**Why reason, why now?**

In 1977, the *New Yorker* published a three-part essay by Hannah Arendt, the first alone running over 76 pages, albeit frequently interrupted by adverts for tobacco, airlines and alcohol. In it, Arendt reflects on the serialization, some 14 years earlier, of her book *Eichmann in Jerusalem* (Arendt 1963). Like few others, the phrase ‘banality of evil’ aligns the murderous machinations that clouded an entire historical epoch with the ruthless and essentially unthinking rationality of a bureaucratic apparatus. And for Eichmann:

“… he did not enter the Party out of conviction, nor did he ever become convinced by it; whenever he was asked to give his reasons, he repeated a set of embarrassed clichés about the Treaty of Versailles and unemployment. Rather, “it was like being swallowed up by the Party against all expectations and without previous decision,” he said in court, adding, “it happened so quickly and suddenly.” He had no time and less desire to be properly informed; he did not even know the Party program, and he had not read (as he never did read) “Mein Kampf.”” (Arendt, Feb. 1963, no page).

Not ideology, hatred, envy or wickedness, but organizing and managing, hierarchies, efficiencies, spreadsheets and targets animate this kind of evil; and while the truth of Eichmann’s contribution to the logistical efficiency of such a monstrous machinery was never in question, his defence consisted in his unwillingness or incapacity to *think* and grasp its meaning and consequences. Arendt (1977) insists that truth and meaning are not the same: the intellect (*Verstand*) is concerned with cognition, knowing, and factual truth, while reason (*Vernunft*) concerns thinking; and it is the task of education to generate both. Arendt is placing reason in an elevated role. It is more than perceptual awareness, more than habituated framing of patterned behaviour, more than means-end calculation: it is an ethical capacity in which those with reason are able to discern good reasons for acting from reasons.

This text is not just remarkable for its depth and precision, but also because such a dense essay, invoking hefty philosophical ideas, citing passages in Latin, French and German, was published in a general interest magazine; when nowadays, especially in business and management journals, engagement with philosophical sources is often frowned upon. Arendt investigates reason against the backdrop of destruction, devastation and persecution, followed by the anxieties of the cold war. Since the publication of her essay intermitting years of relative peace for many in the West at least, of economic progress and of the shift from state control to the organizations of the free market, have let the question of the rationality and the need for thinking slide again into the background. Yet the tremors heralding *our* own times bring Arendt’s concerns back into focus: Climate change, environmental destruction; mental health crises; hunger and obesity, economic inequalities across geographies, genders and skin colours and the question of who is allowed to live; wars over oil; the displacement of work by robots and artificial intelligence which loops back into our lives through the gamified exploitation and manipulation of behaviour, attention spans and desire; the often emotional polarization of politics in culture wars, and spread of disease. All this is coupled with the decline of old institutions and the technologically mediated transformation of public discourse. To once again raise the question of reason, as did Arendt, and set it against the decision-making intellect, is to ask what kinds of organizations and institutions we want and how to live our lives, how we judge values and actions, and how – in light of such *thinking* - we come to educate those conceiving, working in and affected by the organizational forces of trade.

**Instrumental and scientific rationality**

At his trial in Jerusalem in 1961 which Arendt covered for the *New Yorker*, Eichmann argued his role as one of the architects and administrative enablers of genocide was warranted by instructions: he was doing the bidding of a superior force. That force was not just the law, but what lay behind the law, its spirit: the ‘superior laws’ of the German *Fuhrer*. He had, he said, done his duty, not blindly, but as a reasoning, self-legislating being, acting:

“fully within the framework of the kind of judgment required of him: he acted in accordance with the rule, examined the order issued to him for its "manifest" legality, namely regularity; he did not have to fall back upon his "conscience," since he was not one of those who were unfamiliar with the laws of his country. The exact opposite was the case.” (Arendt, 1964: Postscript)

Rather than questioning his duties, Eichmann had, it seems, found in reason a means for their further entrenchment. However, for Arendt, the version of reason invoked by Eichmann was no reason at all. Rather, it was a form of active obedience exercised through procedural conformity and means-end calculation. Through this thoughtless instrumentality Eichmann was able to sheath radical evil with organizational monotony. Whilst nothing can ever equate to the genocide prosecuted by the Nazis, it is unique in its incomprehensible horror, Arendt argued that aspects of Eichmann’s defence serve as a warning lest we let real reason – the moral capacity to continually question prevailing identities and interests – sleep. Without it who knows which further horrors might emerge.

In part, Arendt’s warning is heeded given the repeated political, given the repeated political and legal attempts to rescind the authority of those who might otherwise ride roughshod over the human capacity for questioning. Yet in activities of trade, military policy and international relations, an instrumental way of relating to things has grown in dominance, and it is toward these activities that many who are taught in business schools look to develop their career. Here, to be rational is precisely not to question the organizational aims of growth, profit, influence and survival, for this gets us, practically speaking, nowhere. Rather, it is to frame organizational experience by identifying feasible courses of action from amongst differing options that are ranked according to beliefs about the likelihood and desirability their outcomes. These beliefs, too, can be represented in instrumentally rational terms, aiming at truth, error avoidance, explanatory power, consistency, clarity, and so on (Nozick, 1993: 65).

This transformation away from morality was catalysed by the association of reason with ‘utility’, meaning a property in any object producing ‘benefit, advantage, pleasure good or happiness’ (Bentham, 1789, Ch1), thus shifting the focus towards the mental states produced through action, and towards calculative maximization whereby reason can justifiably and sensibly overrule immediate desire if, thereby, a greater balance of utility is realized. This paved the way for more general and non-psychological variants of utility maximization informing the emerging discipline of political economy and then modern rational choice theory. In management learning and education, tools such as planning, strategic management and decision analysis have been the upshot of this development, becoming the *de facto* standard, comprising technologies of rationality and professionalizing the procedures and organizational roles associated with, and accepted as, proper management conduct. These technologies do not just require ‘exquisite talents’ but also considerable training, indicated by the growth of the business education sector (March, 2006: 201).

The instrumental emphasis on maximising utility through the knowledgeable use of rational controls found iconic form in the scientific management of Frederick W. Taylor’s (1967: 6) whose project of “greater efficiency” through “task management” promised greater cost efficiency and productivity. He applied scientific principles to measuring work performance activity, suggesting ways to intensify task activity without degrading the quality of work (Copley 1923, 226; Cf. Wren and Bedeian 2009, 126-127). Essentially limitless in character (Wang et al., 2012), this logic of measurement surveillance and incremental re-organization remains focussed on the cognitive challenge of arranging means to attain given ends, without itself stipulating, questioning or reflecting on the ends pursued in such activity.

Taken as an explanatory or normative theory, the forms of managerial instrumentality taught in business schools not only require that the most efficient and effective course of action is pursued, but also that the decision was made using probabilistic calculations of means-ends connections on the basis of verifiable and credible information: in other words decisions can be neither capricious nor random. The growing sophistication of these calculations has given rise to elaborate game theoretical operations, for example Axelrod and O’Keohane’s (1985) studies of how the payoff structures in prisoner’s dilemma scenarios influence the possibilities for political cooperation. This form of game theory analysis takes into consideration not just successive feedback cycles, the potential discounting of future outcomes, the potential for (not individually rational, collective contracts) cooperation, as well as changes in the very parameters or sums of the game, influenced by interdependently unfolding decisions (Elster, 1984).

The gains are evidential: organizations have presence in the world like never before, almost to the point where nothing is unorganized (McKibben, 2019). It is a presence configured through the gathering and analysis of information through which rational decision-making is enabled and warranted. Taylor’s process and efficiency observations of work-place activity were undoubtedly at the vanguard. There was something beguiling about representing work patterns in the form of abstracted calculations whose promise of control was framed with the neat, compartmentalized obsession of a Muybridge photograph. But Taylor’s work was but one component in a wider array of rational decision-making procedures working their way into all aspects of organizational life. Accounting, administration and auditing processes were the original ones, without which, arguably, there is no organization (Puyou & Quattrone, 2020), and as technologically mediated information grew in complexity and range, came procedures in more specific areas of management such as finance and strategy (Cortada, 2016: 109-11).

With scientific management an advocacy of generic standards and calculable aims which simply ignores the opaque question of whether the logic by which the aims are set is itself appropriate (Glen, et al., 2014; Akrivou & Bradbury-Huang, 2015). The emphasis is on the aim of improving returns for owners and workers alike, thereby maximising utility. With the massive growth of mediating technology – attributed in part to the success of scientific rationality – reasoning has become almost synonymous with information processing enhanced by digitized analysis (Kiechel, 2010), and management practice – and education – has veered ever more toward being a technical exercise of framing and pursuing performance indicators, integrating governance systems, emulating best practice performance, and enacting and even embodying assessment and surveillance systems.

If, like Davies (2019) we have worries about this uncritical expansion of the instrumental conception of rationality, we shouldn’t, because, unlike any other, this conception is capable of self-correction. One recent and prominent exponent of this view is the evolutionary psychologist Steven Pinker’s (2018). Pinker expresses belief in evolution and the capability of the ‘human brain’ to reason if and when standards of argument, logic, and fact are sufficiently developed: “Making the world more rational, then, is not just a matter of training people to be better reasoners and setting them loose. It also depends on the rules of discourses in workplaces, social circles and arenas of debate and decision-making” (Pinker, 2018: 379) which, for Pinker, means that in public discourse, “issues should be depoliticized as much as is feasible” and “factual state of affairs should be unbundled from remedies that are freighted with symbolic political meaning”. It was a similar notion of rationality that drove Taylor’s defence of his methods: parse work processes into units; attribute outputs to each; suggest alternatives. Scientific management is based on fact revealed by the application of scientific principles of observation and evaluation, and it purports to benefit employers, managers and owners as well as workers, employees and the general public thereby, pretending, at least implicitly, that is possible to depoliticize organizations. The job is to observe and measure accurately, minutely and dispassionately, from which assessment one can calculate the utility gained, set against the utility generated by possible alternatives: keep observing, experimenting and improving. If one technique or operational experiment fails to work – and most of Taylor’s own suggestions, for example, did not work, indeed the Bethlehem Steel company where he worked attested to having lost money as a result of his managerial interventions (Wrege & Hodgetts, 2000) – then try another. Behaviour and outcomes become more explainable and predictable (mediated by a welter of files, manuals, handbooks, procedural reporting structures surveillance systems and other technologies), and the organization grows.

**The dialectic of Enlightenment**

The growth is also the problem: as science advances and organization spreads, the scope for autonomous expression, judgement and feeling weakens, to the point where the distance between rationality and tyranny appears small. This paradoxical tendency of rationality to oust itself has famously received the name *dialectic of Enlightenment*. The struggle of the Enlightenment against superstition and ignorance through the commitment to the free use of reason and the development of the institution of science has played a prominent role at least since the latter parts of the 17th century (Israel 2002, 2006, 2012). What is at stake in the discussions of Enlightenment is the crucial question whether reason ‘works’, i.e. the question of ‘progress’. In the seminal conception of Immanuel Kant, the process of Enlightenment is conceived broadly in terms of our “emergence from […] self-incurred immaturity” (Kant 1784). Kant’s Enlightenment philosophy develops the basic idea that commitment to cultivate independent, critical thought can lead to individual and societal progress also in terms of moral or ethical dispositions and aesthetic taste. It is precisely in this tradition that Arendt places herself when she claims that a broad, moral conception of reason is irreducible. Pinker (2017), on the other hand, advocates a narrower ‘scientific’ conception of Enlightenment which has a more specific understanding of the conditions of progress. According to scientific Enlightenment, what has so far ensured and what will continue to guarantee linear human progress is the cultivation of instrumental rationality that adheres to the methodological foundations of the natural sciences and which pursues technological modulation of individual behaviour, societal structures and natural environments. Pinker has been criticized for narrowly focusing on the part of the Enlightenment tradition which focuses on a commitment to the civilizing potential of the natural sciences and technological innovation (Smith 2019: 10).

Following the passage of the 20th century, and in particular in light of the evil unleashed by Eichmann and his ilk, critical theorists Max Horkheimer and Theodor W. Adorno expressed a profound pessimism vis-à-vis the ability of instrumental rationality and its expressions in science and technology to ensure unambiguous human progress. In 1944, they wrote: “Enlightenment, understood in the widest sense as the advance of thought, has always aimed at liberating human beings from fear and installing them as masters. Yet the wholly enlightened world is radiant with triumphant calamity” (Adorno & Horkheimer 2002, 1). In the fundamental self-critique of reason that Adorno and Horkheimer elaborate, scientific Enlightenment is in essence an attempt to increase human control in individual self-relations, in social relations and in our relation to nature. However, this attempt to install ourselves as masters again and again results in calamitous set-backs which undermine human control and meaningfulness on the personal, societal and ecological level. The dialectic critique of Enlightenment rationality propounded by Horkheimer and Adorno has recently, in the light of developments such as social media echo-chambers and the election of Donald Trump, inspired historian of science Justin Smith to not only repeat the critique of naïve faith in the linear progress of scientific Enlightenment but to warn that it is “irrational to seek to eliminate irrationality both in our society and in our own exercise of our mental capacities” (Smith 2019, 6).

The dialectic critique of Enlightenment also implicitly underlies some of the ecological critics of modern civilization and its destructive effects on natural habitats and ecosystems, its responsibility for the ongoing mass extinction of animal species and its disruptive influence on the climate through the emission of greenhouse gasses. According to writer and environmental activist Bill McKibben’s influential book, *The end of nature* from 1989, for example, modern human civilization had at that point “so altered the planet that not an inch was beyond our control” (McKibben 2019,1; McKibben 1989). This idea was latter underlined and developed by scientists in the beginning of the new millennium when they began referring to our era as the Anthropocene. Recently, McKibben sharpened his diagnosis of the looming dialectic reversal threatening humankind, i.e. the ecological destruction and technological hubris of modern civilization, which now in his view endangers “the human experiment” as such.

With its focus on reason and rationality in management learning and education, this Special Issue intervenes in the current discussion of a broad, moral conception of reason versus a more narrow notion of instrumental rationality, as well as in the debate between proponents of scientific Enlightenment and advocates of a fundamental self-critique of reason who argue for a reappraisal of the Enlightenment tradition.

**The limits of rationality in business education**

According to Rakesh Khurana’s *From Higher Aims to Hired Hands*,a broader commitment to moral and civic values originally played an important part in the conception of professionalism which oriented management learning and education (Khurana 2005). However, this civic and moral conception of professionalism was gradually replaced by a concept of general-managerial professionalism in which economics and decision-science figured strongly. The theoretical picture of the instrumentally rational, utility maximizing agent orienting future managers, and especially the notion of utility interpreted in terms of cost efficiency, profit or simply shareholder value has been criticized for having detrimental consequences for management practice (Ghoshal 2005; Sullivan 2011, Ulrike 2019, Amann et alt. 2011). However, it is both intellectually as well as practically inadequate to reduce rationality to the figure of the *homo economicus*, a ‘skeleton’ already almost a century ago condemned by Friedrich A. Hayek into ‘the closet of economics (see Slobodian & Plehwe, 2020: 5). While the logic of instrumental and scientific rationalism remains deeply engrained in much theory about management and the pedagogies of management education, there is also a substantial and growing concern about the limits of the pursuit of instrumental rational progress, and the capability to address wide-ranging and complex problems in terms of task management and the pursuit of efficiency (March, 2003; Joullie, 2016).

Perhaps the most frequently acknowledged factor slowing down progress is the human decision maker whose cognitive information processing capabilities continuously run against the complexities and time-pressures of the tasks that have to be decided upon. Herbert Simon famously highlights a *satisficing* form of problem solving and decision-making that refrains from seeking the perfectly rational and instead “sets an aspiration level, searches until an alternative is found that is satisfactory by the aspiration level criterion, and selects that alternative” (Simon 1972: 168; Simon 1955). The modification of rationality as a descriptive approach has been carried further by the heuristic and bias-tradition in behavioural economics. Daniel Kahneman thus describes his and Amos Tversky’s contribution as an attempt “to obtain a map of bounded rationality, by exploring the systematic biases that separate the beliefs that people have and the choices they make from the optimal beliefs and choices assumed in rational-agent models” (Kahneman 2003: 1449; cf. 1470).

One way of dealing with such human biases is to develop decision practices that provide ‘cognitive repair’. Denise Rousseau, in her paper *The Realist Rationality of Evidence-Based Management* in this Special Issue, elaborates how in drawing on evidence-based professions such as medicine, managerial decision processes can be modelled that mitigate human limitations, in particular when the production and analysis of evidence is coupled with engaged decision making. In so improving access and use of quality information and in developing aides to facilitate processes of evidence-based decision-making, self-interest and other partisan influences can be alleviated, improving not just the quality of decisions, but also expanding the frame of what is taken into consideration. In this way, decision making can be liberating, as it has the capacity to overcome conservative bias, consider critical alternatives and exert ‘free will’, and promote broader attention to interests and concerns of a wider range of organizational stakeholders.

A different approach to the question of human bias and limits is offered by José Lejarraga and Maud Pindard, in their paper *Bounded rationality: Cognitive limitations or adaptation to the environment?* in this Special Issue. Lejarraga and Pindard question this negative interpretation of the role of bounded rationality and by revising the work of Simon and in particular Gerd Gigerenzer, fashion a positive ‘ecologically rational’ account that locates in managerial heuristics central mechanisms capable of responding to changing, uncertain and complex environments, which are typical in managerial work. The ecological framework is according to Lejarraga and Pindard a distinctly different conception than the bias and heuristic research program although both are rooted in Simon’s conception of bounded rationality. Viewing heuristics as more than poor alternative to perfect decision-making processes allows for the consideration of how heuristics can be studied, refined and taught in their own right. Lejarraga and Pindard’s embrace of heuristics falls into a wider spectrum of responses that veer away from the pursuit of optimal solutions of rational choice theory. Some even suggest the abdication of rationality altogether, instead entertaining ‘absurdity’, ‘play’, ‘luck’, ‘spirituality’ or ‘mindfulness’ (Wagner 1978; Gebauer 2012; Izak 2015; Newark, 2017); non-rational immediate action based on ‘enthusiasm’, ‘confidence’ and ‘improvisation’ (Cunha, et al 2015); bricolage, practical coping (Dey & Mason, 2018); managing as art and craft (Mintzberg, 2004) and pastoral judgment (Holt, 2018).

In his review of William Davis’ book, *Nervous States: Democracy and the Decline of Reason*, Caleb Bernacchio elaborates further on this trend away from rational decision making, emphasizing Davies’ central claim that the ideal of expertise as a neutral source of factual knowledge is an early modern conception which has been decisively undermined, and cannot be pieced back together. Knowledge has become irreversibly politicized, and given growing inequality, ubiquitous examples of elite corruption, and the looming threat of climate change we should no longer require the public to accept the claims of experts and their evidence at face value. If we accept Davies’ argument it not only has profound consequences for our notion of democracy. It also, as Bernacchio emphasizes, provides support for the contemporary call for participatory or inclusive modes of management and governance in organizations and challenges us to reconceive what it means to manage on the basis of evidence.

In their paper on the *Lessons from Creating a Business School for Public Good* in this Special Issue, Martin Kitchener and Rick Delbridge focus precisely on the challenge of creating a more inclusive mode of governance within the business school. Their contribution highlights how business schools are not only engaged with the question of the rational ends of managing in terms of the educational content they purvey (Bennis & O’Toole, 2005), but also in their organizational purposes and aims since they are themselves economic units. Kitchener and Delbridge invoke Max Weber’s notion of substantive rationality to analyse their own experience of attempting the instituting of an approach that does not narrow reason to instrumental rationality. Instead, they model a substantively rational ‘Public Value Business School’, which considerers a multitude of stakeholders and wider concerns through transparent and inclusive management. Kitchener and Delbridge reflect on the ‘oblique’ approaches they used when developing their ideas, convincing others and enacting new practices, illustrating empirically the difficulties of narrating and legitimizing a strategy that is non-instrumental in widening the scope of objectives, with multiple stakeholders in mind.

Kitchener and Delbrick’s empirical illustrations are complemented by Johan Gersel and Rasmus Johnsen’s paper *Towards a novel theory of rational managerial deliberation: Stakeholders, ethical values and corporate governance*. Gersel and Johnsen address the theoretical challenge of attaining rationality when faced with a multitude of goals. Analyzing Michael Jensen’s (1994) influential work on agency theory which sees humans as rational agents whenever they are ‘maximisers’ of an abstract unity such as ‘utility’, ‘satisfaction’ or ‘welfare’ the authors identify in this as well as many other influential management theories an underlying single-purpose logic which is inherently incompatible with multiple purposes and ends. Turning to the work of contemporary philosopher Robert Brandom they continue to develop an alternative, pragmatist account of conceptual understanding capable of moving ‘beyond’ single-purpose shareholder accounts and compensating for human biases, following up on Ghoshal’s (2005) call for more adequate and ethically justifiable management theories. By developing a theoretical approach for how to learn to deliberate contextually on management dilemmas they also challenge the confinement of rationality to context-independent rules that still informs evidence-based management (Rousseau 2006: 261), and also underpins the bias and heuristic tradition.

**Rationality, reason and thinking**

In their above-mentioned contributions to this Special issue Gersel and Johnsen, Kitchener and Delbridge, Lejarraga and Pindard as well as Rousseau expand the limitations of single-purpose conceptions of reason in more or less radical ways, offering a broader consideration of factors, curbing the excesses of otherwise unbridled value-maximizing progress. In this they elaborate a set of concerns already formulated by the posterchild of economically rational thinking, Adam Smith, whose *Theory of Moral Sentiments* invokes the figure of an impartial spectator to temper the moral blindness of the invisible hand, drawn up in the *Wealth of Nations*. Jörg Metelmann and Ulrike Landfester, in their paper *Back to the Roots: Why Academic Business Schools Should Re-Radicalize Rationality* in this Special Issue, trace the educational lineage of the conceptualization of rationality from these beginnings in the attention Smith gives to feelings of both vanity and sentimentality, to Kant, whose view of reason was very much as a generative companion to aesthetic feeling that became manifest as taste. They go on to argue how it was these rich, moralized forms of reason that informed the emergence of universities in Europe, notably those informed by the educational thinking of Wilhelm von Humboldt and his conception of lifelong development, or *Bildung*, along with what Weber was to conceptualize as value-driven rationality. Business schools have lost their way, Metelmann and Landfester argue, because at each step of these developments, a concern with gain and influence meant Smith’s spectator, Kant’s taste, Humbold’s *Bildung* and finally Weber’s criticism of utility-driven rationality, were subverted, narrowed or mistranslated into an instrumental concern for acquisition.

In response, Metelmann and Landfester call for business school curricula to resist standardized procedures and become more open to doubt, not least by embodying difference and variation, even within the same subject matter. The diversity of pedagogic approaches in classrooms is further explored in Ashish Bhatia and Natalia Levina’s paper *The Diverse Rationalities of Entrepreneurship Education: Epistemic Stance Perspective* in this Special Issue. Based on an empirical study of entrepreneurship programs in three highly ranked US MBA courses, the authors identify differences in the propositional attitudes; the modes of engagement; and the styles of reasoning, engendering substantially different ‘epistemic stances’ in three nominally similar courses. Bhatia and Levina therefore not only identify how in each programme different elements of entrepreneurship as a ‘mold breaking practice’, may be learned and how such differences are rooted in wider values and goals, but also how the very subject matter of entrepreneurship transgresses standardized ideas, flourishing instead through variation and differentiation.

One specific example of this comes in form of Damian O’Doherty’s paper *The Leviathan of Rationality: Using Film to Develop Creativity and Imagination in Management Learning and Education* in this Special Issue, which takes leave from Kant’s aesthetics to analyse the educational effects of screenings and debates of the ethnographic film ‘Leviathan’, an immersive, impressionistic study of life at sea using disorientating, unnarrated impressions gleaned from arrays of cameras attached to an ocean-going fishing trawler. O’Doherty argues that the entanglements of the machinations of a swimming factory with the ferocity of nature through the intermingling of water and blood, foam and forms, brings forth an affective awareness of a lack in human control, and hence epistemological doubt, into the classroom.

A similar dislocation of the human being animates the paper by the writer collective Gasparin, Brown, Green, Hugill, Lilley, Quinn, Schinckus, Williams and Zalasiewics, *The Business School in the Anthropocene: Parasite logic and parasitical reasoning for a working earth* in this Special Issue. This essay investigates the limits to human-centered, oftentimes economics focussed models of reasoning when confronting self-referential and complex problems such as those posed by the Anthropocene with its rapidly unfolding climatic implications. Gasparin et al., (2020) elaborate an alternative, non-anthropocenic thinking, first through the framing of the human role in the conceptual language of parasitism, as developed by philosopher Michel Serres, thus opening up an interdependent, communicative set of relations in which the parasitic influence of humans on nature, is mirrored by the parasitization of humans by other members of the ecology. In seeing humans as both parasites as well as host, emphasizes the need for the recognition and safeguarding of reciprocal bonds to ensure the survival of the wider ecosystem. The authors continue with an example of slow design, analysed through a non-anthropocentric method of ‘pataphysics’ whose irreverent normalization of exceptionalism and anomaly forms the generative ground for the imagination of an alternative way of embracing the currently, and rapidly, unfolding climate reality. *The business school in the Anthropocene* and *The Leviathan of rationality* both implicitly draw on Adorno and Horkheimer’s dialectical critique of Enlightenment as well as on Friedrich Nietzsche (1888) and Sigmund Freud’s (##) criticism of the Western tradition of rationality. In applying analyses from contemporary inheritors to these traditions such as Serres and Gilles Deleuze, these two essays represent the most radical call to a self-critique of reason in management learning and education within this special issue.

It is in critically considering the effects of the potential discounting and setting aside of the human that Annika Skoglund’s review of *Becoming Indigenous - Governing imaginaries in the Anthropocene* by David Chandler and Julian Reid is timely. If in the wake of the Anthropocene we are being encouraged into a back-to-nature condition in which the capacity to act upon the world gives way to speculating from within a condition that is necessarily beyond our control. As we return to nature, just how far, asks Skoglund’s review, should we uncritically take on this mantle of vulnerability?

Another return to roots is in the form of a reconsideration of broader notions of reason, manifest prior to industrialization and even Enlightenment. Reason harks back to Socrates and was seminally articulated in the ancient Greek philosophies of Plato and Aristotle, referring to a consideration that bears on a question or speaks in favour of a course of action (Scanlon). Günter Figal, in his paper *Understanding Situations: A Hermeneutical Conception of ‘Practical’ Rationality* in this Special Issue, outlines Plato’s reasoning in terms of a restrictive process in form of opposition to and hindrance of human desire, while Aristotle reserves a much more active role for reason, as the soul’s ‘leading and even primarily active part’. This form of practical reasoning, involving investigation of how actions can be ‘decided, planned, performed, explained and, if necessary, justified’, has been subject to recurring debates in relation to education in business and management (e.g. Chia & Holt, 2008; Rooney, 2013; Shotter & Tsoukas, 2014; Hartman, 2017). Recent philosophical works consider the intrinsic connection between reason and agency and claim that the ability to take refuge in reasons is a condition for our “self-constitution” as human beings (McDowell 1996, Korsgaard 2009), and thus also for agentic freedom, precisely not merely as a means of achieving one’s aims, but to be alive to the indeterminateness of situational contexts by listening to the voices and concerns of others, and the possibilities and realities to which each individual – as a situated being – belongs (Figal, 2020). According to the broad Aristotelian conception, reason is viewed as a dimension of human life that is always already familiar to us because it is to some degree embedded in societal institutions and cultural practices.

**Reason and the future**

This institutional and cultural embeddedness of reason has, of late, become machinic, meaning humans are less and less in a central role. Sam Horner’s review of Katherine Hayles’s book *Unthought: The Power of the Cognitive Unconscious* attests to such a condition. Horner’s review points to the increasingly fluid exchanges of information between humans and technological systems, whereby cognition extends beyond the confines of the human body; becoming active parts of distributed networks which switch, calculate and modify information at speeds far beyond human capacity – and thus beyond human reason and control. This has meant managerial reasoning veering ever more toward being a technical exercise of framing and pursuing performance indicators, integrating governance systems, emulating best practice performance, and enacting and even embodying assessment and surveillance systems (Kiechel, 2010). In a similar fashion, Shoshana Zuboff has thus recently warned that the notion of individual employees, users, customers and citizens as ends in themselves whose freedom of choice must be respected is threatened in novel ways by our tacit acceptance of Google and Facebook’s ‘surveillance capitalism’ through which we are increasingly being reduced to “*the means to others’ ends*” (Zuboff 2019, 94). However, as Horner’s review shows, Hayles goes further in her critique, as even those ‘others’, the captains of industry running IT giants are not ultimately in control, as they themselves are merely plugged into technological networks.

Speculation about the future of a more fully technologized society is often the preserve of science fiction, frequently coining key terms and imageries, such as the cyberspace or androids far before they find their actual scientific realizations. Liu Cixin’s multi-award winning book trilogy ‘*Remembrance of Earth’s Past’*, reviewed in this Special Issue by Norah Campbell, expands the frame of human reasoning not just beyond the terrestrial confines of earth itself, but also beyond mortal time spans. Confronted with a hostile world in which human reason cannot find hold, Campbell’s review shows how Cixin conjures entirely new objects and relations, and how, in fictionally testing fact, science fiction writing ought to be taken seriously the forming of imaginaries that place the human relation to things in a far more equivocal and far less entitled way than do the Enlightened advocates of instrumental reason. Yet in Cixin there is also the sense of what reason can achieve, were it given the space to develop in synch with the dynamic rather than static nature of things, and were its exponents alive to an ever present need for stealth and cunning: indeed the central maxim of the trilogy, expanded in the ‘Dark Forest theory’, seems to be that standing in the light can kill you. Cixin’s novels imagine how desirable planet Earth must appear to aliens having to cope with far less stable homes: indeed, it is so attractive they wish to colonize it, eliminating humanity in the process. They wish to have the planet to themselves.

And with this we return to some of the fundamental themes of reason: of desire and temperance; of how one lives one’s life in the company of others who should remain just that, ‘others’, and how to design and use the technological systems that organize and control lives. Eichmann, too, had started as an ambitious youth; a failed travelling salesman, he found that in the National Socialist bureaucracy, he “could start from scratch and make a career.” As Arendt (Feb 1963: no page) astutely highlights: “Eichmann, for the first time in his life, discovered in himself some special qualities. There were two things he could do well, or better than many other people: he could organize and he could negotiate.” But good organizing and negotiating are in themselves neither good nor bad, and without the critical company of reason they can be embodiments of pure evil. The preparation for such company is the subject matter of education; a task that has perhaps never been as important as it is now.

References

Arendt, H. (1963) Eichmann in Jerusalem I, II, III. Published in February and March issues New Yorker.

Arendt, H. (1964) Eichmann in Jerusalem: A Report on the Banality of Evil. New York: Viking.

Arendt, H. (1977) Thinking I, II, II. Published in November and December issues New Yorker.

Axelrod, R., Keohane, R. (1985) Achieving Cooperation under Anarchy: Strategies and Institutions *World Politics* 38,1: 226-253

Bennis, W. & O’Toole, J. (2005) How Business Schools lost their way. HBR.

Wrege, C. & Hodgetts, D. (2000) ‘Frederick W. Taylor’s pig iron observations: Examining fact, fiction, and the lessons for the new millennium’, *The Academy of Management Journal*, 43 (6): 1283–91.

Chia, R. & Holt, R. (2008) The nature of knowledge in business schools. AMLE 7(4): 471-486

Cortada, J (2016) *All the Facts: A History of Information in the United States Since 1870*. Oxford: Oxford University Press.

Davies, W. (2019) Let’s eat badly. London Review of Books, Vol 41(23). No pages.

Elster, J. (1984) Introduction. In: J. Elster. Rational Choice. New York: NYU Press. Pp: 1-33.

Glen, R., Suciu, C., Baughn, C 2014 The Need for Design Thinking in Business Schools: A Review, *Academy of Management Learning & Education* 13(4): 653-667.

Hartman, E.M. (2017) Can We Teach Character? An Aristotelian Answer. AMLE, 5(1): 68-81.

Hollis, M & Sugden, R. (1993) Rationality in Action. Mind, 102(405): 1-35

Holt, R. (2018) Judgment and Strategy. Oxford: Oxford University Press.

Joullie, J.E. (2016) The philosophical foundations of management thought*. Academy of Management Learning and Education*, 15(1): 157-179.

March, J. 2006. Rationality, foolishness, and adaptive intelligence. *Strategic Management Journal*, 27: 201-214.

Nietzsche, F. (2006/1887) On the genealogy of morality. Ed. K. Ansell-Pearson, Transl. C. Diethe. Cambridge: Cambridge University Press.

Pinker, S. (2018). *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress* . New York: Viking.

Plehwe, D. (2020) Introduction. In: Plehwe, D., Slobodian, Q & Mirowski, P. *Nine lives of neoliberalism. London*: Verso. 1-17.

Puyou, F. and Quattrone, P (2020) Account books as a mediating technology of organization   in Beyes, T., Holt, R, and Pias, C. (eds.)*Oxford Handbook of Media, Technology and Organization Studies.*Oxford: Oxford University Press.

Shotter, J. & Tsoukas, H. (2014) In search of phronesis: leadership and the art of judgment. AMLE, 13(2):

Rooney, D. (2013) Pursuits of Wisdom: Six Ways of Life in Ancient Philosophy From Socrates to Plotinus. AMLE, 12(2)

Sen, A. (1984) Behaviour and the concept of preference. In: In: J. Elster. Rational Choice. New York: NYU Press. 60-81

Zhu, Rooney & Phillips (2016) Practice-Based Wisdom Theory for Integrating Institutional Logics: A New Model for Social Entrepreneurship Learning and Education. AMLE

Wang, L., Malhotra, D. & Murnighan, J.K. (2012) Economics education and greed. Academy of Management Learning & Education, 10(4)