

Theory of Hierarchical Entrepreneurial Deviance

A Recursive Multilevel Account of Entrepreneurial Departure and Amplification

Eugene Fregetto¹

¹ University of Illinois at Chicago (retired), USA

Correspondence: Eugene Fregetto, University of Illinois at Chicago (retired), USA. Email: fregett01@yahoo.com

Received: July 25, 2026
doi:10.65343/erd.v2i3.131

Accepted: August 26, 2026
URL: <https://doi.org/10.65343/erd.v2i3.131>

Published: August 30, 2026

Abstract

Entrepreneurship research offers established explanations of action under uncertainty, entrepreneurial cognition and identity, network mobilization, venture enactment, market emergence, and institutional change. These literatures, however, remain divided across levels of analysis and do not provide an integrated explanation of how an entrepreneurial departure originating in individual judgment may become amplified into broader change. This article develops the Theory of Hierarchical Entrepreneurial Deviance (THED), a reference-dependent, recursive multilevel theory of entrepreneurial departure. THED defines deviance neutrally as a material departure from the expectations, beliefs, routines, categories, or arrangements of a specified reference group or system. It distinguishes two foundational elements—agentic action and uncertainty-bearing judgment—from seven loci of entrepreneurial deviance: interpretive, identity, relational, enactive, market, structural, and systemic transformational. The theory specifies mechanisms through which departures may be translated and amplified across individual, relational, venture, market, field, and system levels, including identity internalization, stakeholder enrollment, collective enactment, artifact creation, market adoption, diffusion, institutionalization, and recursive reinforcement. The hierarchy represents expanding scope and potential consequence rather than a deterministic stage sequence or ranking of entrepreneurs. Trajectories may overlap, stall, reverse, normalize, or de-amplify as learning, selection, resistance, and changing reference states reshape the process. THED further predicts that realized departures become less frequent at broader loci, while successful amplification produces increasingly extensive and persistent consequences. At its rare upper bound, Caruso-level deviance joins exceptional catalytic entrepreneurial conduct with distributed systemic transformation. The framework contributes a testable architecture for explaining where entrepreneurial departures reside, how they travel across levels, and why only a small proportion become structurally or systemically consequential.

Keywords: entrepreneurial deviance, entrepreneurial judgment, multilevel theory, cross-level amplification, recursive process, market emergence, institutional change, systemic transformation

1. Introduction

Entrepreneurship is commonly associated with departure from prevailing assumptions and practices. Entrepreneurs interpret situations differently, combine resources in unfamiliar ways, form relationships across established boundaries, introduce novel value propositions, and sometimes unsettle industries or institutions. Schumpeter (1934) placed “new combinations” at the center of economic development, portraying development not as a smooth, incremental process but as one propelled by entrepreneurial innovation—a view he later elaborated through the concept of creative destruction (Schumpeter, 1942). Subsequent research has examined particular dimensions of this departure. Baron (2006) explains how entrepreneurs recognize opportunities through pattern recognition, connecting seemingly unrelated changes or trends into a coherent pattern that reveals a potential market opportunity. McMullen and Shepherd (2006) explain why and how individuals act under uncertainty, arguing that entrepreneurs translate intentions into action on the basis of subjective beliefs about possible opportunities. Fauchart and Gruber (2011) draw upon social identity theory to demonstrate how founders’ self-concepts imprint ventures’ strategic choices and organizational designs. Hoang and Antoncic (2003) show how interpersonal and interorganizational relationships serve as critical channels through which resource-constrained entrepreneurs obtain social capital, industry knowledge, legitimacy, and financial resources. Sarasvathy (2001) and Baker and Nelson (2005) challenge predictive models of entrepreneurial strategy by demonstrating how entrepreneurs employ effectuation and bricolage, respectively, to act under

uncertainty and resource constraints. Navis and Glynn (2010) explain how new market categories emerge and acquire legitimacy through linguistic framing, identity claims, and relationships among organizations. Battilana et al. (2009), in turn, examine how actors who are embedded within institutions that shape their understandings and actions can nevertheless envision and implement divergent institutional change. Collectively, these research streams illuminate important dimensions of entrepreneurial departure from prevailing reference states. Yet because they focus on different mechanisms and levels of analysis, they do not provide a unified multilevel explanation of how agentic action and uncertainty-bearing judgment give rise to interpretive, identity, relational, behavioral, market, structural, and ultimately systemic forms of entrepreneurial deviance.

This fragmentation leaves a fundamental theoretical question incompletely answered: How can a departure that originates in an actor's judgment under uncertainty become embodied in collective action, validated in a market, and amplified into structural or systemic change? Existing theories explain particular transitions, but entrepreneurship research lacks an integrative account of the expanding locus of entrepreneurial departure. The problem is not merely temporal. It is multilevel: individual interpretations do not automatically aggregate into venture routines; venture novelty does not automatically acquire market legitimacy; market adoption does not automatically reconfigure an industry; and industry change does not necessarily transform a wider system.

This article develops the Theory of Hierarchical Entrepreneurial Deviance (THED). Deviance is used in an analytically neutral and relational sense to mean a material departure from the expectations, beliefs, routines, categories, or arrangements of a specified reference group or system. The construct therefore describes difference from an identifiable reference state; it does not, by itself, imply misconduct, social harm, virtue, a particular degree of novelty, or commercial success. This distinction is important because organizational scholarship has often treated deviance primarily as harmful or dysfunctional behavior, whereas research on constructive and positive deviance demonstrates that departures from prevailing norms may also be honorable, beneficial, or generative. Spreitzer and Sonenshein (2004) advanced an influential definition of positive deviance that departs from traditional perspectives portraying deviance as inherently negative, toxic, or dysfunctional. They conceptualize positive deviance as intentional behavior that departs significantly from the norms of a referent group while conforming to broader standards of honorable conduct. Warren (2003), in turn, developed a typology of workplace deviance based on whether behavior conforms to or departs from referent-group norms and broader societal "hypernorms," thereby distinguishing destructive rule-breaking from constructive forms of nonconformity. THED draws upon this reference-dependent understanding of deviance but does not incorporate positive or negative evaluation into the construct itself. It defines entrepreneurial deviance solely as material departure from a specified reference state and treats the departure's benefits, harms, ethical character, and broader impact as separate evaluative dimensions.

The Theory of Hierarchical Entrepreneurial Deviance (THED) makes four principal theoretical contributions. First, it distinguishes two foundational conditions—agentic action and uncertainty-bearing judgment—from seven loci at which entrepreneurial deviance may be manifested: interpretive, identity, relational, enactive, market, structural, and systemic transformational. Second, it identifies the transition mechanisms through which a departure at one locus may be translated, selected, and amplified across individual, relational, venture, market, field, and system levels. Third, it conceptualizes the hierarchy as an expansion in the scope and potential consequences of entrepreneurial departure rather than as a developmental sequence that ranks some entrepreneurs as superior to others. Fourth, it incorporates feedback, learning, selection, reversal, and recursive interaction, thereby making the framework hierarchical in its levels of analysis but nonlinear in its underlying process. Taken together, these contributions explain why entrepreneurial departures are expected to occur more frequently at lower levels, why their amplification across progressively broader levels becomes increasingly contingent and less probable, and why rare higher-order departures—whether beneficial or harmful—may generate disproportionately extensive and enduring consequences.

2. Conceptual Foundations

2.1 Deviance as a Relational, Reference-Dependent Construct

A behavior or idea cannot be deviant in the abstract; it is deviant only in relation to an identifiable reference state. That reference state may consist of the expectations of a profession, the routines of an organization, the conventions of an industry, the market categories recognized by customers, or the rules of an institutional field. Warren (2003) demonstrates this relational character by developing a four-quadrant typology that classifies workplace behavior according to whether it conforms to or departs from both referent-group norms and broader societal hypernorms. Her framework shows that behavior departing from local organizational norms may be constructive when it conforms to broader moral standards, just as behavior conforming to local norms may nevertheless be destructive when it violates those broader standards. Spreitzer and Sonenshein (2004) similarly define positive deviance as intentional behavior that departs significantly from the norms of a referent group while conforming to broader standards of honorable conduct. THED adopts this reference-dependent logic but

does not incorporate “positive” into the definition of entrepreneurial deviance. A departure may be beneficial, harmful, illegal, ethically ambiguous, commercially unsuccessful, or economically irrelevant. Separating the existence and magnitude of departure from its evaluation prevents THED from equating nonconformity with misconduct, novelty with value, or entrepreneurial consequence with social benefit.

For empirical purposes, entrepreneurial deviance may be represented as $(D(a,r,t))$: the degree to which a focal entrepreneurial manifestation (a)—such as an interpretation, identity claim, relationship, action, artifact, market offering, or structural arrangement—departs from a specified reference state (r) at time (t). The reference state should be identified independently of the focal outcome rather than reconstructed retrospectively after the departure succeeds or fails. Researchers must therefore specify the relevant referent group or system, the particular dimension on which departure occurs, and the historical point at which the comparison is made. Evidence of a reference state may include prevailing industry recipes, dominant designs, recognized market categories, professional standards, established business models, characteristic network structures, institutional rules, or modal organizational practices. This formulation also makes entrepreneurial deviance temporally contingent: an interpretation, practice, or offering that departs substantially from convention when introduced may, through adoption, diffusion, imitation, or institutionalization, eventually become part of the prevailing reference state.

2.2 Action, Uncertainty, and Heterogeneous Judgment

Knight (1921) distinguished measurable risk from genuine uncertainty. Under risk, outcomes can be grouped into sufficiently homogeneous classes, allowing probabilities to be estimated and losses potentially insured. Under uncertainty, by contrast, decisions concern unique or novel situations for which no reliable objective probability distribution can be calculated in advance.

Mises (1949) provides a complementary foundation by conceptualizing the market economy as a dynamic process generated by purposeful human action. Individuals act because they imagine a future state preferable to the present, while entrepreneurs coordinate resources and respond to changing prices and market conditions on the basis of expectations about an inherently uncertain future. Building on this tradition, Foss and Klein (2012) define entrepreneurial judgment as the commitment and deployment of heterogeneous resources when relevant future outcomes cannot be known or calculated beforehand. Because the economic value of an entrepreneurial opportunity can be determined only retrospectively, entrepreneurial judgment is necessarily an *ex ante*, subjective, and idiosyncratic decision to acquire, combine, or reorganize resources today on the basis of an unproven belief about their future uses and value. McMullen and Shepherd (2006) similarly place uncertainty at the center of entrepreneurial action, distinguishing between third-person opportunity beliefs—attention to whether an opportunity may exist for someone—and first-person opportunity beliefs—evaluation of whether that opportunity is feasible and desirable for the focal actor. Entrepreneurial action occurs when such beliefs become sufficiently compelling to translate intention into commitment and behavior. Taken together, these perspectives establish that uncertainty does not itself constitute deviance. Rather, uncertainty creates the conditions for heterogeneous judgment because no objective calculation or algorithm can compel similarly situated actors to interpret the future, value resources, or choose courses of action in the same way.

THED therefore treats agentic action and uncertainty-bearing judgment as foundational elements of entrepreneurial deviance rather than as additional forms of deviance. Agentic action supplies the purposeful effort to create a preferred future, while uncertainty-bearing judgment enables the actor to commit to a course of action without complete knowledge of its probabilities or consequences. Neither element is inherently deviant. Entrepreneurial deviance first becomes analytically observable when heterogeneous judgment generates an interpretation that departs materially from an identifiable reference state, such as prevailing beliefs about what is possible, desirable, legitimate, or economically valuable. This distinction avoids a category error in which uncertainty—an environmental condition—and judgment—a decision process under that condition—are assigned the same ontological status as the interpretive, relational, behavioral, market, or structural departures that constitute the actual loci of entrepreneurial deviance.

2.3 Multilevel Emergence and Recursive Process

Multilevel theory requires the explicit identification of constructs, units of analysis, and mechanisms linking phenomena across levels. Hitt et al. (2007) argue that organizational phenomena are inherently nested: individual actions occur within teams, organizations, industries, and institutional environments, and influences operate both upward and downward across these levels. Kozlowski and Klein (2000) provide a more detailed framework for explaining these cross-level relationships, emphasizing that organizational phenomena develop through dynamic, contextual, and temporal processes rather than existing as isolated micro- or macro-level variables. Top-down forces shape individual and collective action, while bottom-up processes allow lower-level attributes and interactions to emerge as higher-level structures. Consequently, higher-level phenomena cannot be assumed to be simple aggregates of lower-level attributes; they may emerge through composition, compilation, interaction,

selection, and accumulation over time. Kim et al. (2016) demonstrate that entrepreneurship is especially well suited to multilevel analysis because entrepreneurial action is embedded within teams, networks, ventures, support organizations, markets, and institutions. They identify a persistent theoretical gap created by the field's tendency to focus either on micro-level phenomena, such as individual cognition, identity, and traits, or on macro-level phenomena, such as institutions and regulatory environments, while giving insufficient attention to meso-level structures. Founding teams, networks, accelerators, associations, ecosystems, and regional clusters can serve as critical mechanisms through which individual entrepreneurial action is translated into organizational and broader economic outcomes. Selden and Fletcher (2015) similarly address the fragmentation of entrepreneurship research by conceptualizing the entrepreneurial journey as an emergent hierarchical system of artifact-creating processes rather than as a collection of isolated traits, cognitions, networks, and venture activities. Taken together, these perspectives provide the multilevel foundation for THED: entrepreneurial deviance originates in individual action and judgment, becomes socially organized through relational and venture-level mechanisms, and may—through contingent processes of translation, selection, diffusion, and amplification—emerge as market-, field-, or system-level change. They also establish why the levels of THED must be analytically distinguished and why movement between them must be explained through explicit cross-level mechanisms rather than presumed from the presence of lower-level departure alone.

THED extends this multilevel logic from the emergence of entrepreneurial artifacts to the emergence and amplification of norm-relative departure. Entrepreneurial deviance becomes manifested at a broader locus only when a departure at one level is translated into the unit of analysis and reference state associated with another. An unconventional interpretation, for example, becomes relational deviance only when it changes whom the entrepreneur enrolls, how relationships are configured, or how participating actors interact. Similarly, a novel artifact becomes realized market deviance only when external actors adopt it, exchange value for it, or reorganize their behavior around it in ways that depart from prevailing market arrangements. Lower-level departure therefore creates the possibility—but not the inevitability—of higher-level departure. THED is consequently not a ladder of intentions or a deterministic sequence of stages; it is a recursive process of contingent cross-level translation, selection, and amplification through which entrepreneurial deviance may expand, stall, reverse, or remain confined to its original locus.

3. The Theory of Hierarchical Entrepreneurial Deviance

Building upon the preceding section's reference-dependent conception of deviance, theory of entrepreneurial judgment under uncertainty, and multilevel account of emergence, this section formally specifies the Theory of Hierarchical Entrepreneurial Deviance. THED defines hierarchical entrepreneurial deviance as an emergent, recursive multilevel process through which purposeful human action under uncertainty may depart from prevailing interpretive, identity, relational, behavioral, market, structural, and systemic reference states. As summarized in Table 1, "THED Constructs, Level Names, Units, Reference States, and Mechanisms," the theory comprises nine analytically distinct levels: two foundational elements—agentic action and uncertainty-bearing judgment—and seven loci at which entrepreneurial deviance may become manifested—interpretive, identity, relational, enactive, market, structural, and systemic transformational. For each level, the table distinguishes the formal theoretical construct from its more accessible level name and identifies its corresponding unit of analysis, reference state, and central mechanism. These distinctions clarify both where entrepreneurial departure resides and how it may be translated and amplified through identity internalization, stakeholder enrollment, collective enactment, market selection, diffusion, and recursive reinforcement. The discussion that follows examines each construct in ascending order, defining its theoretical meaning, specifying its role within THED, and explaining the mechanism through which it may create the possibility of departure at a broader level. This ordering should not be interpreted as a deterministic progression: entrepreneurial deviance may stall, reverse, recur, or remain confined to a lower-level locus, while higher-order manifestations should occur less frequently but, when realized, may generate broader and more enduring consequences.

Table 1. THED Constructs, Level Names, Units, Reference States, and Mechanisms

Level	Construct	Level Name	Unit of Analysis	Reference State	Central Mechanism
1	Agentic action	Purposeful Human Action	Individual actor	Present state or routine	Purposeful intervention
2	Uncertainty-bearing judgment	Uncertainty	Decision	Available knowledge and calculable alternatives	Commitment without complete probabilities
3	Interpretive deviance	Cognitive Deviance	Interpretation	Prevailing beliefs and causal assumptions	Divergent sensemaking
4	Identity deviance	Identity Deviance	Self/role identity	Legitimate or expected role conceptions	Identity internalization
5	Relational deviance	Relational Deviance	Dyad/team/network	Established ties and exchange patterns	Stakeholder enrollment and recombination
6	Enactive deviance	Process Deviance	Venture process/routine	Established decision logics and practices	Experimentation and collective enactment
7	Market deviance	Market Deviance	Venture–market interface	Offerings, categories, exchange mechanisms	Adoption and market selection
8	Structural deviance	Structural / System-Level Transformation	Industry/field/ecosystem	Competitive and institutional arrangements	Diffusion, response, displacement
9	Systemic transformational deviance	Caruso-level deviance	Economic/social system	Enduring system architecture	Recursive amplification and creative destruction

3.1 Level 1: Agentic Action

Agentic action refers to purposeful, future-oriented conduct through which an individual seeks to alter an existing state in pursuit of a preferred but unrealized state. Its unit of analysis is the individual actor, and its central mechanism is purposeful intervention. Although agency is foundational to entrepreneurship—because opportunities, artifacts, and ventures cannot be developed without action—neither agency nor action is inherently entrepreneurial or deviant. Routine action that reproduces a familiar solution under relatively stable conditions may entail little or no departure from an established reference state. Entrepreneurial relevance increases when an actor seeks to bring about a future that cannot be reliably inferred from existing information, experience, or routines. Dimov (2011) supports this distinction by conceptualizing an entrepreneurial opportunity not as a fully formed object awaiting recognition, but as an emergent possibility that develops through an unfolding process of interpretation, action, and interaction. Ford (1996) similarly distinguishes habitual action, which reproduces familiar behavioral patterns, from creative action, which departs from established alternatives. Felin and Zenger (2009), in turn, conceptualize entrepreneurs as “theorists” who formulate conjectures about possible futures and organize action around subjective beliefs that cannot be derived straightforwardly from existing data or historical experience. Together, these perspectives establish the scholarly foundation for purposeful action beyond established routines. THED extends them by treating agentic action as a foundational condition rather than as a locus of deviance in itself: entrepreneurial deviance becomes observable

only when purposeful intervention produces a material departure from a specified reference state.

Proposition 1 (agency-to-judgment). The less reliably the actions required to realize a desired future state can be inferred from existing knowledge and established routines, the more strongly agentic action will depend on uncertainty-bearing judgment.

Proposition 1:

- distinguishes the desired end from the means required to attain it;
- connects uncertainty specifically to the inadequacy of existing knowledge and routines;
- preserves uncertainty-bearing judgment as the mechanism enabling action when reliable guidance is unavailable; and
- avoids implying that agentic action is itself deviant.

3.2 Level 2 - Uncertainty-Bearing Judgment

Uncertainty-bearing judgment refers to commitment to a course of action when relevant outcomes, probabilities, means–ends relationships, or consequences cannot be known completely in advance. It is a decision process rather than a stable personality trait and becomes observable when entrepreneurs commit resources, attention, effort, or reputation despite such incompleteness. Because genuine uncertainty precludes identification of a uniquely calculable optimum, actors exposed to similar information may reasonably reach different conclusions about what is possible, desirable, or worth pursuing. Packard, Clark, and Klein (2017) reinforce this processual understanding by conceptualizing entrepreneurial judgment not as an isolated choice, but as a continuing process of commitment, reassessment, and revision as actors acquire information and encounter changing conditions. Their framework also demonstrates that uncertainty regarding outcomes, alternatives, and causal relationships may persist—and change form—even after action has begun. Townsend, Hunt, McMullen, and Sarasvathy (2018) further distinguish uncertainty from related knowledge problems, including ambiguity, complexity, equivocality, and ignorance, and explain why probabilistic reasoning becomes inadequate when possible outcomes or the consequences of action cannot be fully specified. Kor, Mahoney, and Michael (2007), in turn, develop a subjectivist account in which entrepreneurial perceptions are shaped by actors' personal knowledge, skills, resources, and prior experiences within firms, teams, and industries. Because these endowments vary, actors may perceive different productive possibilities and assign different values to the same resources or circumstances. Collectively, these perspectives establish that entrepreneurial judgment under uncertainty is inherently processual, provisional, and heterogeneous. THED extends this foundation by proposing that such heterogeneity becomes entrepreneurially deviant when an actor's judgment materially departs from the prevailing interpretation of a specified reference group.

Proposition 2 (Uncertainty-bearing judgment). Under genuine uncertainty, greater heterogeneity among actors in relevant knowledge, experience, imagination, aspirations, and attention will increase variance in their judgments, thereby increasing the likelihood that one or more interpretations will materially depart from the prevailing beliefs of a specified reference group.

Proposition 2:

- specifies that heterogeneity exists among actors confronting a comparable situation;
- includes imagination, which is important when futures cannot be calculated;
- requires a material departure, consistent with THED's definition of deviance;
- identifies the beliefs of a specified reference group; and
- makes the transition from judgment to interpretive deviance explicit

3.3 Level 3: Interpretive Deviance

Interpretive deviance refers to an actor's construction or adoption of a meaning, possibility, causal relationship, or means–ends configuration that departs materially from the prevailing interpretations of relevant others. Its unit of analysis is the actor's interpretation, and its reference state is the prevailing interpretive consensus within a specified group. Entrepreneurial cognition research identifies several processes through which such interpretations may arise. Baron (2006), for example, explains how pattern recognition enables entrepreneurs to connect changes in technology, markets, policies, and other domains into configurations that suggest potential opportunities. Grégoire et al. (2010) show that opportunity recognition can involve structural alignment, through which actors identify underlying correspondences between technologies and markets despite differences in their surface features. Cornelissen and Clarke (2010) similarly demonstrate how analogies and metaphors enable entrepreneurs both to imagine novel venture possibilities and to render those possibilities sufficiently intelligible and credible to attract external support. Weick's (1995) sensemaking perspective provides a broader theoretical

foundation by portraying actors as enacting and interpreting equivocal environments rather than simply retrieving objective meanings from them; sensemaking is an ongoing, socially situated process through which actors construct sufficiently plausible accounts to guide action. Dimov (2007) extends this processual logic to entrepreneurial opportunities, arguing that opportunities are neither fully formed objects awaiting discovery nor isolated moments of individual insight, but evolving possibilities that develop through action, interaction, and external feedback. Collectively, these established research streams explain how entrepreneurial interpretations originate, develop, and become communicable. THED's distinctive contribution is to specify when such an interpretation constitutes deviance: not merely when it is creative or novel, but when it departs materially from an observable interpretive reference state held by a specified group.

Proposition 3 (interpretation-to-identity). The more consequential and self-relevant an actor perceives a materially deviant entrepreneurial interpretation to be, and the more consistently the actor enacts and defends that interpretation over time, the more likely it is to become incorporated into the actor's role identity.

Proposition 3a (contestation and identity internalization). Social contestation will strengthen the relationship between sustained commitment to a deviant entrepreneurial interpretation and its incorporation into an actor's role identity when contestation elicits identity work and reaffirmation; it will weaken that relationship when contestation induces disengagement or abandonment.

Proposition 3 and 3a separates three concepts that should not be conflated:

- Self-relevance explains why the interpretation matters to the actor.
- Sustained enactment and defense constitute the mechanism through which the interpretation becomes part of identity.
- Social contestation is a boundary condition that can intensify or disrupt that process.

3.4 Level 4: Identity Deviance

Identity deviance occurs when an actor incorporates a materially nonconforming entrepreneurial interpretation into the self-concept, such that pursuing the departure becomes consistent with who the actor understands the self to be. Its unit of analysis is the actor's role identity, and its reference state is the prevailing identity expectations or role scripts of a specified group. Once internalized, identity can supply persistence, direction, and evaluative criteria for subsequent action. Fauchart and Gruber (2011) demonstrate that founders' social identities influence whom they seek to benefit, which customer needs they prioritize, which capabilities they develop, and how they structure their ventures. Their distinction among Darwinian, communitarian, and missionary founder identities indicates that venture creation does not follow a uniform identity logic; instead, founders' conceptions of who they are and for whom they act become imprinted on important features of their ventures. Hoang and Gimeno (2010) similarly conceptualize organizational founding as a role transition through which individuals confront role novelty and conflict while incorporating an emergent founder identity into their broader self-concepts. Identity deviance, however, is not required for every entrepreneurial act. Actors may experiment instrumentally without making a departure central to the self, and entrepreneurial identity may develop through action rather than necessarily preceding it (Grimes, 2018; Hoang & Gimeno, 2010). THED therefore predicts identity internalization primarily when a departure requires sustained commitment amid social doubt, sacrifice, role conflict, or ambiguity. Identity can both motivate and constrain subsequent action: identity centrality may promote commitment and perseverance, whereas excessive psychological ownership of an entrepreneurial idea may impede revision in response to disconfirming evidence (Grimes, 2018; Hoang & Gimeno, 2010). Thus, THED treats identity not as a universal antecedent of entrepreneurial action, but as a contingent locus of deviance that emerges when sustained commitment transforms a nonconforming interpretation into part of who the actor understands the self to be.

Proposition 4 (identity-to-relational deviance). The more strongly an actor identifies with a materially deviant entrepreneurial interpretation, the greater the effort the actor will devote to seeking, creating, or reconfiguring relationships that depart from prevailing relational patterns and provide the validation, knowledge, legitimacy, resources, or complementary capabilities required to enact that interpretation.

Proposition 4a (identity rigidity and relational adaptation). The more rigidly an actor's identity is attached to a deviant entrepreneurial interpretation, the less responsive the actor will be to disconfirming relational feedback and the less likely the actor will be to adaptively reconfigure relationships that no longer support enactment of that interpretation.

These propositions provide a clear theoretical sequence: interpretive deviance → identity internalization → relational mobilization → relational deviance

3.5 Level 5: Relational Deviance

Relational deviance refers to the formation, abandonment, recombination, or redefinition of social and economic

relationships in ways that depart materially from prevailing interaction patterns and enable pursuit of an entrepreneurial conception. Its unit of analysis may be a dyad, founding team, network, or broader stakeholder constellation, and its reference state is the established relational configuration within a specified social, organizational, or market context. Network research establishes that relationships provide entrepreneurs with information, financial and social resources, influence, complementary capabilities, and legitimacy, while the content and governance of those relationships evolve as ventures develop (Hoang & Antoncic, 2003). Stuart et al. (1999) further demonstrate that the prospects of young ventures depend not only on their technological capabilities but also on endorsements conveyed through affiliations with prominent strategic partners and investors. Such affiliations provide quality signals that reduce external uncertainty and enhance organizational legitimacy. Aldrich and Fiol (1994) distinguish between cognitive legitimacy—the extent to which a new activity is known and comprehensible—and sociopolitical legitimacy—the extent to which it is accepted by influential stakeholders, governments, and the wider public. Together, these established research streams explain why relationships matter to venture formation, resource acquisition, and survival.

THED's distinctive contribution at this locus is not the possession of network ties, but departure from an established relational configuration—for example, bridging domains that ordinarily remain disconnected, enrolling nontraditional partners, redefining customers as co-creators, bypassing established intermediaries, or assembling an atypical founding team. Fisher, Kotha, and Lahiri (2016) show that developing ventures confront multiple legitimacy thresholds as they engage audiences with differing expectations across stages of the venture life cycle. Relational reconfiguration must therefore remain responsive to changing resource providers and legitimacy demands. Yet relational novelty also creates coordination and legitimation challenges: entrepreneurs must make their departures sufficiently comprehensible and plausible for others to participate without eliminating the distinctiveness that makes those departures potentially valuable. Navis and Glynn (2011) capture this tension through the concept of legitimate distinctiveness, arguing that entrepreneurial identity claims gain favorable evaluation when they connect a venture to recognizable categories while differentiating it from existing alternatives. Lounsbury and Glynn (2001) similarly explain how entrepreneurial narratives connect unfamiliar ventures to established cultural understandings, thereby facilitating legitimacy and resource acquisition. THED extends these insights by conceptualizing stakeholder enrollment as a cross-level translation mechanism through which an individually held departure becomes embedded in a socially shared—and materially nonconforming—relational configuration.

Proposition 5 (relational-to-enactive deviance). The greater the capability, complementarity, and commitment of a stakeholder constellation organized around a materially deviant entrepreneurial interpretation, the more likely that constellation will translate the interpretation through coordinated collective action into venture routines and practices that materially depart from an established reference state.

Proposition 5 clarifies the cross-level sequence: relational deviance → stakeholder mobilization → coordinated collective action → enactive deviance

Proposition 5a (legitimation and collective enactment). The positive relationship between stakeholder-constellation capacity and enactive deviance will be strengthened when legitimacy work renders the proposed departure sufficiently comprehensible and plausible to secure the cooperation or tolerance of consequential external audiences.

3.6 Level 6: Enactive Deviance

Enactive deviance refers to the observable performance of venture-level actions, routines, and practices that depart materially from an established behavioral reference state. Its unit of analysis is collective venture behavior, and its reference state consists of the prevailing routines, practices, or behavioral expectations within a specified organizational, market, professional, or entrepreneurial context. The construct captures the transition from believing differently to doing differently, but it is not synonymous with any particular entrepreneurial method.

Entrepreneurship research identifies causation, effectuation, bricolage, improvisation, and related approaches as distinct but potentially overlapping modes of entrepreneurial action (Fisher, 2012). Sarasvathy (2001), for example, contrasts predictive causation with effectuation, a logic through which entrepreneurs begin with their identities, knowledge, and relationships—“who I am,” “what I know,” and “whom I know”—and seek to control aspects of an unpredictable future through affordable loss, stakeholder commitments, and the exploitation of contingencies. Baker and Nelson (2005) provide a complementary account of entrepreneurial bricolage, defined as making do by recombining resources at hand to address new problems or opportunities. Their research demonstrates that resource constraints do not determine action uniformly because entrepreneurs differ in the uses they imagine for available resources and in whether they enact or challenge perceived environmental limitations. Miner et al. (2001) similarly conceptualize improvisation as the temporal convergence of planning and execution, showing that real-time action can solve immediate problems while also generating knowledge that

becomes embedded in subsequent routines and organizational memory.

None of these methods, however, is inherently deviant. A conventional planning practice may constitute enactive deviance in a context governed primarily by improvisation, just as improvisation may be conventional within an ecosystem where experimentation and rapid adaptation are widely expected. The classification must therefore be established empirically by comparing observable venture behavior with a specified reference state. Enactment also gives entrepreneurial conceptions observable or communicable form through artifacts such as prototypes, narratives, routines, organizational arrangements, and exchange structures. Berglund et al. (2020) conceptualize entrepreneurship as an artifact-centered design process in which opportunity conceptions acquire progressively more concrete form through experimentation or transformation. These artifacts externalize entrepreneurial judgment, facilitate stakeholder coordination, and expose an entrepreneurial conception to evaluation, feedback, and revision.

THED extends this design perspective by treating artifact creation as a mechanism through which an individually or relationally supported departure becomes observable, while reserving the designation of enactive deviance for artifacts and associated practices that depart materially from an empirically specified behavioral reference state.

Proposition 6 (enactment-to-market deviance). Enactive deviance is more likely to be translated into market deviance when external actors perceive its embodied artifact or value proposition as sufficiently distinctive, comprehensible, and valuable to motivate adoption or exchange, and when their responses collectively produce a material departure from prevailing patterns of market adoption, valuation, exchange, or categorization.

Proposition 6 suggests the causal sequence is: enactive deviance → artifact exposure → external evaluation → adoption or exchange → market deviance

3.7 Level 7: Market Deviance

Market deviance refers to a consequential departure from prevailing offerings, value propositions, customer definitions, market categories, business models, or exchange mechanisms that achieves observable adoption by market participants. Its unit of analysis is the venture–market interface, and its reference state consists of the prevailing patterns of offering, valuation, categorization, adoption, and exchange within a specified market at a given time. This locus introduces external selection: customers purchase or switch, investors commit capital, complementors adapt their activities, intermediaries alter established practices, or users reorganize their behavior around the offering. The market value of a novel offering is not self-evident, however, because external actors must interpret its unfamiliar characteristics and determine whether it is useful, credible, and worth adopting.

Rindova and Petkova (2007) show that the perceived value of a technological innovation is socially constructed and that product form supplies functional, symbolic, and aesthetic cues that help customers comprehend and evaluate technological novelty. Market deviance is therefore realized only when external responses convert an enacted departure into observable changes in market behavior. Novelty that fails to produce adoption or exchange remains attempted rather than realized market deviance.

The translation from enactive to market deviance depends partly on the paradox of optimal distinctiveness. Ventures must appear sufficiently different from existing alternatives to attract attention and justify adoption, yet sufficiently familiar to be understood as plausible and legitimate (Aldrich & Fiol, 1994; Navis & Glynn, 2010; Zhao et al., 2017). Markets and market categories are not created by an entrepreneur acting alone. Santos and Eisenhardt (2009) demonstrate that entrepreneurs in nascent fields participate in constructing markets by claiming market positions, demarcating organizational and competitive boundaries, and seeking control over emerging market spaces. Rosa et al. (1999) similarly conceptualize product markets as socially constructed knowledge structures that evolve through feedback between producers and consumers. Their study shows that emerging categories begin as unstable and incomplete conceptual systems but become more coherent as market participants develop shared labels, prototypes, and expectations. Market deviance is consequently relationally validated, collectively produced, and historically situated. As adoption expands, competitors imitate, category meanings stabilize, and once-unfamiliar exchange practices become taken for granted, an offering may move from deviant to conventional even when its physical characteristics remain unchanged.

The cited scholarship explains how innovations acquire perceived value, how markets are constructed, and how categories stabilize; THED adds the concept of market deviance as a reference-dependent, market-level departure that exists only after external adoption or exchange makes the departure socially consequential.

Proposition 7 (market-to-structural deviance). As the adoption of a market-deviant offering becomes more extensive, persistent, “or” strategically consequential, competitors, complementors, suppliers, professional groups, regulators, and other interdependent field actors will be more likely to reconfigure established roles, relationships, resource flows, standards, or governance arrangements, thereby translating market deviance into structural deviance.

Proposition 7 explains the resulting transition as: market deviance → diffusion and strategic consequence → interdependent actor responses → structural deviance

Of particular importance, Proposition 7 does not require widespread adoption in every case. The use of “or” recognizes three possible pathways:

- Extensive adoption creates structural pressure through breadth and diffusion.
- Persistent adoption demonstrates that the departure is durable rather than temporary.
- Strategically consequential adoption may provoke structural reconfiguration even when adoption remains limited—for example, when a platform, regulatory innovation, or new exchange mechanism threatens established roles or sources of advantage.
- An isolated purchase, competitive reaction, or imitation would not by itself constitute structural deviance. Structural deviance occurs only when market responses begin to alter the architecture through which field participants coordinate, compete, exchange resources, exercise authority, or establish standards.

3.8 Level 8: Structural Deviance

Structural deviance refers to the reconfiguration of established competitive, technological, organizational, network, categorical, or institutional arrangements resulting from the diffusion and strategic consequences of market deviance. Its unit of analysis is an industry, ecosystem, organizational field, or institutional field, and its reference state comprises the prevailing roles, relationships, standards, resource flows, governance mechanisms, and category structures within that system. The diagnostic question therefore shifts from whether an entrepreneur introduced something novel to whether adoption of the departure prompted other field participants to alter how they coordinate, compete, exchange resources, establish standards, or exercise authority.

Leblebici et al. (1991), for example, demonstrate how practices initially introduced by peripheral actors can accumulate over time and transform an interorganizational field, illustrating that structural change is historical, distributed, and emergent rather than necessarily the product of a single decisive intervention. Research on industry creation and institutional entrepreneurship shows that structural transformation involves mobilizing resources, constructing frames, forming coalitions, theorizing new practices, and changing rules, categories, and standards (Aldrich & Fiol, 1994; Battilana et al., 2009; Hargrave & Van de Ven, 2006). Greenwood et al. (2002) identify theorization as a central mechanism through which field-level problems are specified, proposed alternatives are justified, and new practices acquire legitimacy and diffuse through professional communities. Garud et al. (2002) similarly demonstrate that establishing a new technological standard requires institutional entrepreneurs to mobilize cooperation among interdependent—and potentially competing—actors while managing the enabling and constraining effects of the emerging standard.

Collectively, these studies establish that structural change is rarely attributable to a solitary heroic entrepreneur; it develops through distributed action, coalition formation, opposition, imitation, negotiation, regulation, and institutional work. THED extends this literature by conceptualizing structural deviance as the field-level amplification of a market departure: although an originating venture may initiate the process, the departure becomes structural only when interdependent actors collectively reconfigure the arrangements that organize the field.

Proposition 8 (structural-to-systemic). The more extensively structural deviance propagates across interdependent fields or industries and produces mutually reinforcing changes in technologies, institutions, actor behaviors, resource allocations, and cultural expectations, the more likely it is to become systemic transformational deviance; this transition is strengthened when the resulting arrangements become institutionalized and persist independently of the originating actors.

Three important aspects of Proposition 8: First, “the more extensively” provides a variable relationship that is more testable. Second, “interdependent fields or industries” emphasizes that systemic transformation requires propagation across connected domains, not merely simultaneous changes in unrelated settings. Third, the institutionalization clause distinguishes widespread but temporary disruption from durable systemic transformation.

Proposition 8 remains consistent with THED’s central premise that higher-order deviance is an emergent and distributed outcome. Originating entrepreneurs may initiate structural departures, but systemic transformation occurs only when those departures become embedded in broader configurations that reproduce themselves without continuing dependence on the original ventures or actors.

3.9 Level 9: Systemic Transformational Deviance—The Caruso Level

Systemic transformational deviance is a consequential departure from the prevailing configuration of multiple interdependent fields or industries that alters the technologies, institutions, behaviors, resource allocations, and

cultural expectations through which an economic or social system is organized. Its unit of analysis is the system of interdependent fields, and its reference state is the established configuration of arrangements that ordinarily reproduces that system over time. Unlike structural deviance, which reconfigures the arrangements within a particular industry, ecosystem, or organizational field, systemic transformational deviance propagates across field boundaries and generates mutually reinforcing changes among multiple domains. The transformation becomes systemic when these changes are institutionalized, recursively reproduced, and capable of persisting beyond the originating venture and actors.

THED designates this highest locus the Caruso level, drawing on Schumpeter's analogy between entrepreneurial aptitude and exceptional singing ability. Schumpeter argued that "the carrying out of new combinations is a special function" performed by people considerably less numerous than those possessing the objective opportunity to undertake them (Schumpeter, 1934/1983, p. 83). In the accompanying footnote, he compared entrepreneurial aptitude with singing ability. Although many people may be able to sing, increasingly exceptional ability is possessed by progressively fewer individuals until "we come finally to the Carusos" (pp. 83–84).

The reference was to Enrico Caruso, whose extraordinary operatic ability represented the extreme upper tail of a widely but unequally distributed human capacity. Schumpeter's theoretical point was that exposure to an opportunity, possession of resources, or formal authority does not ensure the capacity to depart from established economic routines and successfully carry out a new combination.

Importantly, Schumpeter described both a type of conduct and, insofar as that conduct is available to relatively few people, a type of person. His argument therefore should not be reduced to a static personality-trait explanation. The entrepreneurial distinction becomes meaningful through conduct: departing from familiar routines, overcoming resistance, assembling a new combination, and inducing others to respond to it. The Caruso analogy nevertheless makes a strong heterogeneity claim. People may differ not only in their access to entrepreneurial possibilities but also in their capacities to imagine departures, act beyond established routines, sustain commitment, mobilize others, and carry a novel combination into economic life. At the extreme of this distribution are actors whose entrepreneurial conduct initiates changes of unusual scope and consequence.

THED adopts this Schumpeterian insight in a bounded form. It does not assert that every entrepreneurial departure requires a Caruso-like individual. Agentic action, uncertainty-bearing judgment, and lower-level interpretive, identity, relational, enactive, and market departures may be widely distributed. Nor does THED assume that exceptional individual capacity is sufficient to produce systemic transformation. Progression through the hierarchy depends on stakeholder enrollment, collective enactment, artifact creation, market adoption, diffusion, coalition formation, institutional work, complementary innovation, and recursive reinforcement. Even an unusually capable entrepreneur cannot single-handedly transform a system; customers, employees, investors, competitors, complementors, professional groups, regulators, and institutional actors participate in selecting, modifying, opposing, legitimating, and extending the originating departure.

The Caruso-level designation instead identifies the rare conjunction of exceptional entrepreneurial conduct and successful multilevel amplification. An originating actor may provide the interpretation, commitment, and catalytic intervention that set the process in motion, but the resulting transformation becomes systemic only when other actors reorganize behavior across multiple interdependent domains. Systemic transformation is therefore neither the direct expression of an exceptional personality nor the simple aggregation of lower-level departures. It is an emergent outcome produced when a departure propagates across levels, becomes embedded in complementary arrangements, and acquires sufficient independence from its originator to reproduce itself.

This distinction protects THED from heroic-entrepreneur explanations while retaining Schumpeter's insight concerning the rarity of transformative entrepreneurial agency. Structural and systemic outcomes are co-produced by historical conditions, resource availability, institutional openness, complementary actors, opposition, timing, and selection as well as by the originating entrepreneur. Consequently, systemic impact should not be inferred solely from an actor's presumed talent, nor should exceptional talent be inferred retrospectively from a successful outcome. The empirical designation of Caruso-level deviance requires evidence that an entrepreneurial departure generated persistent, mutually reinforcing changes across multiple fields or industries and altered the reference configuration of the broader system.

Finally, "Caruso-level" does not imply that the resulting transformation is beneficial, ethical, or commercially desirable. Consistent with THED's analytically neutral definition of deviance, systemic transformation may produce substantial value while also imposing displacement, inequality, environmental costs, or institutional disruption. The label describes the rarity, scope, depth, and durability of the departure—not its moral worth. In this sense, Schumpeter provides THED with an account of the exceptional entrepreneurial conduct that may initiate transformation, whereas THED contributes the hierarchical and recursive explanation of how such conduct can be translated into a systemic outcome.

Proposition 9 (frequency–consequence). Across successive loci of THED, the probability that an entrepreneurial departure will be amplified to the next locus decreases as the required conjunction of catalytic entrepreneurial conduct, stakeholder enrollment, adoption, coordination, complementary change, institutionalization, and recursive reinforcement becomes progressively more demanding; conditional on successful amplification, the resulting changes are expected to become broader in scope, deeper in consequence, more persistent over time, and less dependent on the originating actors.

Proposition 9 specifies the expected distribution of departures across the THED hierarchy: realized entrepreneurial deviance should become progressively less frequent at broader loci, while its potential consequences should become more extensive and durable. This declining frequency does not imply that actors operating at lower loci are inferior, that all ventures should pursue field-level or systemic transformation, or that a greater departure necessarily creates greater economic, social, or moral value. Nor does it attribute higher-order transformation solely to the exceptional capacity of an originating entrepreneur. Rather, it predicts that each cross-level transition requires an increasingly demanding and improbable conjunction of individual conduct, collective participation, environmental conditions, and reinforcing mechanisms.

Systemic transformational deviance—the Caruso level—is therefore exceptionally rare because catalytic entrepreneurial conduct must coincide with widespread adoption, cross-field propagation, complementary change, institutionalization, and recursive reproduction sufficient for the resulting arrangements to persist beyond their originators.

4. Hierarchical in Level, Recursive in Process

The preceding section orders THED's constructs according to the expanding locus of entrepreneurial departure—from the individual actor and interpretation to relationships, venture practices, markets, fields, and ultimately economic or social systems. This hierarchy should not be interpreted as a deterministic stage model, a fixed temporal sequence, or a scale on which some entrepreneurs are inherently superior to others. A higher locus denotes a departure situated in a broader unit of analysis and evaluated against a more encompassing reference state.

Movement toward a broader locus occurs only when a departure is translated into that locus: an unconventional interpretation does not become relational deviance unless it changes a relational configuration; enactive deviance does not become market deviance without external adoption or exchange; and market deviance does not become structural deviance unless interdependent field participants alter established arrangements in response. The hierarchy therefore imposes analytical discipline on claims of entrepreneurial consequence without assuming that every departure will—or should—progress upward.

Although the loci are hierarchically differentiated, the process connecting them is recursive. Recursion means that manifestations at one locus alter the information, constraints, relationships, resources, and reference states that shape subsequent action at the same or other loci. Upward movement occurs through the translation and amplification mechanisms specified in Section 3, including identity internalization, stakeholder enrollment, collective enactment, artifact creation, market adoption, diffusion, institutionalization, and recursive reinforcement. Downward feedback occurs when market, field, or systemic responses reshape lower-level judgment and action. Market rejection may cause an entrepreneur to reinterpret an opportunity; stakeholder withdrawal may weaken identification with a venture conception; regulatory intervention may redirect venture practices; and structural change may create new uncertainties requiring renewed judgment by the originating venture. Lateral interaction also occurs when developments within a locus—such as conflict among partners, imitation among competitors, or competing category claims—alter the direction and viability of a departure. THED thus incorporates both bottom-up emergence and top-down contextual influence, consistent with multilevel theory (Kozlowski & Klein, 2000).

Three temporal qualifications follow. First, analytically distinct loci may overlap and coevolve. Interpretations, identities, relationships, venture routines, and artifacts often develop through reciprocal interaction rather than in discrete intervals. A founder's identity may influence stakeholder enrollment while stakeholder reactions simultaneously reshape that identity; experimentation may modify both the venture's artifact and the interpretation on which it was based. The levels distinguish where departure resides, not when it must occur. Second, trajectories may appear to skip an adjacent locus because the relevant translation happens rapidly, relies on a preexisting structure, or remains empirically unobserved. A platform with an established network, for example, may convert an enacted artifact into widespread market adoption with unusual speed. Such temporal compression does not eliminate the need to identify the mechanism through which the artifact became adopted, exchanged, or incorporated into market behavior. Third, not every locus is required in identical form for every trajectory. Identity deviance, for example, is contingent rather than universal, and existing stakeholder constellations may substitute for newly constructed relationships. Nevertheless, a broader manifestation cannot be inferred solely from the presence of a lower-level departure; evidence must establish that the departure has

entered the unit and altered the reference state associated with the broader locus.

Entrepreneurial departures may also stall, contract, reverse, or become absorbed into existing arrangements. THED refers to these processes collectively as de-amplification. An interpretation may be abandoned before collective enactment, an unusual relationship may dissolve, an experimental venture practice may fail to attract adopters, or a market-deviant offering may be incorporated into an incumbent category without altering field structure. Even an initially structural departure may remain confined to one field rather than propagate across the interdependent domains required for systemic transformational deviance. De-amplification does not necessarily indicate that no entrepreneurship occurred; it indicates that the departure did not become manifested at a broader locus. Conversely, a departure may leave durable effects at one locus even after the originating venture fails or the original actor withdraws.

The reference-dependent formulation ($D(a,r,t)$) makes another form of temporal change visible: successful amplification may eventually reduce the measured deviance of the focal manifestation. As adoption, imitation, category stabilization, or institutionalization changes the relevant reference state, a once-unconventional interpretation, practice, or arrangement may become normal. Thus, a decline in deviance over time does not necessarily imply declining historical consequence. It may instead indicate that the departure has become sufficiently diffused and institutionalized to redefine the reference state against which subsequent action is evaluated. At the Caruso level, systemic transformational deviance ultimately produces a new configuration of technologies, institutions, behaviors, resource allocations, and cultural expectations that no longer depends on the originating entrepreneur. That configuration then becomes part of the environment confronting later actors and may generate new uncertainties, constraints, and possibilities for subsequent entrepreneurial departure.

Learning is the principal integrative mechanism through which these recursive effects influence later judgment and action. Entrepreneurs and participating stakeholders learn through experimentation, artifact evaluation, stakeholder reactions, resource constraints, legitimacy contests, market selection, regulatory responses, setbacks, and unexpected uses. Entrepreneurial judgment is consequently subject to continuing commitment, reassessment, and revision after action begins (Packard et al., 2017). Sensemaking changes as actors enact and interpret their environments (Weick, 1995), while experimentation and stakeholder interaction progressively reshape entrepreneurial possibilities and the artifacts through which they are expressed (Berglund et al., 2020; Dimov, 2007). Improvised actions may also become incorporated into organizational memory and later routines, allowing initially deviant practices to become internally established patterns (Miner et al., 2001).

Learning, however, should not be equated automatically with improvement, accurate updating, or upward amplification. Feedback may be ambiguous, delayed, politically contested, or interpreted through a rigid identity. Actors may learn to revise a departure, persist with it, redirect it toward another reference state, or abandon it; they may also misinterpret evidence, escalate commitment, or reproduce unsuccessful practices. Moreover, learning is distributed rather than confined to the originating entrepreneur. Customers learn how to use and evaluate an offering, partners learn how to coordinate around it, competitors learn whether to imitate or resist it, and regulators and professional groups learn how to classify and govern it. These interacting learning processes help determine whether a departure is selected, modified, normalized, opposed, or amplified.

THED is therefore hierarchical in the location and potential consequence of entrepreneurial deviance but recursive and nonlinear in the process through which that deviance develops. The hierarchy identifies the unit and reference state at which departure is manifested; recursion explains how action and feedback continually reshape the conditions governing its subsequent trajectory. This combination allows THED to explain not only how an entrepreneurial departure may expand from individual judgment to systemic transformation, but also why it may remain localized, change direction, become conventional, de-amplify, or generate new cycles of entrepreneurial judgment and departure.

5. Construct Boundaries and Rival Explanations

The preceding sections define THED as a reference-dependent, multilevel theory of how entrepreneurial departures may originate, become enacted, and expand across progressively broader loci. Establishing the theory's contribution therefore requires specifying what THED does—and does not—explain. THED is not a general theory of novelty, venture formation, innovation, performance, disruption, or institutional change. Its distinctive explanatory object is the location and cross-level amplification of material departure from an identifiable reference state. It asks where an entrepreneurial departure resides, relative to what it is deviant, and through which mechanisms it becomes manifested at another locus.

THED first must be distinguished from innovation. Innovation generally concerns the development and implementation of a new idea, practice, process, product, or organizational arrangement. Entrepreneurial deviance, by contrast, concerns departure from a specified reference state and may arise before a marketable innovation exists. An unconventional interpretation, identity, relationship, or stakeholder configuration can be

deviant even if it never produces a successfully implemented innovation. Conversely, an innovation transferred from another setting may be new to an organization or market without representing an unprecedented invention. THED can classify such an innovation as deviant when it departs materially from the focal reference state, even if the underlying practice is established elsewhere. Innovation and entrepreneurial deviance may therefore overlap, but neither construct subsumes the other.

Creativity is also adjacent to, but distinct from, entrepreneurial deviance. Creativity research generally concerns the production of ideas regarded as novel and useful. Interpretive deviance requires material departure from prevailing beliefs, but it does not require the interpretation to be useful, accurate, or ultimately successful. An entrepreneur may construct an interpretation that is highly deviant but mistaken, incoherent, or commercially irrelevant. Moreover, THED extends beyond ideas: identity, relational, enactive, market, structural, and systemic transformational deviance concern changes in self-conceptions, relationships, collective practices, exchange patterns, field arrangements, and system architectures. Creativity may contribute to these departures, but it does not explain their location or cross-level amplification.

THED should likewise be distinguished from disruptive innovation. Disruption concerns a particular process through which an innovation changes competitive trajectories and may displace established firms, technologies, or business models. THED encompasses a wider range of departures, many of which never cause competitive displacement. Interpretive, identity, relational, and enactive deviance can exist without market disruption, while market deviance may be absorbed, localized, or imitated without producing structural change. Conversely, disruption is most closely associated with THED's market and structural loci but does not ordinarily explain the lower-level interpretations, identities, relationships, and collective enactments from which a departure may develop. THED therefore should not use *deviance*, *innovation*, and *disruption* interchangeably.

Institutional entrepreneurship overlaps most directly with structural deviance because it examines how embedded actors mobilize resources, construct frames, form coalitions, and engage in institutional work to transform established rules and arrangements (Battilana et al., 2009). THED incorporates these mechanisms at Level 8 but differs in scope and theoretical purpose. Institutional entrepreneurship generally begins with purposive institutional change, whereas THED traces how a departure may originate in individual judgment, become relationally and organizationally enacted, receive or fail to receive market validation, and only contingently develop into field-level change. Moreover, THED's systemic transformational locus requires propagation across multiple interdependent fields or industries rather than institutional change within a single field. Institutional entrepreneurship therefore supplies important mechanisms within THED without being equivalent to the full hierarchy.

Positive deviance differs from THED on the dimension of evaluation. Positive-deviance research defines departure partly through its conformity to broader standards of honorable or beneficial conduct (Spreitzer & Sonenshein, 2004; Warren, 2003). THED deliberately separates departure from evaluation. Entrepreneurial deviance may create economic or social value, but it may also fail, impose costs, violate ethical standards, or generate harmful systemic consequences. The same neutrality applies at the Caruso level: scope, rarity, persistence, and systemic consequence do not establish virtue. Ethical character, commercial performance, social benefit, and harm must be evaluated independently of the existence or locus of entrepreneurial deviance.

Not all deviance is entrepreneurial. Rule-breaking, misconduct, political resistance, eccentricity, and accidental nonconformity may depart from a reference state without involving entrepreneurial agency. Within THED, departure becomes entrepreneurially relevant when it is connected to purposeful action and uncertainty-bearing judgment directed toward creating or enacting a preferred but unrealized configuration of resources, relationships, practices, offerings, or institutions. Intentionality alone is not sufficient, however; the actor's interpretation or conduct must depart materially from a specified entrepreneurial, organizational, market, or institutional reference state. This boundary prevents THED from relabeling every unconventional behavior as entrepreneurship.

THED also must be evaluated against established theories that may offer more parsimonious explanations of particular outcomes. Resource-based explanations may account for venture advantage through valuable, rare, difficult-to-imitate, or complementary resources. Network theory may explain resource access, information flows, endorsement, and stakeholder mobilization. Population ecology may explain variation, selection, survival, and diffusion among organizational forms. Institutional theory may explain legitimacy, isomorphism, institutional work, and field-level change. Entrepreneurial cognition and identity theories may explain opportunity beliefs, persistence, and founder choices. THED does not seek to replace these theories. It organizes several of their mechanisms within a reference-dependent multilevel account and explains how mechanisms operating at one locus may translate a departure into another.

This integrative ambition does not exempt THED from demonstrating incremental explanatory value. The theory adds value only if specifying the reference state, locus, and translation mechanism explains outcomes that cannot

be accounted for adequately by novelty, resource endowments, network position, legitimacy, environmental munificence, or selection alone. For example, resource possession may explain whether a venture can act, but relational and enactive deviance explain whether those resources are mobilized through arrangements and practices that depart from convention. Market demand may explain adoption, but market deviance requires evidence that adoption materially changes prevailing patterns of valuation, categorization, or exchange. Similarly, diffusion may explain the spread of a practice, but structural and systemic transformational deviance require evidence that diffusion reconfigures field or system arrangements.

These distinctions make THED empirically contestable. Support for the theory requires researchers to identify reference states independently of outcomes, measure departure at the appropriate unit of analysis, and demonstrate the mechanisms through which a departure is translated across loci. THED would receive limited support if allegedly deviant manifestations could not be distinguished reliably from ordinary variation; if higher-level outcomes could be inferred directly from lower-level novelty without evidence of enrollment, enactment, adoption, diffusion, or institutionalization; or if conventional variables explained the same outcomes without additional explanatory contribution from reference-dependent departure and cross-level translation. Proposition 9 also supplies a distributional implication: realized departures should generally become less frequent at broader loci as the required conjunction of amplification conditions becomes progressively more demanding.

A related boundary concerns retrospective attribution. Venture success does not establish that an interpretation or practice was deviant when introduced, and systemic change does not demonstrate that its originating entrepreneur possessed an exceptional and immutable personality. In particular, the Caruso-level designation should be applied only when evidence shows that an entrepreneurial departure propagated across interdependent fields, generated mutually reinforcing changes, altered the broader system's reference configuration, and became capable of persisting beyond its originators. The designation describes an achieved locus of departure produced by the conjunction of catalytic entrepreneurial conduct and distributed amplification; it is not an honorific assigned retrospectively to prominent founders.

THED applies to both independent and corporate entrepreneurship. The originating locus may reside in an individual founder, an entrepreneurial team, an internal venture, an organizational unit, an incumbent firm, or a newly created organization. Organizational context changes both the relevant reference state and the conditions governing amplification. Incumbent routines, identities, incentive systems, and resource-allocation processes may suppress interpretive or enactive deviance, whereas established reputations, distribution channels, complementary assets, and stakeholder relationships may accelerate artifact development and market adoption (Hill & Rothaermel, 2003). Independent ventures may face fewer internal constraints but greater liabilities of newness, resource scarcity, and legitimacy. THED therefore does not assume that consequential entrepreneurship requires a new firm or that independent ventures are inherently more deviant than incumbent organizations.

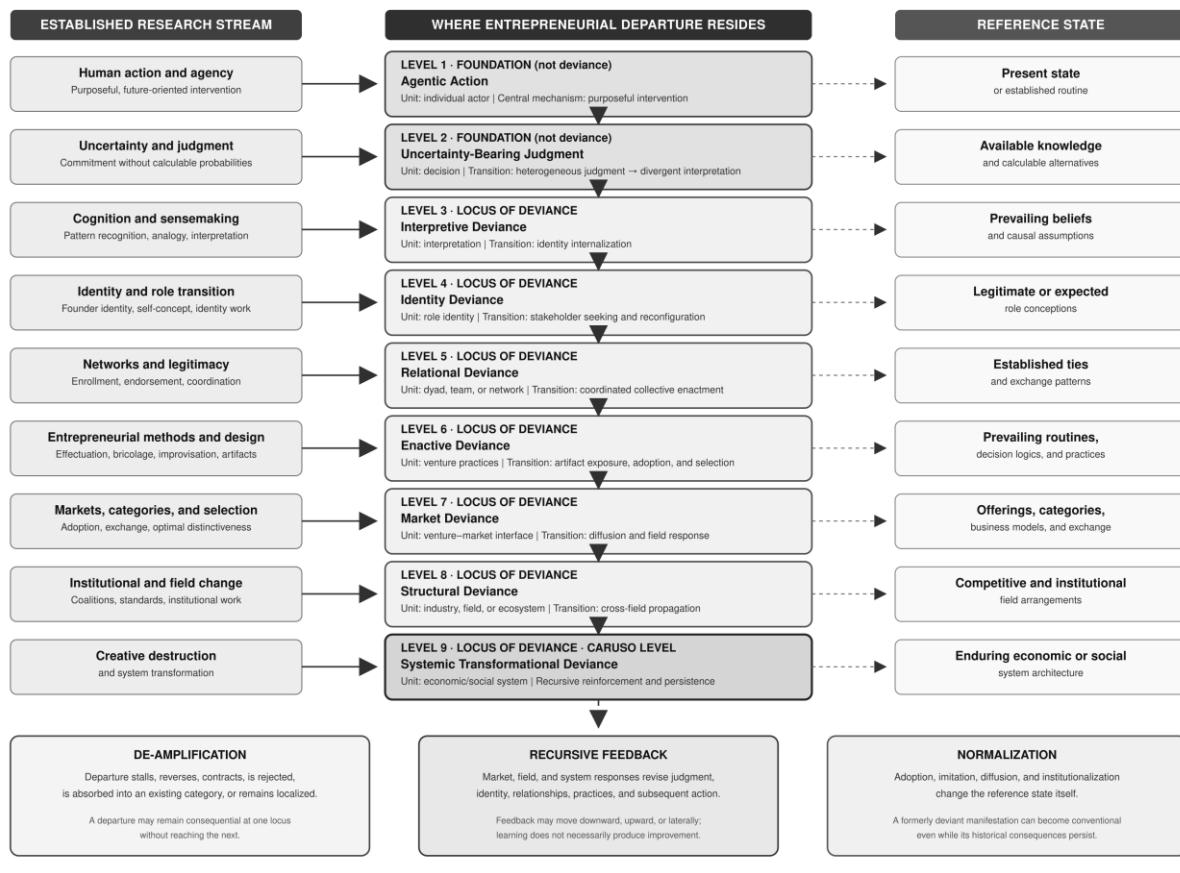
Finally, empirical applications must address the possibility of multiple, nested, or contested reference states. A practice may be conventional within one entrepreneurial ecosystem but deviant within an industry, profession, corporation, or national institutional setting. Researchers should specify which referent group or system is theoretically relevant, document its prevailing expectations or arrangements at the focal time, and avoid selecting a reference state retrospectively because it makes the focal case appear unusually innovative. Where multiple reference states are consequential, departure may be estimated separately for each rather than collapsed into a single classification. These requirements preserve THED's relational precision and establish the boundaries within which its proposed theoretical contributions can be evaluated.

6. Theoretical Contributions

THED contributes to entrepreneurship theory by explaining how purposeful action and heterogeneous judgment under uncertainty may become manifested as reference-dependent departures at progressively broader levels of analysis. Its contribution does not lie in proposing new theories of cognition, identity, networks, entrepreneurial methods, market selection, or institutional change considered separately. Rather, THED integrates these established research streams within a common theoretical architecture that specifies where entrepreneurial departure resides, relative to what reference state it is deviant, and through which mechanisms it may be translated, selected, amplified, normalized, or de-amplified as illustrated in Figure 1.

Figure 1. THED as an Integrative Architecture of Entrepreneurial Departure

Established research streams are located within level-specific units and assessed against explicit reference states.



Four principal contributions follow.

First, THED establishes a differentiated ontology of entrepreneurial action and deviance. It separates two foundational elements—agentic action and uncertainty-bearing judgment—from seven loci at which entrepreneurial deviance may become manifested: interpretive, identity, relational, enactive, market, structural, and systemic transformational. This distinction prevents environmental conditions, decision processes, and observable departures from being assigned the same theoretical status. Uncertainty creates space for heterogeneous judgment, but it is not itself deviance; purposeful action initiates intervention, but it is not necessarily entrepreneurial or nonconforming. Deviance becomes observable only when an interpretation, identity, relationship, practice, market arrangement, field structure, or system configuration departs materially from a specified reference state. By assigning each construct a unit of analysis, reference state, and time, THED provides a relational and empirically tractable account of entrepreneurial distinctiveness.

Second, THED integrates levels without collapsing them. Multilevel scholarship cautions that relationships observed at one level cannot be generalized automatically to another and that higher-level phenomena cannot be treated as simple aggregates of lower-level attributes (Hitt et al., 2007; Kozlowski & Klein, 2000). THED responds by identifying the translation mechanisms through which a departure may enter the unit and alter the reference state of another locus. Identity internalization, stakeholder enrollment, coordinated enactment, artifact creation, external adoption, diffusion, institutionalization, and recursive reinforcement connect the individual, relational, venture, market, field, and system levels. An unconventional interpretation therefore does not become relational deviance merely because an entrepreneur holds it; a novel artifact does not become market deviance without adoption or exchange; and market novelty does not become structural deviance unless interdependent actors reconfigure established field arrangements. THED's distinctive contribution is not to replace the theories explaining these mechanisms, but to show how their operation may translate norm-relative departure across analytically distinct loci.

Third, THED reconceptualizes entrepreneurial distinctiveness as an expanding locus rather than as a single attribute or a ranking of entrepreneurs. Existing research frequently measures novelty, innovativeness, or

entrepreneurial orientation at one level, making it difficult to distinguish the magnitude of departure at a particular locus from the breadth of its subsequent reach. THED demonstrates that an actor may hold a highly deviant interpretation, develop an unconventional identity, or employ unusual venture practices yet ultimately produce a conventional market offering. Conversely, a comparatively modest technical or market departure may become structurally consequential when adoption and diffusion compel numerous interdependent actors to reorganize their behavior. The magnitude of departure at one locus and its amplification across loci are therefore analytically distinct.

This expanding-locus conception also yields the frequency–consequence relationship formalized in Proposition 9. As departures move toward broader loci, further amplification becomes less probable because it requires an increasingly demanding conjunction of entrepreneurial conduct, stakeholder enrollment, coordination, adoption, complementary change, institutionalization, and recursive reinforcement. Conditional on successful amplification, however, the resulting changes are expected to become broader, more persistent, and less dependent on the originating actors.

The Caruso level represents the rare upper bound of this distribution: the conjunction of exceptional catalytic conduct and distributed amplification sufficient to transform the reference configuration of an economic or social system. In this way, THED reconciles broad conceptions of entrepreneurial participation with Schumpeter's argument that transformative entrepreneurial conduct is unevenly distributed and exceptionally rare (Schumpeter, 1934/1983). Lower-level departures may be widespread, while systemic transformational deviance remains uncommon.

Neither observation invalidates the other because they concern different loci of entrepreneurial departure.

Fourth, THED joins entrepreneurial agency with external selection and recursive process. Entrepreneurs formulate judgments, commit resources, construct artifacts, and attempt to enroll others, but they do not determine unilaterally how their departures will be interpreted, selected, modified, or extended. Stakeholders, customers, investors, competitors, complementors, professional groups, regulators, and institutional actors may validate, resist, appropriate, redirect, or normalize the departure. Higher-order outcomes are therefore neither fully designed by an originating entrepreneur nor produced exclusively by environmental selection. They emerge through recursive interaction among actors, artifacts, audiences, markets, fields, and institutions.

This recursive formulation extends entrepreneurship theory beyond a unidirectional progression from opportunity recognition to venture and outcome. Upward amplification may be accompanied by downward feedback and lateral interaction: market rejection can revise an interpretation, stakeholder withdrawal can destabilize an identity, regulation can redirect enactment, and structural transformation can create new uncertainty for the originating venture. Departures may also stall, reverse, contract, or become absorbed into established arrangements. Learning integrates these processes but does not necessarily produce improvement or continued amplification; feedback may generate adaptation, persistence, rigidity, misinterpretation, or abandonment. Moreover, successful diffusion may reduce the measured deviance of a manifestation as it becomes incorporated into the reference state. THED consequently explains not only how entrepreneurial departure may expand but also why it may remain localized, de-amplify, become conventional, or generate new cycles of judgment and action.

Across these four contributions, THED maintains a strict separation between departure and evaluation. Broader amplification does not imply greater economic value, social benefit, ethical conduct, or entrepreneurial superiority. A departure may be innovative but harmful, systemically consequential but ethically objectionable, or confined to a lower locus while creating substantial value. This evaluative neutrality guards against heroic accounts that infer virtue from novelty, prominence, or systemic impact.

Taken together, these contributions position THED as a reference-dependent, multilevel, and processual theory of entrepreneurial departure. Its value ultimately depends on whether researchers can identify relevant reference states, distinguish manifestations across units of analysis, observe the proposed translation mechanisms, and explain variation in amplification beyond that accounted for by novelty, resources, network position, legitimacy, and environmental selection. These requirements provide the foundation for the research agenda and empirical implications developed in the following section.

7. Research Agenda and Empirical Implications

The theoretical contributions developed in the preceding section create a demanding empirical agenda. Testing THED requires more than demonstrating that entrepreneurs differ from incumbents, that novel ventures attract resources, or that innovations sometimes transform markets. Researchers must establish the relevant reference state, locate departure at the appropriate unit of analysis, observe the mechanisms through which it is translated across loci, and distinguish amplification from persistence, reversal, normalization, and de-amplification. These requirements call for process-sensitive, multilevel, and longitudinal research designs capable of connecting

individual judgment with relational, venture, market, field, and system-level developments.

7.1 Research Design and Case Selection

Retrospective accounts from successful founders are insufficient for testing THED because they are vulnerable to recall error, outcome bias, survivor bias, and heroic reconstruction. Sampling only prominent ventures or Caruso-level cases would condition the analysis on successful amplification and obscure the more common trajectories that stall, reverse, or remain confined to lower loci. Strong studies should identify entrepreneurial episodes as close as possible to their initial judgments and commitments and follow them prospectively through subsequent enactment, external evaluation, and possible amplification.

Longitudinal designs could combine contemporaneous interviews, decision records, business plans, prototypes, communications, archival materials, digital trace data, network observations, market-adoption measures, competitor responses, regulatory records, and evidence of institutional change. Data should be collected from multiple participants rather than from the originating entrepreneur alone. Founders may provide evidence about interpretations and judgments, but partners, employees, customers, investors, complementors, competitors, professional groups, and regulators are better positioned to document enrollment, selection, resistance, adoption, diffusion, and institutionalization.

Comparative designs are especially important. Researchers could match entrepreneurial departures that were initially similar in interpretation, resources, technology, or market context but reached different loci. Such comparisons would help explain why one departure remained interpretive, another became enacted but failed to attract adopters, and another produced structural or systemic change. Process tracing and comparative historical analysis could reconstruct extended trajectories; event-history and sequence methods could model transitions, delays, reversals, and recurrent movement among loci; network analysis could examine relational reconfiguration and diffusion; and multilevel models could estimate interactions among individual judgment, stakeholder constellations, venture practices, ecosystems, and institutional environments. Configurational methods may also be appropriate because higher-order amplification is expected to depend on conjunctions of conditions rather than on a single universally sufficient cause.

7.2 Establishing Reference States and Measuring Departure

The reference-dependent formulation ($D(a,r,t)$) provides the starting point for measurement. Empirical analysis should proceed through five steps: (1) identify the focal manifestation and its unit of analysis; (2) specify the theoretically relevant reference group or system; (3) document the reference state at the focal time independently of the observed outcome; (4) assess the dimension and materiality of departure from that reference state; and (5) determine whether the departure was translated into the unit and reference state of another locus. Commercial performance, ethical character, social benefit, and harm should be measured separately rather than incorporated into the deviance measure.

Reference states may be reconstructed from contemporaneous industry reports, professional standards, regulatory documents, market categories, organizational records, business-model surveys, network structures, trade publications, expert assessments, textual corpora, or distributions of prevailing practices. Researchers should avoid relying on a presumed consensus when beliefs or practices are heterogeneous. In such cases, the reference state may be represented as a distribution, dominant cluster, modal configuration, or set of competing conventions. Where multiple nested or contested reference states are consequential, departure should be assessed separately against each rather than combined into an ambiguous overall classification.

Materiality thresholds also should be specified before outcomes are known. Statistical distance from a modal practice may be appropriate in some studies, while categorical difference, expert coding, network distance, or historically grounded qualitative comparison may be more appropriate in others. Because the units and reference states differ across loci, THED does not imply that all forms of deviance can be converted into a single commensurable score. A large interpretive departure and a broad market departure are different constructs, not higher and lower values on one universal scale.

The two foundational levels require measures distinct from those used for the seven loci of deviance. Agentic action may be observed through purposeful interventions directed toward a preferred but unrealized state. Uncertainty-bearing judgment may be assessed through contemporaneous commitments of resources, effort, attention, or reputation made when actors could not specify reliable probabilities or complete means–ends relationships. Neither should be coded as deviance without evidence of a material departure at a subsequent locus.

Level-specific operationalizations might include the following:

- Interpretive deviance may be assessed by comparing entrepreneurs' causal maps, forecasts, analogies, opportunity narratives, or means–ends beliefs with those prevailing among relevant industry, professional, or

organizational audiences.

- Identity deviance may be examined through identity claims, role narratives, measures of identity centrality, and departures from prevailing founder, professional, organizational, or occupational role scripts.
- Relational deviance may be measured through atypical network ties, cross-domain bridging, unusual stakeholder constellations, departures from modal governance arrangements, or the redefinition of conventional exchange relationships.
- Enactive deviance may be coded from observable routines, decision logics, resource-combination practices, experiments, prototypes, organizational designs, and exchange arrangements relative to established behavioral practices.
- Market deviance requires both departure from prevailing offerings, categories, value propositions, customer definitions, business models, or exchange mechanisms and observable adoption or exchange by external actors. Novelty without adoption should be classified as attempted rather than realized market deviance.
- Structural deviance requires evidence that multiple interdependent actors changed established roles, relationships, standards, resource flows, governance arrangements, or category structures in response to the market departure.
- Systemic transformational deviance requires evidence of propagation across interdependent fields or industries, mutually reinforcing changes among multiple domains, institutionalization, persistence, and declining dependence on the originating actors. Prominence, rapid growth, or founder reputation alone cannot establish Caruso-level deviance.

7.3 Testing Translation and Amplification

The central empirical task is not merely to identify departures at different loci but to demonstrate their translation. Propositions 1 and 2 concern the movement from purposeful action through uncertainty-bearing judgment to interpretive departure. Researchers might test whether the declining reliability of existing knowledge and routines increases reliance on judgment and whether heterogeneity in knowledge, experience, imagination, aspirations, and attention increases variance in interpretations.

Propositions 3 through 8 identify mechanisms connecting the seven loci. Tests should examine whether self-relevance and sustained enactment contribute to identity internalization; whether identity motivates relational reconfiguration; whether capable and complementary stakeholder constellations enable coordinated enactment; whether artifacts that are distinctive, comprehensible, and valuable generate market adoption; whether consequential adoption prompts field actors to alter established arrangements; and whether structural change propagates across interdependent fields and becomes recursively reproduced. Evidence that two loci occur sequentially is not sufficient. Researchers should observe or estimate the proposed intervening mechanism and compare it with plausible alternatives.

Failed translations provide especially valuable evidence. A deviant interpretation that never attracts stakeholders, an unusual stakeholder constellation that cannot coordinate, a novel artifact that remains incomprehensible, or an adopted offering that fails to alter field arrangements reveals where amplification stopped and why. Such cases make it possible to distinguish the effect of a lower-level departure from the conditions required to translate it into another locus.

Proposition 9 generates a broader distributional test. Across sufficiently large samples, realized manifestations should become less frequent at successively broader loci as the required conjunction of amplification conditions becomes more demanding. Conditional on amplification, scope, persistence, and independence from originating actors should generally increase. Tests should distinguish this prediction from the proposition that greater departure at a lower locus necessarily produces greater amplification. THED does not make that claim: a modest initial departure may travel widely, while an extreme interpretation may remain private or be rejected.

7.4 Boundary Conditions and Rival Explanations

Future research should identify conditions that facilitate, inhibit, or redirect particular transitions. At the actor level, relevant conditions include prior knowledge, imagination, aspirations, identity centrality, psychological ownership, and responsiveness to disconfirming evidence. At the relational and venture levels, stakeholder complementarity, coordination capacity, network structure, resource availability, legitimacy work, and organizational context may influence enactment. At the market and field levels, category maturity, technological modularity, appropriability, complementary assets, ecosystem dependence, regulatory openness, institutional plurality, and cultural tolerance for nonconformity may affect adoption and diffusion.

Several relationships are likely to be nonlinear or conditional. Identity centrality may promote persistence until rigidity impedes revision. Relational novelty may provide access to diverse resources while increasing

coordination and legitimacy costs. Legitimation may make a departure sufficiently familiar to attract participation but can also reduce the distinctiveness necessary to motivate adoption. Regulatory openness may facilitate experimentation while regulatory uncertainty delays investment or stakeholder commitment. These possibilities should be tested as boundary conditions rather than assumed to operate uniformly across all loci.

Empirical studies also must compare THED with rival explanations. Models should examine whether reference-dependent departure and the proposed translation mechanisms explain amplification beyond resource quality, founder experience, network centrality, technological superiority, market demand, environmental munificence, legitimacy, and population-level selection. THED would receive limited support if conventional predictors explained higher-level outcomes equally well without specifying reference states or cross-level mechanisms. Its incremental value rests on demonstrating that where a departure resides, how far it is from a relevant reference state, and how it is translated provide explanatory leverage beyond novelty or resource advantage alone.

7.5 Recursion, De-amplification, and Changing Reference States

THED's recursive process creates a research agenda extending beyond upward transitions. Longitudinal studies should examine how feedback from one locus reshapes earlier or concurrent loci. When does market rejection revise an entrepreneur's interpretation, and when does it intensify identity commitment? When does stakeholder contestation stimulate productive identity work, and when does it produce withdrawal? How do regulatory responses modify venture practices? When does structural change generate new uncertainty and renewed entrepreneurial judgment?

De-amplification should be treated as an observable theoretical outcome rather than as missing success. Researchers should study departures that contract, reverse, become localized, are appropriated by incumbents, or are absorbed into existing categories without producing broader change. Event-sequence and recurrent-event approaches could examine whether departures return to earlier loci, follow alternative pathways, or generate new entrepreneurial episodes.

Changing reference states present an additional empirical challenge. A manifestation may become less deviant as adoption, imitation, and institutionalization make it conventional. Researchers should therefore measure both departure and reference states repeatedly over time.

A declining value of $(D(a,r,t))$ may indicate failure or conformity, but it may also indicate that successful diffusion has transformed the reference state. Historical consequence and contemporaneous deviance should not be treated as equivalent.

Learning likewise requires multiactor measurement. Entrepreneurs, stakeholders, customers, competitors, and regulators may learn different lessons from the same episode. Feedback may generate accurate adaptation, but it can also produce rigidity, escalation of commitment, misinterpretation, or strategic resistance. Research should examine how these distributed learning processes affect subsequent judgment, selection, normalization, and amplification.

7.6 Studying the Caruso Level and the Consequences of Deviance

Caruso-level cases require comparative historical and rare-event research capable of tracing change across multiple fields and extended periods. Researchers should not begin with celebrated founders and infer exceptional entrepreneurial capacity from eventual impact. Stronger designs would compare originating actors and departures that appeared similarly consequential at an earlier point but subsequently produced different degrees of cross-field propagation. Evidence should identify the originating catalytic conduct while also tracing the customers, complementors, competitors, professional groups, regulators, and institutional actors that collectively reproduced the transformation.

The central empirical question is whether exceptional entrepreneurial conduct increases the probability of systemic transformation and under what configurations of complementary conditions. Such conduct cannot be treated as sufficient. Researchers must demonstrate mutually reinforcing changes in technologies, institutions, behaviors, resource allocations, and cultural expectations; persistence beyond temporary disruption; and reproduction that no longer depends on the originating entrepreneur or venture. This approach preserves Schumpeter's heterogeneity insight without reverting to an unfalsifiable heroic-entrepreneur explanation.

Finally, researchers should investigate the benefits, harms, and distributive consequences of departures independently of their location and amplification. When does relational deviance enable productive boundary spanning, and when does it create exclusionary networks or collusion? When does market deviance expand customer value, and when does it facilitate exploitation or deception? When does structural or systemic transformation distribute benefits widely, and when does it concentrate power, displace vulnerable actors, erode rights, or impose environmental and social costs?

These questions are not peripheral to THED. They prevent the research program from equating deviation with innovation, amplification with success, or systemic consequence with social value. Taken together, this agenda provides a basis for determining whether THED can explain where entrepreneurial departure resides, how it travels across levels, why most departures remain localized, and how a rare subset becomes structurally or systemically consequential.

8. Discussion and Conclusion

Entrepreneurship is frequently narrated as a linear progression from an idea to a venture and from venture formation to growth. The Theory of Hierarchical Entrepreneurial Deviance offers a different account. It addresses the multilevel question with which this article began: How can a departure originating in an actor's judgment under uncertainty become embodied in collective action, validated or rejected in a market, and sometimes amplified into structural or systemic change? THED answers by conceptualizing entrepreneurship as a reference-dependent, emergent, and recursive process in which departures may become manifested at progressively broader loci.

The theory begins with two foundations—agentic action and uncertainty-bearing judgment—but does not classify either as deviance. Purposeful action may reproduce an established routine, and judgment under uncertainty may remain consistent with prevailing beliefs. Entrepreneurial deviance first becomes visible when an actor constructs or adopts an interpretation that departs materially from the beliefs of a specified reference group. From that point, departure may become incorporated into identity, embedded in relationships, enacted through venture practices and artifacts, selected by market participants, diffused through a field, and—only in rare cases—reproduced across an economic or social system. These seven loci are analytically differentiated by their units of analysis, reference states, and central mechanisms.

The hierarchy is therefore an ontology of expanding locus, not a deterministic chronology. Higher levels do not identify better entrepreneurs, more virtuous behavior, or ventures at more advanced developmental stages. They identify departures situated in broader units of analysis and evaluated against more encompassing reference states. Nor must every entrepreneurial trajectory pass visibly through each locus in an invariant order. Identity deviance is contingent, existing relational structures may facilitate rapid enactment, and translation may occur too quickly to appear as a discrete empirical stage. Nevertheless, a broader departure cannot be inferred from lower-level novelty alone. Evidence must demonstrate that the departure entered the unit and altered the reference state associated with the broader locus.

This requirement constitutes THED's central theoretical claim: lower-level departure creates the possibility, but not the sufficiency, of higher-level transformation. An unconventional interpretation does not automatically reorganize relationships; unusual venture practices do not automatically produce market deviance; adoption does not necessarily reconfigure a field; and field-level change may remain confined rather than propagate across a wider system. Cross-level amplification depends on increasingly demanding conjunctions of identity commitment, stakeholder enrollment, coordination, artifact creation, external adoption, diffusion, complementary change, institutionalization, and recursive reinforcement. At each transition, a departure may be selected, modified, opposed, absorbed, redirected, or abandoned.

Proposition 9 expresses the resulting frequency–consequence relationship. Entrepreneurial departures should become progressively less frequent at broader loci because the conditions required for amplification become more extensive and difficult to align. Conditional on successful amplification, however, their scope, persistence, and independence from originating actors are expected to increase. This relationship helps explain why entrepreneurial interpretations and experiments are abundant while systemic transformations are rare. It also distinguishes the magnitude of departure at one locus from the breadth of its reach: a radical interpretation may remain private, whereas a comparatively modest initial departure may become structurally consequential through widespread adoption and complementary change.

The Caruso level represents the rare upper bound of this process. Drawing upon Schumpeter's analogy between entrepreneurial aptitude and exceptional singing ability, THED recognizes that the capacities to imagine departures, act beyond established routines, mobilize others, and sustain a new combination may be distributed unequally (Schumpeter, 1934/1983). Yet THED does not attribute systemic transformation to an isolated heroic entrepreneur. Caruso-level deviance is an achieved system-level outcome produced by the conjunction of exceptional catalytic conduct and distributed amplification. Customers, employees, investors, competitors, complementors, regulators, professional groups, and institutional actors participate in selecting, resisting, modifying, legitimating, and reproducing the originating departure. Transformation becomes systemic only when mutually reinforcing changes propagate across interdependent fields, become institutionalized, and persist without continued dependence on their originators.

THED is also recursive rather than unidirectional. Upward amplification is accompanied by downward feedback

and lateral interaction. Market responses may revise an interpretation, stakeholder contestation may reinforce or destabilize identity, regulation may redirect enactment, and structural change may create new uncertainties for the originating venture. Learning integrates these processes but does not guarantee improvement or continued amplification.

Feedback may produce adaptation, persistence, rigidity, escalation, misinterpretation, or abandonment. Departures may consequently stall, contract, reverse, become localized, or de-amplify. They may also become conventional: as adoption, imitation, and institutionalization transform the relevant reference state, the measured deviance of a once-unconventional manifestation may decline even while its historical consequences endure.

This recursive formulation joins entrepreneurial agency with external selection. Entrepreneurs formulate judgments, commit resources, create artifacts, and attempt to enroll others, but they cannot determine unilaterally how their departures will travel. Higher-order outcomes are neither fully designed by originators nor produced exclusively by environmental forces. They emerge through interaction among entrepreneurial conduct, stakeholder participation, material artifacts, market evaluation, competitive response, institutional work, historical conditions, and changing reference states. THED therefore connects mechanisms studied separately in cognition, identity, network, entrepreneurial-method, market-category, institutional, and multilevel research without claiming to replace those theories.

The theory's explanatory value remains contingent on empirical support. Researchers must identify reference states independently of outcomes, locate departures at the appropriate units of analysis, specify materiality thresholds, observe translation mechanisms, and compare THED with rival explanations based on resources, technological quality, network position, legitimacy, market demand, and environmental selection. Failed transitions and de-amplifying trajectories are as important as celebrated successes because they reveal why lower-level departures often do not travel. Similarly, Caruso-level claims require comparative historical evidence of cross-field propagation, mutually reinforcing change, institutionalization, and persistence—not retrospective attribution based on founder prominence or venture growth.

Finally, THED separates departure and amplification from desirability. Deviance is analytically neutral: it may be beneficial, harmful, ethical, illegal, commercially successful, or economically irrelevant. Greater amplification does not establish greater value, and systemic consequence does not establish social benefit. A lower-locus departure may create substantial value, while Caruso-level transformation may concentrate power, displace vulnerable actors, violate rights, or impose environmental and institutional costs.

THED thus moves beyond a descriptive hierarchy toward a testable theory of entrepreneurial departure. Its contribution is to make visible the connecting architecture through which purposeful action under uncertainty may become thinking differently, relating differently, acting differently, exchanging differently, and, under exceptional conditions, reorganizing the structures within which future action occurs. Most departures will remain localized, some will be reversed or normalized, and only a rare conjunction of catalytic conduct and distributed reinforcement will transform a wider system. Explaining that variation—rather than presuming a linear journey from novelty to impact—is the central purpose of the Theory of Hierarchical Entrepreneurial Deviance.

References

- Aldrich, H. E., & C. M. Fiol. (1994). Fools Rush In? The Institutional Context of Industry Creation. *Academy of Management Review*, 19(4), 645-670. <https://doi.org/10.5465/amr.1994.9412190214>
- Alvarez, S. A., & J. B. Barney. (2007). Discovery and Creation: Alternative Theories of Entrepreneurial Action. *Strategic Entrepreneurship Journal*, 1(1-2), 11-26. <https://doi.org/10.1002/sej.4>
- Baker, T., & R. E. Nelson. (2005). Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage. *Administrative Science Quarterly*, 50(3), 329-366. <https://doi.org/10.2189/asqu.2005.50.3.329>
- Baron, R. A. (2006). Opportunity Recognition as Pattern Recognition: How Entrepreneurs 'Connect the Dots' to Identify New Business Opportunities. *Academy of Management Perspectives*, 20(1), 104-119. <https://doi.org/10.5465/amp.2006.19873412>
- Battilana, J., B. Leca, & E. Boxenbaum. (2009). How Actors Change Institutions: Towards a Theory of Institutional Entrepreneurship. *Academy of Management Annals*, 3(1), 65-107. <https://doi.org/10.5465/19416520903053598>
- Berglund, H., M. Bousfiha, & Y. Mansoori. (2020). Opportunities as Artifacts and Entrepreneurship as Design.

- Academy of Management Review*, 45(4), 825-846. <https://doi.org/10.5465/amr.2018.0285>
- Cornelissen, J. P., & J. S. Clarke. (2010). Imagining and Rationalizing Opportunities: Inductive Reasoning and the Creation and Justification of New Ventures. *Academy of Management Review*, 35(4), 539-557. <https://doi.org/10.5465/amr.35.4.zok539>
- Dimov, D. (2007). Beyond the Single-Person, Single-Insight Attribution in Understanding Entrepreneurial Opportunities. *Entrepreneurship Theory and Practice*, 31(5), 713-731. <https://doi.org/10.1111/j.1540-6520.2007.00196.x>
- Dimov, D. (2011). Grappling with the Unbearable Elusiveness of Entrepreneurial Opportunities. *Entrepreneurship Theory and Practice*, 35(1), 57-81. <https://doi.org/10.1111/j.1540-6520.2010.00423.x>
- Fauchart, E., & M. Gruber. (2011). Darwinians, Communitarians, and Missionaries: The Role of Founder Identity in Entrepreneurship. *Academy of Management Journal*, 54(5), 935-957. <https://doi.org/10.5465/amj.2009.0211>
- Felin, T., & T. R. Zenger. (2009). Entrepreneurs as Theorists: On the Origins of Collective Beliefs and Novel Strategies. *Strategic Entrepreneurship Journal*, 3(2), 127-146. <https://doi.org/10.1002/sej.67>
- Fisher, G. (2012). Effectuation, Causation, and Bricolage: A Behavioral Comparison of Emerging Theories in Entrepreneurship Research. *Entrepreneurship Theory and Practice*, 36(5), 1019-1051. <https://doi.org/10.1111/j.1540-6520.2012.00537.x>
- Fisher, G., S. Kotha, & A. Lahiri. (2016). Changing with the Times: An Integrated View of Identity, Legitimacy, and New Venture Life Cycles. *Academy of Management Review*, 41(3), 383-409. <https://doi.org/10.5465/amr.2013.0496>
- Ford, C. M. (1996). A Theory of Individual Creative Action in Multiple Social Domains. *Academy of Management Review*, 21(4), 1112-1142. <https://doi.org/10.5465/amr.1996.9704071865>
- Foss, N. J., & P. G. Klein. (2012). *Organizing Entrepreneurial Judgment: A New Approach to the Firm*. Cambridge University Press.
- Garud, R., & P. Karnøe (Eds.). (2001). *Path Dependence and Creation*. Lawrence Erlbaum Associates.
- Garud, R., S. Jain, & A. Kumaraswamy. (2002). Institutional Entrepreneurship in the Sponsorship of Common Technological Standards: The Case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1), 196-214. <https://doi.org/10.5465/3069292>
- Greenwood, R., R. Suddaby, & C. R. Hinings. (2002). Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields. *Academy of Management Journal*, 45(1), 58-80. <https://doi.org/10.5465/3069285>
- Grégoire, D. A., P. S. Barr, & D. A. Shepherd. (2010). Cognitive Processes of Opportunity Recognition: The Role of Structural Alignment. *Organization Science*, 21(2), 413-431. <https://doi.org/10.1287/orsc.1090.0462>
- Grimes, M. G. (2018). The Pivot: How Founders Respond to Feedback through Idea and Identity Work. *Academy of Management Journal*, 61(5), 1692-1717. <https://doi.org/10.5465/amj.2015.0823>
- Hargrave, T. J., & A. H. Van de Ven. (2006). A Collective Action Model of Institutional Innovation. *Academy of Management Review*, 31(4), 864-888. <https://doi.org/10.5465/amr.2006.22527458>
- Hill, C. W. L., & F. T. Rothaermel. (2003). The Performance of Incumbent Firms in the Face of Radical Technological Innovation. *Academy of Management Review*, 28(2), 257-274. <https://doi.org/10.5465/amr.2003.9416161>
- Hitt, M. A., P. W. Beamish, S. E. Jackson, & J. E. Mathieu. (2007). Building Theoretical and Empirical Bridges across Levels: Multilevel Research in Management. *Academy of Management Journal*, 50(6), 1385-1399. <https://doi.org/10.5465/amj.2007.28166219>
- Hoang, H., & B. Antoncic. (2003). Network-Based Research in Entrepreneurship: A Critical Review. *Journal of Business Venturing*, 18(2), 165-187. [https://doi.org/10.1016/S0883-9026\(02\)00081-2](https://doi.org/10.1016/S0883-9026(02)00081-2)
- Hoang, H., & J. Gimeno. (2010). Becoming a Founder: How Founder Role Identity Affects Entrepreneurial Transitions and Persistence in Founding. *Journal of Business Venturing*, 25(1), 41-53. <https://doi.org/10.1016/j.jbusvent.2008.07.002>
- Kim, P. H., K. Wennberg, & G. Croidieu. (2016). Untapped Riches of Meso-Level Applications in Multilevel Entrepreneurship Mechanisms. *Academy of Management Perspectives*, 30(3), 273-291. <https://doi.org/10.5465/amp.2015.0137>
- Knight, F. H. (1921). *Risk, Uncertainty and Profit*. Houghton Mifflin.

- Kor, Y. Y., J. T. Mahoney, & S. C. Michael. (2007). Resources, Capabilities and Entrepreneurial Perceptions. *Journal of Management Studies*, 44(7), 1187-1212. <https://doi.org/10.1111/j.1467-6486.2007.00727.x>
- Kozlowski, S. W. J., & K. J. Klein. (2000). A Multilevel Approach to Theory and Research in Organizations: Contextual, Temporal, and Emergent Processes. In K. J. Klein, & S. W. J. Kozlowski (Eds.), *Multilevel Theory, Research, and Methods in Organizations* (pp. 3-90). Jossey-Bass.
- Leblebici, H., G. R. Salancik, A. Copay, & T. King. (1991). Institutional Change and the Transformation of Interorganizational Fields: An Organizational History of the U.S. Radio Broadcasting Industry. *Administrative Science Quarterly*, 36(3), 333-363. <https://doi.org/10.2307/2393200>
- Lounsbury, M., & M. A. Glynn. (2001). Cultural Entrepreneurship: Stories, Legitimacy, and the Acquisition of Resources. *Strategic Management Journal*, 22(6-7), 545-564. <https://doi.org/10.1002/smj.188>
- McMullen, J. S., & D. A. Shepherd. (2006). Entrepreneurial Action and the Role of Uncertainty in the Theory of the Entrepreneur. *Academy of Management Review*, 31(1), 132-152. <https://doi.org/10.5465/amr.2006.19379628>
- Miner, A. S., P. Bassoff, & C. Moorman. (2001). Organizational Improvisation and Learning: A Field Study. *Administrative Science Quarterly*, 46(2), 304-337. <https://doi.org/10.2307/2667089>
- Mises, Ludwig von. (1949). *Human Action: A Treatise on Economics*. Yale University Press.
- Navis, C., & M. A. Glynn. (2010). How New Market Categories Emerge: Temporal Dynamics of Legitimacy, Identity, and Entrepreneurship in Satellite Radio, 1990-2005. *Administrative Science Quarterly*, 55(3), 439-471. <https://doi.org/10.2189/asqu.2010.55.3.439>
- Navis, C., & M. A. Glynn. (2011). Legitimate Distinctiveness and the Entrepreneurial Identity: Influence on Investor Judgments of New Venture Plausibility. *Academy of Management Review*, 36(3), 479-499. <https://doi.org/10.5465/amr.2008.0361>
- Nelson, R. R., & S. G. Winter. (1982). *An Evolutionary Theory of Economic Change*. Harvard University Press.
- Packard, M. D., B. B. Clark, and P. G. Klein. (2017). Uncertainty Types and Transitions in the Entrepreneurial Process. *Organization Science*, 28(5), 840-856. <https://doi.org/10.1287/orsc.2017.1143>
- Rindova, V. P., and A. P. Petkova. (2007). When Is a New Thing a Good Thing? Technological Change, Product Form Design, and Perceptions of Value for Product Innovations. *Organization Science*, 18(2), 217-232. <https://doi.org/10.1287/orsc.1060.0233>
- Rosa, J. A., J. F. Porac, J. Runser-Spanjol, & M. S. Saxon. (1999). Sociocognitive Dynamics in a Product Market. *Journal of Marketing*, 63(Special Issue), 64-77. <https://doi.org/10.1177/00222429990634s108>
- Santos, F. M., & K. M. Eisenhardt. (2009). Constructing Markets and Shaping Boundaries: Entrepreneurial Power in Nascent Fields. *Academy of Management Journal*, 52(4), 643-671. <https://doi.org/10.5465/amj.2009.43669892>
- Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2), 243-263. <https://doi.org/10.5465/amr.2001.4378020>
- Schumpeter, J. A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Translated by R. Opie. Harvard University Press. Originally published 1911.
- Schumpeter, J. A. (1983). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Translated by R. Opie. Transaction Publishers. Originally published 1934.
- Selden, P. D., & D. E. Fletcher. (2015). The Entrepreneurial Journey as an Emergent Hierarchical System of Artifact-Creating Processes. *Journal of Business Venturing*, 30(4), 603-615. <https://doi.org/10.1016/j.jbusvent.2014.09.002>
- Shane, S., & S. Venkataraman. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25(1), 217-226. <https://doi.org/10.5465/amr.2000.2791611>
- Spreitzer, G. M., & S. Sonenshein. (2004). Toward the Construct Definition of Positive Deviance. *American Behavioral Scientist*, 47(6), 828-847. <https://doi.org/10.1177/0002764203260212>
- Stuart, T. E., H. Hoang, & R. C. Hybels. (1999). Interorganizational Endorsements and the Performance of Entrepreneurial Ventures. *Administrative Science Quarterly*, 44(2), 315-349. <https://doi.org/10.2307/2666998>
- Townsend, D. M., R. A. Hunt, J. S. McMullen, & S. D. Sarasvathy. (2018). Uncertainty, Knowledge Problems, and Entrepreneurial Action. *Academy of Management Annals*, 12(2), 659-687.

<https://doi.org/10.5465/annals.2016.0109>

Warren, D. E. (2003). Constructive and Destructive Deviance in Organizations. *Academy of Management Review*, 28(4), 622-632. <https://doi.org/10.5465/amr.2003.10899440>

Weick, K. E. (1995). *Sensemaking in Organizations*. Sage.

Zhao, E. Y., G. Fisher, M. Lounsbury, & D. Miller. (2017). Optimal Distinctiveness: Broadening the Interface between Institutional Theory and Strategic Management. *Strategic Management Journal*, 38(1), 93-113. <https://doi.org/10.1002/smj.2589>

Copyrights

The journal retains exclusive first publication rights to this original, unpublished manuscript, which remains the authors' intellectual property. As an open-access journal, it permits non-commercial sharing with attribution under the Creative Commons Attribution 4.0 International License (CC BY 4.0), complying with COPE (Committee on Publication Ethics) guidelines. All content is archived in public repositories to ensure transparency and accessibility.