Action! Moving Beyond the Intendedly-Rational Logics of Entrepreneurship

Highlights

- Entrepreneurial action is central to all types of business venturing.
- Current literature is predicated on judgmental decision preceding action.
- Extant entrepreneurial logics (e.g., causal, heuristic, effectual) are intendedly-rational.
- Yet, impulse driven behavioral logics can impel action, absent reason or intention.
- We highlight theoretical and empirical tensions central to opportunity pursuit.
- Venturing is birthed by various logics, not limited to the intendedly-rational.

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ABSTRACT

Entrepreneurial action is central to entrepreneurship theory, and is broadly seen to arise as a consequence of intendedly rational logics (whether causal or effectual), reflecting reasoned judgment. But, is this always the case? While entrepreneurial action may often be the result of a judgmental decision (between alternative courses of action/inaction), the presumption that reasoned judgment encompasses all the motives, modes and mechanisms leading to entrepreneurial outcomes seems dubious. Building on an emerging literature that seeks to address the boundaries of reasoned entrepreneurial action, we develop the notion that non-deliberative impulse-driven behavioral logics can also be the basis for business venturing. Our framework offers a complementary perspective to the intendedly-rational, deliberate logics perspective, opening novel pathways for future research and theory-building.

Keywords: Impulse-driven logics; Non-deliberative pathways; Entrepreneurial action; Business venturing; Entrepreneurship; Disinhibition. *JEL classification:* L26 entrepreneurship.

EXECUTIVE SUMMARY

Central to the study of entrepreneurship is the essentiality of entrepreneurial action (e.g. Shepherd, 2015). Since entrepreneurship stems from the willingness to bear uncertainty (Venkataraman, 1997), the dominant theories of entrepreneurial action have sought to provide connections between that which precedes action and that which follows it. To date, extant entrepreneurship theory has been based on intendedly-rational action and actors, with entrepreneurial action underpinned by some form of reasoned intentionality undergirding decision-making processes (McMullen & Shepherd, 2006; Shepherd, 2015; Foss & Klein, 2012). Scholars' ability to predict and understand business venturing has been advanced considerably based on this perspective – and the notion of reasoned judgments preceding behavior has become so central to the study of entrepreneurial action that it typically lies within the definition itself, for example: "Entrepreneurial action refers to behavior in response to a judgmental decision under uncertainty about a possible opportunity for profit" (McMullen & Shepherd, 2006: 134).

However, some empirical observations pose a provocative counterweight to the core assumption that judgmental decisions necessarily precede action. For instance, there are numerous prominent entrepreneurs (e.g., Richard Branson, David Neeleman, Paul Orfalea) who insist that much of their entrepreneurial action and even their respective successes, are not the result of reasoned judgments, but rather based on disinhibition (Branson, 2002; Hantula, 2006; Orfalea & Marsh, 2005; Wynbrandt, 2004). Recent research suggests these are far more than fringe cases. In fact, entrepreneurial action based on ADHD or trait impulsivity may be relatively commonplace (Lerner et al., 2017b; Wiklund et al., 2016; 2017b) – something consistent with recent findings that one in five individuals who engaged in entrepreneurial action appeared to do so without ex ante entrepreneurial intentions (Kautonen et al., 2015: 668).

Our central contention is that entrepreneurial action is birthed by a wide assortment logics – ranging from deductive, causation-based reasoning, to heuristic and effectual reasoning, to disinhibition and a relative lack of ex ante reasoning altogether, to a shifting blend of all types. Though notoriously elusive, that which consists of largely unreasoned entrepreneurial action must also be captured, understood and assessed. While behavioral, non-intendedly rational logic does not supplant the prominence of reasoned action, its presence and impact are under-explored facets of the individual--opportunity nexus. Few, if any facets of human existence are solely demarcated by reasoned deliberative action, and so it seems unlikely that entrepreneurial action stands alone in this regard. The challenge we embark upon in this study is how to give a name and face to venturing emanating from origins that are largely non-deliberative, unintended, and involve unreasoned impulses. Absent the incorporation of less-reasoned logics, theories of entrepreneurial action are, at a minimum, incomplete.

INTRODUCTION

With few exceptions, explanations of entrepreneurship are implicitly functional (Bruyat & Julien 2001; Gartner & Shane 1995; Schumpeter 1934; Stevenson & Jarillo 2007). That is, behavior is typically explained in terms of some ultimate purpose or teleology, which has been defined by the function of entrepreneurship in the economy or the individual's conscious vocational aspirations (Gartner, 2007). When this underlying functional presumption is combined with theorizing on causal structure of individual behavior, such as that actions are reasoned and arise from intentions (Ajzen, 1991), the consequence has been that the function becomes embedded in the reason (e.g. Bird, 1988). Thus, to be considered entrepreneurial, an action is ascribed a functional role, a means to an end (Gartner 2007). Over time, the notion that entrepreneurial actors deliberately evaluate opportunities before acting has become so central to entrepreneurship literature that it is reflected in definitions of entrepreneurial action, such as: "[entrepreneurial action is] '**behavior in response to a judgmental decision** under uncertainty about a possible opportunity for profit' (McMullen & Shepherd, 2006: 134)" (Shepherd, 2015: 493, emphasis added).

While this interlacing of functionality and intentionality forms the dominant conception of entrepreneurial action, such a rendering fails "to capture complex dynamics that reflect the individual and unique characteristics of the entrepreneur" (Chell & Allman, 2003), including idiosyncratic aspects of an action's primordial impetus, which may be neither intended nor based on the functional merits later ascribed to it. Thus, a conception of entrepreneurial action that is solely circumscribed by intentionality does not square with observations of impulse-driven actions that lack explicit entrepreneurial intentionality when undertaken, but eventually reveal entrepreneurial outcomes as a consequence of those actions. In the end, both deliberate actions

and impulse-driven actions may give rise to entrepreneurial outcomes that comprise the domain of entrepreneurship research.

Anecdotally, prominent entrepreneurs such as Richard Branson, David Neeleman, and Paul Orfalea have suggested that their clinically high disinhibition – in essence, being highly impulse-driven with negligible ability to pause or inhibit – is central to their entrepreneurial action and even their respective successes (Branson, 2002; Hantula, 2006; Orfalea & Marsh, 2005; Wynbrandt, 2004). Recent research suggests these are far more than fringe cases; entrepreneurial action based on ADHD or trait impulsivity may be relatively commonplace (Lerner et al., 2017b; Wiklund et al., 2016; 2017b). This is consistent with other recent findings that one in five individuals who engaged in entrepreneurial action appeared to do so without ex ante entrepreneurial intentions (Kautonen, van Gelderen and Fink, 2015: 668). The growing acknowledgement that largely unreasoned actions can and do result in entrepreneurial outcomes has created both challenges and opportunities for entrepreneurship scholars.

Underlying this tension is the primacy of functionalist interpretations, which impose an *ex ante* rational-intentional teleology upon the actions of entrepreneurs. Alternative interpretations invert this order, starting from causal explanations that do not depend on teleological "reverse engineering" of the action. Rather than arguing that individual *X* takes action *Y* in order to achieve entrepreneurial ends, the observer remains open to the possibility that: (1) *X* performs *Y* simply on impulse (in response to a stimulus, external and or internal); and, (2) what *X* does can generate consequences that are meaningful entrepreneurial outcomes. In this sense, the entrepreneurial nature of the action is a diachronic state, evolving over time rather than being fixed from the time of an initial action. This, in turn, allows for action that is not intendedly rational to produce entrepreneurial outcomes.

In this paper, we expand and enhance efforts to develop an explanatory framework governing impulse-driven non-deliberative action by addressing two specific questions. First, in the absence of *a priori* evaluative judgments evincing entrepreneurial intentionality, what is the causal structure of entrepreneurial action? Second, how might such unreasoned action result in entrepreneurs and entrepreneurial ventures? To address the first question, we propose a continuum of causal mechanisms, one that contemplates the existence of non-deliberative individual action, with special attention accorded the understudied range characterized by disinhibition. The concept of disinhibition is central to a number of research streams in psychology (Carver, 2005; Carver & White, 1994; Nigg, 2000). It refers broadly to a lack of inhibition (cognitive, affective, and or behavioral) and forms the foundation of constructs such as ADHD (Barkley, 1997) and impulsive sensation-seeking (e.g. Sharma et al., 2014). Impulse-driven action can be understood as the reflection of disinhibition. It reflects a propensity to simply *act*, based on appetitive, unreasoned impulse. In this regard, to address the second question, we illustrate through three real-life vignettes how such actions can set off causal chains that ultimately reach entrepreneurial ends and consequences.

Our work makes three contributions to the study of entrepreneurship. First, we advance the connection between unreasoned impulse-driven action and entrepreneurship by formalizing an extended taxonomy of entrepreneurial logics. In particular, we focus on behavior preceding judgmental decisions – behavior not based on judgmental assessments or considerations of possible courses of action. An emerging literature has taken the perspective that disinhibition, impulsivity, and related constructs are linked to entrepreneurship (e.g. Lerner, 2016; Verheul et al., 2016; Wiklund et al., 2016; 2017a/b). Going beyond elaborating such as meaningful within the opportunity recognition→evaluation→exploitation paradigm (Wiklund et al., 2017a), we

extend the aforementioned by situating such as distinctive unreasoned behavioral logics. This offers a novel lens and opens considerable new ground for entrepreneurship theory.

Second, to expand and enhance extant entrepreneurship theory through the accommodation of unreasoned impulse-driven action, we highlight the need to broadly consider entrepreneurial action – including allowing separation between what is with certainty *entrepreneurial* and *action.* In so doing, we make the case that these idiosyncratic elements are most fruitfully conceptualized as merging in diachronic fashion, rather than teleologically divining motives and mechanisms from organizing actions of recognizable entrepreneurs. This has implications for the nature of the individual-opportunity nexus as a major marker of entrepreneurship theory. Our work suggests that this nexus is diachronic in nature, evolving over time, rather than synchronic, which implicitly assumes primordial linkages to a founder's reasoned intentionality at a preset point in time.

Finally, our work addresses the mounting discomfort caused by scholars' use of the concept of opportunity (e.g. Davidsson, 2015), particularly in terms of an opportunity's *ex post* clarity and *ex ante* opaqueness (Dimov, 2011). The diachronic nature of the individual-opportunity nexus provides space for the use of "opportunity" as an umbrella concept for the overall process of business venturing (Wood, 2017) – regardless of whether a new venture idea has been formed or there is actually the opportunity for a firm, or whether the outcomes are instigated by rational-intentional mechanisms or those that are less-reasoned and impulse-driven.

REASSESSING THE CAUSAL STRUCTURE OF ACTION

Entrepreneurship has been portrayed as a nexus of opportunities and enterprising individuals (Venkataraman, 1997; Eckhardt & Shane, 2003). A central question in understanding this nexus is why some individuals and not others pursue opportunities (Shane & Venkataraman,

2000; Lee & Venkataraman, 2006). Current conceptions of the relationship between individuals and opportunities focus on two sequential stages: attention and evaluation (McMullen & Shepherd, 2006). According to this perspective, entrepreneurial action occurs when an individual perceives an opportunity to exist (e.g. Baron & Ensley, 2006; Gregoire, Barr & Shepherd, 2010; Mitchell & Shepherd, 2010), and judges it worthwhile to pursue in spite of the risks, uncertainty, and his or her knowledge and experience (e.g. Dimov, 2007; Haynie et al., 2009). The notion that entrepreneurial actors deliberately evaluate opportunities before acting is central not only to traditional models involving boundedly-rational economic actors, but also to perspectives based on effectuation or higher-order motives (e.g. autonomy, need for achievement).

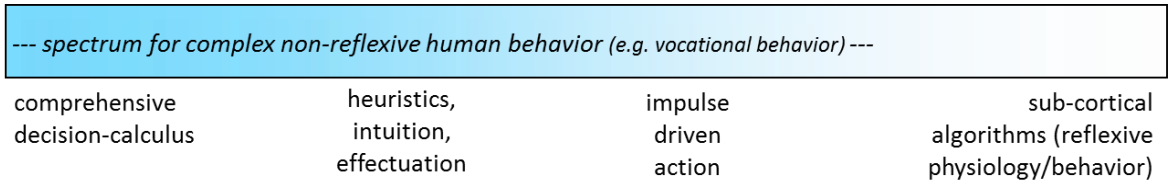
On the other hand, Shepherd's (2015) call for "hot," action-focused research expresses the emerging conviction that less reasoned, more impulse-driven behavioral logics may also impel entrepreneurial action (e.g. Lerner, 2010; 2012; 2016; Spivack et al., 2014; Wiklund et al., 2016; 2017). If accurate, such logics may explain the findings that impulsive sensation-seeking mediates the role of genetics in differentiating entrepreneurs from non-entrepreneurs (Nicolaou et al., 2008). Other support for the notion is provided by recent studies on ADHD – a construct indicated by disinhibition, specifically impulsivity, hyperactivity, and attentional variability – which find it predictive of entrepreneurial intentions (Verheul et al., 2015; Lerner, Verheul, & Thurik, 2017), orientation (Thurik et al., 2016), action (Lerner, Verheul, & Thurik, 2017; Wiklund et al., 2016), and employment status (Verheul et al., 2016).

Spectrum of Action

It is generally accepted that individual action is "crucial to the entrepreneurial process" (Baron, 2007: 167). Existing literature suggests that a diverse array of logics applies when seeking to understand why entrepreneurial individuals act as they do. The implicit presumption

that (all) entrepreneurial action is preceded by and grounded in some type of judgmental decision is a strong assumption, one that restricts researchers' ability to accommodate "the rich nature that makes up entrepreneurial phenomena" (Shepherd, 2015: 501). Further, the presumption is sometimes at odds with empirical realities. For example, Wiklund and colleagues (2016) found that impulsivity, rather than judgmental decision-making, drives a considerable amount of entrepreneurial action. While impulse-driven behavioral logics do not supplant the prominent role of reasoned action, its presence indicates that current theories of entrepreneurial action are incomplete. A better approach is to discard the notion that business venturing is *either* reasoned *or* impulse-driven. Instead, it is more constructive to conceptualize behavior and reasoning along a spectrum (Figure 1).

Figure 1 – Reasoning Spectrum for Human Behavior



Although entrepreneurial behavior often can be shown to follow from reasoned judgments, some individuals may not pause to reason about an opportunity or course of action, including opportunity costs and potential consequences (e.g. Lerner & Hunt 2012; Wiklund et al., 2016). Therefore, recognizing the spectrum and its rarely considered right portion, contributes to a more comprehensive understanding of entrepreneurial action.

Disinhibition and Impulse-Driven Action

The implication of Figure 1 is that for complex human behavior occurring across space and over time, impulse-driven actions as well as considered, intendedly rational actions are rarely mutually exclusive. As in other realms of human behavior, any individual can exhibit varying types of action, and at times does so. Heterogeneity in underlying logics will vary as a function

of conscious intentionality. The initial logic of an action might, at one end of the spectrum, be behavioral in nature (e.g. unfettered impulse); or, at the other end, be quite conscious (e.g. intendedly-rational decisions based on analysis, heuristics, or intentions).

To illustrate: psychophysiological under-arousal (essentially, "boredom") generates a pre-potent impulse for action (e.g. Zentall & Zentall 1983). Higher-order, consciously-held goals also motivate action. Thus, the underlying basis for a particular action (e.g. speeding, sky-diving, developing a prototype) could be either. Speeding, for example, could be elicited by unfettered impulses in response to under-arousal, or by an intendedly-rational decision based on reasoned considerations (e.g. being late, estimates of the likelihood and cost of getting caught, road conditions).[1] Skydiving, like business formation or other endeavors requiring action across space and over time, cannot be an utterly impulsive act in itself. Nonetheless, the underlying logic for the act of skydiving, or initiating the process to skydive, stands to be much more impulse-driven than intendedly rational. Initiating entrepreneurial action can be based on intendedly rational or impulse-driven logics. Initial actions can emanate from reasoned decisions to serve higher-order goals, reasoned attempts to leverage existing means, or unreasoned impulses.

Impulse-driven action can be understood as an expression of disinhibition. Under-arousal creates hedonic motivation, drives finite attention to any potential opportunities present, generates behavioral impulse, and limits consideration of and concern for potential consequences of a hedonic pursuit. Within the psychology literatures – based on different research foci, traditions, and levels of analysis – there is not a singular perspective on disinhibition and impulsivity (Carver, 2005; Sharma et al., 2014). Apropos to our inquiry, disinhibition is a non-intendedly rational behavioral logic based on unfettered appetitive impulses. This rendering is

[1] Thanks to an anonymous reviewer in relation to this point.

consistent with other research focusing on personality (Zuckerman 2002), underlying psychophysiology (Gray 1991; Carver & White, 1994), and ADHD (Barkley 1997).

Relating this to the spectrum depicted in Figure 1, disinhibition unambiguously concerns impulse-driven action. For this reason, it eludes clear and clean assignment to either of the classifications that entrepreneurship scholars have developed: on the one hand involving relatively systematic and comprehensive information processing, or on the other hand involving intendedly-rational heuristics and intuition-based logics. In relation to the former, disinhibition and impulse-driven action is not premeditated and calculative. In relation to the latter, heuristics and intuition, it is not intendedly-rational. On the contrary, disinhibition is neurologically better characterized as being "bottom-up," in that behavior is driven by underlying appetitive impulses (e.g. stimulation seeking impulses cued for behavioral expression, Zentall & Zentall 1983), as opposed to behavior originating from purposeful judgments based on intuition, effectuation, or deductive analysis. Lack of clarity on this important point has limited the extent to which scholars have previously related disinhibition to opportunity pursuit.

Logics for Entrepreneurial Action

Entrepreneurial action occurs in the context of a broader entrepreneurial journey, a winding path that unfolds over time, with no clear beginning or end (McMullen & Dimov, 2013). In this sense, the entrepreneurial journey takes place in a broader life context, in which multiple other actions occur before, during, and after the journey. Thus, the designation 'entrepreneurial' applies to a time-bracketed set of actions that is a subset of all life actions. Drawing the boundary for this subset is not a clear-cut choice as actions are linked in causal chains, whereby the consequences of one become the starting point of another. Entrepreneurial stories typically find the points at which they branch off within the broader life stories in certain watershed events or

actions without which they would not have unfolded. As we argue below, these actions rest on a wider set of logics.

In the context of entrepreneurship, general disinhibition and impulsive sensation seeking are vital sources of individual-actor differentiation (e.g. Nicolaou et al., 2008; Schumpeter, 1934). Yet, as Table 1 suggests, extant frameworks for entrepreneurial behavior presume some type of intendedly-rational rule-directed action – regardless of whether one examines entrepreneurial action through the logics of consequences, appropriateness, or effectuation. Missing from these explanatory pillars is an alternative conception of less-reasoned approaches. As the foregoing discussion suggests, at a minimum, the behavioral logic of disinhibition offers and necessitates consideration of non-deliberative impulse-driven mechanisms.

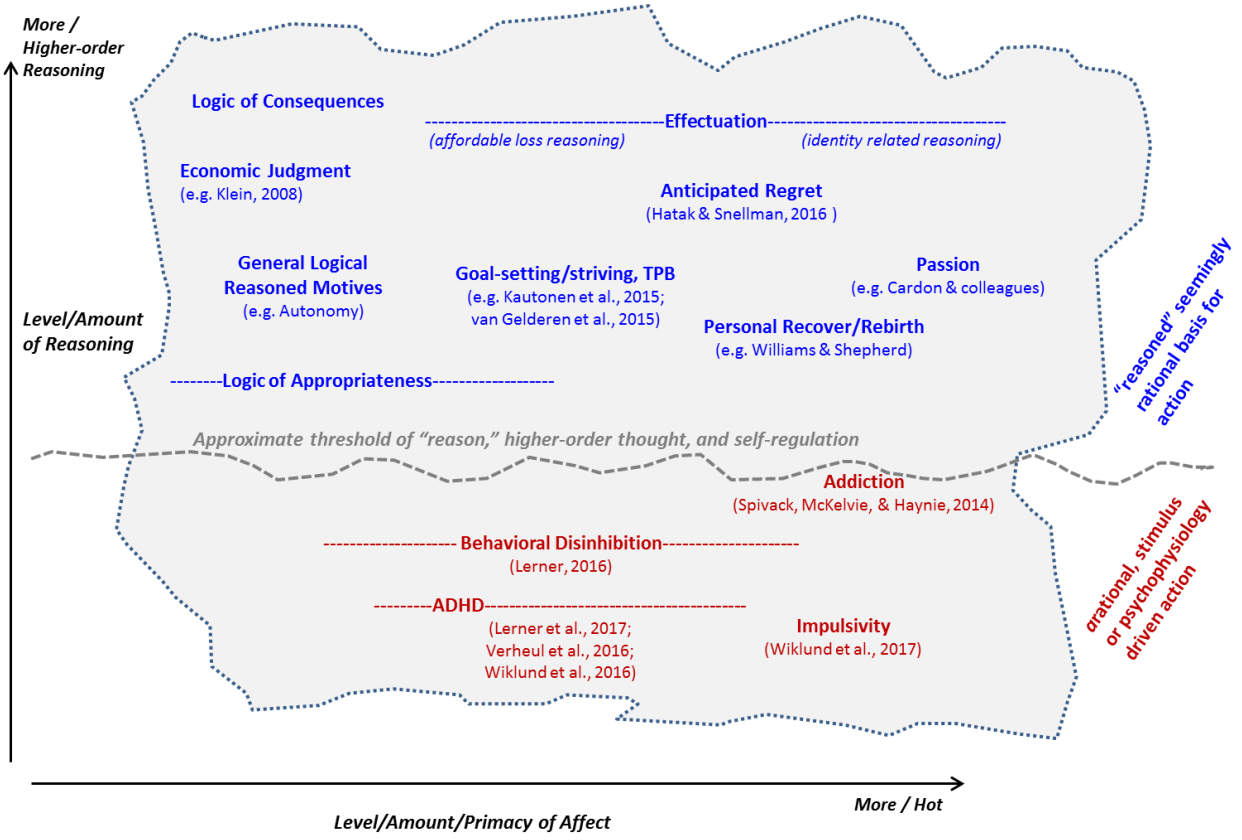
Table 1 – Alternative Logics for Entrepreneurial Action

Logic of…	***Consequences***	***Appropriateness***	***Effectuation***	***Disinhibition***
Behavior is:	Rule-directed based on actor's thorough analysis of apparent causal relations	Rule-directed based on actor's routines/history	Semi-rule-directed attempt to create new means and ends (e.g. affordable-loss rule)	Result of appetitive impulse
Behavior based on…	Decision calculous	Matching of actor routines/rules to circumstances	*Effectual* logic (consciously assessed: means, affordable loss, stakeholders)	Stimulus, "itch," lack of restraint
Amount of information & conscious consideration	High	Low	Moderate	Negligible
Relative Speed	Low	Moderate to High	Moderate to High	High
Predictability & Patternedness of Behavior	Moderate to High (depending on complexity)	Low to High (depending on actor and circumstances)	Low	Negligible
"Intendedly Rational"?	Yes. Intending to make correct decision based on a thorough analysis of knowable information.	Yes. Intending to make appropriate decision based on actor's purposeful matching.	Yes. An intendedly rational, purposeful way to proceed under uncertainty.	No. No judgment of being correct, appropriate, effectually strategic, or good decision.

Table 1 highlights the misclassification risks that accompany the categorization of unreasoned impulse-driven action. Within current theory, effectuation allows for *ex post* sense-making (or rationalization) of impulse-driven action insofar as such actions are not driven by the conscious consideration of predicted consequences and given goals. However, effectuation is an intendedly-rational way to proceed under uncertainty, wherein entrepreneurs intentionally "take a set of means as given and focus on selecting between the possible effects than can be created with that set of means" (Sarasvathy, 2001: 245). With respect to the logic of appropriateness, unreasoned impulse-driven behavior could be rationalized *ex post* by associating it (mistakenly or self-servingly) with quick, possibly intuition-based matching and relatively limited information processing. Yet, for the intendedly-rational logic of appropriateness to apply, action must follow from an actor's *ex ante* attempt to make the appropriate decision based on a matching of circumstances to formal rules, goal-directed heuristics, or intuition.

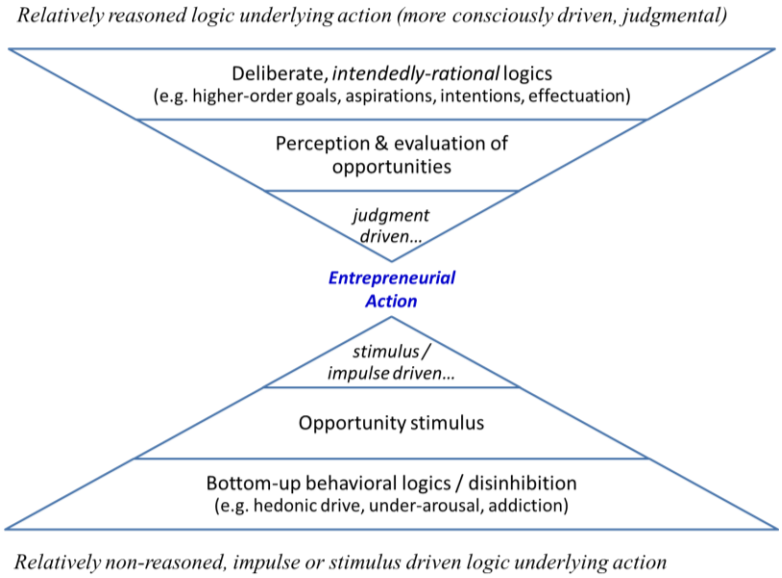
The extent to which the omission of *a*-rational mechanisms is consequential to articulating a comprehensive conceptual landscape of entrepreneurial action is further reinforced in Figure 2. In addition to general behavioral disinhibition, scholars have also considered ADHD, impulsivity and addiction as important bases of entrepreneurial action. Absent the consideration of such mechanisms, taxonomies of entrepreneurial action potentially exclude large swaths of explanatory drivers that are central to human motivation and action.

Figure 2 – Bases of Entrepreneurial Action as a Function of Reasoning and Affect



The historic focus on intendedly rational logics has preserved top-down, synchronic conceptions of ideation, evaluation and decision-making, as each relates to entrepreneurial action. Identification and measurement of top-down logics and their outcomes are well-suited to hypothesis-testing and variance-focused analyses. Conversely, bottom-up, diachronic logics do not behave nearly so well, creating empirical challenges, involving both identification and measurement. The need to further consider and incorporate impulse-driven approaches, such as those represented by disinhibition, is illustrated in the bottom-up portion of Figure 3.

Figure 3 - Top-Down versus Bottom-Up Logics of Entrepreneurial Action



Existing research has gradually begun to acknowledge the limits to reason-based logics, particularly with respect to the formation of opportunity beliefs (e.g. Shepherd et al., 2007) as well as the ideal duration and intensity of attentional engagement. Taken together, these factors influence both the likelihood of opportunity action beliefs and the potential likelihood of noticing discontinuous change (Shepherd et al., 2017). Related work has also investigated the extent to which opportunistic action and speed may be an asset or a liability in opportunity pursuit, as opposed to deeper analysis and prolonged search. Choi, Levesque, and Shepherd (2008) proposed that truncated search and expedited exploitation may have advantages when commercial prospects are characterized by novelty, for which Bakker & Shepherd (2017) provided empirical validation.

While this stream has generated important insights regarding when *deliberative attentiveness* morphs from an asset to a liability in opportunity perception and exploitation, it still frames, presumes and is restricted to opportunity pursuit as a deliberate consideration of alternative courses of action. Extant theory has yet to give full voice to the more radical perspective and possibility of impulse-driven opportunity pursuit. As noted above, the

identification and measurement of "act first" logics are elusive. An individual's consideration of alternative courses of action, or lack thereof, *prior to* behavior are inherently internal and unobservable. This means that existing views of reasoned action may sometimes be the consequence of self-serving frames. As *ex post* sensemaking ensues, it becomes layered with intendedly-rational logic, regardless of whether intendedly-rational consideration actually preceded the action.

ACTION AND ENTREPRENEURIAL CONSEQUENCES – THREE VIGNETTES

Entrepreneurs typically appear before us because of their actions, not their underlying impetus for action. Once those actions occur, there is a rich amount of raw material with which to craft a logical (i.e. intendedly-rational) narrative, linking actions to intentions. Furthermore, with individuals disposed to appear rational to self and others (Tedeschi, 2013), motivated reasoning about the basis for action *ex post* impels and facilitates the crafting of *post-hoc* reasoning, irrespective of whether it actually existed *ex ante*.

Our conceptual case for impulse-driven entrepreneurial action incorporates bottom-up logics by extending and enhancing recent findings that suggest a positive link between venturing, impulsivity and disinhibition (e.g. Verheul et al., 2016; Wiklund et al., 2016; 2017b). Joining and extending this stream beyond the dominant paradigm of opportunity recognition—evaluation—exploitation, our proposed framework offers a depiction of entrepreneurial action in the relative absence of reasoned judgment. Still, in order for our contribution to be useful, it must also be veridical. Accepting that extant theory and a considerable body of empirical work has aptly captured reasoned entrepreneurial action, the question becomes: What contexts, actions and outcomes characterize entrepreneurial action that occurs in the absence of reasoned intentionality? That is, what does impulse-driven, nascent-stage, venturing even look like? To help address these questions, we explore the stories of three impulse-driven venturers. The

following three vignettes are real-life stories, consisting of: Don Mullins, an American asbestos abatement supervisor; Haruto Kobayashi, a Japanese government software developer; and, Fatima Azoulay, a Moroccan female serial entrepreneur. Each case elucidates the experiences of actual individuals drawn from completed studies of entrepreneurial action, vividly presenting different aspects of impulse-driven entrepreneurial action. Consistent with theory-building methods that employ the analysis of heterogeneous case studies (e.g. Eisenhardt, 1989; Eisenhardt & Graebner 2007), these real-life vignettes illustrate diverse individuals and contexts. Through these, we develop detailed portraits of non-deliberative venturing in which individuals forego the intendedly-rational reasoning and opportunity evaluation that is thought to drive entrepreneurial action and entry decisions.

Central to harvesting stylized findings from heterogeneous cases are two finely balanced aims: (i) diversity of the individual contexts, and (ii) representativeness of the overall collection of contexts (Santos & Eisenhardt 2009; Siggelkow 2007). Single case studies are often used in management research to delve into extreme exemplars to address observational gaps that elude mainstream deductive research (Yin 1994), such as Dutton and Dukerich's examination of New York's Port Authority (1991) or Weick's classic exposition of the Mann Gulch Fire (1993). However, as Eisenhardt and Graebner (2007) noted, while single-case studies may be an excellent tool for establishing the existence of a phenomenon, theory building is better serviced by the use of multiple cases. Analysis of diverse cases is also highly instrumental in addressing the "multiple meanings problem" (Eisenhardt & Graebner, 2007; Glaser & Strauss, 1967) that often bedevils qualitative research. Since multiple-case studies are characterized by intentional dissimilarity of an appropriately diverse set of cases (Eisenhardt 1989; Brown & Eisenhardt 1997), the central analytical aims are triangulation and synthesis (Patton 2005), not the

extrapolation witnessed in single-case designs, or the refinement of extant theory by repetitive cases in a particular context. Multiple meanings are systematically culled out through the process of investigating a similar phenomenon across distinctive contexts (Creswell 2012; Patton 2005). In the three vignettes that follow, our triangulation reveals common threads emerging from radically different individuals and contexts.

The Asbestos Abatement Supervisor from the United States

The first context involves Don Mullins, a field supervisor for an asbestos abatement company. His story emerged in a study of entrepreneurial spinoffs (Hunt, 2015; Hunt & Lerner 2012) and reflects the prior industry experience of one author. Asbestos abatement is a multi-billion-dollar industry devoted to the removal and disposal of asbestos-containing materials (ACM). Though highly inert in its manufactured state, disturbed ACM releases tiny fibers that harm the lungs – causing lung cancer, asbestosis, and mesothelioma. No abatement may be performed by unlicensed firms or by uncertified abatement personnel. Non-compliant ACM removal is a felony, with each violation being subject to a $25,000 fine, two years in prison, or both. Multi-million dollar civil and criminal actions have been issued against violators by regulatory authorities of all 50 states (Hunt, 2013).

As a consequence of the strict monitoring and reporting requirements associated with the removal and disposal of ACM, an unusual level of detail is obtained by governmental agencies, which is closely tracked and exhaustively made available to the public. By law, companies must obtain (and annually renew) a State-issued license prior to commencing any abatement work. Individuals wishing to work in the abatement industry are required to undertake 40 hours of initial training from a certified program and pass both Federal and State exams. Each year thereafter, abatement workers must undertake an 8-hour refresher course and again pass both

exams. Approximately 20% of the 150 questions pertain to matters of regulation and enforcement, including penalties for non-compliant abatement (Hunt, 2013).

Taken in this context, impulse-driven action appears to be utterly incongruent with the well-demarcated sign posts that circumscribe the abatement industry. If ever a business activity existed that relies completely upon carefully staged, forwarding-looking, rationally observant rule-directed behavior, hazardous material removal and disposal would seem to be the centerpiece of propriety. The following circumstances and actions of individuals like Don Mullins[2] provide a portal to stress-test that notion:

> *Don Mullins is a 31 year-old, Caucasian male who has worked five years as a site supervisor for SafetyClean, a small firm specializing in the removal and disposal of asbestos-containing materials (ACM) from buildings that are slated for renovation or demotion. Don has completed hundreds of projects for his employer, receiving annual compensation of about $60,000. One Friday afternoon, while Don is overseeing the demobilization by his crew from the site of a completed project, Bill Haggerty, the owner of an adjacent building, approaches Don with an opportunity. The boiler in Bill's building has broken and must be replaced; however, the old boiler, which is covered with crumbling asbestos insulation, must be removed before the new system can be installed. The heating company is neither trained nor certified to perform the asbestos abatement. Since Bill wants the new boiler installed as soon as possible, he offers Don $500 to perform the abatement the next morning. With nothing scheduled the next day, and not considering the recent notification by State authorities concerning the illegality of unpermitted abatement and their heightened monitoring of such activities, rather than pausing or referring Bill to the owner of SafetyClean, he says, "Sure, I can do the removal." Using his employer's truck, abatement equipment and supplies drawn from SafetyClean's warehouse, Don recruits two of his crew who are interested in making a little extra money on the side, and completes the boiler abatement early Saturday morning. As promised, Bill hands Don $500 cash at the end of the job.*
>
> *Though seemingly innocuous, Don's opportunistic action is riddled with incongruities. First off, Don does not hold a General Abatement Contractor (GAC) license, nor does he have the requisite insurance or bonding. Even worse, Don has not observed State and Federal regulations which require contractors to arrange for public safety air quality monitoring throughout the abatement by a licensed industrial hygienist. Lastly, Don never obtained the required State permit to even perform the abatement, since doing so would have required waiting and can only be*

[2] Fictitious names are used, with all else factual (the persons, circumstances, companies and actions). The same applies to the subsequent real-life vignettes.

obtained by a licensed GAC. For these reasons and others, the project Don has completed constitutes felonious action, subject to a $25,000 fine and up to two years in prison. If caught, Don could also be subject to civil litigation and would be permanently barred from ever working again in abatement. It can be objectively demonstrated that Don knows all this because he is a State-certified abatement supervisor, and as such has attended an annual refresher course and passed the 150-question Federal and State exam, 20% of which is devoted to regulation and enforcement. Thus, Don's action cannot be ascribed to a lack of knowledge, nor to a miscalculated opportunity assessment in a highly uncertain context. Rather, on impulse he simply followed the opportunity stimulus, without the requisite pause to make judgmental decision. Intendedly-rational reasoning would have inhibited action. Yet, Don is not caught and, after paying the workers who assisted him on the project, he has enriched himself by about $250.

In the subsequent six months, Don becomes more active in seeking and accepting other projects that he can complete for cash, on weekends, using SafetyClean's equipment and materials. Eventually, Don obtains a GAC license and forms his own abatement company, DM Abatement Services. Ironically, late in the first year of DM's operations, the cycle repeats itself. One of Don's supervisors, Eduardo, uses company equipment and materials without Don's knowledge to complete a non-permitted abatement job on a weekend. One year later, licensing records reveal that Eduardo as left to create his own abatement company, EnviroPros.

For the Don Mullins of the world, impulse-driven action can trigger a chain of subsequent actions that ultimately result in market entry and possibly even venturing success. Concurrently, as the case illustrates, entrepreneurial action that materially violates legal regulation carries with it catastrophic risks and steep costs with respect to legitimacy (Lerner & Hunt 2012). The industry context and story of Don, while illustrative, should *not* be interpreted to suggest that most impulse-driven entrepreneurial action is associated with illegality. Furthermore, most contexts certainly do not afford such an unambiguous portrayal. We now turn to such a more conventional context.

The Bored HTML Coder from Japan

The second context involves Haruto Kobayashi, a young software developer holding a well-paid, prestigious job in the Japanese government. His story surfaced in a study examining entrepreneurial action and influences of the entrepreneurship industry (Hunt & Kiefer 2017).

While scholars have developed a strong case for the manner in which formal organizations serve a means for the "exercise of entrepreneurial judgment" and "experimenting with resource combinations" (Foss, Foss, Klein & Klein, 2007), business venturing may emanate from far more banal and considerably less-structured premises, including simple boredom (Wiklund et al., 2016). As one moves ever-closer to the "big bang" moment of an innovative idea and budding venture, it is far more likely that the circumstances and processes – rather than affording surgical conceptions – are messy and, like the first few nano-seconds of our own universe, utterly unclear. For many individuals, the exercise of judgment over heterogeneous resources (Klein, 2008) may be an apropos construction, especially when considered calmly and coolly ex post. But, it is also likely that ex ante disinhibition and subsequent impulse-driven action carries more veridical weight in these very early big bang moments of venturing.

The kinds of people who self-select to high tech are apt include those who are impulse-driven. It is only sensible that these predilections follow a person into new venturing. It seems unlikely that they are oddly left on the sidelines. The following case – on the other-side of the world from Don Mullins (geographically, culturally, educationally) – dramatizes this point.

> *Haruto Kobayashi is 29-year-old male, who had worked for six years as an IT developer for the Japanese government, writing HTML code to publish to the worldwide web. Out of the blue, a friend from college, Daisuke Yoshida, contacted Haruto about building out the user interface for a mobile application Daisuke and three other partners were developing to assist urban drivers find the lowest cost parking places in congested downtown locations. Haruto told Daisuke that sure he would be happy to hop in. "In truth," Haruto later reflected, "I was so bored with my job at work that I agreed to help without having any idea what Daisuke needed for me to do. I didn't even think to ask him how soon he needed the code or if I would even get paid, which was probably a bit stupid."*
>
> *Over the next two weeks, Haruto spent nearly 100 hours of his evenings and weekends working on the HTML app code. Daisuke and his partners could not have been happier with Haruto's code and promised to pay him for his time if the application successfully launched. Unfortunately, other development groups beat Daisuke's team to the market, the app was never launched, and Haruto received*

no remuneration of any kind. Yet, news of Haruto's HTML skill spread and he was asked to develop user interfaces for seven other mobile applications in the next six months. The ongoing motivation for Haruto's involvement in each of these ventures closely resembled the initial impetus: a simple largely unspecified impulse to do something stimulating. He neither expected nor sought to develop as an entrepreneur, to intentionally experiment, or to learn-by-doing – let alone create a growing organization or a novel business model. As Haruto described it: "After the parking app people just somehow found me and asked me to help them out. I liked the work and wasn't very good at saying "No" to anyone. Most of the apps seemed a bit silly to me, but each one was a fun puzzle to solve. Eventually, I was doing four new apps all at once and was putting in more than twice the hours that I worked for the government. In the middle of these projects, Daisuke came by for a visit. I told him about everything I was working on and he said, 'You should quit the Ministry job and focus on app development.' Well, in Japan you do not simply quit a good government job, which represents the pinnacle of job security and professional prestige. And yet, I found myself telling Daisuke, 'You're right!' So, I resigned the next day." Two years later, Haruto's company has 8 developers and faces pressing demand to grow larger.

Entrepreneurial action involving the steps Haruto took are rare in Japan. According to surveys conducted by the Global Entrepreneurship Monitor (2015), Japan has one of lowest levels of entrepreneurship among the world's developed economies. GEM revealed that only 6 percent of Japanese believe that there are opportunities to start a business in Japan. However, the entrepreneurial environment is witnessing a transformation (Stewart 2016) and individuals like Haruto are finding a wide range of pathways to entrepreneurship's front door. Given the relative unconventionality of nascent-stage venturing in Japan and paucity of new venture mentors (Rowen & Toyoda 2002), there is a certain reticence about entrepreneurial intentions. "I'm not really a business owner type of person, whatever that means," said Haruto "It's a bit strange how it all came together. Maybe it's lucky that I'm easily bored."

The Hyperactive Female Serial Entrepreneur from Marrakech

The final context involves Fatima Azoulay, a middle-aged serial entrepreneur from Morocco. Her story came to light as one of 95 detailed case studies of women entrepreneurs in seven Middle East and North African (MENA) countries (Hunt & Ortiz-Hunt, Forthcoming).

In the previous vignettes, Don Mullins and Haruto Kobayashi each engaged in action that was not preceded by entrepreneurial intentions or effectual reasoning, or indeed any consideration or sense of ultimate consequences; yet, each ultimately started a new company and

generated revenue. Impulse-driven entrepreneurial action can also arise in the context of some impulsive purpose or intentionality, wherein it reflects an inability or unwillingness to pause for the recognition of alternative courses of action, much less deliberate consideration of alternatives' respective pros and cons. It operates in contrast to "analysis-based" action (March & Simon 1993) that reflects reasoned choice between alternative courses of action, including the simplest of all: doing nothing. It is as though the gravitational force of a potential opportunity inexorably draws the actor into active market participation.

Uninhibited, impulse-driven forays into entrepreneurial opportunities can be particularly informative when they take place under comparatively restrictive conditions, when circumstances suggest a premium for cautionary action and careful information processing. In this sense, focusing on a MENA woman entrepreneur is profoundly counter-intuitive because of the tendency to view female entrepreneurial action as prescribed by formal institutional changes, such as legislation supporting businesswomen (Hughes, et al. 2012), and of the perspective that legal strictures and sociocultural biases narrow the viable pathways to business ownership to sensible choices among institutionally endorsed processes (Lerner & Hunt 2012). As the case of Fatima Azoulay suggests, however, impulse-driven action is frequently decisive in making forthright moves into the marketplace:

> *Fatima Azoulay is a 54-year-old woman, who has lived her entire life in Marrakech, Morocco. It was never her expectation that one day she would be an entrepreneur, just as she never expected to be a widow at the age of 24. Until an auto accident killed her husband, Hamza, Fatima prepared the food that he sold from his cart. When Hamza was killed it was impossible for her to prepare the food, take care of her children and staff the food cart, so within a matter of days she sold the cart and used the money to start producing food that she wholesaled to other food cart operators. The food was fresher, tastier and cheaper than the cart operators had previously been selling and Fatima eked out a decent living.*
>
> *Subsequently she has engaged in a wide assortment of entrepreneurial pursuits. Fatima is unusual among Moroccan entrepreneurs, both for the sheer volume of*

entrepreneurial action she has generated and for the fact that despite being a woman operating in a milieu that is heavily dominated by men, it is hard to discern any conscious intentions, coherent plans and cogent aims. On the contrary, the unending series of businesses resemble more of a blizzard of unfettered action – and following the impulse of the day or just for the thrill of it – rather than based on (or even contrary to) reasoned judgment.

Fatima claims to have forgotten how businesses she has started over the years, then proceeds to rattle off no fewer than 17 that spring to mind, including: restaurants, coffee shops, tour guides, clothes stalls, a hat business, rodent control, online dating services, costume jewelry, leather goods, lanterns, a smoothie bar, internet access, a shop specializing in tattoos, henna and piercing, and her latest passion, argan oil. Overall, Fatima estimates that she has started more than three dozen businesses.

"People say that I'm crazy for jumping in and out of businesses all the time, but if I wait until I figure out if something is a good idea then it won't be a good idea anymore. Besides, what's the point of sitting around and making plans? One time, I had eleven businesses going all at once. Most of them failed, though I did make a bit of money in a couple. It probably would have been smarter to focus."

While Fatima laments some of the gains she has foregone as a result of the frenzied pace at which she has entered and exited businesses, she reports enjoying having been an early force in creating new markets even though failing to capture value. "Whatever is popular, I'll be there. When coffee looked like it was going to take off, I was one of the first. When smoothie bars were still small, I was one of the first. Now, other people are making lot of money from coffee and smoothie bars, but I'm broke because I moved on to other businesses, like online dating. I was one of the first there, too. It was a very popular site, but I got interested in tattoos and henna for tourists and didn't maintain the site very well. Eventually, everyone left."

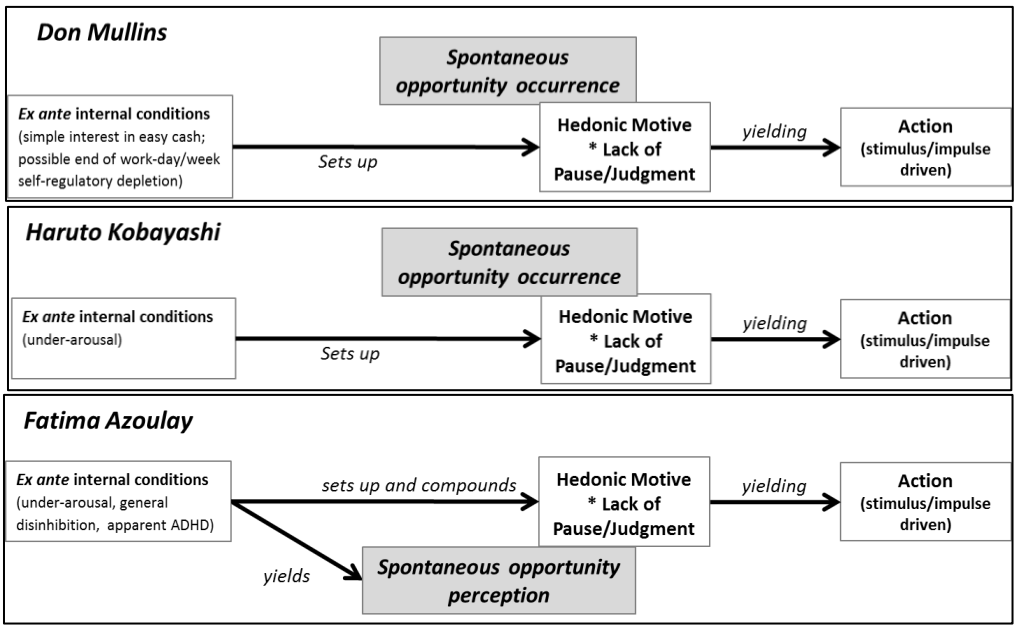
When Fatima is asked to explain her philosophy towards business venturing, she laughs, "I don't think that I have a philosophy or even an approach. I move fast and I work hard. Unfortunately, as soon as I see something new I can't help myself. Soon, I'm running off in a new direction. My children won't even go into business with me because they say I won't finish even one week before I have a new idea. They know me very well. I can't blame them."

Fatima's newest pursuits in argan oil are exciting and frustrating to her. "I was one of the first ones to start packaging pure argan oil for export, but now the market is growing fast and there are many, many competitors. If I hadn't opened the tattoo and henna shop and just focused on argan, I would have a stronger position, but tattoos and henna looked like a great business, too." Pausing for a moment, Fatima smiles and then notes, "The truth is, usually I jump in because I just like the excitement."

ESCHEWING RATIONAL INTENTIONS – A SYNTHESIS

An exhaustive rendering of all the contexts and conditions under which impulse-driven entrepreneurial action arise is clearly impossible. However, the experiences Don, Haruto and Fatima present real-life stories – generalizing across very different contexts – that establish some meaningful sense of the diversity entrepreneurship scholars confront in attempting to describe and predict entrepreneurial action. Their non-deliberative paths to venturing are summarized in Figure 4 and subsequently further discussed.

Figure 4 – Non-Deliberative Venturing Sequences



Despite the highly idiosyncratic personalities and contexts captured through our triangulation of the three cases involving Don, Haruto and Fatima, each of their venturing sequences was spawned by a non-deliberative, impulse-driven action, triggered by external or internal stimuli. In the case of Don, an external agent presents an opportunity, stimulating hedonic impulse (e.g. an easy $500 cash); with no pause to evaluate it and potential opportunity costs (including *known* downside risks that are non-affordable, extreme and highly asymmetric) and without matching to simple rules that have worked in the past – Don simply acts on it. For

Haruto, under-arousal appears to have made him reactive to exogenously presented opportunity stimuli. Like Don, Haruto acts – without pause to evaluate the presented opportunity, opportunity costs and alternative courses of action. For example, when prompted with the *potential* opportunity to venture full-time, he follows the stimulus and resigns from a secure, well-paid, prestigious position. By comparison, Fatima's impulse-driven action appears far more endogenous. She was not presented an opportunity by an exogenous agent. Rather, appetitive drive and cognitive disinhibition, such as mental restlessness and hyperactivity, yield a spontaneous seemingly frenzied flow of new venture ideas. Despite an awareness of the problems caused by her perpetual action and lack of focus, Fatima does not pause to evaluate how she might orchestrate cogent behavior, let alone develop strategies for simultaneous ventures. Rather, the recurrent basis is impulse-driven. In her own words: "Unfortunately, as soon as I see something new I can't help myself."

The three vignettes serve as illustrations of how entrepreneurial activities can arise from impulse-driven, non-deliberative actions. The term "can" is critical here in terms of the implications we seek to derive. The stories of Don, Haruto and Fatima are theoretically meaningful because, through their ultimate realization, they constitute phenomena that fall within the scope of entrepreneurship theory. It is in the context of that realization that the impulse-driven, non-deliberative actions fall squarely within the holistic account of the entrepreneurial journey and thus set off causal chains for its subsequent unfolding (McMullen & Dimov, 2013).

We cannot and do not argue that impulse-driven action is necessary for entrepreneurship. And, we cannot and do not argue that such action is sufficient for entrepreneurial outcomes. Indeed, it is easy to imagine a multitude of similar stories that have not amounted to new

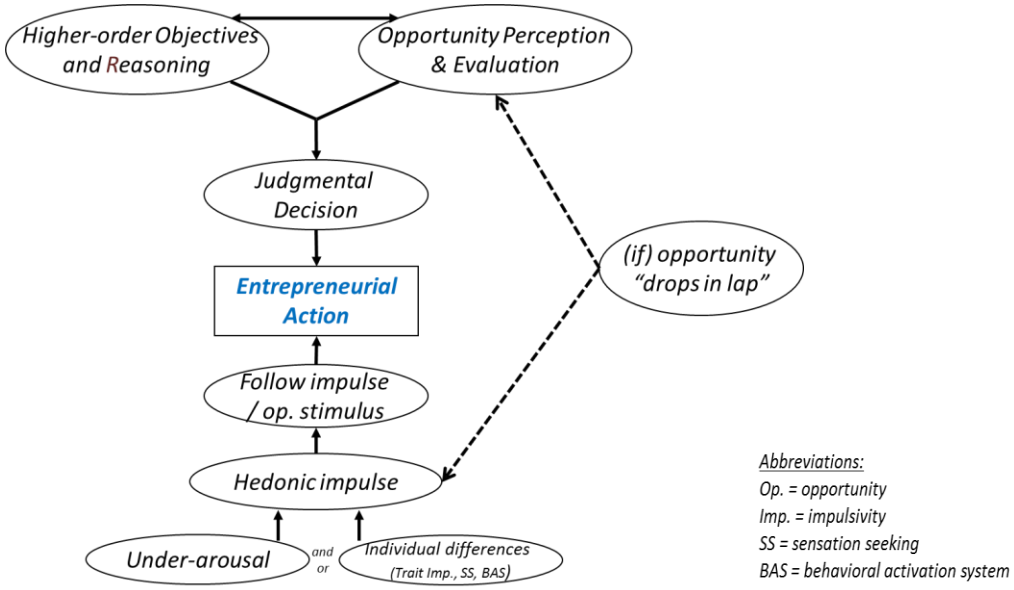
ventures. Rather, the stories simply show that extant theory is incomplete and that non-deliberative action can be useful for entrepreneurship as its consequences can produce entrepreneurial efforts and firms. The importance of the three stories lies not only in showing that they can happen, but also in suggesting that without the early impulse-driven actions they would not have unfolded into something that is meaningful for entrepreneurship scholars.

Each of the three vignettes challenges scholars to partially or wholly suspend prevailing sentiment about how individuals conduct nascent-stage venturing. For example, market-directed theorists such as Klein (2008: 187) have argued that the exploitation of entrepreneurial opportunities can be best thought of as "the exercise of judgment over the arrangement of heterogeneous capital assets," and that it would, therefore, make sense that "entrepreneurship research should focus on the execution of business plans." In relation to McMullen and Shepherd (2006), the vignettes suggest and support the notion that reasoned *opportunity evaluation* does not necessarily precede entrepreneurial action (or even follow it). The new venturing stories of Don, Haruto and Fatima suggest a reasoned theory and approach to opportunity pursuit is incomplete. Despite being radically different individuals, from radically different contexts, and pursuing radically different businesses – all three display similarities in their respective pathways and logic for action (Figure 4).

Figure 5 contrasts the bottom-up pathway exhibited across the three vignettes with extant conceptions, which have been characterized historically by a synchronic, intendedly-rational, top-down pathway. As indicated, rational judgment and *ex ante* intentionality provide an incomplete descriptive framework. A complete model must include the possibility that bottom-up logics have the capacity to result in entrepreneurial outcomes. We summarize this insight in the following proposition:

Proposition 1: *Entrepreneurial processes can be initiated by bottom-up, impulse-driven, non-deliberate actions whose consequences give rise to the purpose that ultimately defines those processes.*

Figure 5 – Reasoned and Impulse-Driven Pathways to Entrepreneurial Action



This proposition raises further the question of why bottom-up, impulse-driven, non-deliberate actions give rise to entrepreneurial outcomes that are meaningful in retrospect but difficult to anticipate in prospect given the non-reasoned nature of the actions. To unpack this, it is helpful to view these actions against a corresponding reasoned entrepreneurial judgment that could be made in the identical circumstances. Such judgments can reach three possible conclusions: (1) there is an entrepreneurial opportunity worth pursuing; (2) there is no entrepreneurial opportunity worth pursuing; (3) it is impossible to determine – due to uncertainty and insufficient information – if there is an opportunity worth pursuing. Arguably, Option (1) is the least interesting. If the opportunity can be widely acknowledged, but the person has acted blindly nevertheless, s/he would perhaps be deemed lucky to have inadvertently come upon such favorable circumstances. Options (2) and (3), in contrast, present opportunities for theoretical

extension because they highlight that judgment can be exercised only within the boundaries of some existing knowledge that can ultimately prove fallible (Dimov, 2017).

Each of the three vignettes is emblematic of individuals driven by key facets of the disinhibition perspective. Don Mullin's action is indicative of a failure to pause, reason and consider weighty consequences when presented with an opportunity. His simple appetitive response to a presented stimulus indicates an abandonment of the rule-directed appropriateness that defines the abatement industry and much of Don's career. He does not engage in a comprehensive or even a gut-level accounting of the potential consequences; nor does he act based on prior routines or what has been appropriate in the past. He also does not act as an effectuator, evidenced most glaringly by the absence of any affordable loss considerations. On the contrary, Don pursues the trivial opportunity of a $250 net pay-day, in the face of a catastrophic set of known possible outcomes – namely a $25,000 fine, criminal prosecution, permanent revocation of license and, even if not discovered by authorities, being fired from a paid position of $60,000 annually.

The asbestos abatement context is illuminating because it is so highly regulated. In rare fashion, Don's action is clearly associated with a lack of reasoning about an opportunity, as the potential consequences are verifiably known to the actor and information asymmetries do not apply, given the mandatory training, annual examinations, project permitting, and rigorously enforced work rules. Under these conditions, action itself indicates improvidence. The known, asymmetric, and extreme consequences are front and center, which would render anyone attempting judgment to Option (2) above. As a proving ground for entrepreneurial action in the absence of forethought, there are few contexts that afford a better view. Furthermore, the case of

Don does not appear to be uncommon or attributable to an artifact of non-essential permitting or regulation (Hunt, 2015), or associated with dark motives (Hmieleski & Lerner, 2016).

The story of Haruto Kobayashi is similarly instructive. In it, we do not see that an organization emerges based on a single impulsive act; rather, nascent-stage venturing emerges through impulse-driven action related to projects and loosely-formed unintended associations. Certainly, many early stage venturing actions may not ultimately lead to organization building and business model development; also, engaging in an action or transaction with the possibility for profit does not make an individual an entrepreneur. However, given *a priori* uncertainty of action outcomes and whether an individual will continue on to ultimately form a venture, entrepreneurship theory cannot broadly dismiss such pre-firm project-based entrepreneurial action as being too incipient. At best, one could judge that the early actions do not provide sufficient information to rule on or rule out a potential opportunity (i.e. Option [3] above).

A major problem for entrepreneurship and theories of entrepreneurial action lies in the "unbearable elusiveness" of the actual consequences to actions within the worldview prior to the actions, i.e. in the asymmetry between present and future (Dimov, 2011). It is impossible to distinguish between latent, incipient, nascent, and non-entrepreneurs without *a priori* knowledge of actions and outcomes yet to occur or not-occur. In light of uncertainty and high rates of abandonment, if what is considered *entrepreneurial* action is restricted only to actions that can be unambiguously attributed to organizing a firm or otherwise developing an opportunity for exploitation, scholars further compound the issue of over-sampling or exclusively sampling on the conventional and readily observable surviving firms (e.g. Yang & Aldrich, 2012; Hunt & Lerner, 2012). As such, even the most diligent research efforts would systemically miss relevant actions, when appetitive impulses, boredom and a vague unspecific desire for action spawn a

series of unanticipated, unforeseeable events that are not originally fueled by forethought, judgment, or even an intention to become an entrepreneur.

Evidence of significant, pre-strategic venturing without intentionality draws entrepreneurship scholarship into an important new realm in which both the intendedly rational and the *a*-rational must be contemplated. However, *a*-rational impulse-driven logics are notoriously difficult to identify, isolate and describe. For example, the utterly kinetic, often random nature of Fatima's entrepreneurial action obfuscates the tremendous achievements embodied in her courageous climb from being a near-destitute young widow with four children to a comfortable, self-sufficient lifestyle. Nonetheless, many facets of Fatima's behavior are emblematic of rapid-fire, unreasoned action without regard to the consequences that characterizes impulsivity (Moeller, 2001) and ADHD. In this sense, impulse-driven venturing involves conditions in which action precedes opportunity identification, definition and development. The wheels of transaction-based commitments are set in motion so rapidly that meaningful information processing simply cannot occur. Instead, the action-oriented cascade stems from disinhibition – and possibly also to a degree from what March and Simon (1993) referred to as "recognition-based" logics, a matching of situations to assumptions through intuition and "gut feel." Upon reflection, Fatima indicates that she is aware that her rapid-fire, disinhibited action creates problems that would be resolved by taking a more measured approach.

On the other hand, rapid responses to even ill-formed and highly ambiguous stimuli have the benefit of producing decisive actions that are relatively unfettered by routinized conceptualizations of a potential opportunity (Schulz, 2014). Indeed, we observe this in Fatima. Her underlying disinhibition, associated behavior, and intuition (based on cursory if any, conscious consideration of appropriateness) yield rapid and novel action – providing her certain

first-to-market advantages over procrastinators, imitators and venturers more inclined towards a reasoned consideration of conditions and opportunity costs. As a woman facing considerable socio-cultural and economic constraints, these dimensions of Fatima's impulse-driven entrepreneurial action may be critical to her survival.

Although existing research has demonstrated that intuition-based or impulsive action is "inherently inaccurate" (Schulz 2014) and that the results are often perilous (Gersick & Hackman 1990), it seems that in Fatima's case – with a large number of tries – they have yielded enough good results to compensate for the losses or setbacks. Consistent with Davis, Eisenhardt and Bingham (2009), Fatima's experience supports that notion that while the optimal degree of structure is elusive, circumstances involving a high degree of unpredictability – as is often the case in new venturing – favor at least some degree of rapid action in the context of simple rules. Whatever else one might conclude, Fatima's impulse-driven "leap-before–you-look" actions appear to be a double-edged sword; they provide a much-needed wedge for aggressive entry into a gender-restricted milieu, and also interfere with effectively capturing profits let alone sustainable returns. Not only do Fatima's entrepreneurial actions exist but they may be critical to ensuring a steady supply of new ventures to the marketplace, including novel approaches by women and other historically under-represented actors. Concurrently, an uninhibited proclivity to act on impulse may undermine other important the capabilities as well as resource acquisition and coordination relevant to firm formation and success (e.g. Lerner 2016; Lerner, Hunt, & Verheul, 2017). We summarize these arguments in the following propositions:

> **Proposition 2a:** *Actions based on impulse-driven, non-deliberate logics – by virtue of the event sequencing and the actions they trigger – generate consequences that cannot be anticipated or evaluated within the constraints of a priori entrepreneurial judgment.*

Proposition 2b: *In relation to the actions that generate them, consequences of impulse-driven, non-deliberative logics have a diachronic (rather than synchronic) role.*

DISCUSSION

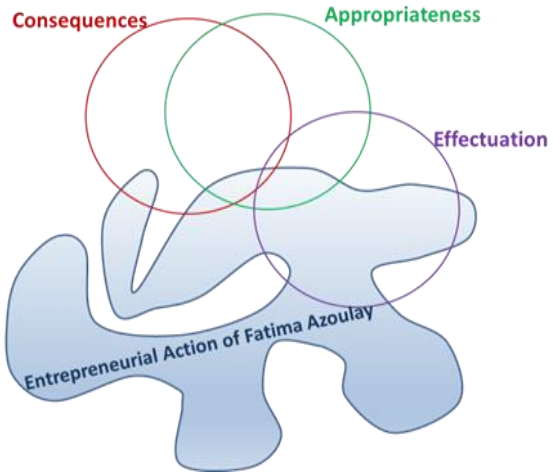
Like all substantial human endeavors, entrepreneurship is characterized by a vast array of actions and outcomes. Many of these endeavors are indeed apt to involve intendedly rational decision-making and the consideration of alternative courses of action; but not all. This represents a challenge for entrepreneurship scholars. In the quest to understand nascent-stage bases for entrepreneurial action, extant literature historically has tilted heavily towards models presuming deliberate, higher-order reasoning to conceptually circumscribe the individual-opportunity nexus (Shane 2003; McMullen & Shepherd 2006); however, efforts are accelerating to understand and accommodate entrepreneurial action that is characterized by less-reasoned pathways (e.g. Shane & Nicolaou 2015; Shepherd 2015; Wiklund et al. 2016).

Our central argument is not that extant theory on opportunity identification and entrepreneurial action is broken, with individuals instead unintentionally jumping and stumbling into suddenly being founders. Simply, less-reasoned logics are indicative of a "different" mental operating style and behavioral approach; one that has its own set of descriptors, risks, proclivities and outcomes. Frameworks designed to fully describe and predict entrepreneurial action can and should incorporate that which is intendedly-rational *and* that which is not.

As framed by our summary propositions and illustrated through three vivid descriptions of impulse-initiated nascent-stage action, there is a need to broaden and deepen the study of unreasoned entrepreneurial action. There are three pressing reasons for supporting this conclusion. First, anomalies exist that defy categorization within existing frameworks. As the three diverse vignettes demonstrated, there are actors and actions that do not fit conveniently into

prevailing logics, such as the rule of consequences, appropriateness or effectuation. While some facets of each reasoned perspective can explain select features of the conditions, actions and outcomes displayed by Don Mullins, Haruto Kobayashi and Fatima Azoulay, the vignettes reveal large swaths of unanticipated, unexplained entrepreneurial action, as is illustrated in Figure 6. To varying degrees, extant theories of *reasoned* logics can explain some facets of Fatima's entrepreneurial behavior. But, the diagram also conveys the important fact that extant theories leave a considerable amount of action unexplained. Like the broader field of entrepreneurship, false dichotomies forcing theoretical "either/or" commitments to one of several models of reasoned action will fail the "Fatima Test," insofar as extant reasoned logics alone are insufficient and the characterization of Fatima's actions is materially incomplete.

Figure 6 – Reasoned Frameworks in the Context of Unreasoned Action



Nascent-stage actions taken by Fatima Azoulay exhibit some minor elements that can be attributed to a reasoned consideration of consequences and appropriateness, and perhaps to an even greater degree, effectuation; but a resolute focus on rational intentions leave much of Fatima's quixotic nature and venture initiation activity unexplored and unexplained. The governing logic of her nascent-stage actions appears instead to emanate from disinhibition and

the impulse-driven side of the spectrum (Figure 1). In this sense, entrepreneurs like Fatima, Haruto and Don are anomalous to extant frameworks.

A second reason to take seriously the need to consider unreasoned action is the economic importance of impulse-driven actors and actions. Even if the case that intendedly rational, rules-based decision-making is ultimately found to govern the vast majority of entrepreneurial action, a case can be made that at the margin, impulse-driven actors play an indispensable role in generating a steady supply of entrepreneurial activity for the marketplace. This, in turn, enhances both the entrepreneurial environment as well as the broader economy by increasing the size and efficiency of markets for novel technologies, organizational forms and business models. The fact that moving rapidly may sometimes be a virtue is not at odds with the notion that the underlying mechanisms of action are impulse-driven. As McMullen and Shepherd (2006) noted, there must be some number of action-minded individuals to offset those paralyzed by uncertainty. Extant theory largely holds that individual perceptions of uncertainty – especially those that elicit hesitancy, indecisiveness and procrastination – lead to irreversible inaction and missed opportunities (Casson, 1982; Shane & Venkataraman, 2000).

In a highly competitive market for the creation and capture of economic value, opportunity exploitation often affords nothing more than a brief window of opportunity (Kirzner 1997; Mises, 1949; Schumpeter, 1934). This means that a thriving entrepreneurial environment necessarily requires that the inaction of those who are stymied by uncertainty and indecision is "offset" by individuals who possess the willingness to strike while the iron is hot (Mann 1996; McMullen & Shepherd 2006), even when they may lack the resources to do so (Stevenson 1984) and a minimally developed idea/strategy of how they might actually do so. The relative bypassing of reason, bypasses inhibiting "fear, doubt, and aversion" (Van Gelderen et al. 2015),

and serves as an efficient, market-enhancing force that replenishes the supply of entrepreneurial actors, even if (or because) may individuals fail to succeed (Casson 1982). Recent theoretical research (e.g. Choi et al., 2008; Shepherd et al 2007; 2017) indeed suggests that differential information and knowledge/ignorance can be a basis for why *some* actors form first-person opportunity beliefs and move to exploit more quickly. Our theory and real-life empirical vignettes do not challenge or contradict that perspective/possibility. Rather, we further extend the potential basis for entrepreneurial action beyond such reasoned information processing.

The third reason to go beyond the left side of the spectrum relates to entrepreneurship's key role in developing new theory for the psychological, social and economic origins of nascent-stage venturing. Viewed retrospectively, virtually any human action appears to be infused with some measure of reasoned consideration. However, efforts to anchor entrepreneurial studies to retrospection will inherently underplay the more quixotic, impulsive, unformulated bases of early-stage actions. Ideas are born and often die in early-stage events that represent the fertile breeding ground for entrepreneurship in any entrepreneurial environment. One of the most vexing aspects of entrepreneurship studies stems from the challenges in apprehending the precise contexts, motives and actions at the most nascent stages of ideation, action and development (Crawford et al. 2015; Hunt & Lerner 2012; Yang & Aldrich 2012). More than any other facet of entrepreneurship, this early-stage, pre-strategic, pre-organizational phase represents the single strongest rationale for considering entrepreneurship a field of study, as opposed to a phenomenon subsumed by existing fields like economics, sociology, psychology or strategic management (Wiklund, Davidsson, Audretsch, & Karlsson, 2011).

It is interesting that there is relatively little theory from strategy that explains the most nascent-stage activities. In addressing the earliest stages of venturing, entrepreneurship scholars

are largely on their own to develop and test new theories. The point at which actions become interesting to strategic management is also the point at which actions increasingly appear to be rational, reasoned and rule-based – and thus subject to specifiable business policy. Therefore, if scholars assume that entrepreneurship begins only when it can be described through the language of strategy, then entrepreneurship scholars forego the essence of what makes entrepreneurship a field rather than a phenomenon. Nascent-stage, pre-strategic contexts and actions are central to the initiation of entities, activity systems and value creation, and some proportion of these stem from impulse-driven actions. In this sense, an exploration of alternatives to reasoned action is tantamount to an exploration of entrepreneurship's primordial roots (*cf.* Shepherd, 2015).

Conclusion

The theoretical framing and descriptive vignettes presented here contribute to an emerging conversation on the less-reasoned origins of entrepreneurial action (Lerner, 2016; Spivack, McKelvie, & Haynie, 2014; Wiklund et al., 2016; 2017b). Consistent with the aforementioned studies, our investigation takes important new steps in demonstrating that disinhibition can be a psychological resource that may be instrumental in overcoming the "behavioral bounds" (*cf.* Gavetti, 2012) inhibiting opportunity pursuit. Coupled with other recent inquiries, our diachronic, spectrum-approach to the mechanisms of nascent-stage venturing offers a veridical and useful approach. Central to our theoretical model and vignettes are the notions that: (a) unreasoned behavioral logics such as disinhibition are meaningful for individual decision-making (or lack thereof) and the behaviors leading to opportunity pursuit, and, (b) efforts to fully understand entrepreneurial action cannot solely rely upon intendedly rational logics of action, including the conception of effectuation as a catch-all for what might be rationalized as experimenting, learning-by-doing, expanding one's means, leveraging one's prior experience, or engaging relevant stakeholders.

Our work prompts reconsideration of the overarching theoretical premise that opportunity evaluation is a precursor to entrepreneurial action (e.g. McMullen & Shepherd, 2006; Haynie et al., 2009). Our investigation suggests the need for a more nuanced approach. Measured through the lens of reason, impulse-driven action suggests a breakdown in intendedly-rational logic, a failure to think things through, or even a glaring instance of foolishness. However, the value of a strict, functionalist approach in the context of a priori irreducible uncertainty, is suspect if the most common outcome is inaction and stasis. An efficient, vibrant marketplace for entrepreneurial innovation (Hunt & Ortiz-Hunt, 2017) necessarily includes impulse-driven, non-deliberative actions, some proportion of which may evolve into entrepreneurial outcomes, formal organizations and competitive business models. It is thus also relevant to the examination of intended and unintended business strategies (Mintzberg & Waters 1985).

Importantly, we do not presuppose impulse-driven action is necessarily adaptive for venturing outcomes. Rather, our theory approaches the origins of action from a bottom-up behavioral perspective, contributing to reconciliation as a matter of degree, and as a matter subject to much-needed boundary conditions, many of which we have supplied through our line of inquiry. In doing so, we open many promising questions for future research. For example: what types of contextual and individual-level factors are most associated with triggering impulse-driven entrepreneurial action and to what ends? Future inquires can advance various business venturing literatures, involving for example: motives, self-regulation, decision-speed, opportunities, institutions (e.g. action *despite* legal/regulatory/cultural barriers), resource acquisition, leadership, teams, and inertia.

While entrepreneurial action may often be reasoned, it cannot be ubiquitously assumed so. Limiting entrepreneurship scholars' focus and frameworks to the realm of the intendedly-

rational and reasoned action is restrictive – and not consistent with the diversity of human behavior in nearly all spheres of human activity, including entrepreneurship (Shepherd, 2015). Individual level disinhibition offers and opens a new door in the taxonomy of logics for entrepreneurial action. Overall, this opens up a prime opportunity to reconsider the fundamental premises of extant theory. In relation to the entrepreneur, it highlights questions about the entrepreneurial equivalent of intendedly-rational *homo-economicus.* With entrepreneurship understood as an extended journey lacking a clear cut beginning (McMullen & Dimov 2013), all the facets of the human journey are relevant, including the unreasoned and primordial.

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