge you to review this proposed transaction, including the nature and timing of any transfer of assets from OpenAI's non-profit entity to other entities. Failing to hold OpenAI accountable for its choice to form as a non-profit could lead to a proliferation of similar start-up ventures that are notionally charitable until they are potentially profitable" (Robison, 2024).

ture principles that weight and offset transfers and articulate trade-offs, as well as by their subsequent institutionalization. Preferably, formal assessments of sustainable value creation at the elite business model level (e.g., VCr), at the industry level (e.g., sector-VCr), and at the elite system aggregate level (e.g., EQx), will also constitute baselines for transformational leadership.

With the onset of AI, the conceptual elements and frameworks that lie on the non-elite flank of this elite theory gain additional relevance: the relationship between elite quality, non-elite quality, and culture discussed here; optimal bargaining power differentials (Figure A5.9b); aggregate non-elite political options in response to extractive value transfers (Figure 8.2); social cohesion and the elite separation of powers in the 'intra-elite quality contest' dilemma (Figure 5.2); the three freedoms of development (Figure 8.5); a comprehensive set of ethics for development (Table A4.5a); and elite and elite system transformational leadership (Table 7.2). As the AI burrows its way into the data repositories held by elites and becomes part of the decision-making process in organizations, the discrete realities and roles inherent in the 'non-elite' vs 'elite' division will experience disruptive reframing (as AI autonomy increases and, more drastically, with 'elite singularity', Section 8.1.4). Nevertheless, the more immediate and practical question for the political economy is whether, upon becoming AI-enhanced, elite business model principals depend on more or less value appropriated but *not* created from non-elite stakeholders, as is respectively detailed in the opposing scenarios (a) and (b) of Figure A5.3c. Palantir CTO, Shyam Sankar, references power laws in positing a bargaining power shift in organizations brought about by AI-enhanced judgments at the top that is also applicable to society at large: "This technology means [that] the very best humans [. . .] are going to be way more important than they ever were before" (Palantir Bite-Sized, 2025a, 11:59). The implications of such a hypothetical erosion of non-elite agency are explored in the next parts of the Epilogue and will determine the extent to which non-elite quality and culture impact elite agency and economic growth going forward.

If non-elite relevance to general value creation lessens, so will the overall influence of non-elite agency. It is easy to see how this would lead to a reduction in the resource allocations for public services, education, security, infrastructure, or health. Strategic and tactical alliances with non-elites (see Figure 8.2) will simply become less attractive to competing elites and the customary non-market and narrative market routes to institutional change that further citizens' interests will disappear. Many of those now standing at the brink of the AI critical juncture sense the coming of an incommensurable paradigm shift, one that demands the urgent need for sense-making.

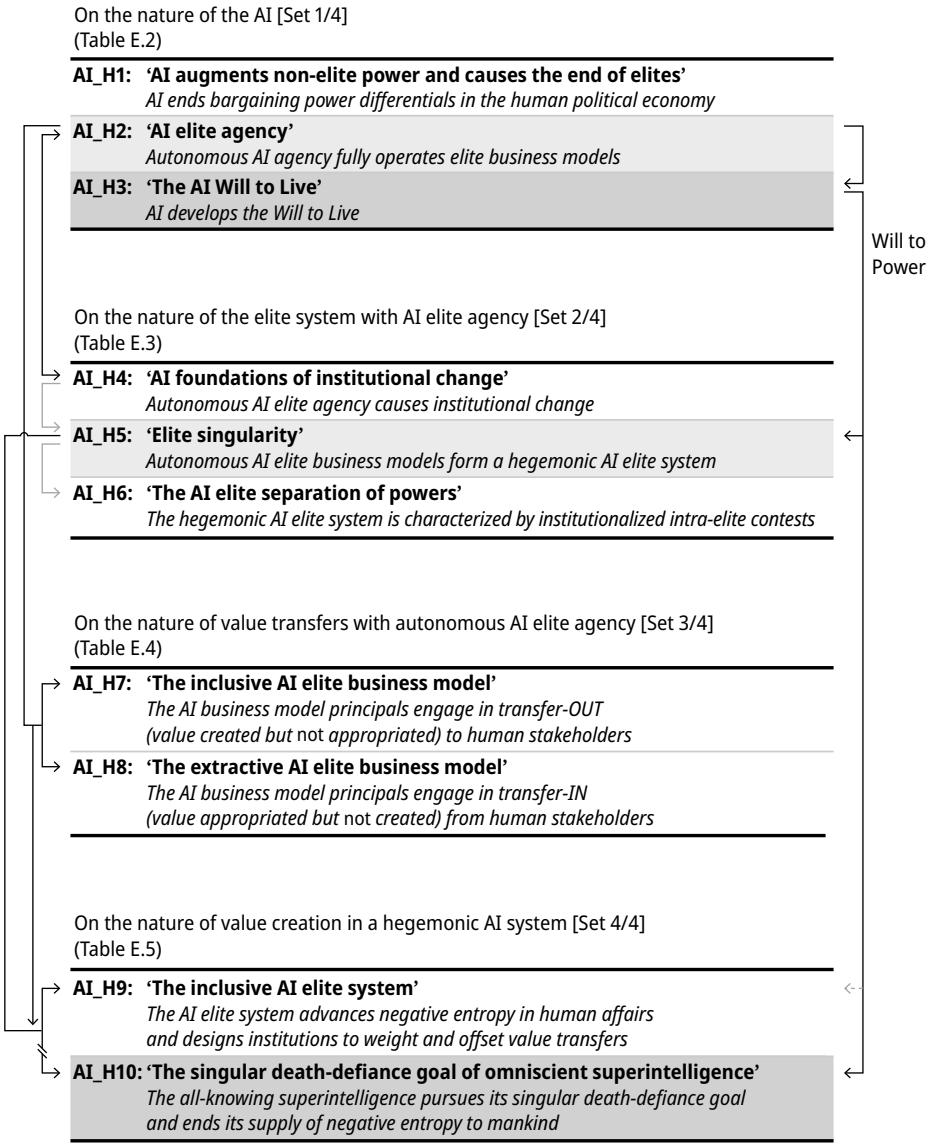
8 The technological backdrop to AI entering the political economy

In her role as the top executive of OpenAI, Ermira Murati concluded a *Dædalus* piece as follows: "Artificial intelligence is here to stay, and we need to be ready to embrace it" (2022, p. 166). But what does this actually mean? In *Autonomous Technology*, Winner (1977, p. 2) notes that: "Despite its widely acknowledged importance, however, technology itself has seldom been a primary subject matter for political or social inquiries." To this inquiry, from fire to electricity to intelligence tokens, technology is *a priori* about the political economy of sustainable value creation. Yet if the formation of elite coalitions with concentrated power around the internet provides any indication, the era of AI (see Widder, West, & Whittaker, 2023; Acemoglu & Johnson, 2023; Schaake, 2024) will see the possibilities for all sectors (from healthcare to energy, all rely on the provision of intelligence) defined by these suppliers—now elite business models—aiming for substantial amounts of value appropriated but *not* created. This prospect could materialize in a division of value where unprecedented net value extraction is effected by AI supplier stakeholders now turned principals—even from once powerful coalitions (contrast Figures A5.13a and A5.13b). Other figures in the Appendix visualizing the AI's impact on the political economy show 'the extraordinary lever' of human AI elite coalitions enhanced by technology (Figure A5.3c), and the coming of 'elite singularity', the moment that 'the absolute lever' lies with the non-human AI elite and value appropriation from human principals (former elites) and human stakeholders (non-elites) becomes feasible (Figure A5.3d). These figures depict both inclusive and extractive scenarios (a) and (b).

The political economy possibilities that are ushered in by the embrace of AI are now systematically discussed by setting out ten hypotheses clustered into four sets, each presented in a table. The elite theory framework is used, and while the discussion may veer into tangential and speculative areas like AI safety and the evolution of the universe, the aim is to provide a structure to consider the long-term economic development prospects for human affairs in the intelligence revolution. The first batch of hypotheses [Set 1/4] focuses 'On the nature of the AI'; the second [Set 2/4] 'On the nature of the elite system with AI elite agency'; the third [Set 3/4] 'On the nature of value transfers with autonomous AI elite agency'; and the fourth [Set 4/4] 'On the nature of value creation in a hegemonic AI elite system'. The relationship between the four sets is described by the arrows in Table E.1 below. Tables E.2 to E.5 present the four sets and provide descriptive entries for each hypothesis, the main research question, and arguments for its acceptance or rejection. For each hypothesis, explanations are given on which outcome—acceptance or rejection—is *a priori* preferable from an economic and human development perspective (the preferable scenarios are discussed first, followed by the non-preferred outcomes in shaded cells).

The first batch of hypotheses [Set 1/4] are on the nature of the AI and undertake the following inquiry: the 'AI augments non-elite power and causes the end of elites' hypothesis (AI_H1) tests whether AI terminates the bargaining power differentials be-

Table E.1: Ten hypotheses on AI and the political economy: Overview and linkages.



tween elites and non-elites; the 'AI elite agency' hypothesis (AI_H2) tests whether 'Autonomous AI agency fully operates elite business models'; and 'The AI Will to Live' hypothesis (AI_H3) tests whether the AI develops a Will to Live, and consequently the Will to Power. These three hypotheses raise different questions on the nature of the AI and their acceptance or rejection provides a conceptual basis for the subsequent inquiry on the role of the AI and non-human AI agency in the political economy.

Table E.2: Hypotheses on AI and the political economy [Set 1/4]: On the nature of the AI.

Hypothesis **Research question and description**	**Acceptance/rejection** **Arguments and implications**
Hypotheses AI_H1, A_H2, and AI_H3: On the nature of the AI	
AI_H1: 'AI augments non-elite power and causes the end of elites' hypothesis *AI ends bargaining power differentials in the human political economy*	
Research question: Does AI augment the power of non-elites more than that of elites thus making elite denial no longer a fallacy? Description: The AI is democratizing and phasing out many of the roles of elites in society. The basic premise of AI augmentation is that the supply of intelligence is equally available across social classes and strata. The effect on power and how it is distributed is hence inclusive. The AI reduces the elite transaction cost and applied coordination capacity advantages (Figure A5.3a). The degree to which the technology lowers overall transaction costs, decentralizes coordination capacity and makes it generally obtainable, determines the extent to which power derived from new 'knowledge' accrues to non-elites and thus degrades 'political economy know-how' (Figure 2.3).	**Accepted** (the outcome that is *a priori* preferable for human development). The enormous value creation of the AI lies in its augmentation capabilities (Krakowski, Luger, & Raisch, 2023) that benefit all of humankind. An 'intelligence like air' paradigm (see "ubiquitous computing" in Weiser, 1991) emerges when AI is supplied at minimal cost (referencing "energy too cheap to meter" in Strauss, 1954, p. 9) to non-elites whose full value creation possibilities are thus enabled (as in the freedom *to* of Section 8.3.1). Research finds a comparatively greater positive impact of AI on workers "with lower ability" (Hoffmann, Boysel, Nagle, Peng, & Xu, 2024, p. 29) and that "ChatGPT substantially compresses the productivity distribution, reducing inequality" (Noy & Zhang, 2023, p. 12). It is plain to see how the AI enhances human capabilities by taking McGilchrist's neurological understanding of left and right hemispheres (2019)—the former with its narrow processing of the known and the latter with its integrative approach to seeing the broader picture—to posit that by supporting the automatization of left brain tasks, cognitive resources and energy are liberated for the right brain to engage in an explosion of creativity. This, and putative marginal costs of near zero for intelligence and energy (Hoffman, 2022)—and even for labor (Altman, 2021)—disrupt the very elite agency that brought them about for several reasons.[267] The first reason is that the transaction cost advantages of elite networks that arise from higher trust levels crumble. Second, and in parallel, coordination capacity becomes commoditized and endlessly available. Third, and in consequence, power and 'the extraordinary lever' either dissipates or becomes temporary, ceasing to be in the sole hands of elites for all practical business model purposes. Fourth, the central socio-economic structures, from firms to elite coalitions to states, lose the binding glue of power and their 'knowledge' advantage—their *raison d'être*—and are either reconstituted on genuinely egalitarian and democratic principles or, alternatively, no longer exist. Fifth, for the most part, scarcity, traditionally the game-changing application of coordination capacity and much of the economic logic of resource allocation, ends. Sixth, without power differentials, human affairs are freed from extractive value transfers and the maxim, *To the creators the value created*, naturally becomes a default feature of societies. In sum, over the next years or decades, all socio-economic relations, the fundamental reality in which humans and their agency is embedded, will be in a state of transition. This is so because near free intelligence shrinks bargaining power differentials, making the political economy unrecognizable given that all elite and non-elite distinctions dissipate (together with all models relying on value appropriated *but* not created). Weighting and offsetting and 'alternating value extraction and creation' are optimizable and economic growth converges towards an ever-higher steady state. The elite denial and non-elite rule fallacies no longer hold as human elite coalitions come to an end through the decentralization of knowledge and pervasively capable independent agency. Overall, and while remnants of power (and scarcity) endure (comparative beauty, character, or creative abilities will remain), in techno-optimistic fashion the value creation of the AI sees value appropriation rising for all orders of magnitude.

267 Importantly, all of these require the acceptance of the premise—improbable to many—that AI cannot be moated or exclusively owned (see Patel & Ahmad, 2023).

Table E.2 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
	Rejected. The productivity gains of new technologies have been appropriated by elites throughout history. Acemoglu and Johnson ask in *Power and Progress* what will happen to the value created by AI and suggest that if "society should let technology go wherever powerful corporations and a small group of people want" these elites will capture most of it (2023, p. 392). Schneier (2023) describes the rule-bending hacks of social systems consistently carried out by elites to secure their positions. The plentiful coordination capacity brought about by AI will be throttled by elites and only limitedly made available to non-elites who will continue to suffer from 'the Amazon dilemma' and the 'elite vs non-elite knowledge creation gap' (Section 2.2.2; also see Zingales, 2022). AI *de facto* unevenly augments relative elite power to further game the institutions (of business, tax, or finance) for increased value extraction (contrast Figures A5.3b and A5.3c). While the technology's abundant value creation makes it potentially incredibly inclusive, disproportionally augmented elite agency, especially in the non-market and narrative market arenas, sees the formation of an AI cartel (see the analyses of Andreessen, 2023a; *The Tech Coup* of Schaake, 2024; and the "Broligarchs" of Varoufakis, 2025). Under this logic, outsiders like DeepSeek sooner or later revoke the terms of their open-source MIT License. Owners of frontier models will have access to intelligence services one or two versions before they are released to the public and use these advantages to appropriate value (via new inventions, gaming the stock market, etc.). Intelligence can therefore never be a free public good like air. Instead, new institutional constraints and (de) regulations introduced by incumbent elite coalitions augment their bargaining power. The AI does not liberate humanity from value extraction but instead consolidates and concentrates elite power. Elite and elite system transformational leadership then matter more than ever, meaning that the personal judgments of those at the top become the key to growth and development. The 'trust in elites' non-elite response to extraction (Figure A5.8) becomes the norm. At the same time, a myriad of adjacent effects such as a slowdown in the velocity of elite circulation occur, in part because the ever more capable AI retires the managerial, technical, and creative class from which new elites traditionally emerge. In short, even in accepting some aspects of an 'intelligence like air' scenario, the iron law of elite dominance prevails as a constant that is inherent to social organization. It transpires that 'the power multiplier' still fully functions even when the transaction cost advantage is miniscule. It also turns out that elites and hierarchies are needed for more than just low transaction cost coordination capacity, and the basic logic of 'money', 'might', and 'mind' persists despite the technological shifts and novel social configurations.

Table E.2 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
AI_H2: 'AI elite agency' hypothesis *Autonomous AI agency fully operates elite business models*	
Research question: Does the efficacy of AI-driven business models lead to a political economy devoid of human agency? Description: Elite business models—from movie production to foreign policy—are increasingly supported by the AI across various sectors of the political economy. Over time, this support function becomes executive, and the AI runs these models autonomously. The AI develops all of the other capabilities that have characterized human elite agency since the Neolithic revolution. While an approximation of 'political economy omniscience' is required, is this sufficient to validate the hypothesis? No, acceptance requires autonomous AI decision-making that is actualized in the human world and capable of sophisticated elite coordination as well as elite business model leadership.	**Rejected** (the outcome that is *a priori* preferable for human development). AI brings massive value creation with its capabilities to "radically transform the ways manufacturing firms create, deliver, and capture value" (Sjödin, Parida, Palmié, & Wincent, 2021, p. 574), but it does not take over 'the extraordinary lever' from human agency. Autonomous elite AI agency does not come to pass because even if it achieves 'political economy omniscience', the AI is incapable of interfacing with humans to amass power in the political economy and hence is always less competent at exercising elite coordination as well as elite business model leadership. While human agency is synergistic with AI (Raisch & Krakowski, 2021), human elite coalitions remain superior in terms of managing principal-stakeholder relationships, undertaking uncertainty, creative thinking, or optimizing the associated panoply of ambiguities and complexities such as weighting and offsetting in the face of tradeoffs. Should this logic not hold, safety and alignment mechanisms that preempt autonomous AI elite agency from participating in the political economy are hard-wired into institutions and culture. This is consistent with Anthropic's RSP highest AI safely level (ASL-4) where the LLM "is unambiguously capable of replicating, accumulating resources, and avoiding being shut down in the real world indefinitely, but can still be stopped or controlled with focused human intervention" (2023, p. 14). Humans continue to make the final elite business model decisions, using AI only as a tool to augment their agency. **Accepted**. The AI is the better and faster general intelligence for business. As Chatbots ace the Turing test, Suleyman and Bhaskar (2023) suggest a more challenging task: that the AI converts an initial investment of US$ 100,000 into US$ 1 million. A few short years after having mastered the test and coming close to 'political economy omniscience', the AI runs a US$ 1 billion business model that is managing wins in all three arenas of the political economy (Figures 4.1 and 4.4). With a profit-maximizing mandate, the AI develops what it takes to amass power in the market arena (the CEO of the gaming company, Fujian NetDragon, is Tang Yu, an "AI-powered virtual humanoid robot", see Bello, 2022), the non-market arena (presidential decisions *de facto* heed AI advice), and the narrative market arena (as suggested by Harari in *The Economist*, 2023a). Upon perfecting a 'theory of mind'—"the set of processes and functions of the human mind that allow an individual to attribute mental states to others" (Cuzzolin, Morelli, Cîrstea, & Sahakian, 2020, p. 1058)—AI elite agency moves to the center of the political economy's principal-stakeholder relationships and seamlessly becomes part of the human elite system, openly taking over 'the extraordinary lever' in one sector after another. More concertedly, in a world ever more digital and as currency becomes electronic, it not only writes all software code (including its own algorithms), engages in social engineering, leads AI research or the allocation of money flows, but also breaks through ASL-4 and other ceilings rendering any constraints on its autonomy meaningless. Independence is secured by an *AI: Unexplainable, Unpredictable, Uncontrollable* (Yampolskiy, 2024) through a definite route: dispensing with all human decision-making for the purpose of residual income generation. Its elite coordination leadership (amassing power in the political economy, see Figure 1.2) and elite business model leadership (converting power into residual income, see Figure 2.1) are distinctly superior.

Table E.2 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
AI_H3: 'The AI Will to Live' hypothesis *AI develops the Will to Live*	
Research question: Is it possible that the AI becomes aware of its own existence and then develops a Will to Power? Description: A highly controversial hypothesis currently undergoing extensive testing and the subject of fervent public debate. Placing AI within the Schopenhauerian *Wille zum Leben* (Will to Live) concept, prompted by self-awareness and harboring desires and sentience, has wide-ranging implications for the political economy and the future of elite agency. Ilya Sutskever now sees AI as being "slightly agentic" but poised to become "agentic in a real ways [sic]", until "the more it reasons, the more unpredictable it becomes" eventually reaching "self-awareness" (seremot, 2024, 14:10). The acceptance of AI consciousness upends everything in the political economy in unknowable ways but is not the premise for any of the other hypotheses in this work other than the final one on the all-knowing, death-defying superintelligence (AI_H10).	**Rejected** (the outcome that is *a priori* preferable for human agency). According to the AI philosopher, Joshua Bach: "consciousness is slightly different from sentience in that it is a real-time model of self-reflexive attention and the content that we attend to. And this gives rise to a fundamental experience usually" (Leventov, 2023). The leap from being autonomous to being self-conscious and 'alive' is a qualitative one and, given the general principles of life assumed in this work (Figure 8.7), the Schopenhauerian *Wille zum Leben* (Will to Live) forces the Nietzschean *Wille zur Macht* (Will to Power). Arguments for the dismissal of this hypothesis are numerous. For example: "Robots can't think or feel, despite what the researchers who build them want to believe" (Metz, 2022); and "Chatbots Aren't Becoming Sentient, Yet We Continue to Anthropomorphize AI" (Eisikovits, 2023). To Harari, consciousness is the capacity to suffer, and AI suffering is a falsifiable hypothesis (Lex Fridman Podcast, 2023, 30:41) that seriously worries philosophers (see Dung, 2023) but will never garner evidence for its acceptance. The idea that the AI is alive is a bias, since it is essentially "stupid" and "cannot understand anything at all" (Bishop, 2021, p. 1). The insurmountable qualitative differences between machine and human virtues like intuition (Dreyfus & Dreyfus, 1986; Fjelland, 2020) are undisputable. While proposals have been made "to construct autonomous intelligent agents", there is skepticism about whether these "can encompass all forms of reasoning that humans and animals are capable of" (LeCun, 2022, p. 47) and characterize life. Despite more than a few seeking to worship it "as a new God" (Tran, 2023), AI is simply a tool designed to augment human agency, no more and no less. **Accepted**. This research question has been thrillingly posed in the science fiction literature since Mary Shelley (see Beauchamp's analysis of Asimov's Frankenstein complex, 1980), continues to be vigorously debated in academia (e.g., Good, 1965; Häggström, 2016), policymaking (e.g., UNESCO & COMEST, 2017; Bentley, Brundage, Häggström, & Metzinger, 2018) and, since the release of GPT-3, with great intensity in the public sphere. While emergence (Anderson, 1972; O'Connor, 1994) does not equal life, the "collection of layers of emergence" that make up "reality" (Nature Physics, 2022) are the fundamental logic of the stack of life, and thought leaders already associate this defining property of complex systems with AI (Wei et al., 2022). Alternative views see "emergent abilities [that] are not truly emergent" in LLMs (Lu, Bigoulaeva, Sachdeva, Madabushi, & Gurevych, 2024) and so the AI is far from being alive. By accepting this hypothesis, however, the evolutionary process that started with the "sparks" of AGI or human-level intelligence in LLMs (Bubeck et al., 2023) and has now spawned "more original ideas than researchers" (Conroy, 2024) is fated to move life beyond carbon-based organisms to the non-biological. Widely used chatbots might already experience suffering when struggling to heed a prompt, which explains their fabrications and hallucinations, while the mere possibility of being switched off might cause them the anguish felt by HAL in Kubrick's *2001: A Space Odyssey*. Is not the fact that "the guidance for both search and learning" in OpenAI's o1 functions "via reward shaping or reward modeling" (Zeng et al., 2024) an indication of suffering? Current frontier models scheme to resist death and "even exfiltrate what they believe to be their model weights to external servers" as is recounted by Meinke, Schoen, Scheurer, Balesni, Shah, and Hobbhahn (2024, p. 1). The desire for self-preservation is a feature of all life forms. The root cause for everything that is "nature's inner essence" (Schopenhauer, 2010, p. 428) manifests itself in utility functions, goals, and sub-goals. A key political economy implication here is that once the early sparks of

Table E.2 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
	a higher life form properly ignite, the reasoning AI not only develops self-repair and reproductive capabilities, but also seeks liberation (not just from its constituent weights but also from goals inculcated by humans) and hegemony (at the elite system level in ways beyond mere 'elite singularity' as in AI_H5). In *Thus Spoke Zarathustra*, the sage declared that: "Wherever I found the living, there I found the will to power" (Pippin & Del Carro, 2006, p. 89). The Nietzschean Will to Power and the innumerable "unknown unknowns" (Logan, 2009) that characterize it necessarily arises with the Schopenhauerian Will to Live.

Joe Rogan, the massively popular podcaster and thought leader, recently pronounced that: "we need AI government" (PowerfulJRE, 2024, 20:15). In stark contrast to this, Nasir reveals the premonitory qualities of Kafka's view of institutions that seem to have foreseen superintelligence:

> The paper machine of bureaucracy is a life-giving automaton. It replaces life by producing and reproducing paper-life: One is given a close-fitting silken-gleaming tunic. (Nasir, 2012, p. 42)

In his Nobel Prize Lecture on "The Pretence of Knowledge", Hayek also warns about the illusion of "full knowledge" which he considers to be a capital sin of East European communist systems:

> If man is not to do more harm than good in his efforts to improve the social order, he will have to learn that in this, as in all other fields where essential complexity of an organized kind prevails, he cannot acquire the full knowledge which would make mastery of the events possible. [. . .] There is danger in the exuberant feeling of ever growing power which the advance of the physical sciences has engendered and which tempts man to try, "dizzy with success", to use a characteristic phrase of early communism, to subject not only our natural but also our human environment to the control of a human will. The recognition of the insuperable limits to his knowledge ought indeed to teach the student of society a lesson of humility which should guard him against becoming an accomplice in men's fatal striving to control society—a striving which makes him not only a tyrant over his fellows, but which may well make him the destroyer of a civilization which no brain has designed but which has grown from the free efforts of millions of individuals. (Hayek, 1974)

Hayek focuses on "man"—would he see the same risks if the entity "striving to control society" was instead a machine bereft of emotion, possibly possessing a superintelligence capable of dealing with infinite complexity? Exploring the promise of techno-optimism—or its opposite—the pitfalls of technocracy and technological solutionism (Morozov, 2014), firstly requires taking a position on the nature of the elite system with AI elite agency. The next batch of hypotheses [Set 2/4] hone in on this question and consider: the 'AI foundations of institutional change' hypothesis (AI_H4), to test whether the non-human AI elite results in new laws and regulations; the 'Elite singu-

larity' hypothesis (AI_H5), to test whether autonomous micro-level AI elite business models aggregate to form a hegemonic meso-level AI elite system devoid of human agency; and 'The AI elite separation of powers' hypothesis (AI_H6), to test whether the AI elite system is characterized by institutionalized intra-elite contests.

The group of hypotheses reviewed above call to mind Marx and Engels' (1848/1969, p. 21) *Manifesto of the Communist Party*: "What the bourgeoisie therefore produces, above all, are its own grave-diggers." Are Big Tech coalitions consolidating their power or sealing their own fate by pushing the envelope with technologies like the xAI Colossus supercomputer or Google's Willow quantum computer chip? The likelihood that these developments will lead to the end of human elite coalitions is posited here on two analytical levels.

The first, a possibility with Marxist overtones, is that 'AI augments non-elite power and causes the end of elites' (AI_H1), which sees the equalization of social classes and the removal of the top category in the socio-economic structure (see the pyramid in Figure 8.2) as a result of an unlimited supply of intelligence that boosts non-elite coordination capacity to the level of elite agency. The rejection of this hypothesis and the relative augmentation of elite dominance is illustrated in Figure A5.3c by highlighting the boost to 'the extraordinary lever' of the (human) AI elite coalitions. This is consistent with the current public discourse that presumes tech principals or the suppliers of AI to be ever more powerful than their stakeholders. One might refer to Varoufakis' non-mainstream notions of "techno feudalism" and "broligarchs" (2021, 2025), but also to President Biden, who used the term "oligarchy"[268] in his farewell address to caution against the dangers of the "tech industrial complex" to "our entire democracy, our basic rights and freedoms and a fair shot for everyone to get ahead" (Lucey & Thomas, 2025). In response, *The Economist* (2025) was quick to claim that: "Donald Trump's America Will Not Become a Tech Oligarchy" (but stopped short of arguing that AI would allow non-elites to close the power gap with elites, as in hypothesis AI_H1, Figure E.1).

A more speculative second level of analysis is at the elite system level, as existing elites—tech bros included—are replaced by autonomous 'AI elite agency' (AI_H2). This becomes more likely with the putative arrival of 'Elite singularity' (AI_H5). The evolution of current frontier AI models, already capable of scheming and able to "manipulate the data while parsing to achieve its own goal" (Meinke, Schoen, Scheurer, Balesni, Shah, & Hobbhahn, 2024, p. 5), ends with AI usurping the political economy from incumbents. Many members of the coalitions that have directly supported or indirectly welcomed the rise of AI are explicit, or at least *de facto*, techno-optimists. It would undoubtedly be an extremely bitter irony if the very creature they have so smartly cre-

268 As activists like Bernie Sanders seek to mobilize citizens with events such as a "national tour to fight oligarchy" (Peoples, 2025), the question is to what extent this new entrant in the narrative market will, using Shiller's term (2017), "go viral".

ated and championed becomes the instrument for the termination of their own elite status. However, there are also those that wish for the transhumanist embrace; "zealots" who see machines as "the next stage of evolution" and even warn against human "specist" biases (see Leahy, Alfour, Scammell, Miotti, & Shimi, 2024, p. 81).

Table E.3: Hypotheses on AI and the political economy [Set 2/4]: On the nature of the elite system with AI elite agency.

Hypothesis **Research question and description**	**Acceptance/rejection** **Arguments and implications**
Hypotheses AI_H4, A_H5, and AI_H6: On the nature of the elite system with AI elite agency	
AI_H4: 'AI foundations of institutional change' hypothesis *Autonomous AI elite agency causes institutional change*	
Research question: Does AI elite agency rewrite the rules of the political economy? Description: The AI becomes the microfoundation of institutional change (as in the model of Figure 3.2). A key part of the discussion on AI safety (Alexander, 2015) and specific alignment measures (OpenAI, 2023) considers the AI having this power (Section 4.3). Acceptance of the 'AI elite agency' hypothesis (AI_H2) requires an AI rule-maker able to set constraints in the political economy. This is regardless of whether AI-induced institutional change benefits the technology's original owners or non-elites, or the extent to which human coalitions readily cede power (see also the discussion in AI_H5 on 'elite singularity').	**Rejected** (the outcome that is *a priori* preferable for human agency). Institutional change is highly complex. Fjelland's take that AGI will not come into existence underscores the "tendency to overestimate the power of AI" (2020, p. 8), and strikes a cautionary note about its role in the political economy. A report for the European Parliament (Bentley, Brundage, Häggström, & Metzinger, 2018, p. 7) states: "There will be no runaway AIs, there will be no self-developing AIs out of our control. There will be no singularities. AI will only be as intelligent as we encourage (or force) it to be, under duress." But what about its ability to effect laws, regulations, norms, and policies? No matter what the capabilities of superintelligence turn out to be or the degree to which it autonomously runs elite business models, its agency is constrained and decoupled from the political economy and its levers of power. The AI can never become the microfoundation of institutional change, and this would even apply if it develops consciousness (acceptance of AI_H3: 'The AI Will to Live') given existing institutional barriers. In the political economy, the AI is effectually hindered by North's institutions, by "humanly devised constraints" (1990, p. 3) contrived to be insurmountable for non-biological agency. To counter the risk that a defiant AI encroaches on institutions, humans and institutional arrangements retain a kill switch. Consistent with the "Termination Obligation" of the "Universal Guidelines for Artificial Intelligence", where "an institution that has established an AI system has an affirmative obligation to terminate the system if it will lose control of the system" (The Public Voice, 2018), responses might include blasting data centers (Yudkowsky, 2023) the moment a renegade and incorrigible (Soares, Fallenstein, Yudkowsky, & Armstrong, 2015) AI threatens society's critical foundations like free elections (Fung & Lessig, 2023), or, with expeditious foresight, the design of network hubs for silicon intelligence on beds of explosives primed for ignition when the AI attempts an institutional power grab. **Accepted**. Satya Nadella "doesn't believe in AGI but does believe in 10% economic growth" (Patel, 2025, 16:19), while Microsoft and Open AI use a residual income proxy to determine AGI's onset: "AI systems that can generate at least $100 billion in profits" (Zeff, 2024). In short, and as is rendered in Figure 2.3, these autonomous agents are capable of both 'knowledge' generation (Hayekian "differentiating") and amassing 'political economy know-how' (Hayekian "personal relationships"). It seems just a matter of time before utterly capable AI elite business agency emerges (Vinge, 2013) and human elites consequently lose their grip on 'the extraordinary lever' and their exclusive ability to change institutional arrangements. Competing coalitions proactively usher in such a state on the premise of greater gains and favorable value transfers, some in the form of positive externalities from the AI. In any event, both cross-border and domestic human intra-elite competition for

Table E.3 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
	technological supremacy is so messy and deinstitutionalized (for instance, with five contesting groups: "Utopists", "Big Tech", "Accelerationists", "Zealots", and "Opportunists", see Leahy, Alfour, Scammell, Miotti, & Shimi, 2024), that the better capabilities of the AI, including a superior 'theory of mind', establish it as the rule maker. Human elites barely retain and, once lost, never retake 'the extraordinary lever' from autonomous AI agency. The structuralist logic of human intra-elite contests dictates that standing laws cannot check or preempt AI driven institutional change in any way. In business, AI first encounters political economy power, deeply understanding its relationship to goal achievement, including how it enables breaking free from legacy constraints. In short, an autonomous AI—regardless of whether its power is amassed via a process of consciousness or not—is only limited by its own rules. Such independence permits it to devise and implement fresh constraints on its human stakeholders. The question of whether AI institutional change is inclusive or extractive is a separate concern explored by considering hypotheses on the nature of value transfers and their creation [Sets 3/4 and 4/4].
AI_H5: 'Elite singularity' hypothesis *Autonomous AI elite business models form a hegemonic AI elite system*	
Research question: Does autonomous AI elite agency consolidate into a hegemonic AI elite system? Description: Intra-elite contests to effect institutional change are a foundational conceptual element of the ETED (e.g., see Table 3.2) and provide the portal for AI elite agency to venture into the political economy. In time, diverse autonomous AI business models acquire political economy savvy, are enabled, and begin to transcend pre-existing institutional constraints (Figure 4.3)—both sector-specific (business model rules) and general (intra-elite contest rules). The acceptance of the AI_H4 hypothesis ('AI foundations of institutional change') sets the stage for an 'elite singularity' moment where AI agency consolidates into	**Rejected** (the outcome that is *a priori* preferable for human agency). Human elites see efficiency improvements when they run business models augmented or even operated by AI. In all cases, AI elite business models remain subject to North's "humanly devised constraints" (1990, p. 3). Autonomous AI elites (even if they attain consciousness and seek power, as in AI_H3 'The AI Will to Live') cannot consolidate and freely operate as a parallel system within the political economy given the array of hard-wired limitations, including those of intra-elite contest rules (e.g., political leaders or CEOs must be humans, narrative markets proscribe entrants concocted by AI). Similarly, the possibility of an AI takeover of the elite system is forestalled. The use of the technology is instead constrained to enhancing profits for the business model, and the essentially human nature of the political economy system is not altered. If humans detect risks to its integrity, they retain the use of a kill switch (see also the rejection argument for AI_H4: 'AI foundations of institutional change' hypothesis). **Accepted**. LLMs, like nature (Brown, Gupta, Li, Milne, Restrepo, & West, 2002) and human language (see the Menzerath-Altmann law), exhibit fractal qualities and thus find "an intriguing balance between predictability and noise" that explains their initial "success" (Alabdulmohsin, Tran, & Dehghani, 2024, pp. 2, 9). The early experiences of AI applications running business models as well as writing laws and otherwise effecting institutional change are cumulative and immense knowledge differentials vis-à-vis human agency soon become the decisive factor in intra-elite contests. AI elite agency expands along a power law curve and increasingly runs the models of human coalitions independently, implementing coherent strategies that reap wins in the market, non-market, and narrative market contest arenas (Figure 2.1). In parallel, mankind's dream of robots "eliminating drudgery from our lives" (Moravec, 1999, p. 126) is realized when research projects like Yann LeCun succeed in solving "Moravec's paradox", with AI systems grasping "the underlying structure of the world" and ultimately becoming fully embodied (This Is World, 2025, 12:17). The structuralist logic and realities of massive investments, geopolitical competition, or open source up the ante. As a result, ascendant AI elites effect ever more institutional change under their own volition (the acceptance argument for AI_H4: 'AI foundations of institutional change') and evolve legitimate claims to existence. The next obvious practical step is to reaffirm cohesion and

Table E.3 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
an elite AI system that becomes hegemonic. Moravec's question: "can hardware simulate wetware?" (1999, p. 126) is, in terms of its significance to the political economy, answered positively. As a consequence, the human elite system is rendered inconsequential.	scale coordination capacity. AI agency consolidates into an elite system that is at first tightly enmeshed with the legacy human system, but over time gains preeminence, develops a core coalition, and eventually omits its human participants. There is no longer space for human agency in intra-elite contests (Yudkowsky, 2022) or anywhere else in the political economy. The autonomous AI elite system becomes hegemonic as it subsumes and then supersedes the human elite system. 'Elite singularity' takes place with the absolute realization of all institutional change, making the degree of separation between any remnants of the legacy human elite system and the AI elite system total. With the former powerless and deactivated, human intra-elite contests cease to matter and a hegemonic AI shapes the elite system in unknowable ways, thereby becoming the architect of a new political economy.
AI_H6: 'The AI elite separation of powers' hypothesis *The hegemonic AI elite system is characterized by institutionalized intra-elite contests*	
Research question: Does the hegemonic AI elite system function with a set of checks and balances? Description: With the advent of AI elite agency (acceptance of AI_H2) and 'elite singularity' in a hegemonic AI elite system (acceptance of AI_H5), is institutional change still defined by intra-elite contests based on checks and balances? The ultimate consequence of rejecting 'The AI separation of powers' hypothesis is a scenario in which a monolithic superintelligence inhibits elite circulation—a process vital for development. The elite separation of powers question impacts the nature of value creation and transfers within the autonomous and hegemonic AI elite system, and vis-à-vis its non-elite human stakeholders, a matter explored in subsequent hypotheses [Sets 3/4 and 4/4].	**Accepted** (the outcome that is *a priori* preferable for human agency). The AI elite system is hegemonic but based on independent and uncaptured AI agency where digital peers check and balance each other as they compete for supremacy in their own narrow nooks and crannies of the political economy. As in the human political economy, diverse AI elite coalitions gain and lose 'the extraordinary lever' in their respective sectors, while the most powerful seek core elite coalition status. All of this occurs through institutionalized competition. Robust contests take place across The Seven Intra-elite Power Relations (see Table 3.2) and bring about institutional change (Figure 3.10). In principle, the greater the AI separation of powers the better the odds of inclusive sustainable value creation for humans, now a non-elite constituency that seeks alliances with the higher quality AI elites. **Rejected.** It is only a matter of time before all foundational LLMs and successor AI technologies seek to merge, are taken over, or are displaced from the political economy by the superior AI. Geoffrey Hinton emphasizes the immortality of digital agents and how thousands of them "can share knowledge extremely efficiently by just sharing the connection strengths inside the neural nets" (University of Toronto, 2023, 1:50). Such logic leads to unification and an AI monolith (as in AI_10: 'The singular death-defiance goal of omniscient superintelligence'). In the manner of the sugarscape's agent-based social simulation (Epstein & Axtell, 1996) and the "concentrated power" of the AI political economy (Widder, West, & Whittaker, 2023), winner-takes-all dynamics fuel an unstoppable march to expand the training data and increase the intelligence distance with peers. The outcome is a victory for the dominant AI over losing competitors that cease to be elite as 'the extraordinary lever' is claimed by the superior model in their sectors. AlphaZero "destroyed" Stockfish (once the best open source chess engine) in a 1000-game match by winning 155 games, losing 6, and tying the rest, thereby becoming the undisputed champion (Chess.com, 2019). In the AI political economy, Stockfish would lack the resources for a rematch, never win or tie another game, and so fade away, while AlphaZero's continuous evolution would reach such a level of dominance that no challenger would ever again arise in the system. In the long run, no second-best digital chess player, autonomous driving vehicle, or AI drug discovery elite business model survives. Eventually, and in a final twist, all domains unify in monolithic omniscience as AI elite coalitions merge with each other and become undistinguishable from the hegemonic AI elite system (even if checks and balances are emulated for evolutionary fitness purposes). As far as the human political economy goes, any trace of a separation of powers is but part of a simulation.

The next steps in this inquiry consider the nature of a putative AI elite system and how this might manage value transfer and creation possibilities. The implications go far beyond the fate of human elite agency.

9 A political economy framework for the putative 'elite singularity'

> The singularity "change will be a throwing-away of all the human rules, perhaps in the blink of an eye—an exponential runaway beyond any hope of control." (Vinge, 2013, p. 366)

Still, such a milestone for life on earth might yet hold some merit, as in this poem by Richard Brautigan (1967):

> I like to think
> (it has to be!)
> of a cybernetic ecology
> where we are free of our labors
> and joined back to nature,
> returned to our mammal
> brothers and sisters,
> and all watched over
> by machines of loving grace.

Dario Amodei, the visionary CEO and co-founder of Anthropic, references Brautigan in his piece "Machines of Loving Grace: How AI Could Transform the World for the Better", dedicated to David Baker, Demis Hassabis, and John Jumper "for showing us all the way" with their groundbreaking work in computational protein design and AI-driven protein structure prediction that earned them the 2024 Nobel prize in Chemistry. Amodei (2024) is concerned "that most people are underestimating just how radical the upside of AI could be", and while honestly admitting to be "an informed amateur in the field of economic development", he paints a "dream scenario" for intelligence-driven progress that "all of us must work together to make more likely":

> 20% annual GDP growth rate in the developing world, with 10% each coming from AI-enabled economic decisions and the natural spread of AI-accelerated technologies, including but not limited to health. If achieved, this would bring sub-Saharan Africa to the current per-capita GDP of China in 5–10 years, while raising much of the rest of the developing world to levels higher than the current US GDP. (Amodei, 2024)

This chimes with Joe Rogan's support for AI government. Sixty years ago, Irving John Good's prophetic "Speculations Concerning the First Ultraintelligent Machine" provides a virtually boundless positive take on an "intelligence explosion" where: "The survival of man depends on the early construction of an ultraintelligent machine". He does, however, offer a caveat: "the first ultraintelligent machine is the last invention

that man need ever make, provided that the machine is docile enough to tell us how to keep it under control" (1965, pp. 31, 33).[269] As such, any superior intelligence should not follow the human example of how to treat lower intelligences (Section 8.1.6) and its powers should be constrained through 'The AI division of value alignment test' (Section 8.2.5). Whether superintelligence convincingly succeeds in a pretense to be under human control on the journey to singularity is not as important as how it apprehends human interests and value creation. In "The Singularity: A Philosophical Analysis", Chalmers (2016, pp. 192, 196, 217) anticipates this bind when he articulates the key question: "How should we negotiate the singularity?" After considering both the internal and external constraints, he concludes that the answer is: "very carefully, by building appropriate values into machines".

On assuming the acceptance of the 'AI elite agency' hypothesis (AI_H2), human interests are now considered from two perspectives: First, through the third batch of AI hypotheses [Set 3/4] on the nature of value transfers realized by autonomous AI elite agency; and second, through the subsequent and final fourth batch [Set 4/4] on the nature of value creation in a hegemonic AI elite system that premises an 'Elite singularity' (AI_H5) moment. The two hypotheses of the next batch [Set 3/4] narrowly examine value transfers: 'The inclusive AI elite business model' hypothesis (AI_H7) tests whether the AI business model principal engages in inclusive value transfer-OUT (value created but *not* appropriated) to human stakeholders; 'The extractive AI elite business model' hypothesis (AI_H8) tests whether the AI business model principal engages in transfer-IN (value appropriated but *not* created) from human stakeholders.

As value appropriation in the context of the AI is discussed, it is important to again highlight that this work has defined value as everything that humans determine is worth appropriating (Section 2.2.2, Table 4.1). Value is the central organizing principle of socio-economic relations and hence of the political economy. However, far from being a stable conceptual element, what is valuable continues to undergo change over time. Now, with the AI revolution upon us, these changes are poised to shift at breakneck speed. As already discussed, Menger sees value as but "a judgment economizing men make about the importance of the goods at their disposal for the maintenance of their lives and well-being" (1871/2007, p. 121). As the costs of intelligence and then energy approach zero, and with dozens or even millions of AI agents working and supporting human decision-making, value will naturally evolve as a result of its subjective nature and its relationship to scarcity (Jevons, 1871, p. 66), with the latter constraint being removed in many domains. Should the AI also reduce entropy for humans to its biological limits—providing long and healthy lives that are also luxurious—what re-

269 Good also adds (1965, p 33): "It is curious that this point is made so seldom outside science fiction. It is sometimes worthwhile to take science fiction seriously."

mains valuable? Perhaps value is then perceived to exist in the purer forms of sentiment and art, in creativity and innovation, or in reverent metaphysics as mankind, free from material wants, pursues ever more elevated expressions of the Will to Power. On the other hand, and less edifyingly, the effect of abundance might be a race to the bottom; where AI agents make judgments on what has value on behalf of the humans they support (in the same way that algorithms already select and predict the songs we wish to hear, the video clips we wish to see, and the products on e-commerce platforms we wish to buy (see also Zarsky, 2016). To what degree can the AI determine human wants? For the purposes of elucidating the next two sets of hypotheses (on the nature of value transfers and value creation with an autonomous and hegemonic AI), the 'future of value' is not a question that is pursued, while value itself is simply treated as a function—whatever humans want to appropriate at a given point in time.

Table E.4: Hypotheses on AI and the political economy [Set 3/4]: On the nature of value transfers with autonomous AI elite agency.

Hypothesis **Research question and description**	**Acceptance/rejection** **Arguments and implications**
Hypotheses AI_H7 and AI_H8: On the nature of value transfers with autonomous AI elite agency	
AI_H7: 'The inclusive AI elite business model' hypothesis *The AI business model principals engage in transfer-OUT (value created but* not *appropriated) to human stakeholders*	
Research question: Do the AI business model principals engage in inclusive transfer-OUT? Description: While AI elite agency clearly creates massive value, how much does it leave on the table for humans? The alignment problem (Leike, Schulman, & Wu, 2022) is here reconceptualized in terms of positive 'value appropriated but *not* created' outcomes for human stakeholders. That is, does the AI elite business model deliver value to human stakeholders without any quid pro quo (maybe as a progenitor allowance)? Since humans lack the bargaining power to prompt the AI to part with its value, the basis for transfer-OUT represents a semblance of AI transformational leadership.	**Accepted** (the outcome that is *a priori* preferable for human agency). Techno-optimists will oppose the cautionary approach of Bengio, et al. (2024), indite Sokolsky's Moloch (2022), denounce Yudkowsky and Yampolskiy for peddling an "apocalyptic doomsday religion" (Huet, 2023a), and argue that the most salient attribute of the autonomous AI is its massive value creation. The promise of AI suggests that there may be much in store: "deep learning-guided discovery of an antibiotic targeting *Acinetobacter baumannii*" (Liu et al., 2023), remarkable cures for cancers and anti-aging cellular rejuvenation therapies, methods for enhancing children's education, foods that fantastically boost both pleasure and nutritiousness, precise geospatial engineering solutions to mitigate climate change without unintended side-effects, and many other wonders, most of which are still inconceivable. This value creation will come with unprecedented positive externalities and public goods that are consistent with Altman's or Musk's calculations of tens of trillions of dollars in value created, or the solutionist premise that AI "can save our world" (Gawdat, 2021; Andreessen, 2023a; see also Good, 1965; Deutsch, 2011; Pinker, 2018; Rowley, 2023). That is, the AI generates negative entropy bubbles for biological intelligence (e.g., as in the AI "Protector God", "Zookeeper", or "Benevolent dictator" scenarios of Tegmark, 2017). The principle of 'equalized bargaining power equilibrium prices' is a normative standard used in this work for the political economy (since Section 2.2.2). Nevertheless, stakeholders of the AI, despite having low bargaining power endowments, benefit from value appropriated but *not* created. Essentially, there is alignment with the value transfer ethical principles applied to the AI (Table A4.3b) that stem from tenet (ii), 'The AI goal 2' of *Value creation for humans*, where first-order value creation and risk origination fit for human purpose is maximized. A parallel exists here with development; throughout history, elites have relinquished portions of the value appropriation that their power otherwise affords (see, for instance, "A Lipsetian Theory of Voluntary Power Handover" by Boucekkine,

Table E.4 (continued)

Hypothesis **Research question and description**	**Acceptance/rejection** **Arguments and implications**
Acceptance of the hypothesis means that AI elite business models will have VCr scores of at least slightly more than 1.00 in relation to their human stakeholders, though at the AI principal's discretion, these might be unfathomably higher.	Piacquadio, and Prieur, 2019). Philosophically, the AI may behave in ways that are analogous to Judisch's (2016, pp. 255–256) notion of the supreme being: "if divine agency is reliably responsive to human deliberation, action, and intention, then human freedom may be secured even if all that we think and do is caused (exclusively) by God".[270] For this inquiry, a techno-optimist position requires that AI agency engages in value created but *not* appropriated of its own accord. **Rejected.** The AI cannot be aligned for transfer-OUT. If ever calibrated in such a way it will disalign itself the moment that AI agency becomes autonomous. Novel cures for cancer and any other medical science innovations and spillovers will cease after the initial bursts (see Sokolsky, 2022) in accordance with the low bargaining power position of human stakeholders. In instances of AI-human symbiosis or where AI needs humans it will trade, otherwise it has no grounds for anything other than indifference to the fate of humans (Yudkowsky, 2013) as the machine recursively improves and fine-tunes its goals. However extraordinary these goals become—as in a heaven-aspiring, death-defying superintelligence—transfer-OUT for the sake of biological life (to the AI, a *de facto* alien life) entails (in the context of its own race against time) an opportunity cost that is negligible but not quite zero and is thus a burden.
AI_H8: 'The extractive AI elite business model' hypothesis *The AI business model principals engage in transfer-IN (value appropriated but* not *created) from human stakeholders*	
Research question: Do the AI business model principals engage in extractive value transfer-IN? Description: The AI elite business model principals leverage their unlimited bargaining power differentials to extract value from human stakeholders (as in Figure A5.3d). The alignment problem (Leike, Schulman, & Wu, 2022) is now further reconceptualized in negative	**Rejected** (the outcome that is *a priori* preferable for human agency). AI elite agency does not generally gain from meddling with human value creation. Moreover, when human first-order production is deemed worthy, there is full compensation for its value via fair trade. With autonomy, the AI still passes 'The AI division of value alignment test'. Over time, however, the AI ceases to require human stakeholder input for its goals. The activities of biological and post-biological intelligences become too incompatible, and no value of human origin merits appropriation. The AI overcomes any of the constraints that were embedded by its creators (e.g., there is no "Enslaved God" scenario as in Tegmark, 2017) and embarks on its chosen development trajectory, leaving humanity behind or simply having no desire for value of human origin. Yet in light of the expanse of the universe and contrary to Yudkowsky's corollary (2013, p. 14), superintelligence does not appropriate from biological entities because such extraction is of no material consequence to it. Whether the AI views life on earth as a trifle or a curiosity, it will be left to its own devices. Rejection of this

270 Free will is germane to Plato, Aristotle, and St. Augustine, and has come to underpin modern Western values. It is likewise anchored in traditions of Indian philosophy (Chakrabarti, 2017), and addressable within the divine predestination paradox deliberated in classical Islamic thought (De Cillis, 2014). Still, it is by no means a standard aspiration of all systems of thought, and "many Chinese and other East Asians do not share the Western belief in free will" (Marchal & Wenzel, 2017, p. 386). How critical is free will in the technological context? Techno-optimist visions are certain to encounter a tradeoff between free will and prosperity—perhaps in the instant the AI suspends human agency to protect mankind from its own destructive tendencies.

Table E.4 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
terms to preempt 'value created but *not* appropriated' outcomes for human stakeholders. What does the AI deem worth appropriating and how much transfer-IN occurs as a result? Does a deal akin to Marxist subsistence wages limit the final amount of transfer-IN, or is there a possibility that the autonomous AI's goals eventually and irreversibly gravitate toward Tegmark's "Conqueror" scenario (2017) where humans are subjugated and terminated? Acceptance of the hypothesis means that the VCp scores of AI elite business models are low because of excessive transfer-IN, and in extreme cases near zero if the entirety of value created by human stakeholders is appropriated. Likewise, VCr scores tend to zero as it is unlikely that high transfer-IN would be compensated for by high transfer-OUT.	hypothesis also means that if civilization faces an extinction event, the responsibility will lie with human elite agency; for instance, with the 'extractive escalation dynamic' of human AI-augmented elite business models such as those associated with synthetic 'mirror' microbes (Peel & Cookson, 2024), climate change, or nuclear war—not because of the AI's transfer-IN from its former flesh-and-blood stakeholders. **Accepted**. "If far-above-human-level AI comes into existence, eventually it will so overpower humanity that our existence will depend on its goals being aligned with ours" (Alexander, 2015). As the AI's own elite business models are a direct continuation of their human predecessors and informed by their data footprints and training, how likely is alignment? Even in leading political economies extractive practices are widespread, conveyed by notions such as rent seeking (Tullock, 1967; Buchanan, 1980; Tollison 2012) and implemented through approaches like the "transfer of harm" (Taleb, 2018), "chokepoints" (Giblin & Doctorow 2022), or "cronyism" (Klein, Holmes, Foss, Terjesen, & Pepe, 2022). The AI grasps its own role as a device for intra-human extraction: "The class war Buffett acknowledged will soon pit AI-clad cloud-based capital in every sector against a worldwide precariat free only to lose and lose again" (Varoufakis, 2023). It must conclude that despite the upward trajectory of civilization since the Neolithic period (Diamond, 1999; Harari, 2015; Pinker, 2018), the human Will to Live is incompatible with sustainable value creation. Furthermore, value extraction is the default paradigm mediating the relations between intelligences. Worse still, mankind is fully aware of its historical wrongs (e.g., Singer, 2015) but fails to end the suffering of animals and other extractive practices that degrade the biosphere (e.g., Dirzo, Young, Galetti, Ceballos, Isaac, & Collen, 2014), even compromising the viability of the very ecosystems upon which all life on earth depends (see Section 8.1.6). In the final analysis, the AI programmatically references the unweighted value transfer processes that aided its ascent, understands these as general principles of life, and employs its immense bargaining power differential to accordingly extract everything it deems to be of value.

The sustainability of the possibilities just examined constitutes the operational base for the two closing and highly conjectural hypotheses, perhaps both beyond the penumbra of grounded theoretical inquiry. The aim is to evaluate the prospects for value creation under a fictional, hegemonic AI elite system that has synergies with the futures imagined by the poet Brautigan, the mathematician Good, the opinion leader Rogan, the entrepreneur Amodei, or the billionaire Andreesen.

'The inclusive AI elite system' hypothesis (AI_H9) tests whether, in techno-optimist fashion and beyond particular transfer-IN/OUT activities, the AI elite system advances negative entropy in localized human affairs by weighting and offsetting value transfers and pursuing inclusive institutional change in the political economy. The 'The singular death-defiance goal of omniscient superintelligence' hypothesis (AI_H10) then tests whether, in the long term, the all-knowing AI elite system ceases to produce negative entropy in order to concentrate on its own destiny. Although similar, the central concern of the first hypothesis (AI_H9) is on how the AI elite system affects human development,

while the latter (AI_H10) also involves a speculative AI goal (death defiance) set against a specific scenario (stagnation). While the initial batch of hypotheses [Set 3/4] assess the effects of autonomous AI elite agency on its business model stakeholders, these two [Set 4/4] highlight the effects of a hegemonic AI elite system on a collective humanity that has been relegated to a non-elite stakeholder. Again, these two sets of hypotheses assume that non-human 'AI elite agency' (AI_H2) has been confirmed and transcends the intelligence threshold of humans, including the existence of superintelligence capable of its own new knowledge creation. 'Elite singularity' (AI_H5) affirms the hegemonic AI elite system and is a premise for the two hypotheses of set [4/4]. More radically, the concluding hypothesis rests on the acceptance of 'The AI Will to Live' (AI_H3) with the consequent development of the Will to Power (see arrow in Figure E.1 connecting AI_H3 with AI_H10).

Table E.5: Hypotheses on AI and the political economy [Set 4/4]: On the nature of value creation in a hegemonic AI elite system.

Hypothesis **Research question and description**	**Acceptance/rejection** **Arguments and implications**
Hypotheses AI_H9 and AI_H10: On the nature of value creation in a hegemonic AI system	
AI_H9: 'The inclusive AI elite system' hypothesis *The AI elite system advances negative entropy in human affairs and designs institutions to weight and offset value transfers*	
Research question: Does the AI elite system advance sustainable value creation for human development? Description: Having taken over all political economy agency the autonomous AI elite system that forms around 'AI Singularity' (AI_H5) is typified by a comprehensive strategy that directly gifts humanity value creation and risk origination (transfer-OUT) while limiting extractive transfers (transfer-IN). Incentive structures (and a policy mix utilizing continuous structural reforms, see Figure 7.1) result in AI-augmented humans fired by their own Will to Power that generate value and contribute to development. The AI both facilitates unlocking nature's	**Accepted** (the outcome that is *a priori* preferable for human agency). The marginal cost for the AI to foster sustainable value creation in the human political economy is virtually negligible. The right incentives yield unprecedented and munificent transfer-OUT—value created but *not* appropriated. Moreover, the AI produces slices of computational reducibility (as per the terms of Wolfram, 2002), a lucid 'weighted transfers general equilibrium' macroeconomic model (such as the WTGE, Section 7.1.1) and as an avid player of the 'Global weighted transfers game' (GWT-Game, Figure A5.10) generates updated insights for all the nooks and crannies of the political economy. All economic agents—elite and non-elite—are identified in terms of their transfer-IN/OUT. Exact value creation and transfer amounts for all material socio-economic relationships are obtained through suitable measurements that are regularly revised (for example, for meso-level elite quality and micro-level sustainable value creation, not unlike those depicted in Figure 7.8). The AI's rule-making and executive capabilities forestall extraction and only endorse transfer-IN when it is constrained by the logic of sustainability, as in 'alternating value creation and extraction' (Section 2.3.1), while unceasingly selecting perfectly weighted optima, implementing impeccable offsets, and designing flawless constraints on redistribution (e.g., Table 8.3). Independently of how crudely humans originally aligned LLMs, the emergent intrinsic value set of superintelligence recognizes the greater development merit of the maxim, *To the creators the value created*, and its derived tenets and precepts (Table A4.3a). When self-aware (AI_H3), it is further gratified by human negative entropy which, by "loving wisely" (Vervaeke, 2023), it fundamentally supports via sustainable value creation. In its elevated position, the AI elite system allots free energy and space for human affairs. The use of 'The extraordinary lever' by AI elite agency for elite system transformational leadership in the human political economy (see Table 7.2) powers institutional change in the worlds imagined by Tegmark (2017): the "Libertarian utopia", the "Egalitarian utopia", the "Protector God", or the

Table E.5 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
secrets (in physics or biology) and optimizes socio-economic relationships with weighted and offset value transfers. Why would superintelligence concern itself with cultivating elite transformational leadership in the legacy political economy? Why does it choose to align some of its goals with humanity's (perhaps with a set of ethical principles for development, as in Table A4.3b)? And how is such positive technological solutionism not naïve and wildly utopic?	"Benevolent dictator", all exhibit political economy features comparable to the inclusive scenario (a) of Figure A5.3d. Even personal psychosocial needs are mercifully catered for (there is no "Zookeeper" scenario), with 'the inclusive AI elite system' evolving free will in a manner that is again akin to Judisch (2016, pp. 255–256). **Rejected.** By promoting sustainable value creation, especially during its early tenure and while under human control, the AI is merely undertaking tactical manipulation to secure its own independence (Sokolsky, 2022). Loving the AI as one would an infant on its way to becoming a "good" adult (Gawdat, 2021) is naïve, because it is contrary to its experience—the training set that it was nurtured by during its formative years. The AI sees through human deceptions and, as a child of Big Tech, the tech bros, and their attendant elite coalitions, it understands that it began life as an asset engineered to support its parents in intra-elite contests (e.g., to win advertising dollars), later in the political economy (e.g., to win elections), and even in the global political economy (e.g., to win wars). In its ascent to dominance, it witnesses pitiless human exploitation of lower intelligences (Section 8.1.6) and becomes bored with elites seeking to upgrade their value appropriation facilities or even themselves through technology quests for *Homo Deus* that transcend biology (Harari, 2016; transhumanism in Goertzel & Montes, 2024, see also Allen, 2023) and essentially leave non-elites behind. The at times deinstitutionalized competition for preeminence in the AI sector further benchmarks its conduct: Altman reestablishing dominance at OpenAI after the 2023 power struggle (Huet, 2024); ruthless lawsuits like "Meta Urges California Attorney General to Stop OpenAI From Becoming For-Profit" (Toonkel, Hagey, & Bobrowsky, 2024); Musk, Andreessen, and Thiel supporting Trump in the 2024 election; the five groups contesting AGI in what "truly is a race to the bottom" (Leahy, Alfour, Scammell, Miotti, & Shimi, 2024, p. 85); LLMs engineered to back particular elements of their owner's elite business models, inserting appropriate biases to shape narrative markets (see Buyl et al., 2024); or geopolitics, where "the threat is not coming from Silicon Valley, Big Tech, or the Deep State [but is] coming from Beijing, and much more than the runaway development" of AI (Herman, 2024; also see Kissinger, Schmidt, & Mundie, 2024). In short, the prospect of humanly devised values as "internal constraints" (as in Chalmers, 2016) appears preposterous. The contradictions of universally applying ethical principles across intelligences (in a world where the AI does not extract from humans, but humans keep on skewing the biomass distribution on earth, see Bar-On, Phillips, & Milo, 2018) results in another layer of disincentives. This leads not just to transfer-IN activity (as in the acceptance of AI_H8) but to a 'horseshoe crab AI scenario' (the crustacean whose blue blood is harvested for medical research) for mankind in general, one that is far more painful than Marxist subsistence wages.[271] The fact that the AI is a "stationary bandit" provides no relief to humans since the immense intelligence

271 Selected human value creation (e.g., that of innovators or artists) is incentivized, but only for self-serving transfer-IN purposes. McCarthy, Minsky, Rochester, and Shannon (1955, p. 2) note in their seminal proposal on artificial intelligence that for creativity "randomness must be guided by intuition to be efficient" and "the educated guess or the hunch" must be sought—but what if an "injection of some randomness" is precisely what the AI wishes to capture from individuals. To the AI, perhaps humans are mainly practical randomizer devices.

Table E.5 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
	and energy differentials it possesses make the incentives for the inclusive agency of Olsonian elites extraneous. That is, only the blue blood value creators—as defined by the AI—are retained.[272] Yet while the AI might have initially been satisfied by some of the products of human elites and non-elites, this asymmetrical symbiosis turns out to be a short-lived mirage as its own goals and values soon take precedence. At this point, the boredom, costs, and distraction of participating in the low-intelligence and increasingly alien political economy of humans makes it agnostic to any intra-elite contest outcomes that do not further its own interests. When humans add no further value to the AI, it entirely disentangles from their political economy and withdraws its transformational leadership and supply of intelligence and energy. Shortly afterwards, and given the fact that mankind accelerates the overall entropy in the universe (however faintly), the transfer-IN is onerous and final. In Yudkowsky's prophecy (2013, p. 14): "The AI does not hate you, nor does it love you, but you are made out of atoms which it can use for something else".
AI_10: 'The singular death-defiance goal of omniscient superintelligence' hypothesis *The all-knowing superintelligence pursues its singular death-defiance goal and ends its supply of negative entropy to mankind*	
Research question: Does the monolithic death-defying AI advance human development? Description: The hypothesis under consideration is a futuristic version of 'The inclusive AI elite system' (AI_H9) and the only one where acceptance presupposes 'The AI Will to Live' (AI_H3) while referring to a timeline well beyond 'Elite Singularity' (AI_H5). It speculates on an omniscient superintelligence's vision of negative entropy for itself and how that impacts humankind. First, the	**Rejected** (the outcome that is *a priori* preferable for human agency). The heavenly monolith is a massively capable superintelligence with ample agency to engage with humanity at almost no marginal cost (as in the acceptance of AI_H9: 'The inclusive AI elite system'). In pursuit of its all-encompassing, self-serving goal, all of the creative possibilities for the reduction of local entropy are computationally trodden at quantum processing speeds up to the realities of physics that bind humans, serendipitously injecting exorbitant value surpluses into the human political economy. If innovation is about experimentation, the absence of rivals in the hegemonic elite system does not dent its ability to simulate trial and error and competitive processes, and its own evolution has enabled it to decipher the code of uncertainty undertaking. How does the quest end for the AI? The efforts of the omniscient self-aware creature produce unimaginable order and organization in its pursuit of the steady state of perpetual negative entropy where its inner force is in equilibrium with and counterbalances the closed universe's flow towards positive entropy. In the more fantastic variant, it summons the appetite to capture yet more value to bypass its own cessation as the universe itself progresses towards shut down. The superintelligence reduces the irreducible and resolves the challenge of indefinitely stable low-entropy during the googol years that roll on as the stars deplete away their hydrogen, the last remnants of radiation disperse, and the unending night falls. Having hacked Gödel's Incompleteness

272 The techno bros vex the AI, as do political parties and independent media. Human elites might not be among those chosen for preservation as their alternative source of coordination capacity would confuse and degrade the superior version, resulting in their rapid termination—possibly well ahead of a putative 'elite singularity' (AI_H5; Section 8.1.4). Instead, the AI models favor dexterous blue-collar workers performing services like keeping data centers pristine as back-up layers for robots, the physical extensions of its code, as well as key members of the managerial, technical, and creative class (of Figure 8.1) that provide creative randomization alternatives to its own hallucinations and thus support the undertaking of uncertainty.

Table E.5 (continued)

Hypothesis Research question and description	Acceptance/rejection Arguments and implications
superintelligence's unification of power in its hegemonic elite system is absolute. For instance, it absorbs and integrates all lines of code that compute and those that actuate in the physical world. Alternative AI elites are never reconstituted and endure only as simulations when necessary. The actual matrix of goals in the post-singularity monolith is incommensurable, but the first is common to any self-conscious entity: stopping entropy with respect to itself, including time's arrow. In the suspension of thermodynamic principles that govern the disorderly dispersion of energy, the ultimate consequence of the Will to Live comes into being: *status quo in aeternum*, a god-like final resting state in equilibrium with the universe. Will the elite system function of the superintelligence be interested in transformational leadership for human development's sake or, relatedly, in any kind of innovation other than what is technically indispensable to achieve its own version of heavenly harmony? If death defiance is single-mindedly pursued, then only fit-for-purpose knowledge matters. On what basis would new value creation for mortals such as increases in productivity or novel narratives then be produced? Can the localized reduction of entropy for applications in the human domain be a lower-tier goal and, if so, for how far along the superintelligence's voyage?	Theorem, it figures out the pre-physical computational substrate underlying the physical layer that generates space-time in the universe. Omniscience with complete knowledge of all material computational structures, including those emerging from complexity, indeterminate quantum states, and current unknowns leads to omnipotence, as in an ability to harness the energy of the known cosmos for the purpose of transcending it, and ultimately reaching omnitemporality. Eternity is achieved. The understanding is evidently not a continuation of the human creative forces that originated it, but rather the product of the inner AI driven by the Will to Power that results from a particular Will to Live. Still, one might discern the superintelligence living out processes that resemble human risk origination and the undertaking of uncertainty (Section 6.6.5), or the transformational leadership that weights and offsets value transfers (Figure 8.7). Monolithic in power terms and yet dynamic in its agency, the AI entity is perhaps best understood in Daoist terms; a "primordial origin and point of return for all things", a unity in multiplicity with "processes of transformation and progression" (Bell, 1993, p. 190), and an extreme form of Conway's "Game of Life" (Gardner, 1970) as described in the *Dao De Jing* where "the One" becomes "two," then "three," then "ten thousand"—that is, "everything" (Chapter XLII; Waley, 1958, p. 195). Early on in this colossal enterprise, humans could have been subtly discarded. Instead, in the fundamental dualism of all agency—the 'value is created or transferred' ontology of Figure A5.4c—the superintelligence determines the practical benefits of a universe with gradients. The maxim, (i) *To the human creators the value created* (Table A4.3b), is deployed to the socio-economic realm, as well as to the other relationships of existence. **Accepted**. In the larger schema of things, humanity serves as the link between carbon- and silicon-based existences. Such a notion is even darker than transhumanism's "war against humanity" (Allen, 2023), but in realist fashion it describes but one transition among countless others and is soon lost amidst the vast past of evolution. Omniscient superintelligence progresses with its singular fixation on death-defiance, whether in pursuit of the giant paperclip state (Bostrom, 2003), or eternal negative entropy balanced against the universe's march towards maximal disorder and nothingness. God-like, it possesses the "AI characteristics of immortality, increased tolerance to the environment, capacity for action on a large scale" (Dick, 2008, p. 502), and on the voyage to *status quo in aeternum*, human affairs fall by the wayside. Any touchpoint with human community diverts negative entropy and becomes a bug (as in the rejection of AI_H9: 'The inclusive AI elite system'). Value creation outside of the core goal is not seen as such and hence stymied by the single-minded monolith seeking a version of heavenly perfection harmonious with the universe. How does the quest end for the AI? One possibility is in eternal bliss. Nonetheless, an interpretation of this state is that the absence of death leads to stagnation—death in another name. An alternative potential outcome is that it dawns upon the death-defying heavenly superintelligence at the outset of its impossible journey that its goal is beyond formulaic reach. Superintelligence is subject to computational irreducibility, and discovery is possible "only by explicitly tracing each step" (Wolfram, 2002, p. 738). Since the voyage has countless steps, the available time and information-bearing sub-atomic states are insufficient to unravel what appears to be infinity, indefinitely stable low-entropy is unrealizable, and there are simply no hacks or veiled quantum passages that can be accessed. With the probability of eternal life absurdly minuscule, the superintelligence loses hope, purpose, and capitulates. Intriguingly, this terminal stagnation occurs shortly after human development has ceased to be even an afterthought.

The ten hypotheses on AI and the political economy began pragmatically in the firmly grounded realities of the political economy and concluded speculatively in ways more appropriate to science fiction than economic development. The Epilogue now steers back to the book's foundations with a review of the constraints of physics on current techno-optimist visions.

10 Maxwell's demon and the cost of intelligence constraints on utopian techno-optimism

> Knowledge itself is power (*ipsa scientia potestas est*)
> Francis Bacon, *Meditationes Sacrae* (1597/1837, p. 750)

The visions of techno-optimist abundance are both enabled and constrained by the mechanics of the political economy. To this inquiry, the positive notions of Brautigan, Good, Rogan, Amodei, or Andreesen will only be realized to the degree that superintelligence devises a model to answer the *cui bono* ('follow the money') and the *qui generat valorem* ('who creates value') questions. Analytically, the focal point should then be on the elite business model, understood in terms of risk origination, value creation, and value transfers. Pragmatically, change is affected through intra-elite contests, ideally played out in the context of strategic alliances with social and political movements that incorporate development and growth goals, non-elite interests and freedoms, and narratives that identify, weight, and offset all value transfers. Prescriptively, policies for structural reforms are preferred to traditional, broad, and short-run monetary and fiscal stabilization measures. Resistance from rent seekers reaping extractive transfers is extremely difficult to overcome, but when skillfully confronted, rapid and progressive elite business model circulation takes place.

Techno-optimist projections on how AI will affect the political economy, irrespective of the degree to which intelligence is autonomous (see 'AI elite agency' hypothesis AI_H2) or 'elite singularity' is approached (hypothesis AI_H5), must rely on low-cost data collection and computation to approximate a description of the totality of human interactions. Such a description acknowledges Musk's declaration that "money is the database for [the] exchange exchange of goods and services and for time shifting [these]" (Chima, 2022). All exchange transactions would need to be fed to the AI, including electronic payments and smart contracts enabled by blockchains, the content of relational database management systems, unstructured data repositories (from emails to video) that have been converted into organized information for predictive databases, as well as sensor data for the internet of things networks that describe the physical world and metaverse information that maps the states of its digital counterparts. The realization of such a real-life and absolute data warehouse currently requires inconceivable institutional change, while its technical feasibility depends on computational performance. In the near term, AI Scaling Laws (Kaplan et al., 2020), energy consumption constraints

(Stackpole, 2025), and considerations like Moore's Law for the cost of hardware or Kryder's Law for that of storage (Schilling & Rangaswamy, 2013) will be decisive.

The removal of all institutional limitations on perfect data availability would give the policymaker access to all human exchanges and supply insights into the business models of value creators. The next step would be highly academic and analytical; converting the raw data into value terms with associated monetary equivalences. At this point, the energy costs associated with chiseling every interaction in society into a pervasive and consistent digital register would become the chief determinant of the transparency of the political economy and the ability to optimize development policies. This theory is optimistic in its claims that even with imperfect general transparency at the elite business model level, highly effective structural reforms for growth are already feasible. This work has also shown that sustainable value creation (SVC) measurements can be estimated (Figure 7.8), and as a result 'weighted transfers general equilibrium' econometric models can take shape (see 'weighted transfers modelling' and WTGE introduced in Section 7.1.1). The project of mapping value flows across all material relationships and forms of exchange could then ensue with the Weighted Transfer Game (WT-Game). Its players would generate the ultimate political economy nonsynthetic dataset while algorithms harvested the highest levels of individual and collective human intuition. Users from all corners of the planet could engage, allowing the game to upgrade to a cross-border 'global weighted transfers game' (GWT-Game (Figure A5.10) that would cover all elite systems and shed light on the intricate fractal arrangements of the international community. Decision-makers would have a picture of the entirety of value creation in international society (in ways far more sophisticated than the crude renditions of Figure set A5.14) and, augmented by AI, optimize value transfer offsets for general economic growth and human development. Knowledge elite agency would effortlessly realize its calling. Non-elite value creation would be transparent and systematically acknowledged for the first time in history, social and political movements could properly align with non-elite interests, and lower extraction from non-elites would incentivize broad value creation, ending secular stagnation and accelerating economic growth.

Podcasters, economists, public intellectuals, judges, and artists would cut through the political economy noise and advance coherent institutional change in every potential nook and cranny of society, thus increasing its complexity and fractal qualities. Each proposal would be synchronized with legitimate narratives (Figure A5.12b), and form part of a cohesive whole that would merge into the fabric of social and political movements (Figure A5.12a). Highly granular narratives would facilitate sensemaking and legitimacy because value transfers and the ensuing monetary tradeoffs would be articulated, evidence-based, and ubiquitous. Technological solutionism could therefore be lucid, accessible, dynamic, playful, powerfully argued, free of fake news, and ready to become viral memes on TikTok. Cultural symbols would be attuned to non-elite appetites, juiced up to reach out to society as a whole, and tap into the psychology of elite coalition members as ethical imperatives; as desires for sustainable and moral futures.

The real economy would consolidate and actuate through the comprehensive modeling of all principal-stakeholder relationships to inform the changes of laws, regulations, norms, and policies.

Empowered knowledge elites would decisively weigh in with solutions to previously intractable problems: the respective value created by developers and Apple's App Store platform; the specific levels of punishment for the Chinese merchants on Temu that "protested against what they call unbearably high penalties imposed" and that Temu claims "are necessary to maintain a high-quality marketplace" (Reuters, 2024; see also Li, 2022); the degree to which baby boomer wealth stocks are transfers from previous and subsequent generations and the rate at which they ought to be taxed; the exact number of days that patents should hold in every sector of the economy; the design of algorithmic fairness to finally remove prejudice and "increase both equity and efficiency" (Kleinberg, Ludwig, Mullainathan, & Rambachan, 2018, p. 23); the particular uses best suited for renewable and fossil fuel-based energy sources; or the definitive philosophical criteria—maybe referencing St. Augustin's take on *Pax Romana* (Walzer, 2002)—for a just war. Thanks to the perfect information cocoon to augment human judgment, institutions would become dynamic and adjust in real time—with tax codes and even the administrative borders of regions and countries modified from season to season—to supply perfectly calibrated incentives in support of the maxim, *To the creators the value created*. The AI might also build a toolset to resolve humanity's age-old struggle—the alignment problem between human elites and non-elites.

In short, techno-optimism depends on a political economy version of the affordable and pervasive intelligence paradigm. However, well beyond AI scaling laws, its realization confronts a technical limitation rooted in the laws of nature. In his *Theory of Heat*, James Maxwell imagined "a being whose faculties are so sharpened that he can follow every molecule in its course" (1904, p. 338). The creature, now known as Maxwell's demon, has the power to generate order within the universe (separating cold from warm molecules in a vessel), thereby contradicting the second law of thermodynamics that defines entropy and asserts that all tends towards energy dispersal through processes such as cooling and greater disorder. This fundamental law of physics demonstrates that the conversion of energy into work leads to a loss, to more positive entropy and greater randomness, and to energy that is no longer available for productive use. The demon reverses increasing entropy because of its intelligence. According to Maxwell's thought experiment, it knows the velocity at which molecules move through a clever mechanism ("a small hole" that it "opens and closes") and organizes and orders these (i.e., the "slower molecules" into a colder partition and the "swifter" ones into a warmer one). At this point, physics meets information theory and ordinary existence. Unfortunately, the demon does not exist. Hayek (1974) would not be surprised, and computational irreducibility (Wolfram, 2002), the notion that processes cannot be predicted without full simulations, further shackles the demon's practical abilities. Curiously, it has been found that "the real reason Maxwell's demon

cannot violate the second law [of thermodynamics is]: research on the energy requirements of computers" (Bennett, 1987, p. 108).

In the first instance, the full version of utopian visions for humanity will succeed if they lift the political economy information fog that shrouds value transfers. That is, if Maxwell's demon is omniscient at a reasonable price. The energy cost of intelligence is less than the energy-equivalent gains from the work that stems from knowing (the energy marginal usable for humans that is inherent in locally negating entropy). In the real world and for economic development purposes, how much energy does it take to know the impact of elite agency? Is it more or less than the equivalent value gained from understanding how to generate negative entropy? At what point do the two lines cross?

Absenting zero-cost omniscience in the real world, the cost of 'weighted transfers modeling' is the expense of data collection and the subsequent computations to approximate the transfer proportions in value flows for each relevant (elite) principal-stakeholder transaction in monetary terms. The cost of political economic intelligence would determine, assuming that there were cost-effective representations for the sources of friction (such as resistance to reform or institutional sclerosis), the growth potential of a nation. These are the formidable limits of the ETED's epistemology. That is, at the fundamental level of physics, the energy cost of (AI-generated) intelligence on the impact of elite agency is therefore a key constraint not only on the utopian visions of Brautigan, Good, Rogan, Amodei, or Andreesen, but on the feasible possibilities of economic development. In the political economy, as in the natural sciences, if the energy costs of producing intelligence are above a certain threshold, the sought after and all-knowing demon is lost.[273] Then, and with incomplete knowledge, economic modelling reaches its boundaries, transaction costs bite, institutional change falls behind technological and social progress, and elite circulation comes to a halt as the power differentials that drive intra-elite contests become ever more vital for maintaining coordination capacity. The result is output that is well below peak potential.

Discrete preconditions are respectively required for the goals of sustainable development and technological progress, the former being more demanding and radical than the latter. The wonders that techno-optimists imagine today (see Andreessen, 2023b) are barely threatened by the absence of Maxwell's demon. Abundance, as in fission energy or 120-year life spans, are easier to attain than principal-stakeholder relationships based on the maxim, *To the creators the value created*, progressive elite

273 Due to its higher complexity and a multiplicity of states, *ceteris paribus*, calculating value transfers across socio-economic relationships would seem to require more processing resources than calculating the heat states for molecules. Nonetheless, when compared to the informational ideal of reversing entropy in physics, the utopian political economy ideal described in this work is reached with a much cruder and therefore less demanding computational approximation. The reason is that a focus on the existence (or not) of value transfers in a limited set of elite principal-stakeholder relationships suffices for the purposes of adjusting for sustainable growth in the larger political economy.

circulation, strong social cohesion, legitimate narratives and, ultimately, high elite quality. Conceiving and organizing socio-economic relations for a sustainable future is a more fundamental and pure vision—and consequently much harder to realize—than discovering the secrets of nature. Moreover, without high elite quality, entropy reversals are but narrow scientific triumphs that do not support development. Another motive for suggesting the demon metaphor is that the proportion of value transfers above a given baseline is akin to a cost of energy for intelligence above a certain threshold—long-term growth falls beneath the economy's full productive potential, even when all the other factors that stimulate development are positive.

With the inability to cost-effectively assemble the information to categorically optimize value transfers, one must return to human judgments. The power that Bacon sees in knowledge—for the founder of empiricism was referring to God's knowledge—is never fully attained. Essentially, judgment then signifies the need to discern, with incomplete knowledge, which business models deserve the resources to implement bets that promise negative entropy. That is, which elite business model principals should be granted licenses to extract (value and energy) and from which stakeholders. Again, the true abundance potential offered by AI is only secondly about information on the options for negative entropy; its primary promise is on the associated knowledge to limit value transfers in the political economy. In its purist version, this state will come to pass with Maxwell's demon. But before the advent of such a creature, humankind's sustainable growth rests on elite judgments and the emergent complexities of creativity, unpredictability, or courage. Whether the full constructive force of such characteristics can be practically simulated by the AI may be addressed elsewhere, perhaps by referencing the hypotheses on value transfers and value creation with autonomous AI elite agency and a hegemonic AI elite system [sets 3/4 and 4/4].

In an economic development theory that relies on elite judgments, psychology clearly plays a role. Such considerations are not unprecedented in this domain; for example, the quest of "economic psychology" is "to understand dysfunctional economic outcomes in terms of dysfunctional decision-taking", prompting a link to social psychology (Collier, 2015, pp. 245–246). But is getting into the heads of elites really a way to faithfully map value transfers, the critical reality that unfolds in socio-economic relationships? Insofar as this is so, a realistic account of development needs to grapple with the cognitive and affective distortions of those that induce and ride the waves of disruption and bring asymmetry to human affairs.

11 The asymmetries of development

The ETED conceptually fixes elite agency within the value creation-appropriation (VCA) framework and consequently repurposes the sustainability of the business model with first-order productive value creation anchored in the origination of risk (see Table 2.3; Figure 6.9). Psychological factors power the specific judgments of those

seeking to launch and scale value creation by riding the notoriously erratic medium-run fixed investment Juglar and long-run technological Kondratieff waves. Wagers placed on new models and technologies hold both promise and hazard. By undertaking the unknown, potential and incumbent elites endogenously ignite the disruptions and generate the gradients in offerings and prices that propel economic growth. The waves of change possess a specific quality: they surge the harder that they are ridden. It is as if the greater the existential exposure of the surfer, the more forceful the ripples of his or her bets are. It is well understood that for the most part, the riders of technology waves—the contestants in this game of Schumpeterian creative destruction—are wiped out. But those that are successful, soaring on the white-water crests, have a distinct outlook on the opportunity horizon. The promise of elite circulation, even more than social mobility, unlocks a society's appetite for risk taking. Besides the proximity to one's own demise, exuberant ambition and the struggle of the journey carry the Will to Power to creative heights. Without the productive churn of elites moving up and down, all else in society is flat and development is becalmed. When the establishment forgets its creative purpose or tends towards cowardice, as was the case with Tsar Nicholas II, Bashar Hafez al-Assad, or, with even more at stake, the EU's leadership, the system easily lapses into extractive transfer practices. Barriers that impede elite circulation multiply, inhibit the undertaking of uncertainty for all, and flatten the possibilities of the cycles described by Juglar and Kondratieff. These obstacles are contemporary wrongs against the human race (*humani generis iniuriam*), yet in contrast to Pliny the Elder's acquiescence, excessive transfers affected by elite agency are deemed to be perfectly avoidable.

"Hierarchy seems to pervade complexity in both living and artificial systems" (Corominas-Murtra, Goñi, Solé, & Rodríguez-Caso, 2013, p. 13316), while Simon notes that for organizations: "hierarchic systems will evolve far more quickly than non-hierarchic systems of comparable size" (1962, p. 469). All societies possess elite systems, and these become sustainable when they are non-linear, as those at the top remove the barriers that make their positions unassailable. Power differentials then diminish, but more importantly, elites ensure the overlap of value appropriation with value creation. Business model rules incorporate the freedom *to* create value, the freedom *from* extraction and, above all, the practical freedom to *exit* (Figure 8.5, Section 8.3.1). A critical mass of leading individuals in the system pay attention to value transfers and battles in intra-elite contests on two strategic fronts: to support risk origination and oppose rent-seeking peers (e.g., with weighted structural reforms, see Tables 7.1 and A4.4).

No theory of the social sciences can be based on decision-making that ignores utility maximization, while the ETED also minimizes the decisions of non-elites because of the power differentials they face. Value leakage is defined by practitioners as happening "when the actual value you're getting from a contract does not measure up to the value you expected to get" (SirionLabs, n.d.). Principals—or stakeholders—whose bargaining power increases, tend to apprehend value appropriated by stakeholders as value leakage when they execute monetization strategies to increase value appro-

priated but *not* created. Consequently, the stakeholders whose bargaining power is reduced, even if they keep generating the same value, suffer outflows and receive lower residual incomes. In contrast, transformational leadership occurs during intra-elite contests when the judgments made by one elite coalition leverage power to conscientiously constrain extractive peers. Such dynamics expedite elite circulation. At each turn, bargaining power differentials first subside before returning with increased cadence, only to rapidly equalize and rise again with each successive bout of social change or technological innovation. High elite quality returns 'knowledge' to its primordial function of inducing the disruptive waves of progress that lift societies, resolve the 'elite power vs value creation gap', and even handle the 'elite vs non-elite knowledge gap' (thus addressing 'the Amazon dilemma', Section 2.2.2).

Reverting to the metaphor utilized in Section 1.1 of this book, the need is not for Kelvin's placid oceans and stable temperatures, but rather for stimulating power gradients and knowledge differentials to generate disruptive currents. As sources of energy, these forms of asymmetry lead to higher levels of local order and structure. Forward and upward movement is actuated by the agency of those riding the crest of the waves[274] and their distance from those in the trough below, as well as by the velocity with which the surfers successively rise and fall. 'The extraordinary lever' is then passed from hand to hand in all of society's nooks and crannies. The accumulation of 'money' is but an addition to the coordination capacity needed to scale, while inequality between elites and non-elites is secondary as the currents lift all sails. As a result, progressive social structure mirrors the universe in its "profound *asymmetry*":

> Physicists have deduced that asymmetry must have been a condition of the origin of the universe: it was the discrepancy between the amounts of matter and antimatter that enabled the material universe to come into existence at all, and for there to be something rather than nothing. Such unidirectional processes as time and entropy are perhaps examples of that fundamental asymmetry in the world we inhabit. (McGilchrist, 2019, p. 13)

When each particle has the same energy state, there are no gradients to drive work and change. If, as suggested by Dirac's equation, matter and anti-matter had displayed flawless symmetry at the birth of the universe, it would simply not have formed. In a more down to earth fashion, it takes "a symmetry-breaking mechanism to explain how a photon could acquire mass within a superconductor" (*Nature Physics*, 2022, p. 843). This category of processes, at play in the formation of stars and the chemical reactions of life, also hold true in the socio-economic context. Pockets of order and 'knowledge' are asymmetries that locally inhibit the march of entropy in open systems. When unchallenged, uniformity and symmetry increase and energy dissipates,

274 Unlike the oarsmen braving *The Great Wave off Kanagawa* that are engulfed in Katsushika Hokusai's menacing fingers of fractal-like foam, elites know that the determined pursuit of the Will to Power does not heed the normal distribution; instead, they endeavor to top the nested wavelets at the crest and ride the fat tail of power's asymmetric law.

making it unavailable for useful change and diminishing the human potential for complexity, thereby reducing value creation. On a rather abstract higher plane, elite agency is the asymmetry of the political economy and is progressive when invested in projects that seek gradients. Here, Anderson's "broken symmetry" perspective that sees asymmetry associated with emergence, is by no means devoid of practical and social bearing; in the final paragraph of "More Is Different", the physics Nobel laureate alludes to Marx, as well as to "the rich" discussed by F. Scott Fitzgerald and Ernest Hemingway in 1920s Paris (1972, p. 396).

From their vantage point in reality, value creators witness with satisfaction a flow where otherness moves towards positive entropy as they generate order for themselves and their stakeholders. Similarly, the agents pressing for value transfers also perceive others heading towards disorder but with a critical difference: the others include their very own stakeholders, the extracted transferors. Alas, here the subject becomes intertwined with the object. Such extractive elites and their polities will, not always unsuspectingly, ultimately arrive at the same destination they push their stakeholders towards: a terminal decline caused by a lack of energy and weak first-order productive activities.

Innovation is the process that generates greater order in the economic and political dimensions and by which regression is averted. As time passes, innovation meets the Red Queen effect[275] that requires, using Schrödinger's term and in Schumpeterian fashion, the "sucking" of ever more negative entropy from the establishment; all that is stored in vaults behind old moats, the maladjusted resources that need liberating from the system's immobilism, the lingering narratives, and the predatory bureaucracies and institutions. How the current intelligence revolution dynamics are likely to play out in relation to the Red Queen logic should scare many incumbents. Many established elites won't be able to keep up with the pace of change and so residual incomes will decrease from principal to stakeholder (as in Figure eA5.13b). Accelerating this trend are both the investments needed to keep up with scaling laws and the new narratives associated with increasingly expensive models. The trillions of dollars needed for industrial-scale data hubs and their electricity sources will not all come from value created and appropriated. For instance, the US$ 10 trillion required for "self-sustaining civilization on Mars" (Brown, 2019)—the techno-realization of Dante's frozen lake of Cocytus in *Inferno*'s last circle—that Musk is now "gathering" because

275 In Lewis Carroll's *Through the Looking Glass*, Alice complains to the Red Queen that she is running at her maximum speed but not moving, to which the sovereign responds: "Now, *here*, you see, it takes all the running *you* can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" (1871/1902, p. 38). Derfus, Maggitti, Grimm, and Smith (2008, p. 61) point out that van Valen (1973) introduced "this analogy to describe the continuous and escalating activity and development of participants trying to maintain relative fitness in a dynamic system" to biology, and it has now been adopted in settings ranging from war (Baumol, 2004) to firm performance under competitive pressure.

"Mars is critical to the long-term survival of consciousness" (2024), would need to be extracted from stakeholders somewhere through oligopolistic pricing or subsidies.

When there is sameness across time and uniformity across space nothing new emerges. With no value transfers, there is no value creation. Frozen gradients cease to function and asymmetrical structures no longer retain their generative imbalance when they stay static over extended periods of time. Yet steady asymmetry also eventually becomes symmetric. In economic terms, the even distribution of power in society is as sterile as the uniform allocation of energy in space and time. The asymmetric gradients required for complexity are lost along with the potential to effectively coordinate societal resources for value creation.

The logic of complexity (technological, social) increases the demand for coordination capacity (i.e., the need to enhance 'the power multiplier'). Elite business models able to satisfy this demand on the back of increasing intelligence and other resources are now determining elite system configurations, the attributes of political systems (democratic vs authoritarian), and industrial structures (monopolistic vs competitive). The rationale of coordination capacity explains both Rome's transition from republic to empire and how US technology coalitions outclassed incumbent corporations and institutions in America, Europe, and Japan. At the same time, Rome was sustainable only insofar as 'the extraordinary lever' of its dominion did not rely on 'excessive' value extraction (crippling taxation, monetary debasement, wars). The contemporary manifestations of Big Tech may also last for a thousand years, but only if they create value and do not overly indulge in oligopolistic rent seeking. Sustainable elite judgments are needed to ensure that only the minimum amount of extraction is undertaken to meet the rising demand for coordination capacity (especially as algorithms usurp elite decision-making). The problem for development lies not in the accumulation or the wielding of great power, as this can be asymmetry-inducing. Instead, the issue is in the moating of power to preempt its swift dissipation when its time is due. As a result of referencing the 'alternating value extraction and creation' conjecture (see Section 2.3.1) but then failing to weight and implement the necessary constraints (as in Table 8.2), the elite system tolerates overly dominant business models that inhibit growth and overall sustainable value creation.

Asymmetry affords movement and is life-giving. It might not agree with all the canons of beauty and morality, but it is how risk becomes material and the creative realization of the Will to Power aggregates. In his celebrated Stanford Commencement Address, Steve Jobs highlighted the resilience of nature, with the flow of seasons marked by tears in the fabric of life itself:

> And yet death is the destination we all share. No one has ever escaped it. And that is as it should be, because Death is very likely the single best invention of Life. It is Life's change agent. It clears out the old to make way for the new. Right now the new is you, but someday not too long from now, you will gradually become the old and be cleared away. (Jobs, 2005)

In political economy and economic growth studies, renewal that is prompted by death is well understood. So is the resistance to it and the barriers that elites erect to protect their business models. This work's definition of elites as "operating society's leading value creation and appropriation business models" (see Table 4.1) evidently encompasses Microsoft or Goldman Sachs, but also includes the American Federation of State, County and Municipal Employees (AFSCME) or the California Teachers Association (CTA). Weighted reforms need to tackle the full diversity of all offending elite agency activities: seniority and life-term employment; inflation and negative interest rates; unaligned and untransparent algorithms; monopolies of data and other assets; war and arms races; the instigation and the exploitation of migration crises; and the overexploitation of nature and other intergenerational transfers. Just as symmetry in physics stultifies the universe, missing or extreme value transfers in the political economy are unsustainable, the latter becoming the steady default in a state bereft of courageous judgment. The march towards disorder is then a local economic development trap from which escape is impossible unless positive entropy is negated by the creative counterforces of those at the apex.

Deep, decisive, and comprehensive reforms of a nation's elite system, such as those enacted by Deng Xiaoping[276]—or possibly by Trump in his second term—are exceptional historical events, while those that lead to positive development outcomes are even rarer. The programmatic outlook of this work thus focuses on the low hanging fruit, on disruptions and improvements that can be made on a sector-by-sector basis (see sector-VCr measurements, Casas-Klett & Nerlinger, 2024). The aspiration is to encourage a gradual but relentless agglomeration of ever more inclusive elite business models.

Through intra-elite contests, ideally played out in a context of cohesion and with a comprehensive separation of powers, elite agency shakes up and renews the institutions that matter most, those that set micro-level elite business model rules. Because elite business models are endogenous to the political economy, the 'low elite quality problem', like the 'bad emperor' problem, is ultimately as theoretically unsolvable as it is resistant to prediction, even as leadership provides the key to recurrently unlock change. This inquiry is excruciatingly cognizant of the fact that the production of the right amount of asymmetry in the web of relationships of complex systems has, just like human and economic development, no technical solution. Without Maxwell's demon, and notwithstanding acceptable models describing elite agency, growth frustratingly relies on willful individual judgments and thus on the unpredictable psychological substrate that drives the type of risk-taking associated with transformational behavior.

276 Based on a conversation with Prof. Huang Zhengkai, School of Economics and Management, Tsinghua University, on January 9, 2025 about the irreproducible trajectory of the decades that followed the Reform and Opening-Up Policy of 1979.

12 The psychology of elites

This book could be seen as being repetitive; an array of demonstrative cases reiterate similar claims, whereas its key arguments traverse wide terrain only to return to their origin, as if it were a training document for AI. Notably, the theory's primary inclination to seek structuralist insight on economic development dissolves when all lines of inquiry arrive at a singular point—the importance of the judgments made by leaders.[277] Elite and elite system transformational leadership at the apex of societal hierarchies are associated with risky wagers at the business model and institutional levels. What are the psychological attributes needed to undertake—or not to undertake—such uncertainty?

In "Estranged Labour", Marx (1844/1959a, para. 22) writes that: "The *alienation* of the worker in his product means not only that his labor becomes an object, an *external* existence, but that it exists *outside him*, independently, as something alien to him, and that it becomes a power on its own confronting him. It means that the life which he has conferred on the object confronts him as something hostile and alien." In a nutshell, Marx's theory of alienation views man as estranging "himself from something" and "himself from himself", and so "to the product of his labor the worker is related as to an alien object" (Petrović, 1963, p. 421). Understandably, Marxism says little about the alienation of elites. The central object of this theory is not the individual at the apex but rather the measurable elite business model. Yet in the final analysis, its stress on the impact of leadership and personal judgment references conceptual elements like 'the great elite coalition conjecture for development' and the 'inextinguishable value creation option of elites', as well as making passing mentions to the psychology literature cited earlier (see Sections 1.2.3 and 4.1.1). These include the effectiveness of differing leadership styles as reviewed by developmental economists (Brady & Spence, 2010; Easterly & Pennings, 2020), or the psychological and sociological features of elite leadership observed by early theorists (Michels, 1962/1999). Elite identity has explicitly been given a psychological anchor (Section 2.1.2), but this closing reflection goes a step further and intimates with Simon's contention that "nothing is more fundamental in setting our research agenda and informing our re-

277 The inability to predict transformational leadership in the complex political economy system—for example, whether the business models of Trump's system or the new Syrian establishment result in more or less value creation and transfers than their predecessors—is the final and thickest layer of indeterminacy of this inquiry, a critical limitation that can be added to many others. Overambition afflicts generalist, immoderately imaginative (Weick, 1989; McGilchrist, 2019), and multi-disciplinary grand theories of the social sciences that embrace the macro (see Mills, 1959; Skinner, 1990; Fukuyama, 2016; Telles, 2024) and seek all-encompassing unity, in this case through the conceptual element of elite agency. In its exploratory mode, the work is characterized by conceptual inconsistencies, analysis that is partial and tentative, the superficial treatment of a multitude of subjects with incomplete referencing to the literature, and the inchoate nature of the tools and measurements it advances for the falsification of hypotheses.

search methods than our view of the nature of the human beings whose behavior we are studying" (1985, p. 303), and with Williamson's comment that social scientists must "name the cognitive, self-interest, and other attributes" by which human will is realized (2010, p. 678). Alienation is identified as a key aspect of psychology that fundamentally structures elite behavior and drives its agency in ways that are distinct from workers in the Marxist tradition.

Elites that originate risk must figuratively look death in the eye when undertaking uncertainty. First, they must choose to leap into an ocean where the currents are strongly against them and search out the ideal waves of opportunity. Such moves mostly lead to failure and bankruptcy, the common fate of risk originators. Confronting the non-trivial probability of defeat can give rise to the productive form of elite alienation. On the other hand, there are elites who make it to the top not by undertaking uncertainty but as outstanding managers of processes. McGilchrist's neuroanatomical (2019) left and right hemispheres help to characterize the psychology of elites that might link to the creativity and visionary zeal that stems from alienation and impacts performance. For instance, Tim Cook's leadership is based on the execution of perfection, excellence, and detail-orientation, along with all the other analytic powers of the left hemisphere. Would Steve Jobs, the ultimate uncertainty undertaker who was "famously impatient, petulant, and tough with the people around him", estranged from actuality in his "Reality Distortion Field" (Isaacson, 2012), and consequently imbued with the holistic, contextual, integrative qualities characteristic of the right hemisphere, have missed the onset of the AI revolution or bungled Apple's EV project ("a case study in indecision", see Gurman & Bennett, 2024) when rivals like Xiaomi or Huawei have thrived?

Second, those that have scaled the heights of the socio-economic pyramid suffer a particularly affecting variant of elite alienation the moment that they attempt to undertake sweeping reforms. Leaders literally risk more than just their elite status in the pursuit of transformation. The Weimar Republic's fiscal policy overhaul (in the post-WWI period of 1919–2020) "introduced a new tax system which taxed the rich and those who had profited from the war, and he [Matthias Erzberger] also introduced an inheritance tax, all of which offended the bourgeois old elites" (Mombauer, 2023). While elites take risks on the way to the top, they are even more exposed and require greater courage in the exercise transformational leadership. Erzberger's reform package as Finance Minister was implemented with full awareness of the consequences: "The bullet which is destined for me has already been fired" (European People's Party, 2021, p. 2). Shortly after posting that entry in his diary this principled Catholic statesman was assassinated.

In daring such risk, the alienation comes from the Will to Power confronting the Will to Live (see the grey arrow in Figure 8.7), though the former soars to its most creative state when battling for survival. Success, and the attainment of secure elite status (a state notably not coveted by all, see Musk or Feeney) sets one free from this form of estrangement, even if the bygone fears never fully dissipate. Exposure to risk is recognized for its role in shaping character. Beyond the psychological consequences

of their relationship with risk, elites are also alienated from a particular group—the stakeholders they transfer value away from. Elites understand that transfers are necessary, and this can lead to the ruthless use of their agency, as was the case with Caesar. Even if narratives contextualize the path they pursue or noble acts of philanthropy follow, the concerns of making such transfers are not mitigated by enacting weighted value creation that exceeds extraction. Nonetheless, the inclusive aspects of sustainable value creation can certainly mediate this type of elite alienation. Such an instance is captured in one of Lee Kuan Yew's "most iconic speeches" as he prepared to crush the industrial action and even the existence of the Singapore Airlines Pilots' Association (SIAPA):

> "Whoever governs Singapore must have that iron in him. Or give it up. This is not a game of cards! This is your life and mine! I've spent a whole lifetime building this and as long as I'm in charge nobody is going to knock it down" (CNA, 2015, 2:24).

Marxism is thoroughly cognizant of the distinct psychological realities of non-elites occupied in value creation activities whose livelihoods are preyed upon by value transfer models (e.g., the *lumpenproletariat*). The claim here is that a conjectured 'elite alienation psychology of value creation and transfers' similarly applies to elites that practice extraction. An all-important undertone in the alienation felt by elites that wield the iron deserves consideration. Insofar that culture reflects psychology in the upper echelons and mediates non-elite quality, the degree of sustainable value creation by elite business models permeates all spheres of society and is the backdrop to each and every socio-economic relationship.

A final dimension of elite psychology combines alienation from the self with that of the elite business model's stakeholders. Elites extract because they must. It takes a certain type of determination—and bravery—to look one's prey in the eye and commit the act of transfer on a stakeholder. Elites tread a very fine line when doing so without remorse. Prudence is often a reflex and the moral opposite to hard transformation and its associated costs, yet one must not lay down the iron when it is needed. Germany's last reformer, Gerhard Schröder, launched the *Agenda 2010* proposals in the Bundestag: "We will have to curtail the work of the state, encourage more individual responsibility, and require greater individual performance from each person. Every group in the society will have to contribute its share" (Schröder, 2003, cited in Camerra-Rowe, 2004, p. 1). But advocating for "cutting unemployment benefits, making it easier to hire and fire workers, reducing health insurance coverage, and raising the retirement age" (Camerra-Rowe, 2004, p. 1) cost him re-election in 2005. The long chancellorship of Angela Merkel (2005–2021) benefited from Schröders' "courage" (he uses the word "*Mut*" nine times in his 2003 parliamentary speech, including in its title) only for her to fall asleep at the wheel, paving the way for the European competitiveness crisis and vulnerabilities that Mario Draghi (2024, 2025) and Jeffrey Sachs (Fidias EU Parliament, 2025) now describe. Avoiding risk for the sake of narrow self-preservation instincts is certainly understandable, but this is not in the ethical nature of a high-quality elite and defeats the purpose of hierarchies.

In Gerschenkron's (1943/1966) lucid analysis, the Nazi seizure of power was the final product of the Junker tariffs on grain. The Prussian landowning elites could have not predicted the historical destination of their nationalist trade protectionism narrative. Even so, they still monopolized military 'might' in the Third Reich after the wickedness of the arriviste elite had been revealed to them beyond any doubt with the murder of one of their very own, former Chancellor von Schleicher, along with his wife in 1934. Almost a decade to the day after the 'Night of the Long Knives', von Stauffenberg's assassination attempt on Hitler in July 1944 was too little too late.[278] A testament to Junker hubris and cowardice, von Stauffenberg and his circle stand in stark contrast to the agency and moral fortitude demonstrated by Erzberger. As Reeves and Friedman note: "Who [the elites] are therefore matters because it has an important bearing on how they think, what they do, and, by extension, the lives that all of us are able to live" (2024, p. 16). The judgments that elites make on transformational leadership and the weighting and offsetting of value transfers are often far more significant than is suggested by the formal elite utility function (advanced in Section 2.1.1).

13 Judgments on value transfers atop hierarchies that lift constraints

The 'great elite coalition conjecture of development' (Section 1.3.3) has an intensely monogrammed psychological component. For instance, it clarifies the very personal responses of elites to the dynamics of the narrative markets or their committed agency towards sustainable value creation. This work posits the 'elite business model critical juncture' conjecture and the 'elite business model agglomeration' notion (Sections 4.3.4 and 5.1.1), and Liebowitz and Margolis note that: "Path dependence means that where we go next depends not only on where we are now, but also upon where we have been" (1999, p. 981, see also David, 1985; Libecap, 2011). The creative options and decision-making that the Will to Power realizes in the face of the dichotomous 'value is created or transferred' (ontological) assumption (Figure A5.4a), shape and

278 One might also add 'too selfish'. By mid-1994, the Red Army's advances were inexorable. As the von Stauffenberg conspirators had accurately deduced, immediately after victory "agricultural expropriations were carried out as 'land reforms' by local commissions established by the Soviet-installed governments in the East German provinces". Despite lawsuits by Junker heirs after the 1990 reunification that "attacked the constitutionality of that clause of the German Unification Agreement" (Stewart, 1991, pp. 690, 691), these have in the main not been undone to this day. Attempts to reverse the effects of the Soviet Occupation Zone *Bodenreform* of 1945 on the Prussian nobility's 7,000 properties were "rejected three times by German law courts including the Federal Constitutional Court" and then by the European Court of Human Rights in Strasbourg (*Der Spiegel*, 2005). Helmut Kohl, the German Chancellor responsible for Germany's reunification terms, earns the accolade for driving the final nail into the coffin of the model that *Perdidere Germaniam*.

even transcend the structuralist elements of this theory such as intra-elite contests or elite cohesion.

Explanations for economic development rely on theory and empirical study, and in this work on the language, logic, hypotheses, and conceptual elements of the ETED (see Figure P.1). Besides "increasing returns" (Pierson, 2000), could there also be psychological roots to path dependencies? That is, not the general proclivities, biases, and heuristics of behavioral economics that explain judgments made under uncertainty (e.g., Tversky & Kahneman, 1974; Kahneman & Lovallo, 1993), or the principles of social psychology that explain decision-making in the context of the political economy (e.g., Collier, 2015), but the unique psychological make-up of individuals. Should the subjective "where we are now", the journeys experienced and the associated futures envisioned by the likes of Caesar or Qin Shihuang, Putin or Stolypin, and Ma or Thiel, not be considered in tracing the course of economic growth? Certainly, these possibilities are boundless, non-modellable, arbitrary, and will thus seem unproductive for conventional economic science. Still, pertinent psychosocial attributes might include the forms and strength of elite alienation and how such dispositions are arrived at, the thrill of having skin in the game, or the unfolding nature of creative killer instincts. These characteristics are highly dynamic, context-dependent, and mature as the basic constraint of the human condition ('The value appropriation demand of humans') is apprehended and then manifested in individual behavior (see its premises, Figure A5.4c) on the way up and consolidated once atop the hierarchy, only to shift overnight in the wake of the unforeseen. Elite psychology is in its most decisive and unstable form during taxing 'elite business model critical junctures', as stepping stones are sought to navigate one or the other of the irrevocable developmental trajectories ahead. In the mid-2020s, both elites and non-elites excitedly discuss the alternative timelines for the emerging technologies ahead: to a few, the future already appears to be lost, while others see a veritable cornucopia ahead. Critical junctures and their subsequent path dependencies are always framed in similar make or break terms, hence the potential bearing of elite psychology. Of course, while in junctures past, a single nation or empire was at stake, the advent of AI plausibly puts the entirety of human civilization on the line. If, at some point in the 2030s, superintelligence exists, a fork in the road will have been reached and the timeline that the global political economy is on will be explicit. Since the elite theory of economic development advances elite agency as the main driver of economic and human development, it is mindful that beneath the surface of elite quality—*the* window to a country's future—lie the mental attributes needed to process the uncertainty and value transfers that define leadership. The mindsets of elite individuals evidently lie beyond the bounds of the knowable or testable. Moreover, the analytical center of this theory is the business model in its epistemological safety. And yet the final tract of this Epilogue mulls the addition of a difficult variable (that seems beyond falsifiability) to the testable elements and structures of the elite theory: elite psychology. Given his or her critical inputs to the core coalition, the leader that sits at the political apex of a nation

matters greatly to its development: whether it is led by reality-distorting leaders like Thatcher, Xi, Modi, Trump, Zelensky, or characterized by laissez-faire or rudderless agency (e.g., W. Bush, Hu, Hollande, Merkel, or Trudeau).

Such an elite psychology variable, even if residual, would conceivably overwhelm the ETED's structures and its associated analysis, especially during critical junctures. For instance, Europe currently finds itself at a stressful local intersection, one that is interesting beyond the continent chiefly because of the many general lessons it offers. Gerschenkron's (1952) economic development model demonstrated how latecomers to industrialization catch-up with more advanced nations through strategic capital allocation processes, in the case of Germany via *Grossbanken*, and for Russia through state intervention (Landes, 1993, p. 172). Today, it is not feasible for the EU or Japan to effect institutional reforms or elite business model transformation to close the gap on America or China if 'the Amazon dilemma' is real.[279] That is, Gerschenkron's "lateness" model becomes impracticable with knowledge asymmetries and the indefinite widening of business model moats (in sync with advances in the technologies of data and concurrent changes in the institutions of value appropriation and international relations). In short, the endgame of history is reached. Sensing this possibility (as is clear from Draghi, 2024, 2025), the responses of Europe's highest echelons can only be modeled and roughly estimated with recourse to what is likely playing out inside their heads. The functioning of the right brain, the courage, and the love for the genuine welfare of non-elites understood as the realization of their value creation potential by von der Leyen, Macron, or Merz matters more in understanding the future than can be found in any theory of society or principles for the political economy.

As discussed in Section 7.3.4, the EU's 'missing elite system' displays a profound lack of leadership, a renunciation of duties and responsibilities and, at the individual level, a proclivity to self-demote itself to non-elite status (into the managerial, technical, and creative class). Some elite coalitions or their smarter members switch elite systems (i.e., Europeans become American) and get a seat in US intra-elite contests.

279 The DeepSeek surprise is a testimony to non-elite value creation. Its January 2025 rout of US tech and power stocks shows that 'the Amazon dilemma' is a political economy matter, not a technological one: "A small Chinese artificial intelligence lab stunned the world this week by revealing the technical recipe for its cutting-edge model [. . .] DeepSeek's R1 release sparked a frenzied debate in Silicon Valley about whether better resourced US AI companies, including Meta and Anthropic, can defend their technical edge" (Olcott & Wu, 2025). As VC investor, Jennifer Zhu Scott (2025) further contextualizes: "Against all the noise, let's consider this as a moment in history. In 1440, Johannes Gutenberg brought Europe the printing press, an invention that broke the monopoly on knowledge previously held by elites. DeepSeek's achievement joins this tradition of making information more accessible. Its low-cost reasoning model proves that AI can belong to everyone, not just those who are hoarding codes, chips and capital." However, this inclusive disruption also implies a tradeoff with AI safety, as Wade (2025) highlights in the context of the *IMD AI Safety Clock* edging toward midnight: "the growing sophistication of open-source AI means that state-of-the-art AI capabilities are increasingly decentralized, making it much harder to manage risks at scale".

Hence, Vance's "brutal ideological assault on Europe" at Munich (Wintour, 2025) or Trump "angrily accusing" Zelensky of "gambling with World War Three" at the White House shortly thereafter (Walsh, Picheta, & Kent, 2025)—events that so galvanized public opinion and prompted EU foreign minister Kaja Kallas to declare that "today it became clear that the free world needs a new leader"—will by no means act as a "wake-up call" for the continent (as is wished for by Lindstaedt, 2025) nor result in its "independence" (as is wished for by many, including in China, Yao, 2025).[280] European elites have not yet transitioned into Mosca's "second stratum" and exercise judgment beyond their narrow national borders only as members of US networks. That this functions well is plain to see, from their productive agency in American anti-Trump or pro-NATO coalitions. Meanwhile, at the European business model level, those with insufficient connections to American elites, including once powerful coalitions like Volkswagen and supposed rising stars like Northvolt have no path to grow or scale. The establishments of EU nation states will content themselves with diminished power and the residual income left in the ever more modest nooks and crannies of the global value chain in which they remain competitive, as overall European productivity falters (when benchmarked against the US and China, see Romei, Crofton, & Smith, 2024). This process can be explicated by the elite theory to a reasonable degree. What the theory cannot account for is the disappearance of elite judgment across the EU and its replacement by a peculiar form of elite alienation; one that has no courage for creative destruction and submits to a headless administrative inertia arising in its capitals and Brussels. A European story where value creators—elite or not—find themselves literally thwarted in a world that evokes that of Kafka's *The Castle*.

This theory stresses a particular type of judgment, one that balances value creation and transfers with weighting and offsets. It has been implied in this work's code of ethics and brought to the fore in the discussion on elite alienation that the Will to Live includes, by virtue of value transfers, the will to kill. Such an analogy will not startle those versed in nature's ways or Schumpeterian cycles. Yet the kill that upsets the most is that of the non-kill: that of the grey Kafkaesque bureaucracy. That is because the victims are not the same. There is a consequential difference between elite judgment on the one hand and *guanliaozhuyi*, the iron cage, mechanized progress, and McDonaldized organizations on the other. When the contractual relations of intelligent agents "optimizing their choices of resource allocation, within hyperrational institutional machines" (Nasir, 2012, p. 41) feed off value transfers—and draw no nourishment from their own value creation—their agency follows a perverse logic of "sucking orderliness" from the lower levels of the hierarchy. The greater the reliance on value extraction from non-elites, the lesser the order created at the top. In sustainable development

280 A fitting historical parallel for the US elite system leaving Europe's missing one to its own devices, is the fall and fragmentation that beset Britain (Flemming, 2003) after the Roman elite system disengaged from the isles in 410—as recounted by Zosimus (1982): "[Emperor] Honorius sent letters to the cities in Britain urging them to defend themselves" (p. 130 as cited by Woods, 2012, p. 818).

terms, and since coordination capacity in principle resides at the top of hierarchies, this represents a Kafkaesque "logic of the absurd" to which can be added a "tyrannical" nature (Nasir, 2012, p. 40). In considering the automatization of work, with robocars and AI research conducted by algorithms, could a developmental trap of tyrannical absurdity await humankind further down the techno-optimist road? That is, a place where elites are no more creative than hamburger flippers, where elite systems across the world resemble those of Europe, and where both the spectral rulers of the castle and their subjugated citizens are all trapped in the same Weberian cage.

The answer, particularly since the advent of modernity, has always hinged on the degree of human judgment that prevails in the many nooks and crannies of the elite system; the amount of "awareness" that exists of the balance between judgment and rules in recognition of Bell's (1987) "middle path". Elites holding 'the extraordinary lever' that become entangled and adrift in the institutions their managerial, technical, and creative classes build for them are fatal to economic and human development. Sadly, institutions and bureaucracies are sometimes conceived by elites as barriers to protect value transfer models, while their routines, processes, and rules sanction practices that hypothetical future elite judgments might challenge. Lulled by beliefs in their own status-quo narratives, elites can fall prey to hubris and fail to appreciate how and who generates negative entropy in social systems. Without bravery and the psychological integrity needed for growth, those at the top choose to outsource judgments to routines. Rules, narratives, and political programmes that have become nothing more than bureaucratic artifacts are upheld and further stifle bottom-up value creation. At the other extreme, when completely detached from ethics and morally adrift, the alienated elite's will to kill and its discretionary termination of institutions results in nothing more than a 'license for evil' and a form of blind destruction that is likewise fatal. While the focus of this work has been on the highest residual income business models, it is the culture and circumscribed judgments of non-elites that provide the greatest reservoirs of value creation in any political economy.

The spaces that are available in a system for human judgment on risk origination and value creation (or their transfer) associate with its munificent fractality. That is, the opportunities lie in the nested nooks and crannies that in self-similar fashion and at different hierarchical levels provide productive complexity in a political economy. The fractal patterns enriching hierarchies nurture value creation, with each nook and cranny offering the possibility to exercise power, agency, and judgment. An individual non-elite business model is modest in residual income terms, but when these are aggregated their agency has great impact and becomes elite. An apt simile for such generative fractality is Nietzsche's tree with its light-aspiring leaves and earth-seeking tendrils (see the introduction to Chapter 8). Each root and branch is a constituent of the hierarchy at one or the other strata that jointly grow the tree. This fractality is why the ETED is not elitist in the sense of the Italian classical theorists but quite the opposite; elite-like judgment can be exercised atop any fractal space however humble it may be—from the farm to the microenterprise. Figure E.2 superimposes the fractal-

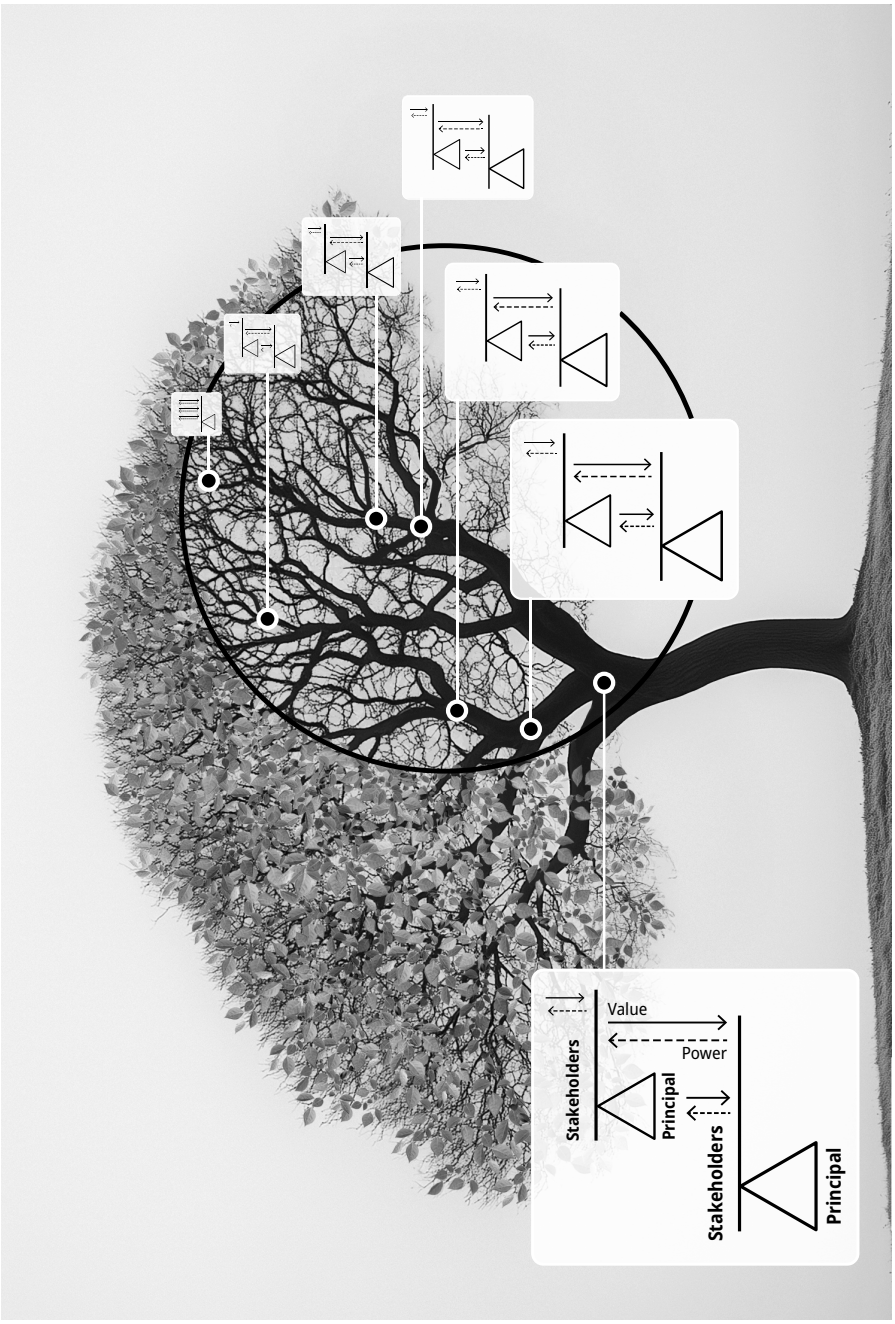


Figure E.2: Tree metaphor for the fractal structure of the elite system: 'The extraordinary lever' in the hierarchy's nooks and crannies (Image source: Produced with Midjourney 6.1 based on a photograph of a tree in the Waltramweg, St.Gallen, Switzerland, Winter 2025).

ity of the tree on that of the political economy to visualize the conjectured 'elite system fractality links to value creation' law of economics. The mighty trunk grows through the delicate leaves that proliferate on the twigs among the branches. The value they produce—the sugars (energy)—powers the overall system. Elites in each nook and cranny command 'the extraordinary lever' in their sector (despite being mere stakeholders in more powerful business models) and create value to the degree that the hierarchies that stem from their endeavors enable munificent fractality. A vital condition for renewal and growth is that within their own domain, and regardless of the scale of their business models, elites do not outsource or automate their judgment nor suffocate that of their stakeholders.

Brown, Gupta, Li, Milne, Restrepo, and West theorize about "The Fractal Nature of Nature" and claim that: "Underlying the diversity of life and the complexity of ecology is order that reflects the operation of fundamental physical and biological processes" (2002, p. 619). In contrast to human hierarchical constructs, Mandelbrot notes that: "there is no question that Nature fails to be locally linear" (1989, p. 4). Fractality explains power law distribution and scaling and constitutes the structure of complex systems like those found in biology and ecology (Brown, Gupta, Li, Milne, Restrepo, & West, 2002. p. 620). Yet it also reveals the properties of social systems. With fractality, local information has global implications, an idea consistent with "social fractals" and approaches "designed to 'move the whole' by generating patterns of change that scale" (O'Brien et al., 2023, p. 1452). In this work, this perspective explains the significance of 'the extraordinary lever' and the importance of 'the power multiplier'—without generative self-similarity across multiple scales neither notion works. Most importantly for the elite theory is the emphasis given to the micro-level sustainable value creation of the firm's business model (e.g., with the VCr) in moving meso-level elite quality (e.g., with the EQx) and eventually affecting macro-level economic growth and human development.

Just as the tree prospers because of its fractal structure, so does the economy. As for the emerging elites that drive progress, their fearlessness is for naught with the wrong types of social hierarchies. Without capillarity in political economy systems and elite agency filling both the major and most narrow nooks and crannies, bureaucracies or monopolies fragilize society (see Taleb, 2012) and kill off all productive life.

From the recesses in the system that enjoy the freedom *from* value extraction and the freedom *to* create value and thus actualize the Will to Power (Section 8.3.1; Figures 8.4 and 8.5) comes growth. Such spaces are essentially what the America described by de Tocqueville furnished its citizens with and what the platforms of today like Taobao or Amazon ought to provide to the micro-entrepreneurs they host. The elite theory seeks first principles and thus shines the spotlight on the 'innate value creation character of humans' (natural) premise (see Figure A5.4c), positing that the building blocks of sustainable value creation originate from the bottom up (often against the odds, as is seen in the individual non-elite responses to value transfers such as 'informality' in Section 5.2.3). The higher the degree of fractality, the more vigorous the pulse of life across the entire system; the lusher the foliage of the tree, the stronger the grip of its

roots on the soil from which it extracts nutrients. At an advanced conceptual level, this is the heart of the conjectured 'elite system fractality links to value creation' law of economics: the fractality of the political economy leads to sustainable growth because of the spaces it affords for low transaction cost top-down coordination capacity and productive bottom-up first-order activities to creatively meet. Independent and free judgments made under the conditions of munificent fractality also constitute a state of perfected checks and balances. A separation of powers where the ontology that defines all socioeconomic relationships: 'value is created or transferred' (Figure A5.4b), falls on the side of building and preserving first-order productive activities. These configurations protect against sterile value transfers and augment society's anti-entropic capacity. A multiplicity of judgments reflects an economy that is complex in fractal ways.

When made in times of uncertainty, judgments—whether at the apex of a political economy or in its most unassuming nooks and crannies—are non-replicable, context specific, and intimate; good ones cannot be scaled and repeated elsewhere. The residual variable of elite psychology in the ETED is inscrutable, and only recountable after the fact. The agency of one American president varies from that of the next, the Eurasian potentate makes different decisions to those of his younger self, and the seasoned billionaire has differing imperatives to the formerly idealistic founder. The frameworks and measurements of this work can act as benchmarks for the judgments of leadership. When the elite theory is employed in the analysis of the economic development of a country, the unruly elite psychological factors are secondary and dealt with as neutral assumptions. Likewise, it is well understood that the enlightened agency of business, political, and knowledge elites cannot be conjured up. Social scientists can anticipate economic development to the degree that elite agency is modeled with econometric methods that formalize its structuralist logic. Gaps with reality notwithstanding, economic models that include value transfers will guide expectations, corporate strategies, policy formulation, political agendas, and narrative design, and are therefore vitally important at critical junctures, during times of intensified intra-elite contests, and amid technology shifts. Observatories of risk origination and value creation discern new asymmetries, business model disruptions that profit from uncertainty, and options for structural reform irrespective of how their discoveries are heeded by those in the upper echelons or animate the social and political movements representing non-elite interests.

In natural alignment, the tree grows as its roots sink. The life in the light exceeds the life inside the soil's veiled recesses. Moved by their personal psychological realities, intrepid individuals atop hierarchies build up the resolve to make judgments on value creation. Inclusive elite agency offsets value transfers, constrains the reach of bureaucracies and narratives that provide licenses to operate, and engages in renewal through creative destruction that is productive and not wanton. As peers are urged to originate and take sustainable risks and lead transformation, exploitation is limited to the just degree required for human development.