

Back to Which Future? Recalibrating the Time-Calibrated Narratives of Entrepreneurial Action to Account for Non-Deliberative Dynamics

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Back to Which Future? Recalibrating the Time-Calibrated Narratives of Entrepreneurial Action to Account for Non-Deliberative Dynamics

Wood, Bakker, and Fisher (in press) develop a time-calibrated theory of entrepreneurial action, which they define as purposeful and consequential human activity in which entrepreneurs introduce something new to the world (Schumpeter, 1934; Herbert & Link, 1988). The authors posit three dimensions of temporality that entrepreneurs use to structure the venture creation process: 1) *Initialization*, which refers to the point in time that an entrepreneur deems appropriate for incipient entrepreneurial action; 2) *Pace*, which alludes to the time lapse between an entrepreneur's initial action and the desired outcome; and 3) *Chronology*, which involves the sequencing of actions and events towards the realization of an important milestone. In connecting these temporal dimensions to entrepreneurial action, the authors draw upon the notion of “time-calibrated narrative construction,” which they conceptualize as a dedicated cognitive activity, wherein individuals devise “internal stories” that temporally situate action associated with an entrepreneurial endeavor. In essence, their theory predicts the likelihood of entrepreneurial action based on variations in the way entrepreneurs cognitively integrate initialization, pace, and chronology into an internal time-calibrated narrative.

Attentiveness to the manner in which agent-specific conceptions of temporal context influence the entrepreneurial process is a needed and welcome development in theories of entrepreneurial action (Lévesque & Stephan, 2020; Wadhvani et al., 2020), and Wood et al. have taken important steps towards creating a constructive basis to identify and assess idiosyncratic temporal calibrations that characterize the business venturing lifecycle. This is a critical development because, as entrepreneurship scholars are increasingly aware, “entrepreneurial time” rarely bears anything more than a passing resemblance to *chronos* – carefully segmented, assiduously measured, sequential time. As McMullen & Dimov (2013) note, “prior work has thus tended to diminish the role of time in the entrepreneurial process by

studying entrepreneurship as an act, as opposed to a journey that explicitly transpires over time” (p. 1482). Cognizant of the multitudinous ways in which entrepreneurship is quite literally a “journey,” the issue that concerns us with the Woods et al. theorization is the extent to which it unnecessarily constrains itself to the governing premise that entrepreneurial action ubiquitously emanates from reasoned intentionality. The implicit reverence for that which is *a priori* deliberative, rational, and coherent elevates *chronos* over the more entrepreneurship-friendly conception of time, *kairos*, which is best thought of as connoting “propitiousness,” a dimension of time that allows for surprise beginnings and endings, both of which entrepreneurship witnesses with great frequency (Townsend & Hunt, 2018). As Martin Buber wrote, “All journeys have secret destinations of which the traveler is unaware.”

The Marginalization of Impulsivity and the Unreasoned

Wood et al.’s theorization is rooted in the notion of “temporal work” (Kaplan & Orlikowski, 2013), which refers to the mental intertwining of the past and the present to construct visions of the future and to engage in “mental time travel,” allowing people to cognitively “pre-live” events (Suddendorf & Corballis, 2007). The “pre-living” of an entrepreneurial endeavor enables entrepreneurs to construct what Wood et al. call a “time-calibrated narrative,” as entrepreneurs go “back to the future” by imagining possible action paths while trying to discern potential outcomes through effortful thought regarding time contingencies. As is readily apparent, this theoretical positioning assumes that a high degree of reasoned intentionality precedes and is requisite for entrepreneurial action. Traditionally, this assumption has been supported through the assertion that business venturing involves a non-trivial commitment of non-recoupable resources, such as time and money (Bhawe et al., 2016) and that the commitment of these resources inherently necessitates reasoned intentionality.

While we do not doubt that logical reasoning and judgment often play a role in opportunity exploitation and that such logics can be instrumental to founding and scaling a

successful enterprise, we would still assert that the rationality assumption yields a heavily censored, and therefore incomplete, recounting of the business venturing process. It is a bit like describing a forested landscape with all but a few trees cut down. That which is dense, dynamic, and chaotic is made excessively simple by removing all but reasoned intentionality. The elements of impulsivity, spuriousness, haphazard urgency, and randomness are rendered subordinate to rational narration. Although Wood et al. acknowledge the possibility of less-rational, impulse-driven entrepreneurial action, citing Lerner et al., (2018a) and Wiklund et al., (2018), they ultimately “take the position that entrepreneurs attend thoughtfully to key aspects of pursuing new introductions” (p. 8) and designate this as the gravitational center of their framework. In concluding, they suggest that the notion of impulsivity is compatible with their theorization, asserting that time calibration is a force that sometimes compels immediate entrepreneurial action (p. 41), while stipulating “these assorted forms of unreasoned action” are amenable to rational intentionality.

Wood et al.’s emphasis on the intentionality of reasoned entrepreneurial action is understandable given the intellectual heritage of their argument (e.g., McMullen & Shepherd, 2006; Wood et al., 2017) and the way it has spawned further “intentionalist” theorization (e.g., McMullen et al., 2020; Davidsson & Gruenhagen, 2020). Indeed, their approach succeeds in convincingly demonstrating the indispensability of reasoned intentionality as one facet of entrepreneurial action. However, a growing body of research shows that unreasoned drivers (e.g., disinhibition, impulsivity) are non-ignorable facets of human activity that are equally indispensable to a predictive framework for entrepreneurial action, especially involving individuals yet to engage in business venturing (Lerner et al., 2018a; Nair et al., 2020).

In their attempt to handle the “inconvenient truth” of unreasoned action by casting it as a subset of reasoned intentionality, Wood et al. make the same error as Brown, Packard and Bylund (2018), who argue that “impulsive behaviors can and ought to be understood within the

framework of judgment and, thus, as rational human action” (2018, p. 1). Wiklund (2019) succinctly dispatches that claim, noting that impulsivity is, by definition, the precise opposite of rational human action. Hunt & Lerner (2018) similarly warn that little good can come from force-fitting non-rational feet into patently rational shoes. The better pathway is to apply the broad-spectrum approach of Lerner et al. (2018a), who argue for treatment of rational and non-rational drivers as empirically distinct and conceptually coexistent.

For very good reasons, impulsivity and other unreasoned actions do not fit neatly and cleanly into the methods and musings of time-calibrated narratives. Situating unreasoned action in the manner proposed by Wood et al. unintentionally marginalizes its distinctiveness and importance. Doing so also unnecessarily limits the nature of future research on entrepreneurial action (Hunt & Lerner, 2018) by censoring human motives and actions that are as assuredly relevant to entrepreneurship as they are to any other complex, interpersonal endeavor. By essentially marginalizing impulsivity, Wood et al.’s theorization (p. 8) effectively excludes -- without careful consideration or supporting evidence -- various other unreasoned drivers of entrepreneurial action, as well, such as hyperactivity and addiction (Lerner et al., 2018a). As Lerner et al. (2018b) theorized, and related empirical research has shown (Lerner et al 2018a; Wiklund et al., 2016; 2017; Yu et al., 2018), efforts to downplay unreasoned and unintended action by claiming it is not relevant to business venturing is unnecessarily self-limiting. There are two reasons for this: first, the exclusion does not strengthen the explanatory framework (Wiklund, 2019); and, second, the exclusion may simply be wrong, given the presence and consequentiality of unreasoned and unintended dynamics in varied forms across all phases of the business venturing lifecycle (e.g., Lerner et al., 2018b; Wiklund et al., 2017). This matters greatly because impulsive, less-rational, non-deliberative logics, are all likely to elicit rather different temporal configurations and time-calibrated narratives.

Narrativity and the Intentionality Bias

The underlying difficulty is that entrepreneurship research is strongly predisposed towards capturing the intentional aspects of entrepreneurial action (Hunt & Lerner, 2018). Process-oriented research involving the cognitive dimensions of entrepreneurship, by necessity, relies heavily upon qualitative types of data, such as interviews and other accounts that are prone to “narrativity” (Czarniawska, 2004). Data narrativity refers to the degree to which events in a spoken or written account of an experience are matched to a verbal sequence of clauses so that they fit generally understandable structures of meaning (Lwin, 2017). Heavily influenced by classical forms of storytelling, narratives usually offer an intelligible sequence of events and thereby favor consequentiality or teleology over the less reasoned or intended (Sternberg, 1992; Dimov, 2020). Similarly, Wood et al.’s theorization involves narrative construction, and even if text is not necessarily verbalized, its interplay with cognitive processes will likely produce “storied”, hence purposeful, arrangements of life events (Herman, 2002).

However – and this is important – the mere fact that scholarly research is well-equipped to capture the intentional aspects of entrepreneurial action does not mean that intentionality sufficiently circumscribes the arena of entrepreneurial action, or that the “nebulous, open-ended, and accidental” nature of pre- and proto-venture thinking and action (Nair et al., 2020) can be force-fit into focused and deliberate narratives. The consequences of this paradox are made even more poignant when considered under the conditions of *a priori* irreducible uncertainty, which is a governing assumption of entrepreneurial action (Knight, 1921). The ability of entrepreneurs to construct *ex ante* time-calibrated narratives that faithfully capture “winding paths” and “discontinuous reactive sequences” under conditions of Knightian uncertainty (Wood et al., p. 26) is, at best, limited, and more realistically, probably impossible.

Accurate depictions of nascent-stage entrepreneurial action are no friend of rationality-driven narrativity. Given that the intentionality assumption is, as noted above, rife with theoretical and epistemological problems, Hunt & Lerner (2018) argue that judgment-driven

logics occupy an important role in entrepreneurial decision-making and action, but that the role is only partial. Alternatives exist and they matter, evidenced through a burgeoning literature and supported by methodological advances (e.g., Van Lent et al., 2020; Bort et al., 2020; Lerner et al., 2020) documenting the unintended and unreasoned elements of entrepreneurial action. Consistent with Lerner et al.'s (2018a) argument that business venturing is birthed by various logics and is not limited exclusively to the intendedly rational, various efforts have emerged to explore non-deliberative sources of entrepreneurial action. Thus, it appears that “intentionalist” approaches to entrepreneurship are not so much incorrect as they are incomplete.

Broadening Wood et al. through Modal Logics

Moving forward, we advocate relaxing the assumption of reasoned intentionality that underlies Wood et al.'s theorization, and extending their notion of time-calibrated narratives to incorporate a broad-spectrum conceptualization of entrepreneurial action (e.g., Hunt & Lerner, 2018; Lerner et al., 2018a). We do *not* suggest that *no* entrepreneurs “attend thoughtfully to key aspects of pursuing new introductions” (Wood et al., p. 8), but rather that the basis for entrepreneurial action is not solely circumscribed by rational forethought. Embracing modal, multi-valued logics (Townsend & Hunt, 2019) allows less-rational, non-deliberative, and impulsive modes to exist alongside those that are demonstrably rational and well-grounded in structured judgments. Integrating these concepts would expand the framework's applicability and veridicality, and would strengthen the usefulness of its considerable contributions, as can be demonstrated through its core components: initialization, pace, and chronology.

Starting with *initialization*, although the commencement of observable entrepreneurial action often involves conscious deliberation, the constitution of which may rest on purposive and consequential acts, these drivers are also surrounded by a panoply of unintentionality, such as relieving boredom, reacting to a chance social encounter, or taking an unexpected detour (Lerner et al., 2018a). Then, too, the decision to pursue a new venture is not necessarily a

unilateral one, which means that an entrepreneur may confront constrained agency in her or his ability to time the action (Townsend & Hunt, 2018; 2020). That is, some entrepreneurs are “embedded” in distributive action, in which case it is the interaction between individuals that gives momentum to a venture (McKeefer et al., 2015). Likewise, the initializing action may be bound by socio-economic circumstances and institutional factors, such as technical and financial innovations (Fritsch & Storey, 2014; Toms et al., 2020), business-friendly legislation (Hunt, 2015), or the advent of new technologies (Davidsson, 2015; Dimov, 2011).

With respect to *pace*, although it makes intuitive sense that projections of future outcomes can guide entrepreneurial action, such projections are often flawed. The authors extensively discuss uncertainty as a source of “noise,” but concerns over pace are also colored by a host of psychological factors, which further complicate the link between the anticipated lead time of success and the occurrence of entrepreneurial action. For example, the expected time lapse between the start of entrepreneurial action and desired outcomes may be skewed by so-called “psychological time”, or the perception of the passage of time (Block, 2014). For example, in their description of pacing, Wood et al. draw on literature suggesting that early “waiting time” to first product shipments or sales is a critical concern for budding entrepreneurs. If entrepreneurs perceive early time as being longer and more impressive than later time, they may cognitively overestimate what can be accomplished in it. While inaccurate pacing can fall within intentional reasoning, such perceptual distortions threaten the veridicality of narratives.

Finally, while the *chronology* of entrepreneurial action is far from inconsequential – Wood et al. rightly refer to the path dependency literature to illustrate this point – the *a priori* sequencing of events is subject to a myriad of complexities. The anticipation and interpretation of chronology is anything but a cognitively mechanistic *fait accompli*. For one thing, entrepreneurs high in disinhibition may not only border on chaotic in their sequencing of behavior but also fail to consider their own projected chronology (e.g., Lerner et al., 2018a;

Wiklund et al., 2016). Moreover, as noted above, entrepreneurs often face wider socio-economic, industrial, and interpersonal dynamics (Fritsch & Storey, 2014; Toms et al., 2020; McKeefer et al., 2015) – forces that are often excluded from forethought. Each of these, in turn, blur the connection between the sequence that would-be entrepreneurs envisage prior to taking action and the one that eventually plays out in reality. However, when asked, “How did they get to where they are?” individuals generate narratives that are based on well-reasoned logics even when logic is in short supply (Lerner et al., 2018a; Van Lent et al., 2020; Lwin, 2017).

A Wider Path Forward

Overall, Wood et al. offer an important contribution, addressing a serious shortcoming in extant business venturing literature and outlining a theoretical path forward, but their framework could go further than they have allowed. We have argued here that unintended and unreasoned elements of entrepreneurial action may elude and even weaken the connection between an entrepreneur’s conscious time calibration and the actual timing of events, thereby limiting the framework’s descriptive and predictive value. In the 1989 sequel to the Hollywood classic, *Back to the Future*, malfunctioning time circuits cause the central character, Marty McFly, to be transported to an unintended timeframe. Likewise, if entrepreneurs’ time calibrations are not set right, they might envisage the wrong future, or one that has little bearing upon entrepreneurial action. It may even lead them to form a narrative that is highly divergent from what actually transpired. “Recalibrating” the theory of time-calibrated narratives invites fruitful incorporation of unreasoned drivers. Wood et al. rightly argue that entrepreneurial action theory needs a temporal dimension, and their model provides a useful starting point. Unshackled from the governing premise of reasoned judgement, it can better encompass the full spectrum of human behavior comprising entrepreneurial action by integrating intentional and unintentional action, and by underscoring the importance of varied logics made manifest in personal interpretations of reality.

REFERENCES

- Bhawe, N., Rawhouser, H., & Pollack, J. M. (2016). Horse and cart: The role of resource acquisition order in new ventures. *Journal of Business Venturing Insights*, 6, 7-13.
- Block, R. A. (2014). *Cognitive Models of Psychological Time*. New York: Psychology Press.
- Bort, J., Crawford, G.C., Lerner, D., & Wiklund, J. (2020). Speed versus accuracy: Experimentally modeling the strategic utility of impulsivity in entrepreneurship. *Unpublished working paper*.
- Brown, L., Packard, M., & Bylund, P. (2018). Judgment, fast and slow: Toward a judgment view of entrepreneurs' impulsivity. *Journal of Business Venturing Insights*, 10, e00095.
- Czarniawska, B. (2004). *Narratives in Social Science Research*. London: Sage.
- Davidsson, P. (2015). Entrepreneurial opportunities and the entrepreneurship nexus: A re-conceptualization. *Journal of Business Venturing*, 30(5): 674-695.
- Davidsson, P., & Gruenhagen, J. H. (2020). Fulfilling the process promise: A review and agenda for new venture creation process research. *Entrepreneurship Theory and Practice*. DOI: 10.1177/1042258720930991.
- Dimov, D. (2011). Grappling with the unbearable elusiveness of entrepreneurial opportunities. *Entrepreneurship Theory and Practice*, 35(1): 57-81.
- Dimov, D. (2020). Opportunities, language, and time. *Academy of Management Perspectives*, 34 (3): 333-351.
- Fritsch, M. & Storey, D. (2014). Entrepreneurship in a regional context: Historical roots, recent developments and future challenges. *Regional Studies*, 48(6): 939-954.
- Herbert, R. F. & Link, A.N. (1988). *The entrepreneur: Mainstream views and radical critiques*. New York: Praeger.
- Herman, D. (2002). *Story logic: Problems and possibilities of narrative*. Lincoln: University of Nebraska Press.
- Hunt, R.A. (2015). Contagion entrepreneurship: Institutional support, strategic incoherence, and the social costs of over-entry. *Journal of Small Business Management*, 53(sup1): 5-29.
- Hunt, R.A., & Lerner, D.A. (2018). Entrepreneurial action as human action: Sometimes judgment-driven, sometimes not. *Journal of Business Venturing Insights*, 10, e00102.
- Kaplan, S., & Orlikowski, W. J. (2013). Temporal work in strategy making. *Organization Science*, 24(4): 965–995.
- Knight, F. H. (1921). *Risk, Uncertainty and Profit*. New York: Houghton-Mifflin.
- Lerner, D.A., Hunt, R.A., & Dimov, D. (2018a). Action! Moving beyond the intendedly-rational logics of entrepreneurship. *Journal of Business Venturing*, 33(1): 52-69.
- Lerner, D., Hunt, R.A., & Verheul, I. (2018b). Dueling banjos: Harmony and discord between ADHD and entrepreneurship. *Academy of Management Perspectives*, 32(2): 266-286.
- Lerner, D., Hatak, I., & Rauch, A. (2018c). Deep roots? Behavioral inhibition and behavioral activation system (BIS/BAS) sensitivity and entrepreneurship. *Journal of Business Venturing Insights*, 9: 107–115.
- Lerner, D. A., Verheul, I., & Thurik, R. (2019). Entrepreneurship and attention deficit/hyperactivity disorder: a large-scale study involving the clinical condition of ADHD. *Small Business Economics*, 53(2): 381-392.
- Lerner, D., Alkærsg, L., Fitza, M., Lomberg, C., & Johnson, S. (2020). Nothing Ventured, Nothing Gained: Parasite Infection is Associated with Entrepreneurial Initiation, Engagement and Performance. *Entrepreneurship Theory and Practice*. DOI: 10.1177/1042258719890992
- Lévesque, M., & Stephan, U. (2020). It's time we talk about time in entrepreneurship. *Entrepreneurship Theory and Practice*, 44(2): 163-184.
- Lwin, S.M. (2017). Narrativity and creativity in oral storytelling: Co-constructing a story with the audience. *Language and Literature*, 26(1): 34-53.

- McKeever, E., Jack, S., & Anderson, A. (2015). Embedded entrepreneurship in the creative reconstruction of place. *Journal of Business Venturing*, 30(1): 50-65.
- McMullen, J. S., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, 50(8): 1481-1512.
- McMullen, J. S., Ingram, K. M., & Adams, J. (2020). What makes an entrepreneurship study entrepreneurial? Toward A unified theory of entrepreneurial agency. *Entrepreneurship Theory and Practice*. DOI: 10.1177/1042258720922460.
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1): 132-152.
- Nair, S., Gaim, M., & Dimov, D. (2020). Toward the Emergence of Entrepreneurial Opportunities: Organizing Early-Phase New-Venture Creation Support Systems. *Academy of Management Review*, doi.org/10.5465/amr.2019.0040
- Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Sternberg, M. (1992). Telling in time (II): Chronology, teleology, narrativity. *Poetics Today*, 13(3): 463-541.
- Suddendorf, T., & Corballis, M. C. (2007). The evolution of foresight: What is mental time travel, and is it unique to humans? *Behavioral and Brain Sciences*, 30(3): 299–313.
- Toms, S., Wilson, N., & Wright, M. (2020). Innovation, intermediation, and the nature of entrepreneurship: A historical perspective. *Strategic Entrepreneurship Journal*, 14(1): 105-121.
- Townsend, D. M., & Hunt, R.A. (2018). Heroic action and the problem of emergence: An analytical approach to entrepreneurial action theory. *Academy of Management Proceedings*.
- Townsend, D. M., & Hunt, R.A. (2019). Addressing entrepreneurship's false dichotomization of risk and uncertainty through modal logics. *Academy of Management Proceedings*.
- Townsend, D. M., & Hunt, R.A. (2020). Manipulating time: Temporal agency and entrepreneurial action. *VPI Working Paper Series*, 2020:8-1.
- Van Lent, W., Hunt R. A., & Lerner, D. A. (2020). Unearthing the unintended: Historical methods and the study of venture creation. *Unpublished working paper*.
- Wadhvani, R., Kirsch, D., Welter, F., Gartner, W., & Jones, G. (2020). Context, time, and change: Historical approaches to entrepreneurship research. *Strategic Entrepreneurship Journal*, 14(1): 3-19.
- Wiklund, J. (2019). Entrepreneurial impulsivity is not rational judgment. *Journal of Business Venturing Insights*, 11, e00105.
- Wiklund, J., Patzelt, H., & Dimov, D. (2016). Entrepreneurship and psychological disorders: How ADHD can be productively harnessed. *Journal of Business Venturing Insights*, 6:14–20.
- Wiklund, J., Yu, W., Tucker, R., & Marino, L. (2017). ADHD, impulsivity and entrepreneurship. *Journal of Business Venturing*, 32(6), 627–656.
- Wiklund, J., Yu, W., & Patzelt, H. (2018). Impulsivity and entrepreneurial action. *Academy of Management Perspectives*, 32(3), 379–403.
- Wood, M. S., Bakker, R. M., & Fisher, G. (2020) Back to the future: A time-calibrated theory of entrepreneurial action. *Academy of Management Review*. DOI: 10.5465/amr.2018.0060.
- Wood, M. S., Williams, D. W., & Drover, W. (2017). Past as prologue: Entrepreneurial inaction decisions and subsequent action judgments. *Journal of Business Venturing*, 32(1): 107-127.
- Yu, W., Wiklund, J., & Pérez-Luño, A. (2019). ADHD symptoms, entrepreneurial orientation (EO), and firm performance. *Entrepreneurship Theory and Practice*. doi.org/10.1177/1042258719892987.