



Unshackling Imagination: How Philosophical Pragmatism can Liberate Entrepreneurial Decision-Making

John F. McVea¹ · Nicholas Dew²

Received: 27 March 2021 / Accepted: 1 October 2021 / Published online: 18 October 2021
© The Author(s), under exclusive licence to Springer Nature B.V. 2021

Abstract

Despite the evident importance of imagination in both ethical decision-making and entrepreneurship, significant gaps remain in our understanding of its actual role in these processes. As a result, scholars have called for a deeper understanding of how imagination impacts value creation in society and how this critical human faculty might more profoundly connect our theories of ethics and business decision-making. In this paper, we attempt to fill one of these gaps by scrutinizing the underlying philosophical foundations of imagination and applying them to the challenges facing entrepreneurs attempting to create new value in an increasingly unpredictable and kaleidic world. Accordingly, we apply a view of imagination developed by the pragmatist philosopher John Dewey to the radically subjective economic philosophy of G.L.S Shackle. As a result, we develop a concept of imagination which we believe can be both significant and hopeful for research at the intersection of business ethics and new value creation.

Keywords Pragmatism · Imagination · Entrepreneurship

Introduction

As John Dewey has noted, it is only through unleashing our imagination that we have learned to reach beyond contemporary limitations towards future possibilities: “[E]very great advance in science has issued from a new audacity of imagination” (Dewey, 1929, p. 294). As such, he concurred with Shelley that imagination represents “the great instrument of moral good.” (Dewey, 1958, p. 345). These convictions of philosophers and poets are also echoed in economics and business literature where the entrepreneur is summoned as the driving force of economic progress (Kier & McMullen, 2018; Seelig, 2015; Suddaby et al., 2015), while also emphasizing that “entrepreneurship begins with, and is guided by imagination” (Roundy, 2020, p. 35). However, these clarion calls for imagination to vault us into a brighter future are

not the unique preserve of academics. For instance, Harvard Business Review has quoted the CEO of Black and Decker declaring that “[n]ever in our lifetimes has the power of imagination been more important in defining our immediate future” (Reeves & Fuller, 2018, p. 8). Despite this superficial support for its importance, “how entrepreneurs turn imaginations into actualized innovations is still not fully understood” (Ibid). As a result, most studies of entrepreneurship “treat imagination as an essential, but latent, construct that is rarely defined, much less measured. Often, readers are left to infer their own meaning of the term and presume its effect on entrepreneurial action” (Kier & McMullen, 2018, p. 2268). Considering this tension, between the colloquial importance of imagination and its relative absence from our theories of value creation and trade, there have been calls for research to focus on the role of imagination to more deeply understand and teach the process of entrepreneurship and entrepreneurial decision making (Ibid).

While much of this work remains in a nascent stage, traditional approaches to entrepreneurship have tended to treat imagination as an additional, or antecedent, stage of existing theories of value creation and trade (Chiles et al., 2010; Hayek, 1945; Kirzner, 1973). As a result, imagination has been positioned as an enrichment to an entrepreneurial decision-making process founded on rational action and

✉ John F. McVea
Jfmcvea@stthomas.edu

Nicholas Dew
ndew@nps.edu

¹ Schulze School of Entrepreneurship, University of St. Thomas, 2115 Summit Ave, St Paul, MN 55105, USA

² Graduate School of Defense Management, Naval Postgraduate School, Monterey, CA 93943, USA

calculative choice. Thus, imagination is usually invoked to explain how entrepreneurs alert themselves to opportunities created by exogenous economic currents.

In contrast, others have taken a less traditional route, turning away from economics towards the humanities, particularly the story-telling and narrative literature (Garud et al., 2014; Michaelson, 2016; Manning & Bejarano, 2017). Amongst several insights, these writers have illuminated a role for imagination as a useful tool to help entrepreneurs capture or control the resources they need to execute their plans. From this narrative perspective, imagination is seen as a powerful instrument of persuasion to help entrepreneurs weave a web of belief amongst stakeholders (Dunham, 2004), inspire collaborative action, and persuade others to concede control of resources. In this guise, rather than preceding entrepreneurial action, imagination is seen as succeeding the act of entrepreneurial creation, in an instrumental role, during execution.

In this paper, we take a different perspective by exploring the unique approaches developed by English radical economist George Shackle and American pragmatist philosopher John Dewey. From this perspective, all human experiences are holistic opportunities for progress and growth, driven by the inherent need for harmony between us and the physical and social environments in which we attempt to thrive. Thus, for the pragmatist, our imagination can play a vital role in continuously reconstructing the harmony we need to prosper. However, this imagination operates not through flights of fancy, but rather by dramatically reimagining reality through mental rehearsal of new futures, new actions, new artifacts, and ultimately new ways to be. To specify the full ramifications of this pragmatist approach to imagination, we will show how these insights can reinforce and enhance the work of George Shackle and link imagination with the strands of Austrian economics which remain most influential within the field of entrepreneurial studies.

Shackle attempted to stretch economic theory beyond a dependence on calculative rational choice as the foundation for business decision-making. He argued that decision-making, particularly that of the entrepreneur, is better thought of as primarily an act of imaginative construction, rather than as the act of choice between objective, discoverable alternatives. By framing entrepreneurial thinking this way, he attempted to liberate it from mere opportunism into a creative role capable of bringing original action, ‘causes uncaused’, into the world. He proposed that placing imagination at the heart of entrepreneurial action could fundamentally change how we think of the nature of entrepreneurial decision-making. However, despite his persuasive arguments for more expansive theories of economic decision-making, Shackle had little to say about exactly how imagination operates in these circumstances. This absence led to critiques that unconstrained imagination would lead to unrestrained

delusion or unethical fantasy, which ultimately limited the impact of his work. However, Shackle’s work was influential in his day, building on the pioneering work of Austrian theorists such as Von Mises, Hayek, and Schumpeter. Nevertheless, over time many economists of the Austrian school found ways to fit their work alongside the economic mainstream as interesting amendments to the rational maximization, rather than as independent contradictions. Although Shackle’s work fell out of favor, other Austrian approaches have remained the most influential and inspirational economic theories within the entrepreneurship literature (Kirzner, 1997). However, in maintaining this influence, the entrepreneur was recast as a merely alert equilibrator in a world of rational maximization (Buchanan & Vanberg, 1991). As a result, only Shackle’s work preserves the critical link to the notion of imagination as the central engine of entrepreneurial decision-making. However, we acknowledge that Shackle’s work was far from complete, raising questions about his philosophical foundations, its potentially nihilistic nature, and the absence of description of how imagination actually works (Schwartz & Spong, 2009). We believe that by enriching Shackle’s liberated view of entrepreneurial decision-making with Dewey’s conception of dramatic rehearsal, we can justify installing imagination at the very core of the entrepreneur’s thinking and the entrepreneurial character.

First, we believe that by adopting an active and more foundational role for imagination, we can unfetter our view of entrepreneurial choice, shifting it from a constrained pessimism to a more open-ended optimism. As a result, we can enrich the conception of the entrepreneur from an alert arbitrageur by acknowledging the entrepreneurship’s capability to create change *de novo*. Second, we believe that by focusing on the role of imagination we can better capture the integrated relationship between entrepreneurial action, entrepreneurial values, and entrepreneurial character. This overcomes an inertia problem identified in the literature:

When we lose hope and adopt a passive mindset, we cease to believe that we can meet our ideals or fix our problems. In statistics, Bayesian learning involves taking a belief about a statistical distribution (‘a prior’) and updating it in the light of each new piece of information obtained. The outcome of the entire process can be determined by the initial belief. Pessimism can become a self-fulfilling prophesy (Reeves & Fuller, 2012).

In contrast, through imagination, we can release our thinking from the unhelpful anchors of the past and liberate our actions to create previously unforeseen possibilities of thinking and living. Of course, this is not to say that by integrating imagination into the heart of our theories of entrepreneurial decision-making we will eliminate optimistic errors about

the future. “Bold ideas, unjustified anticipations, and speculative thought are our only means for interpreting nature: our only organ, our only instrument, for grasping her. And we must hazard them to win our prize” (Popper, 1959, p. 280).¹ However, we hope to show that by enlisting insights from imaginative thinkers such as Shackle and Dewey, this can be done without opening the door to fully-fledged fantasy and solipsism (Latsis, 2015, p. 1161).

Finally, by adopting this imaginative perspective, we hope to contribute to uncovering important interconnections between entrepreneurial decision-making and ethics. We believe integration can be key to moving beyond frameworks that see business ethics solely as moral constraints or rules within which entrepreneurs may unreflectively maximize, or more recklessly, ‘move fast and break things.’ As such, we hope to highlight the critical Deweyan insight for entrepreneurial leaders that “the things actually at stake in any serious deliberation is not a difference in quantity, it is what kind of person one is to become, what sort of self is in the making, and what kind of world [is in] the making” (Dewey, 1983, p. 150). We believe that this imaginative moral quest can be at the center of every entrepreneurial journey.

Entrepreneurship and Ethics

It has been widely observed that the intersection of entrepreneurship and ethics is a critical juncture from which to study the process of value creation in society (Brenkert, 2002; Harris et al., 2009; Vallaster, et al., 2019; Van der Wal & Demircioglu, 2020). Entrepreneurial action and value creation are major drivers of change in society, generating new possibilities for living, for interacting with others, with other species and other ecological resources and, given recent entrepreneurial developments in artificial intelligence and genetic manipulation, for what it means to be uniquely human. These changes are riven with ethical consequences leading to calls for ethics to be a timely and integral part of the entrepreneurial process rather than remaining ex-post, external, legal, or socio-political constraints (Surie & Ashley, 2008; References withheld; Dunham, 2010).

However, ethics and entrepreneurs are not connected solely because of the ethical implications of their actions. We believe, despite the tendency for these disciplines to be studied in isolation within their distinctive fields of inquiry, that these two topics inherently share some conceptual building blocks which can fuel some important insights.

¹ We would like to thank one of our reviewers for bringing to our attention the enduring tension between a Popperian and Kuhnian view of progress. Exploring the philosophical differences between ‘normal’ and ‘revolutionary’ entrepreneurship is a topic in its own right and is outside the scope of this paper.

This has become particularly true as entrepreneurial studies have evolved beyond the study of start-up environment into the exploration of a unique entrepreneurial mindset across a much broader scope of inquiry than that of embryonic businesses (Haynie et al., 2010; Kuratko et al., 2020; McGrath & MacMillan, 2000). As stated previously, this paper focuses on a foundational conceptual overlap: the role of imagination.

Imagination is a critical element in many of our most dramatic stories of new value creation. It is often seen as the window into our entrepreneurial futures, “Imagination is everything. It is the preview of life’s coming attractions” (Einstein, quoted in Glass, 1981, p. 20). It is pervasive in the stories of, for example, Elon Musk, Oprah Winfrey, Bill Gates, Shawn Carter, Thomas Edison, and Cher Wang, and many others (Koehn, 2001). As such, our most culturally celebrated examples of new value creation seem to center around how creativity, iconoclasm, and passion are fueled by imagination. However, the impact of imagination is not limited to entrepreneurial heroes. Imagination also plays an important role in the quotidian activities of pioneering local chefs, architects or engineers who toil for years conjuring up solutions for problems about which no one cares, envisioning new answers to questions which others have abandoned, obsessively trying to create something which has never before existed, or stubbornly defying the eternal parental retort: “Well dear, if that was supposed to exist, then someone would have already created it!” Our theories of value creation need to accommodate the concept of imagination to be generalizable across these extremes and the exemplars, as well as more mundane examples in between.

Despite the evident importance of imagination, there remain gaps in our shared understanding of how this critical human faculty impacts value creation and markets. One of our aims is to fill one of these gaps by scrutinizing the underlying philosophical foundations of the concept of imagination. We begin this exploration with the ideas of the economic philosopher George Shackle a pioneer in the integration of imagination into modern economics. (It should be noted that classical economics, notably in the work of Adam Smith, was initially very comfortable accommodating imaginative moral sentiments into their explorations of value creation and trade (Hühn, 2019; Werhane, 2000). We will show that Shackle’s reincorporation of imagination into economic decision-making results in several significant insights about how markets are created and operate. However, while opening some important doors, his analysis also leaves some key conceptual issues unanswered. Resolving these issues led us to a surprising place: the work of the pragmatist John Dewey.

Though wide-ranging in his philosophical and political impact, Dewey is not generally associated with business or entrepreneurship. Indeed, it is unlikely that many

entrepreneurial scholars would think him at all relevant to their field. Furthermore, despite general recognition of Dewey's importance as a philosopher, there has been limited application of his ideas even within the field of business ethics (reference withheld). Nevertheless, we believe that Dewey's work is indeed germane to an understanding of imagination as a normal and central aspect of human reasoning. Importantly, Dewey's approach resolves some of the open questions arising from Shackle's work. It addresses the criticism that Shackle's use of imagination is absent constraint and thus can drift into nihilism or solipsism (Latsis, 2015). The crux of their joint contribution, where they critically converge, is in the notion that imagination is constitutive and foundational to entrepreneurial decision-making. As such, imaginative possibilities are not an exogenous precursor to the actions of the entrepreneur which simply await discovery and exploitation. Nor is imagination limited to types of decisions in particular contexts, such as brainstorming, R&D, or the arts. For both Shackle and Dewey, imagination, properly understood, is a completely normal and intrinsic part of the process of thinking and deciding.

In summary, we propose that we can gain an important and original perspective on business decision-making and ethics if we: (i) view imagination as central to decision-making; (ii) understand how Shackle's subjectivist perspective provides key insights to make this integration work, and (iii) enrich the subjectivist perspective with Dewey's understanding of dramatic rehearsal to integrate imagination with moral character in a way that resolves some of the key analytical problems in Shackle's approach.

The Work of George Shackle

Shackle was not only a highly imaginative thinker within the discipline of economics but was also one of a small number of scholars to have put imagination at the center of economic decision-making (Perlman, 1990). In recent years, Schwartz and Spong (2009) have revisited his work and rediscovered it to be a well-reasoned decision-making model that fits naturally with several important aspects of moral reasoning. Shackle's ideas have also been kept alive in the entrepreneurship literature by a small group of scholars to whom we owe an important intellectual debt (e.g., Chiles et al., 2010; Koppl et al., 2015; McMullen, 2010). Like these authors, we believe there are important reasons to take Shackle's insights about the role of imagination more seriously.

Today, scholars like Shackle have very little impact on the teaching of business or entrepreneurship. Subjectivist and philosophical economics have been marginalized in the field of economics. However, at the same time, modern economics has been criticized for divorcing itself from the reality of the phenomenon it is supposed to study: value creation

and trade. In this spirit Nobel laureate Ronald Coase once observed that "[i]f economists wished to study the horse, they wouldn't go and look at horses. They'd sit in their studies and say to themselves, 'What would I do if I were a horse?'" (Coase, 1999). One important consequence of this gap between theory and practice has been the absence of economic analysis of the human actor the entrepreneur and with it the role of imagination. The entrepreneur and her imagination have become, "essentially a gadfly, annoying mainstream theory and theorists, which they prefer would go away" (Storr et al., 2004, p. 333).

Austrian economics is sometimes seen as the savior of the human element within economics because of the role it preserves for the entrepreneur in the markets (Kirzner, 1997). Thus, in the hands of Austrian theorists, the entrepreneur evolves from an invisible hand into a real and vital human being and a critical backstage equilibrator. This entrepreneur is an always-alert opportunist, racing to be the first to collect dollar bill opportunities from the sidewalk (Kirzner, 1973). Or perhaps she is an even more fully rounded character. She could be the happy recipient of private new information from which she could arbitrage for her own profit and, in doing so, better inform the public at large.

Although the Austrian view of the entrepreneur may be more humanly satisfying than an invisible hand, it still does not fully square with our practical observations. Even in these enlightened models, the ultimate source of opportunity is exogenous, invisible, and unexplained. Besides, those who play the entrepreneurial role, outside of economic texts, seem to be individuals who abundantly employ their imaginations, envisage new possibilities, and foster them via new organizations, products, technologies, markets, industries, and new institutional arrangements. These actors proactively shape economic environments that are kaleidic in nature—that is, contingent, continuously evolving, non-determined, open-ended, and creative (Buchanan & Vanberg, 1991). As a result, continuous change is influenced by the relentless imaginative activity of entrepreneurial actors (both individuals and firms) in pursuit of new sources of value. Today's kaleidic markets might be better described as being in persistent imagination-fueled disequilibrium. Furthermore, it is this constant flow of novelty and change that is at the heart of the ethical opportunities and threats which raise persistent concerns about the nature of the value creation process. It is the imagining of novel creations and ways of living that generate new ethical dilemmas by opening the door to previously unforeseen consequences.

In this conceptualization, the market itself is not just a source of equilibrium pricing but rather it is the "process that exploits man's imaginative potential" (Buchanan & Vanberg, 1991, p.184). For Schumpeter—sometimes given to grandiosity—imagination is the fountainhead for the "incessant" creation of new economic structures. At birth, any new

product, service, or organization, “is only the figment of our imagination” (Schumpeter, 1934, p. 85). But imagination also is a fountainhead in a very pragmatic and mundane sense. Buchanan and Vanberg identify that imagination analytically *leads* the market process.² For any open-ended market process, where individuals engage entrepreneurially to satisfy the needs of others for goods and services, it is not sufficient to try to bolt the concept of imagination onto a bloodless market process. Instead, imagination naturally resides at the center of that process as an intrinsic, rudimentary, and human capability. Entrepreneurs apply their imaginations to develop new elements in the world that would not otherwise come to fruition. This process involves liberal use of creative, social, and pragmatic imaginations (Kier & McMullen, 2018). Potential opportunities to create new value typically originate from the entrepreneurs imagining the lives of stakeholders and their needs or desires for new products and services—real stakeholders with real names and real faces (References withheld) satisfied by a real entrepreneur with real imagination. As a result, the market system operates continuously, fired and fueled by entrepreneurial imagination (Chiles et al., 2010).

This is the context for Shackle’s sustained philosophical analysis of the nature of imagination in choice. As Roger Koppl puts it, Shackle is “trying to understand... the real meaning of choice” (Koppl, 2001 p.186). One of Shackle’s key conclusions is that imagination is the cornerstone of decision-making because it is only through imagination that the necessary elements for making choices can be assembled. Thus, images of the future are acts of construction, fueled by the imagination of participants, “[w]ho themselves have no idea, in advance, concerning the ideas that their imaginations will yield” (Buchanan & Vanberg, 1991, p.184). The resultant unpredictability does not mean the future is beyond expectation or conjecture, but it does mean

that decision-makers can only present the future in their decisions through “imaginative constructions” since they have no other satisfactory guideposts from which to make decisions (Loasby, 2007, p.189).

An inescapable element of Shackle’s approach is the proposition that humans are capable of original thought, “*causes uncaused*.” Our future, thus, depends on the innumerable choices first imagined and then made by ourselves and other individuals. For sure, human action is sometimes simply a response to the world, but Shackle emphasizes that human action is also capable of being the first domino in sequences of cause and effect. He believed that without this premise there is no real conception of free will. It is here that Shackle challenges the usefulness of frameworks for value creation that make novel opportunities exogenous to the process of value creation itself. Therefore, to analyze choice, he asks: “What does the decision-maker actually know at the point of decision?” Decision-makers cannot possibly know all the potential outcomes of their choices and therefore, at the decision point, there can be no given set of future possibilities which are independent of the choice process of the decision-maker (Buchanan & Vanberg, 1991). To quote an important paragraph in Shackle’s work:

The content of time-to-come is not merely unknown but non-existent, and the notion of foreknowledge of human affairs is vacuous. Then the effort to gather enough data to establish a unique path of history-to-come can be renounced in favor of the discipline of possibility. (Shackle, 1979, p.33).

In principle, an individual can never have access to all the subjective information in other people’s minds since a key part of this information rests in other people’s imaginations. Thus, every decision-maker must proactively construct imagined sequels to their decisions in the shadow of ignorance about the plans of others (Lachmann, 1976). Imagined options may only begin the process of coming into the world when individuals work on implementing their ideas (Buchanan, 1982). Thus, the rolling process of imaginative development emerges as an ongoing social endeavor to imaginatively evolve through interactions with stakeholders and further conjectures based on the social process of bringing these imaginings to market. Thus, Shackle stressed, “The future is not there to be discovered, but must be created” (Shackle, 1969, p. 16).

There are several implications of Shackle’s imagination-fueled approach to decision-making, of which we will focus on two. The first is that the range of imaginable sequels is infinite and incompletable. Imaginable sequels are limited only by the imagination of the chooser. Instead of comparing the complete range of alternatives as elemental facts in the world, the chooser can create possibilities as “poems of his own imagination ... things made by himself.” (Shackle,

² To fully capture this point, Buchanan & Vanberg provide the following thought experiment:

“Assume that no goods exist, and that persons are described by certain talents, capacities and skills that enable them to produce consumable goods from nature... [T]rade will take place when persons recognize that their wellbeing can be enhanced by producing and exchanging rather than producing for their own consumption only... [T]here is an added requirement, that any participant exercise imagination in choosing to specialize in production with the ultimate purpose of achieving an increase in well-being through exchange. Think of the choice calculus of a person in this setting. What can I produce that will prove of exchange value with others? ... Individuals would use their own imagination, their own assessment of the potential evaluations of others, in producing goods wholly divorced from their own consumption ... This seeking to satisfy others through producing marketable value as an indirect means of producing value for themselves—this characteristic behavioral element in a market order was central to Adam Smith’s insight.” (Buchanan & Vanberg, 1991, p.181–182).

1990, p.34; quoted in Schwartz & Spong, 2009, p.130). This is the sense in which Cowen concludes that Shackle's work is "constructing a poetry of individual choice." Crucially, the decisions we make in business and elsewhere are not bounded in the sense that a horse race is bound. For Shackle, there is no *a priori* limit to the list of horses that may be envisioned in the race, no limit on the 'histories-to-come' that the entrepreneur might imagine (Shackle, 1979, pp. 23–24). Instead, she potentially faces an endless proliferation of hypothetical scenarios that she must somehow organize before she can make plans for herself (Shackle, 1983, p.36). Therefore, even if an arbitrary limit is imposed to practically truncate the imaginative process, it is still not, in principle, possible to assign probabilities to expected outcomes of even moderately complicated decisions. Certainly, this is not possible if we define probabilities as the chances of a particular outcome from amongst the complete set of possibilities. Of course, this is not to say that the chooser must treat all imaginable outcomes equally. The chooser may (will) have preferred outcomes, or possibilities which she may think more achievable and some which she may think impossible in any real-world she can imagine. However, the open-endedness of the choice set makes this situation qualitatively different from those within a model where all the probabilities can be assumed to sum to one.

Second, Shackle's model has significant implications for how alternative courses of action should be valued, a point elaborated at length by Buchanan (1969). Conventionally, the cost of any choice is the next best alternative to the chosen option. Convention also recognizes that this cost lies in the future, i.e., it is a future expected cost. However, this convention avoids taking the next step—which Buchanan does take—which is to accept that the next best option will be subjective. The cost of a choice, at the decision point, therefore, depends on what the chooser *imagines* it to be. The cost of action is the product of the subjective imagination of the chooser and draws from an infinite list of possibilities.

To summarize, in many open-ended entrepreneurial situations, options and alternatives do not simply present themselves to decision-makers, and the costs and benefits of choices do not preexist in the decision-makers imagination. Instead, choosing involves a proactive imaginative effort by individuals to envision the options, alternatives, costs, and benefits, followed by deliberation over the best choice in advance of full knowledge of possible outcomes. It is as if we must declare our strategies for the game before the rules of the game have fully emerged and, as a result, our choices play a role in creating the future game.

The subjective nature of cost points to an important area of conceptual overlap between entrepreneurship and ethics that emerges from an imagination-centric view of decision-making. From this perspective, even in ethical

choices, which affect the wellbeing of others, there can be no comprehensive means of determining the future costs of a decision on others (Buchanan, 1969). To the subjectivist, costs are "reciprocals, or variables, to the act of choice itself" (Boettke & Candela, 2020, p. 289) because choice is "amongst the products of imagination" (Shackle, 1966, p. 758). This distinction is important. All the parties affected by an ethical choice may not be participants in the choice itself. However, the chooser remains bound by their own imagination, with imperfect insight on their impact on others. Of course, choosers may augment their imaginative capabilities by proactively enlarging their second-person perspective to better encompass their understanding of others through perspective-taking and empathizing (Chiles et al., 2010; McMullen, 2010). This approach is reminiscent of Smith's impartial spectator (Smith, 1982/1759). On one hand, this suggests a powerful role for imagination in forging intersubjective understandings of the costs of moral choices. On the other hand, the subjectivism of these processes also suggests inevitable limitations to this capacity.

As stated earlier, the subjectivist approach to choosing is inherently more personal and introspective than rationally calculative alternatives. As such, it is perhaps particularly well suited to the most complex and novel decisions:

[T]hese types of problems (where there is as yet no accepted formula for dealing with specific conflict situations) represent decisions that are much more frequent and, in some ways, more consequential and interesting than those in which clear ethical and legal guidelines apply and they are therefore likely to be influenced by thought process[es] involving moral imagination (Caldwell & Moberg, 2007, p. 201).

From the subjectivist perspective, in complex and open-ended decisions, choice is based on an imagined outcome and its costs are based on the second-best imagined outcome. However, as both exist only in the imagination of the decision-maker, it would be unwise to separate the decision from the decision-maker, nor the choice from the values of the person doing the choosing.

As a result of this inseparability, it is unsurprising that one of the areas of business literature which has given a serious appraisal of imagination in decision-making is the business ethics literature. Moral imagination involves awareness of the context around moral dilemmas, the ability to imagine and evaluate new mental models, the creation of new possibilities, and the reframing of dilemmas to develop novel solutions that can be morally justified (Werhane, 1999). Werhane's work was significantly influenced by the work of Johnson who, more directly, extended Dewey's approach to ethical decision-making. Since Werhane's pioneering work, there has been a growth in interest in moral

imagination. Much of this work is sympathetic to many of the arguments we make in this paper.

While Werhane initially founded her approach on the work of Adam Smith and Kant, she used Johnson's definition of moral imagination as the "ability to imaginatively discern various possibilities for acting within a *given* situation and to envision the potential help and harm that are likely to result from a given action" (Johnson, 1993, p. 202, italics added). As such, moral imagination stands in contrast to the application of universal truths or moral rules to resolve ethical dilemmas. It is based on the belief that moral maxims are often too narrow to capture the intricacies of our most complex moral situations. Instead, moral imagination grounds itself in "the practical demands of the situation" (Moberg & Seabright, 2000, p. 872). It introduces sensitivity and awareness of the people involved in a decision, and any ethical conflicts in which they might be affected. From this perspective, Alexander has proposed "that the *discovery* of new, integrative values is a primary aim of the moral imagination, an aspect not even acknowledged by the modernist rule-oriented theories of morality" (2013, p. 199). Some theorists have identified different elements of moral imagination depending on the power of the decision-maker and the degree of structural change required for an ethical solution. For instance, Hargraves has developed six alternative avenues for moral imagination to mediate the relationship between the decision-maker and the stakeholders: creation, collaboration, coalition, compromise, consent, coercion (Hargraves, 2009). Others have explored links between emotions, moral reasoning, and moral imagination (Huebner et al., 2009; Langdon & Mackenzie, 2012; Tangney et al., 2007) and several interesting empirical studies have followed. The results suggest that moral imagination can improve mutually beneficial decision-making (Godwin, 2015; Mahmood & Ali, 2011), and that there may be several antecedent influences on moral imagination, including moral identity (Caldwell & Moberg, 2007), moral attentiveness, and creativity (Whitaker & Godwin, 2013), as well as corporate culture (Caldwell & Moberg, 2007). Finally, some studies have suggested that more empathetic individuals (Mahmood & Ali, 2011), those who see themselves as well-rounded human beings, tend to be more morally imaginative, while dogmatic or egocentric individuals who see themselves as operating in professional roles are less morally imaginative (Mahmood & Ali, 2011, References withheld). What these streams of research share is the conclusion that, to be effective, moral imagination should include (a) understanding and reframing a situation beyond its current context; (b) using imagination to envision all possible alternatives along with their potential impacts on possible stakeholders; and (c) applying moral standards to the various alternatives to determine the best course of action (Schwartz & Hoffman, 2017).

Strange Bedfellows

At first glance, Dewey and Shackle may appear as strange bedfellows and thus as an unlikely place to refresh our understanding of entrepreneurial decision-making. While these authors were both historically important and influential, the impact of their work, especially that of Shackle, has faded over time. Moreover, both thinkers have been notoriously hard to categorize within traditional academic silos, as they wandered, and wondered, widely across disciplines. Furthermore, to our knowledge, neither ever referred to the other's work. Neither did they share many direct intellectual linkages, unless we were to go back to the foundational ideas of Hegel or perhaps Heraclites. However, before digging more deeply into how we believe these two perspectives could enhance our understanding of entrepreneurship, we will lay out some, perhaps surprising, shared underpinnings that may serve as a foundation for our subsequent proposition: that the approaches of Shackle and Dewey can reinforce each other and invigorate our understanding of the role of imagination in the process of entrepreneurship. As Shackle's work has become much less well-known, we will focus on illustrating two important areas where his work echoes the more broadly recognized pragmatism of Dewey.

First, we believe that Shackle may be categorized (like Dewey) as a philosophical pragmatist. As one of the foundational thinkers in American pragmatism, Dewey was instrumental in developing a philosophy that is characterized by the rejection of the spectator view of knowledge and the insistence that we both experience the world, and are *of* the world (Putnam, 1994, p. 2). Furthermore, pragmatists warmly embrace fallibility, fueled by a human need to continuously reconstruct knowledge and fact in the light of experience (Ibid). From this perspective, beliefs are simply a set of tools that are useful in a particular time and place. As a result, pragmatists tend to reject sharp analytical dichotomies and foundational categories, instead emphasizing the holistic and integrated nature of human experience (Ibid). Finally, pragmatists celebrate what Putnam has called 'the primacy of practice', that we mediate between ourselves and the *environment-in-which-we-are-entangled* by reflecting on and adjusting to everyday human events (Ibid, p. 2).

While it is unclear that Shackle formally considered himself operating within any philosophical school, his descriptions of continuously evolving facts and meanings emerging and dissolving in a kaleidic world, together with his economic speculations based the real experiences of businesspeople, are philosophically pragmatic through and through. For, instance, when contrasting his view of scientific inquiry with the logical positivists who dominated

contemporary neoclassical economics, he stated that, “Science tells us what to count on, what to rely on. But in doing so it merely imitates and refines the process by which we build, each of us for ourselves, the homely technology of everyday living.” (Shackle, 1976, p. 6).

As Latis has recently observed:

[t]his link between knowledge, stereotypes, evolution, and usefulness appear also in pragmatism literature (See for example Dewey (2002)). Hence, Shackle’s notion of the present solitary moment is compatible with pragmatism. According to this philosophy, what is useful is real. The character of use involves also power; for the term use always involves aim, motive and means. Knowledge is real because it’s useful (Cantillo, 2010, p. 10).

It is notable that in his publications, rather than attempting to verify his claims using the standard tools of empiricism and statistical validation, Shackle simply characterized his inquiries as forms of “systematical impressionism” (Earl & Littleboy, 2014). Furthermore, in a holistic tone worth of Dewey himself, Shackle noted: “...it follows that such a subject as economics must not be looked on as self-contained. Human nature and action as a whole is the proper objective of study, and philosopher, psychologist, economist and historian must work hand in hand” (Shackle, 1969, p. xiii).

Finally, in summarizing Shackle’s philosophical approach, Cowen concludes:

Shackle reads as closer to a modern pluralist or pragmatist. Frameworks for understanding the world invariably overlap and spill over into each other, while each remains incomplete. The different ways of viewing reality are useful and shed light on the human condition. But we should not expect the sum of all available approaches to provide a comprehensive account of reality (Cowen, 2003, p. 19).

The second area where Shackle’s work echoes Dewey’s pragmatism is in its rejection of the conception of rationality used by economists. Shackle and Dewey share a characteristically rich view of human action that strikes a sharp contrast with the rational choice theory that dominates mainstream economics where economic actors “seek to maximize utility ... they assess alternative options in terms of net gain; they implement options that they expect will result in the greatest utility” (Morrell, 2004, p. 241). Dewey rejected and trivialized the idea of *homo economicus* as a simplistic “dollar-hunting animal” (Devas, 1883, p. 27). Instead, he proposed that humans make complex choices through a richly integrated process of reflective deliberation which:

... no more resembles the casting-up of accounts of profit and loss, pleasure and pains, than an actor

engaged in drama resembles a clerk recording debit items in a ledger (Dewey, 1983, vol. 14, p. 139).

In similar fashion, Shackle rejected the formulation of economic decision making as probabilistic choice, not because of his methodological preferences, but because of its incapacity to realistically capture the nature of the human action.

Shackle considers choices that are not bound by generalizable rules or formulas. For Shackle, the individual choice is marked by surprise, uniqueness, and its irreducibility to formulae of mathematical probability (Cowen, 2003, p. 17).

Furthermore, in the most radical part of his approach, he placed a particular emphasis on the critical stage before choice: the formation of expectations.

[I]n such a scheme of thought as my own the decision-maker’s field of choice is **created** by himself so that he is faced not with a set of relationships all simultaneously, and so in a sense timeless, but with a system which evolves from moment to moment in his own mind (Shackle, 1969 [1961], p. 100, emphasis in original).

Finally, Shackle repeatedly and explicitly contrasted his approach with probabilistic rational choice theory as a useful way to frame crucial decisions:

Most importantly, man is seen as creating his own history. We therefore can always imagine a longer or shorter list of possible rival skeins for the future. By taking the imaginative individual decision, and individual free will, as a choice variable (at least in methodological terms), **Shackle defies any attempt to express this process in terms of probabilistic reasoning. We do not choose in light of a given set of probabilities. Rather we, through our choices and acts of imagination, decide what the possibilities are going to be.** For Shackle, the phenomenological description of how such imaginative acts are made is prior to any theory of probability or expected utility. (Cowen, 2003, p. 20, emphasis added).

With these two shared foundations, philosophical pragmatism, and opposition to rational probabilistic choice, we will now dig more deeply into the contribution of this approach to our understanding of entrepreneurship.

The Work of John Dewey

John Dewey was a pivotal figure in American philosophy. Today he is remembered primarily for his work in education; however, he also wrote extensively in the areas of

decision-making, ethics, and human creativity. Dewey's work has unfortunately been neglected within business and economics, yet we believe that it can bring valuable insights particularly to questions at the intersection of ethics and entrepreneurship. His approach is also both complementary and enriching to the radically subjectivist view of Shackle. Dewey's perspective reinforces the value of placing imagination as a central element in decision-making, including decisions about economic value creation. However, we believe that Dewey develops a more sophisticated and morally robust framework that help us better understand the true nature of decision-making processes through which entrepreneurs bring new goods and services to fruition. Indeed, we believe that "Dewey's definition of intelligence: to see the actual in light of the possible" (Alexander, 2013, p.194) is at the very heart of what is often referred to as the entrepreneurial mindset (McGrath & MacMillan, 2000).

Dewey challenges us to recast our conception of imagination from a peripheral or antecedent role into the very heart of the decision-making process which allows us to surmount the limitations of our initial instincts and habits.

The imagination is the medium of appreciation in every field. The engagement of the imagination is the only thing that makes any activity more than mechanical. Unfortunately, it is too customary to identify the imaginative with the imaginary, rather than with a warm and intimate taking in of the full scope of a situation (Dewey, 1966, p. 276).

More specifically, we believe that Dewey's concept of *dramatic rehearsal*, as the engine of imagination, can enhance Shackle's thinly described mechanism for the formation of expectations. Second, a Deweyan perspective can provide an important counter to the criticism that Shackle's radical subjectivism opens Pandora's box of constraint-free nihilism which can only result in paralysis of choice or an overwhelming of moral reflection. Finally, because of its holistic nature, Dewey's deliberative approach, which is founded on the choices that ultimately form our character, brings with it a practical framework for entrepreneurial ethics which could be integral to, rather than an external constraint over, entrepreneurial decision-making and the process of value creation itself.

American Pragmatist

As an intellectual Dewey was heavily influenced by the psychological insights of William James, the philosophy of Hegel, and the science of Charles Darwin. He shared James' belief that Darwin's evolutionary ideas could be extended beyond biology and have unsettling effects on all spheres of knowledge. Dewey also adopted James' theory of instrumental truth: that facts and truths are simply useful tools or

beliefs that we use to understand or solve situations. This naturalistic and holistic approach led him to challenge many of the accepted dualisms which characterized western philosophy: the mind/ body, thought/ experience, the creator/ creation. For our inquiry into entrepreneurial decision-making, one important such challenge is the separation between reality and imaginative thoughts.

[T]he unseen region in question is not merely ideal, for it produces effects in this world. When we commune with it, work is actually done upon our finite personality, for we are turned into new men, and consequences in the way of conduct follow in the natural world upon our regenerative change. But that which produces effects within another reality must be termed a reality itself, so I feel as if we had no philosophic excuse for calling the unseen or mystical world unreal (James, 1904, p. 406).

From this pragmatist perspective imagination plays a pivotal role in the world, driving changes in ourselves, in how we act and, as a result, in the futures we help to create. This conception of imaginative thought is far from traditional conceptions of flights of fancy. In contrast, it relocates imagination from the artistic periphery of human thought towards a central role in our decision-making—a shift later reflected in Shackle's work, albeit restricted to the realm of economic philosophy. As such, Dewey proposed that it is primarily through imagination, rather than through the identification of hard facts, that we can understand, adapt to, and have an impact on the world.

[T]here actually occurs [in life] extremely little observation of brute facts... Facts are usually observed with reference to some practical end of purpose, and that end is presented only in imagination (Dewey, 2008, p.14).

With reality imaginatively fashioned, imagination spreads its wings to consider the world in the light of possible future ways of being or future ends. From Dewey's perspective the entrepreneur, rather than being a mere alert and responsive observer of reality, becomes a shaper and creator of new ways of doing and being. Thus, the entrepreneur's imagination plays an active role in extending her senses into the environment and carving out meaning from a world which otherwise would remain to us but a "buzzing blooming confusion" (James, 1890). Dewey proposed that it is this imaginative function which makes us distinctively human, distinguishing us from other creatures which remain slaves to their senses and instinctive responses. Primitive creatures respond to their first thoughts, their impulses; humans, as reflective creatures, have developed the ability to deliberate upon their second, third, or any number of imaginative thoughts.

As part of his exposition of imagination, Dewey developed the concept of *dramatic rehearsal* as a mental tool with which we can explore a myriad of ways to bring ourselves into harmony with the reality of an ever-changing environment and community that surrounds us. As such, when our habitual ways of living come into conflict with the reality of the environment around us, our energy is diverted, stimulating our imagination to visualize alternative possibilities. This liberates us to create possible new objects and experiences which could allow us to interact within the reality of our future surroundings in more mutually harmonious ways. Thus, in a sense, both the source and the ends of entrepreneurial imagination are reality itself.

The Foundations of Dewey's Approach

Dewey believed that by applying these Darwinian insights to human psychology we could unshackle our thinking, revolutionize our education, and inspire 'relentless inquiries' which could enrich and harmonize our lives. He believed the historical emphasis on *abstract reason* to identify the facts and truths of life to be 'a pernicious reification' which had the ironic consequence of inhibiting the exercise of reason in our daily lives.

After all we are only pleading for the adoption in moral reflection of the logic that has been proven to make for security, stringency and fertility in passing judgments upon physical phenomena. And the reason is the same. The old method, in spite of its nominal and aesthetic worship of reason, discouraged reason, because it hindered the operation of scrupulous and unremitting inquiry (Dewey, 1957, p. 165).

Thus, if entrepreneurs limit their thinking to carefully reasoned analytical choices based on past data, drawn from stable markets, based on existing products and discernable possibilities, it would disable them from the core reflective process which has allowed for so much human progress in all other fields. It would also represent a failure to recognize the truly febrile and kaleidic nature of the environment in which the entrepreneurs are attempting to thrive.

In contrast, from the naturalistic and pragmatist perspective, our lives are precarious. We are surrounded by ignorance, ambiguity, uncertainty within an ever-changing environment. In the face of this ambiguity and change, successful creatures need to find islands of stability and continuity to allow them to connect actions with consequences, make plans, grow, and prosper. In this kaleidic world, pragmatists concede that truth is neither fixed nor certain. Yet Dewey's epistemology is neither cynical nor skeptical. It is based on the belief that through reflective human inquiry and continuous evolution of thought, we can create the temporary patterns of continuity we need to prosper, even in the

absence of abiding truths. In this regard, imagination and dramatic rehearsal become critical tools stabilizing our lives through continuous processes of inquiry. As reflective creatures, we can imagine ways of thinking and means of acting which continuously move us towards harmony with our everchanging surroundings. When successful, these ways of thinking and acting may solidify into habits, and eventually, these habitual qualities can become the foundation for persistent character. In turn, this evolving consistency-in-being can enable us to shape, rather than just weather, the course of our lives, prosper in the face of radical uncertainty, and creatively influence our futures in ways that are valuable both to ourselves and to those with whom we interact.

Imagination is not Imaginary

Dewey had great faith in the role of imagination; however, despite its crucial role in his philosophy, he did not explicitly develop his concept into a coherent theory. Fortunately for us, Fesmire has attempted just such a task. According to this analysis (Fesmire, 2003), Dewey believed imagination to be both a natural and existential part of being human, as natural as dam building is to beavers and nest building to birds. "Imagination is as much a normal and integral part of human activity as is muscular movement" (Dewey, 1930/1916, p. 277). Dewey made an important distinction between our imagination and the imaginary. The *imaginary* refers to imagined 'stuff' such as wizards and goblins, that begin and end solely within the subjective thoughts of the individual. The imaginary are fantasies, and while they can be aesthetically pleasing and thus valuable, they remain illusory. However, the *imagination* on which Dewey focused is a process that begins and ends in the reality of our existence. Imagination is the ability to understand 'what is' in light of 'what it could be.' 'This ability contrasts with our habitual and instinctual understanding of "what is" by considering 'the way it has always been' or 'the way it is today.' This also draws a sharp contrast from imaginary thoughts about "what could be" in worlds altogether unmoored from our present or past. For Dewey, the imagination which is central to our decision-making process is immersed and embedded in the hard and brutal reality of existence.

Whether in art, industry, or moral conduct, imagination reaches deeply into the 'hard stuff of the world of physical and social experience' and seizes upon possible new relations for thought and action. New aims and ideals emerge to guide behaviors generated through imagination, but they are not made of imaginary stuff (Fesmire, 2003, p.66).

Within this conception, Dewey identified two different foundations for our imagination: empathy and possibilities. 'Empathetic imagination' allows us to assume

the perspectives, attitudes, and feelings of others. This form of imagination takes us beyond the limits of our own experience and opens our imagination to the needs of others. It roughly equates with moral imagination, or with what Kier and McMullen (2018) put in the broad category of *social imaginativeness*. By comparison ‘possibility imagination’ allows us to challenge our instinctual, habitual understandings and interpretations of situations and what they could be in the future. This is a form of creative imagination that allows us to overcome the limitations of our past and present. “*Only imaginative vision elicits the possibilities that are interwoven within the texture of the actual.*” (Dewey, 1958, p. 342).

It is important to emphasize that Dewey recognized the importance of habit and intuition in our lives. Johnson has captured how our intuitive ways of thinking operate in tandem with deliberative ways of thinking:

These habitual modes and tendencies of appraisal operate well most of the time, until we run into new situations that go beyond those conditions in which our habits of valuing and judging were originally established. In such cases, our normal activity and engrained habits tend to become frustrated and are felt to be inadequate to the task of managing the complexities of our present situation, which now reveals an indeterminacy—a problematic character—about how to go forward. This is the ‘need’ phase of the process that leads us to inquire into what is going on and whether any changes are necessary to keep things balanced and functioning. (Johnson, 2019, p. 9, in Fesmire, 2019).

These circumstances are reminiscent of Shackle’s crucial situations and these re-imaginings are in the territory of what Rorty has referred to as the strong poet (Rorty, 1989). However, rather than solely the preserve of the revolutionary artist, from a Deweyan perspective this sort of thinking is recognizable in the actions of changemakers everywhere: “I am thinking here of any of thousands of ordinary people who see problems and go out on a limb to bring them to our national, and global consciousness; (Johnson, 2014, p. 106). Thus, within the bounds of commerce, it is the entrepreneur’s imaginative processes of inquiry which fuels their ability to create value for themselves and others, placing imagination at the very center of the process of value creation. By using imagination, entrepreneurs may create new goods and services that enable new ways of living that will be more harmonious with our future environments than those which would persist were we limited to our habitual responses and rational choices.

Dramatic Rehearsal as the Engine of Imagination

The innovative force at the heart of Dewey’s understanding of imagination is the process he described as *dramatic rehearsal*. As we make our way through the kaleidic environments in which our lives are embedded, we frequently encounter blocks or barriers to our habits and goals. Alternatively, we may also be spontaneously impacted by new external forces which we feel could disrupt our equilibrium. When this happens, we feel vexation or distress, because of the tension between ourselves and the direction of the environment with which we are enmeshed. We must continuously reform physical harmony to prevent us from bumping into the world and continuously bruising ourselves. However, from a pragmatist perspective, the physical and the mental are also inseparable. There is no discernable difference between how our minds and bodies interact with the kaleidic world. Our senses reach out and breach the interface between the body and the world. Senses do not simply record the world; they grasp and shape reality. As a result, our feelings of discomfort and disorientation through our social interactions activate our deliberations just as surely as do physical bruises.

We tend to frame the discomfort between ourselves and our changing environment as problems-to-be-overcome. However, a more entrepreneurial way of looking at them would be as opportunities-yet-to-be-fulfilled. When we feel thwarted in achieving these possibilities, our senses trigger internal disquiet. Our immediate reactions to disquiet are instinctual thoughts leading to swift and habitual responses. However, these instinctive responses may or may not resolve the problem at hand in ways that harmonize us with our environment. Alternatively, through our ability to reflect, we may instead pause, hesitate, and search for a second thought, which could help overcome the dissonance and restore us to congruence with our surroundings. Through these deliberations, we can imagine possibilities as real events populated with real people, who respond in real ways, leading to real consequences. As a result, our imaginings may take on a life of their own, often with unpredictable consequences. These scenarios may suggest that new approaches, skills, and tools need to be added to our repertoire, and as such, they will challenge existing habits and artifacts. Ultimately, they may even challenge us to question our character and beliefs and to try to reimagine who or what we are trying to become.

In sum, Dewey describes imagination as taking its momentum from stymied habitual action by forcefully redirecting it into creative mental action. Thus, imagination flashes like the sparks which fly when the brakes of a freight train are slammed—redirecting frustrated physical momentum into energy, heat, and light. Our energized imagination then stimulates new possibilities through our dramatic rehearsals.

It is also important to emphasize that dramatic rehearsal is a socially embedded rather than a private intellectual activity. For Shackle, the imagination includes information from numerous external sources and for Dewey dramatic rehearsal is something that must be communicated and shared to empathetically understand the potential impact on others.

Imaginative dramatic rehearsal should not be a solitary act of reflective soliloquy but rather a socially shaped process that seeks to reveal the full range of constructive possibilities present in a given situation (Johnson, published, in Fesmire, 2019, p. 188).

Finally, Dewey directly addresses the aspect of Shackle's work that is most frequently criticized: the potential for infinite regress or theoretical nihilism created by a limitless human imagination (Latsis, 2015). First, Dewey placed several constraints around his conception of imagination in decision-making. As previously described, he explicitly discounts the sorts of ungrounded speculations which can create imaginary or fantasy thoughts. Second, as part of the process of imagining new possibilities, these alternatives must be continuously assessed to the degree that they might create future harmony amongst the conflicting forces in the world. These deliberations are not calculations, rather they have an aesthetic nature, a form of human artistry in decision-making which cannot be reduced to rules or algorithms. As Alexander has observed:

The key to moral conduct for Dewey is the capacity to discover the aesthetic dimension of human existence. This does not mean simply creating those ideals which by their lure allow people to act cooperatively for mutually fulfilling ends, though that is certainly included. It also means the ability to understand others and oneself in terms of the aesthetics of character, a palpable, concrete insight into the meaningful continuity of our lives (Alexander, 2013, p.204)

Summary

The work of Shackle and Dewey fortify the concept of imagination at the intersection of business decision-making and ethics in ways that we believe are both significant and hopeful. We believe that together these perspectives can deepen our understanding of the relationship between imagination and entrepreneurship by reframing it as a normal and fundamental part of the entrepreneur's decision-making process, and as part of the formation of entrepreneurial character. This stands in contrast to approaches which treat imagination as a special category of thought that is exogenous or antecedent to entrepreneurial or

economic action, is exercised exclusively in creative fields such as the arts, is solely carried out by exceptionally creative people, or is just a peripheral enrichment to conventional thought processes. Instead, both Dewey and Shackle encourage us to see imagination itself as a constructive act of creation and as the central engine of decision-making, particularly in crucial situations. Imagination is simply the normal response to the continuous flow of unexpected challenges and disruptions served up by a kaleidic world and is, therefore, an integral and foundational part of maintaining enough balance to prosper.

This imaginative deliberation allows entrepreneurs to engage deeply with reality, with future possibilities, with their physical surroundings and, in particular, with their stakeholder relationships, to construct new ways of living, novel ways of being, and novel products and services which can bring them back into sync with the kaleidic physical and social environments in which they are attempting to flourish. As a result, entrepreneurial action and thought is itself an original source of newness, thus fundamentally changing the nature of the underlying decision-making process itself. These imagined possibilities, of course, come with costs and benefits that the entrepreneur must also spend time imaginatively conceiving. Traditional models of rational choice may, of course, play a role in the decision maker's 'less-than-wild conjectures.' However, in crucial situations, such as those faced by pioneering entrepreneurs, decision-making should transcend the traditional models of maximizing rational choices between discoverable alternatives. "To reduce all cases of judgment of action to the simplified, and comparatively unimportant, case of calculation of quantities is to miss the whole point of deliberation" (Dewey, 1983, vol. 14, p. 151).

In contrast, we believe it more fruitful to describe crucial decisions as strategies and plans which are imagined, dramatically rehearsed, and created by the entrepreneurs to bring themselves and their stakeholders into more fruitful future harmony. The results of these deliberations reflect the entrepreneurs' choices about how to live, who to be, and what sort of world they want to bring into existence. As a result, values, character, and ethical choice can help drive the very heart of the entrepreneurial process. Entrepreneurial choices should be seen as creative and ethical deliberations capable of introducing change and newness into the world. Thus, the entrepreneur is more akin to the strong poet (Rorty, 1989), than they are to the gambler running their odds, or the alert opportunist racing to pick up dollars from the sidewalk. However, these creative choices are neither imaginary nor unconstrained. The dramatic rehearsals of future innovations both begin and end in the lived reality of the world, not in an imaginary world existing inside the mind of the entrepreneur. They are ultimately constrained by the need to thrive in the long run by recreating harmony within the

web of relationships and physical constraints that make up the entrepreneurial environment.

Our exploration of this holistic perspective on entrepreneurial decision-making leads us to four key takeaways which we believe have significant opportunities and implications for research and teaching:

- (1) *Imagination as a core element of the deliberative process.* We argue that there are important advantages to viewing imagination as integral, rather than antecedent to or separate from decision-making. It allows us to see imagination as constitutive of both our ethical and entrepreneurial deliberations. As a result, entrepreneurial action can be considered as constructed through free will and imagination, woven together with perceptions of reality and the need to thrive harmoniously in our physical and social environments. This raises several interesting research questions. How exactly do entrepreneurs conduct their dramatic rehearsals? Since the quality of their entrepreneurial insight, and the resultant innovations, depends on the quality of their dramatic rehearsal, what can we learn about the best ways of carrying out this process? How might we measure the quality of dramatic rehearsals? Second, how might we combine the theories of dramatic rehearsal with existing approaches to stakeholder theory? Since stakeholders must be critical actors in any dramatic rehearsal process, and since creating strategies which benefit all stakeholders is a central tenet of the stakeholder approach (Freeman, 1984), we believe that there are important opportunities to fruitfully explore and combine these theoretical approaches. Putting imagination into the center of choice also has the useful corollary that we are less likely to forget there is a rounded, fleshed-out human actor at the center of those processes. In terms of teaching and practice, bringing a more rounded, human version of the entrepreneur to center stage could release us from teaching our entrepreneurial students with an over-emphasis on rational choice that inhibits the very creative thought processes that accommodate entrepreneurial and ethical solutions. This could also allow us to justify a reduction in the overall amount of quantitative and analytical focus within entrepreneurial programs and curricula. Were we able to dial back the amount of financial and market forecasting, the attempts to “prove” future markets, and the lengthy planning exercises, we would be able to invest in more classes in creativity, imagination, empathy, and mind-broadening experiences.
- (2) *Entrepreneurial decision-making can be ethical through and through.* The second key takeaway from our analysis is that ethical entrepreneurial decision-making only works *because* of imagination. Ethics

scholars have sometimes worried that one outcome of a heightened role for imagination could be immoral imagination which could encourage a self-justified ‘anything goes’ attitude amongst entrepreneurs (Brenkert, 2002; Seabright & Schminke, 2002; Rozuel, 2012). As a result of these unrestrained attitudes, all sorts of potential problems could be unleashed on society by relentless entrepreneurship coupled with the power of infinite possibility. Some entrepreneurs might attempt to use the power of imagination to gain support for their delusions, ungrounded solutions, or even worse, to justify capricious or selfish behaviors and open the door to a hyper-creative form of moral relativism. The normal reflex to concerns over the out-of-control ‘entrepreneur as rule breaker’ is to restore order by putting a heavier emphasis on external ethical rules and boundaries to bring imagination to heel. In this formulation, ethical order and imaginative anarchy are pitted against one another, with moral probity constraining imaginative flourish. By contrast, the alternative normative prescription which emerges from this study would be to educate entrepreneurs that in their role they should apply *more imagination* not less, to our problems and challenges. To the degree that entrepreneurs engage in imaginative deliberations, empathic considerations and the creation of harmonizing solutions, the less need there will be for rigid external ethical constraints. We believe that many of the ‘anything goes’ fears about unrestrained imagination are based on a misunderstanding of the imaginative process and on an underestimation of the educated capabilities of the entrepreneurs themselves. One of Dewey’s most important contributions is to distinguish between the imaginary and the imagination. The sort of imagination construed by Dewey both begins and ends in the rich constraints of reality. True imagination is expressly not a subjective product of the fantasy unhinged from the reality of the world. Furthermore, dramatic rehearsal provides both additional possibilities as well as additional constraints. The entrepreneur must not only attempt to imagine new possibilities which bring the stakeholder environment into harmony but to do so successfully they must engage in rigorous inquiry and grounded experimentation. These are ingredients that can help enrich ethical frameworks rather than challenging them. Thus, the results of entrepreneurial and moral imagination are of this world, not beyond this world. They are fruits of practice and are not grounded in external or metaphysical beliefs. Imagination is the taking-in of the world, rather than unrestrained flights of fancy. As a result, we believe that this perspective opens up a whole range of important and interesting research questions. How might we study and research

entrepreneurial and ethical imagination as a single integrated phenomenon? How might we incorporate the study and consideration of questions such as “what sort of an entrepreneur do I want to be?” and “what sort of a world am I trying to encourage?” as critical reflective and exploratory fields of inquiry in entrepreneurial education.

- (3) Our third key takeaway is that imagination is a key resource, both individually, organizationally and socially. One of Kier and McMullen’s (2018) contributions shows there are different dimensions of imaginativeness (creative, social, and pragmatic) and measurable variation across individuals on these dimensions. This raises the prospect of variation in imaginativeness among teams in pursuit of entrepreneurship. The imaginative process should combine stakeholder empathy, new possibilities, and pragmatic considerations to imbue social and economic assets with imaginative value. Yet observing imagination to be a key resource is not the same as saying imagination is a scarce resource. People engage in creative mental simulation all the time; indeed, at times the problem is to get them to engage in less. Rather, turning the diversity of imaginative capabilities in an organization into a valuable resource requires the application of organizational processes and structure. It is unclear how well teams and organizations harness the collective imagination of their members to purposefully advance an organization’s goals. However, were we to speculate, we would guess that teams and organizations are predominantly optimized on other more measurable outputs and that they systematically waste much of the imaginative potential in their ranks. Quite possibly there is a vast waste of imaginative potential in most organizations (including entrepreneurial start-ups) and therefore significant remaining opportunities to turn imagination into a resource for creating new value. The same may be said at the societal level, where social structures such as markets are generally conceptualized in terms of optimizing the efficient allocation of resources: land, labor, capital. Very few scholars have gone as far as Shackle in also conceptualizing markets in terms of their ability to harness the imaginative and creative potential of society (Buchanan & Vanberg, 1991). In general, the optimization of diverse imaginative capabilities seems to us to be an outstanding opportunity for future research.

This leads to one final takeaway, which is that imagination should attain the place it deserves in entrepreneurship and ethics education. As educators, we need to develop legitimate ways of talking about imagination in the classroom to align education practices with this central aspect of

entrepreneurship and ethical decision-making. Techniques that highlight and develop imaginative capabilities are often treated as ‘lightweight’ activities in an entrepreneurship class, dominated by data collection, projection, and analytical calculation. This is particularly true compared to topics such as venture capital or option valuation that only affect a minority of ventures. In our experience, the proposition that imagination is central to the practice of good decision-making already resonates very well in classroom discussions on entrepreneurial topics and is readily accepted by a wide variety of experienced practitioners. As Alexander has observed:

Imagination has the central ability to generate new values, according to Dewey. It is important to insist again that imagination is a social activity. Just as we learn to talk to ourselves because others have talked to us, so we learn to reflect and deliberate before we act because we have been taught to. This is what education aims for, the internalization of social activities (Alexander, 2013, p.198)

Given variation among individuals in their application of imaginativeness, the great opportunity in the classroom is to find ways to turn diversity in imaginativeness dimensions into learning opportunities. Differences in imaginative capabilities also provide learning gaps that instructors can help individuals fill.

Acknowledgements Both authors read and approved the final manuscript.

Author Contributions Both authors contributed equally to this paper conception and design. Material preparation and analysis were performed by JFM and ND. The first draft of the manuscript was written by both authors and both commented on previous versions of the manuscript. This paper was prepared with the help of Research Assistant Erin O’Connor.

Funding The authors did not receive support from any organization for the submitted work. No funding was received to assist with the preparation of this manuscript. The authors have no relevant financial or non-financial interests to disclose.

Declarations

Conflict of interest The authors have no conflicts of interest to declare that are relevant to the content of this article.

References

- Alexander, T. M. (2013). *The human eros: Eco-ontology and the aesthetics of existence*. Fordham University Press.
- Boettke, P. J., & Candela, R. A. (2020). Where Chicago meets London: James M. Buchanan Virginia Political Economy, and cost theory. *Public Choice*, 183, 287.

- Brenkert, G. G. (2002). Entrepreneurship, ethics, and the Good Society. *The Ruffin Series*, 3, 5–43.
- Buchanan, J. M. (1969). *Cost and choice; an inquiry in economic theory*. Markham Pub. Co.
- Buchanan, J. M. (1982). The domain of subjective economics: Between predictive science and moral philosophy. In I. M. Kirzner (Ed.), *Chapter 2: Method, process, and Austrian Economics: Essays in Honour of Ludwig von Mises*. D. C. Heath and Company.
- Buchanan, J., & Vanberg, V. J. (1991). The market as a creative process. *Economics and Philosophy*, 7(2), 167–186.
- Caldwell, D. F., & Moberg, D. (2007). An exploratory investigation of the effect of ethical culture in activating moral imagination. *Journal of Business Ethics*, 73(2), 193–204.
- Cantillo, A. F. (2010). *Shackle: Time and uncertainty in economics*. University of Cambridge.
- Chiles, T. H., Tuggle, C. S., McMullen, J. S., Bierman, L., & Greening, D. W. (2010). Dynamic creation: Extending the radical Austrian approach to entrepreneurship. *Organization Studies*, 31(1), 7–46.
- Coase, R. (1999). Opening Address to the Annual Conference International Society of New Institutional Economics Washington, DC, USA, September 17, 1999.
- Cowen, T. (2003). Entrepreneurship, Austrian economics, and the quarrel between philosophy and poetry. *The Review of Austrian Economics*, 16, 5–23.
- Devas, C. S. (1883). *The groundwork of economics*. Longmans, Green, & Company.
- Dewey, J. (1929). *The quest for certainty: A study of the relation of knowledge and action*. Putnam.
- Dewey, J. (1930/1916). *Democracy and education: An introduction to the philosophy of education*. Macmillan.
- Dewey, J. (1957). *Reconstruction in philosophy*. Beacon Press.
- Dewey, J. (1958). *Art as experience*. Perigee Books (original work published 1934).
- Dewey, J. (1966). *Democracy and education: An introduction to the philosophy of education*. The Free Press.
- Dewey, J. (1983). *Middle works of John Dewey. 1899–1924: Human nature and conduct*. Southern Illinois University Press.
- Dewey, J. (2002). *Human nature and conduct*. Mineola, NY: General Publishing Company.
- Dewey, J. (2008). *A common faith, in the later works of John Dewey* (Vol. 9). Southern Illinois University Press.
- Dunham, L. C. (2004). *Building the web of belief: The emergence of stakeholder networks in early stage ventures*. University of Virginia.
- Dunham, L. C. (2010). From rational to wise action: Recasting our theories of entrepreneurship. *Journal of Business Ethics*, 92, 513–530.
- Earl, P. E., & Littleboy, B. (2014). Shackle and behavioural economics. In G. L. S. Shackle (Ed.), *Great thinkers in economics series*. Palgrave Macmillan.
- Fesmire, S. (2003). *John Dewey and moral imagination: Pragmatism in ethics*. Indiana University Press.
- Fesmire, S. (2019). *The Oxford handbook of Dewey*. Oxford University Press.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Garud, R., Schildt, H. A., & Lant, T. K. (2014). Entrepreneurial storytelling, future expectations, and the paradox of legitimacy. *Organization Science*, 25(5), 1479–1492.
- Glass, B. (1981). *Expect to win*. Word Books.
- Godwin, L. N. (2015). Examining the impact of moral imagination on organizational decision making. *Business & Society*, 54(2), 254–278.
- Hargrave, T. J. (2009). Moral imagination, collective action, and the achievement of moral outcomes. *Business Ethics Quarterly*, 19(1), 87–104.
- Harris, J. D., Sapienza, H. J., & Bowie, N. E. (2009). Ethics and entrepreneurship. *Journal of Business Venturing*, 24(5), 407–418.
- Hayek, F. A. (1945). The use of knowledge in Society. *American Economic Review*, XXXV(4), 519–530.
- Haynie, J., Shepherd, D., Mosakowski, E., & Earley, P. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, 25, 217–229.
- Huebner, B., Dwyer, S., & Hauser, M. (2009). The role of emotion in moral psychology. *Trends in Cognitive Sciences*, 13(1), 1–6.
- Hühn, M. P. (2019). Adam Smith's philosophy of science: Economics as moral imagination. *Journal of Business Ethics*, 155, 1–15. <https://doi.org/10.1007/s10551-017-3548-9>
- James, W. (1890). *Principles of psychology*. Cosimo Inc.
- James, W. (1904). *The varieties of religious experiences—A study in human nature*. Longmans, Green, & Company.
- Johnson, M. (1993). *Moral imagination: Implications of cognitive science for ethics*. University of Chicago Press.
- Johnson, M. (2014). *Morality for humans: Ethical understanding from the perspective of cognitive science*. University of Chicago Press.
- Johnson, M. (2019). *The aesthetics of meaning and thought: The bodily roots of philosophy, science, morality, and art*. University of Chicago Press.
- Kier, A. S., & McMullen, J. S. (2018). Entrepreneurial imaginativeness in new venture ideation. *Academy of Management Journal*, 61(6), 2265–2295.
- Kirzner, I. M. (1973). *Competition and entrepreneurship*. University of Chicago Press.
- Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of Economic Literature*, 35(1), 60–85.
- Koehn, N. F. (2001). *Brand new: How Entrepreneurs Earned Consumers' Trust from Wedgwood to Dell*. Harvard Press.
- Koppl, R. (2001). Alfred Schütz and George Shackle: Two views of choice. *The Review of Austrian Economics*, 14(2), 181–191.
- Koppl, R., Kauffman, S., Felin, T., & Longo, G. (2015). Economics for a creative world. *Journal of Institutional Economics*, 11(1), 1–31.
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2020). Unraveling the entrepreneurial mindset. *Small Business Economics*. <https://doi.org/10.1007/s11187-020-00372->
- Lachmann, L. M. (1976). From Mises to Shackle: An essay on Austrian economics and the kaleidic society. *Journal of Economic Literature*, 14(1), 54–62.
- Langdon, R., & Mackenzie, C. (2012). *Emotions, imagination, and moral reasoning. (Macquarie Monographs in Cognitive Science)*. Psychology Press.
- Latsis, J. (2015). Shackle on time, uncertainty and process. *Cambridge Journal of Economics*, 39(4), 1161.
- Loasby, B. J. (2007). Uncertainty, intelligence and imagination: George Shackle's guide to human progress. In G. M. Hodgson (Ed.), *The Evolution of Economic Institutions: A critical reader* (p. 183). Edward Elgar Publishing.
- Mahmood, S., & Ali, B. (2011). Moral imagination and management decision-making: An empirical study. *African Journal of Business Management*, 5(2011), 1466–1480.
- Manning, S., & Bejarano, T. A. (2017). Convincing the crowd: Entrepreneurial storytelling in crowdfunding campaigns. *Strategic Organization*, 15(2), 194–219. <https://doi.org/10.1177/1476127016648500>
- McGrath, R. G., & MacMillan, I. C. (2000). *The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty*. Harvard Business School Press.
- McMullen, J. S. (2010). Perspective taking and the heterogeneity of the entrepreneurial imagination. In R. Koppl, S. Horwitz, & P. Desrochers (Eds.), *What is so Austrian about Austrian Economics?* (Vol. 14, pp. 113–143). Emerald Group Publishing Limited.

- Michaelson, C. (2016). A novel approach to business ethics education: Exploring how to live and work in the 21st century. *Academy of Management Learning and Education*, 15, 588–606.
- Moberg, D., & Seabright, M. (2000). The development of moral imagination. *Business Ethics Quarterly*, 10, 845–884.
- Morrell, K. (2004). Decision making and business ethics: The implications of using image theory in preference to rational choice. *Journal of Business Ethics*, 50, 239–252.
- Perlman, M. (1990). The fabric of economics and the golden threads of G.L.S. Shackle. In S. F. Frowen (Ed.), *Unknowledge and choice in economics*. Macmillan.
- Popper, K. (1959). *The logic of scientific discovery*. Routledge.
- Putnam, H. (1994). Pragmatism and moral objectivity. In J. Conant (Ed.), *Words and Life* (pp. 151–181). Harvard University Press.
- Reeves, M., & Fuller, J. (2018). *We need imagination now more than ever*. Harvard Business Review Press.
- Reeves, M., & Fuller, J. (2021). *The imagination machine*. Boston: HBS Publishing.
- Rorty, R. (1989). *Contingency, irony, and solidarity*. Cambridge University Press.
- Roundy, P. T. (2020). On entrepreneurial stories: Tolkien's theory of fantasy and the bridge between imagination and innovation. *Business Perspectives and Research*, 9, 31.
- Rozuel, C. (2012). Moral imagination and active imagination: Searching in the depths of the psyche. *Journal of Management Development*, 31(5), 488–501.
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle*, Harvard Economic Studies (Vol. 46). Harvard College.
- Schwartz, M., & Spong, H. (2009). Subjectivist economics and ethical business. *Journal of Business Ethics*, 90(1), 123.
- Schwartz, M. S., & Hoffman, W. (2017). Ethical decision making surveyed through the lens of moral imagination. *Business and Professional Ethics Journal*, 36, 95–120.
- Seabright, M. A., & Schminke, M. (2002). Immoral imagination and revenge in organizations. *Journal of Business Ethics*, 38(1/2), 19–31.
- Seelig, T. (2015). *Insight out: Get ideas out of your head and into the world*. HarperOne, An Imprint of Harper Collins Publishers.
- Shackle, G. L. S. (1966). *The nature of economic thought; selected papers, 1955–1964*. Cambridge [England]: University Press.
- Shackle, G. L. S. (1969). *Decision, order and time in human affairs*. Cambridge University Press.
- Shackle, G. L. S. (1976). *Epistemics and economics*. Cambridge University Press.
- Shackle, G. L. S. (1979). *Imagination and the nature of choice*. Edinburgh University Press.
- Shackle, G. L. S. (1983). The bounds of unknowledge. Beyond Positive Economics? In J. Wiseman (Eds.) Proceedings of Section F of the British Association for the Advancement of Science York 1981. Macmillan.
- Shackle, G. L. S. (1990). *Expectation in economics*. Westport, Conn: Hyperion Press.
- Smith, A. (1982/1759). The theory of moral sentiments. In D. D. Raphael, & A. L. MacFie (Eds.). Liberty.
- Storr, V. H., Lavoie, D., & Boettke, P. J. (2004). The subjectivist methodology of Austrian economics and Dewey's Theory of inquiry. In E. Khalil (Ed.), *Pragmatism and economic methodology*. Routledge.
- Suddaby, R., Bruton, G. D., & Si, S. X. (2015). Entrepreneurship through a qualitative lens: Insights on the construction and/or discovery of entrepreneurial opportunity. *Journal of Business Venturing*, 30(1), 1–10.
- Surie, G., & Ashley, A. (2008). Integrating pragmatism and ethics in entrepreneurial leadership for sustainable value creation. *Journal of Business Ethics*, 81, 235–246.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345–372.
- Vallaster, C., Kraus, S., Merig, L. J. M., & Nielsen, A. (2019). Ethics and Entrepreneurship: A bibliometric study and literature review. *Journal of Business Research*, 99, 226–237.
- Van der Wal, Z., & Demircioglu, M. A. (2020). More ethical, more innovative? The effects of ethical culture and ethical leadership on realized innovation. *Australian Journal of Public Administration*, 79, 386–404. <https://doi.org/10.1111/1467-8500.12423>
- Werhane, P. H. (1999). *Moral imagination and management decision-making*. Oxford University Press.
- Werhane, P. H. (2000). Business ethics and the origins of contemporary capitalism: Economics and ethics in the work of Adam Smith and Herbert Spencer. *Journal of Business Ethics*, 24, 185–198.
- Whitaker, B., & Godwin, L. (2013). The antecedents of moral imagination in the workplace: A social cognitive theory perspective. *Journal of Business Ethics*, 114, 61.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.