Contesting Entrepreneurial Imperialism:

Reimagining Popular Narratives Towards Inclusive Entrepreneurialism

by

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ABSTRACT

Widening economic inequality has been identified as a moral challenge that constitutes a global impediment to socioeconomic well-being. While incongruities exist within any dynamic system, a sustained unequal value distribution can lead to social and economic obstructions for individuals and communities. Entrepreneurship has been identified as a force for good and subsequently funded as an institutional methodology to disburse well-being by democratizing economic empowerment.

Current popular approaches are institutionalized in wealthier Western contexts, encapsulated in linear narratives, and aggressively exported to new, foreign environments. Due to the often-unrecognized philosophical assumptions underlying these narratives, current approaches tend to limit the benefits of entrepreneurship to specific audiences and position the promoting institutions as entrepreneurial imperialists, creating an economic hegemony as they reinforce current power dynamics and save the most valuable entrepreneurial exchanges for those with access and resources, often benefiting the institutions economically.

While much has been written on removing the impediments to current entrepreneurial approaches, this dissertation prioritizes practical utility by proposing the need for a refreshed philosophical approach, a new entrepreneurial narrative, and dynamic institutional networks that prioritize autonomy towards more effectively engaging a favorite of current entrepreneurial narratives: the rising generation.

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GLOSSARY OF TERMS

Business Model: is a testable hypothesis that "describes the rationale of how an organization creates, delivers, and captures value" (Osterwalder & Pigneur, 2010, p. 14; see also Teece, 2010; Skaja, & Holcomb, 2023), through the four main dimensions of value proposition, value creation, value delivery, and value capture (Mikl et al., 2020).

Colonialism: Kohn and Reddy (2006) suggest that "colonialism is the practice of dominance" through the related processes of foreign "settlement, violent dispossession and political domination" over newly conquered territories, often to obtain and maintain control over a region geographically disconnected from the foreign entity (Kohn & Reddy, 2006).

Communal [Common Pool] Resource: As Elinor Ostrom (2002) noted, "common-pool resources are systems that generate finite quantities of resource units so that one person's use subtracts from the quantity of resource units available to others" (p. 1317; see also Ostrom et al., 1994).

Competition: A complex idea that has "always been central to economic thinking" (Vickers, 1995, p. 3) in representing a process like rivalry, where multiple entities strive to exchange value with the same individual(s). Within a system, competition can be represented as "(i) greater freedom of rivals (for example, freedom to enter an industry following the removal of legal monopoly rights or barriers to trade); (ii) an increase in the number of rivals; and (iii) a move away from collusion towards independent behaviour between rivals" (Vickers, 1995, p. 3).

Design: The process of "transformation of existing conditions into preferred ones" (Simon, 1996, p.55).

Entrepreneur: An individual who creates positive economic value by transitioning away from their current status quo through a new exchange of value

(Agarwal, 2012; Campbell et al., 2013; Dobrev & Barnett, 2005; Gartner, 1988; Jeon 2022; Onuoha, 2007; Sørensen & Sharkey, 2014).

Entrepreneurship: A "transition" (Jeon, 2022) towards a direct interaction with an economic ecosystem through a new exchange of value (i.e., novelty—see McMullin & Dimov, 2013) with a market, through a variety of means, including but not limited to "new [or enhanced] products and services" (Mitra, & Edmondson, 2015).

Entrepreneurship Ecosystem: A set of interdependent actors (entrepreneurs, suppliers, customers, etc.) working within system-level contexts (socioeconomic, informational, and institutional) that are governed in a way that enables entrepreneurial action (Audretsch & Belitski, 2017; Bouncken & Kraus, 2022; Stam, 2014). For public universities, this would refer to environments in which dynamic stakeholder relationships (academic departments, students, staff, faculty, etc.) develop within specific contexts (accelerator programs, incubators, business plan competitions, startup awards, etc.) to empower the creation and exchange of new [or enhanced] value (adapted from Volkmann et al., 2019).

Hero-preneur: Based on the confusion created via a trait-based approach to entrepreneurship research, namely the search to identify "who is an entrepreneur?" this refers to the follow-on presumption that specific individuals, possessing certain traits or skillsets, are entrepreneurs (Gartner, 1988) who can singlehandedly create and exchange value; often positioning the "founder" as the main economic actor through an overemphasized importance of their impact (Papi-Thornton, 2016).

Imperialism: Often used synonymously with colonialism in literature, this term is more accurately utilized to imply instances in which one, often foreign, entity "exercises power over another" (Kohn & Reddy, 2006). Traditionally explaining military, or sovereign, power, this term has evolved to commonly reference

economic exploitation or hegemony, regardless of whether that is exercised in person or remotely (Kohn & Reddy, 2006; Young, 2001).

Innovation: Built on Hamel and Zanini (2020, p. 149), this research utilizes the term to describe creating familiar benefits in new ways—to overcome historic tradeoffs, creating new value before it is exchanged.

Knowledge mobilization (KMb) is an umbrella term for a breadth of activities (Wilsdon, 2015) that encourage making academically generated knowledge accessible to non-academic audiences (Phipps et al., 2016). It can include interrelated discussions of "knowledge synthesis, dissemination, transfer, exchange, and co-creation or co-production by researchers and knowledge users" (Wilsdon, 2015).

Nascent entrepreneurs: A descriptive term denoting those who move beyond the initial conceptualization or creation of an idea [i.e., innovation] by transitioning towards implementation through intentionally committing finite resources to actively exchange new value (adapted from Wagner, 2006; Jeon, 2022).

Polycentricity: "connotes many centers of decision-making that are formally independent of each other. Whether they actually function independently, or instead constitute an interdependent system of relations, is an empirical question in particular cases. To the extent that they take each other into account in competitive relationships, enter into various contractual and cooperative undertakings, or have recourse to central mechanisms to resolve conflicts, the various political jurisdictions in a metropolitan area may function in a coherent manner with consistent and predictable patterns of interacting behavior. To the extent that this is so, they may be said to function as a system" (Ostrom et al., 1961; cited by Ostrom, 2016, p.198).

Rising Generation: The Pew Research Center (2015) suggests that "Generations are one way to group age cohorts. A generation typically refers to groups of people born over a 15-20 year span". This includes, as Mata, Baldwin, and Davison (2024) note, groupings from the "Lost Generation" (1883-1900) through the most recent Generation Alpha (2013-present). While there is a deep history of defining the terms juvenile and youth in law (see Hartinger-Saunders, 2008), this research utilizes the term "rising generation" to refer to economically emerging age groups. Namely, those that are able but have not yet, or have only recently entered the marketplace through employment: Generation Z (1997-2012), encompassing those who are ~11-30 years of age.

Services: Bitner et al. (2008) described it as a series of 'fluid and dynamic' experiences that occur "through a sequence . . . of events and steps" (p. 68) of interaction between, at minimum, a provider, and a customer/user with an often "[limited amount of] static physical properties" (p. 67).

Startup: "a human institution designed to create a new product or service under conditions of extreme uncertainty" (Reis, 2011, p. 27).

Undisciplined: In direct opposition to the term "discipline" (Discipline, n.d.), this dissertation utilizes this term to denote an action (verb) that suggests individual control is gained by understanding situational context through collaboration and acting based on evolving predictions of future contexts

PREFACE

During his receipt of the 1974 Prize in Economic Sciences in Memory of Alfred Nobel (the Nobel Prize in Economic Sciences), Friedrich August von Hayek (F. A. Hayek) gave a lecture titled "The pretense of knowledge." Aside from other concepts noted in his lecture, Hayek drew attention to the danger and subsequent challenges posed by the juxtaposition of "limits to [individual] knowledge" and our "fatal striving to control society" (para. 23).

Indeed, there is a consistent idealization of control in history as a collective of separate societies and diverse contexts. The idea that society can understand, respond to, and ultimately predict complex socio-economic systems that have "grown from the free efforts of millions of individuals" (Hayek, 1974) has become popular across societies. It appears politically (across the spectrum) and within the narratives of our educational institutions. If society chooses to look backward, they will also see it historically, where external entities entered new contexts and, in what seem to be somewhat dramatic versions of attribution, confirmation, contrast, and a host of other personal biases, try to implement processes that worked somewhere else, only to create an [often enormous] deficit to the health, culture, and/or socioeconomics of local peoples and institutions.

Charles C. Mann (2012) provided several examples of this economic imperialism when he discussed the impacts of ecological and economic exchange as Europe interacted with the Americas in its search for China. In "1493", Mann notes,

> Europeans cleared forestland, yanked out the stumps with horses and oxen, and plowed the result, again with horses or oxen, until it was a flat expanse of nearly bare soil. In these stripped areas, farmers planted single crops: solid rustling expanses of wheat or barley or rye. Fallow plots were used as

> pasture. Dotting the open areas were patches of forest, clearly demarcated as such, used for hunting and wood. (p. 69)

However, when these same individuals arrived in a very different context, they likely saw unfenced local plots that covered "as much as two hundred acres" apiece (p. 70). These plots were as follows:

> Brush and slash were put to the torch, leaving a heave of blackened stumps. Around the stumps, farmers dug shallow holes with long-handled hoes made from bone or clamshells, dropping a few kernels of maize and several beans in each hole. As the maize grew, the young colonist Henry Spellman observed, "the beans run up thereon"—twining themselves around the growing maize. Below the maize grew squash and gourds, pumpkin and melon, common beans and runner beans, and ropy vines asprawl in every direction. Here and there, patches of thick-leaved tobacco plants stood. (p. 70)

When seen through the lens of the patterned, demarcated English countryside that was left behind, colonists saw the new world as "a random snarl of marshes, beaver ponds, unkempt fields, and hostile forest" that "would have to [be] transform[ed]" to create "something more suitable" (p. 72).

To me, this is a fascinating, as well as a devastating, example of the inefficiencies of imperialism seen through the economic knowledge problem. These individuals collectively thought that they knew the system because they had succeeded (in a limited definition of the term "success") through their previous approach. However, they seemingly never considered their finite knowledge or that the over 3,600 miles between their former and present locations (along with entirely different native populations) would change the contextual relevance of their ideas. Instead, they believed in their knowledge of the situation and proceeded forward

with that unrelenting belief, in many ways forcing it onto incumbent populations through acts of imperialism.

With the benefit of hindsight, an observer can see the problems caused by exhibited biases in this historical recollection. For example, research suggests extensive benefits from a practice as presently standard as crop rotation, as well as multi-layered farming and companion planting. In other words, had the newcomers not been so unrelenting in their assumptions, they may have noted, aside from a decrease in the cultural contention they were instigating, that the "unkempt fields" they so desperately wanted to change could increase the soil quality, control weeds, and protect against pests and erosion, while ultimately increasing the quality, benefits, and long-term value of their crops. Collaboration could have replaced imperialistic control, and all parties could have benefitted. As noted, and paraphrasing Hayek (1974), if we, as a collective society, want to do more good than harm, we must learn that we cannot acquire enough knowledge of complex systems to adequately replicate, let alone control them.

As Hayek (1974) suggested, our efforts will yield the most beneficial results if our limited knowledge is utilized to avoid strict creation and control of socioeconomic systems, "but rather to cultivate growth by providing the appropriate environment, in the manner in which the gardener does this for [their] plants" (para. 23).

As an emerging scholar who is fascinated by entrepreneurship, as an employee who promotes entrepreneurship, and as a father who loves nothing more than to practice entrepreneurship with future generations within the walls of my home, I have often wondered if our entrepreneurial institutions have ever taken the time, despite their admirable desires, to see if they were creating the right 'entrepreneurial fields' for everyone to participate in; or are they implementing a form of entrepreneurial imperialism in the methods and frameworks that is spread

globally. In full disclosure, I am often surprised by the extant literature that I read (both scholarly and gray): while there seems to be a broad interest in the extensive study of those who have been 'successful' in entrepreneurship; there has been a similar attention directed at those who have tried but haven't been successful with entrepreneurship. More recently, as I will attempt to show, researchers have noted that the field is not level. In certain contexts, different demographic groups seem far more prone to take entrepreneurial action than others, and when they do, they are far more likely to succeed than other groups. In general, researchers have begun studying (and devoting resources to) traversing this gap by engaging those diverse demographics with our current approaches to entrepreneurship. However, I will attempt to show that our entrepreneurial institutions may be plowing the field wrong and, if they are, to suggest what consequences doing so has had.

This is, ultimately, the purpose of this dissertation: to examine entrepreneurship through a new lens. A lens representing those who theoretically should be engaging in the practices of entrepreneurship, a tool of emancipation, but remain disengaged and uninterested; often constrained by the narratives of entrepreneurial institutions who are imperialistically exporting inefficient model(s) into a wide array of diverse contexts. Attempting to culminate in the identification of a new narrative, and artifact that can empower the creation (not control) of entrepreneurial environments, thereby unleashing the our future generations' entrepreneurial potential.

CHAPTER 1

INTRODUCTION

There are multiple philosophical approaches to understanding and ultimately promoting the ideal outcomes of an economy and its impact on the well-being of its constituents. One economic concept that represents a diversity of philosophies is the debate surrounding the knowledge problem. The central concept within this debate revolves around propositions regarding where knowledge is, how it is acquired, and how it can be used effectively.

For example, in response to the Great Depression that engulfed the world in the 1930s, John Maynard Keynes revolutionized current economic models by introducing one approach to the knowledge problem: Keynesian economics. While economists who utilize this approach vary widely, this philosophical stance generally "justify(s) government intervention through public policies that aim to achieve full employment and price stability" (Jahan et al., 2014). Based on the belief in concepts like anticipated monetary policy and stabilization policies (see Blinder, 2008), there seems to be an implicit belief that knowledge can be gathered and holistically understood by a small team that creates policies to direct an economy efficiently. Those who support this type of conceptual approach distinguish themselves on their "belief in activist policies to reduce the amplitude of the business cycle, which they rank among the most important of all economic problems" (Jahan et al., 2014, p. 54). This supports the assumption that mathematical models can enhance the prediction of the future and enhance policy recommendations.

There is an inherent danger in this approach. Beyond colonialism, once a process of obtaining success is identified and mapped, it is easy to propose the necessary, linear steps required for any driven individual to achieve a level of externally prescribed success.

A competing view is found in the Austrian School of Economics, or Austrian Economics, with the belief that "the knowledge relevant for settling many . . . issues is widely dispersed throughout the [community]" (Cerovac, 2018, p. 81). This ideology promotes the dynamics of individual self-regulation as a more efficient, albeit unpredictable, market coordinator. This suggests that "minimal (democratic) government [is the] best arrangement for making use of this knowledge" (Cerovac, 2018, p. 82). Through this lens, Boettke (2018) noted that

> The solution to [the] economic coordination problem is found in the competitive entrepreneurial market process of discovery and learning through time. But, the effectiveness of that process of discovery and learning is a function of the institutional framework within which economic activity is played out. The knowledge necessary to guide and discipline decisions is institutionally contingent—it literally does not exist in a certain institutional environment. (p. 12)

In summation of this ideology, Boettke proposes the concept of "epistemic institutionalism" (Boettke, 2018, p. 11), which overlaps with Cerovac's "epistemic liberalism" (2018). Cumulatively, these concepts argue that within institutional environments, there are "epistemic advantages of [a] free market [approach] over deliberative democracy" (Cerovac, 2018, p. 81). Suggesting more dynamic types of economic engagement, that ultimately cannot be easily mapped. These dynamics allow for a unique contextualization of successes based on the democratization of choice and behavior of local individuals.

This debate plays out in many contexts, and subsequently, when these diverse epistemologies are narrated into entrepreneurial programming, they create diverse methodologies and frameworks that prioritize deliberative control or contextual free market democratization.

Within the context of economic debate, and subsequent policy, a more significant proportion of entrepreneurial narratives within institutions have favored a Keynesian or deliberative approach. Even Joseph Schumpeter (1942), the father of entrepreneurship and an Austrian economist, is known for suggesting that "the greater the extent […] within which things can be simply calculated, […] the more the significance of [intuition] decreases" (p. 85-86; as cited in Croitoru, 2012, p. 143). While I am not suggesting that Schumpeter believed in the ability of a market to achieve equilibrium, I am suggesting that despite the availability of multiple philosophical approaches to economic concepts, there is a distinct prevalence towards the top-down, deliberative, disciplined (Aulet, 2013), and linear narratives within institutions. Narratives that have seemingly gone unchallenged.

These linear narratives begin to separate the individual from the process, thereby positioning successful entrepreneurs as global [economic] heroes (see Wooldrige, 2009), and popular Western narratives support that claim. In turn, these entrepreneurial heroes, and the institutions that create them, promote their particular ideologies, narratives, and related methodologies.

Utilizing the hero's journey framework (Campbell, 1968; Vogler, 2007), the following chapters show the power of the current, often linear, entrepreneurial narratives sourced, most commonly, from wealthier Western contexts. Then, utilizing that hero's journey framework, maps and proposes a new journey that post-secondary academic institutions could utilize to diversify the narrative towards inclusion over exclusion through the proposition of a novel framework approach to mapping a decentralized, dynamic system. This new narrative, based on the concept of radical subjectivism, decentralizes the use of knowledge to enhance the instigation of entrepreneurialism within large and complex systems (see Cerovac, 2018).

THE POWER OF METAPHOR

> Can one not say that the strategy of language at work in metaphor consists in obliterating the logical and established frontiers of language in order to bring to light new resemblances the previous classification kept us from seeing? In other words, the power of metaphor would be to break an old categorization in order to establish new logical frontiers on the ruins of their forerunners. (Ricoeur, 1977, as cited in Levin, 1982, p. 27)

The power of language and metaphor should not be understated. From as far back as Aristotle, the potential of metaphor as a linguistic device has been discussed (Tesson, 2006). Metaphor is defined as a "figure of speech in which a word or phrase literally denoting one kind of object or idea is used in place of another to suggest a likeness or analogy between them" (Metaphor, n.d.).

It is common for metaphors to be utilized as an entrepreneurial narrative tool; even Weber (1920/1988) suggested a correlation between the concept of an entrepreneur and that of a "businessman" (p. 200). These types of approaches to language can have a direct impact on our comprehension of concepts. Unsurprisingly, Western political leaders also use metaphors "in shaping U.S. scientific research policy" (p. 79), along with society and popular culture (Miller & Acs, 2017) to "frame" our thoughts and affect the way that we act and react in the real world" (Tesson, 2006, p. 77).

The power of linguistics and the idea of metaphorical language is widely acknowledged within literature. Language, particularly metaphorical language and examples, "appears to make the learning experience more personalized" (Taylor et al., 2018, p. 566), enhances learner comprehension of complex or otherwise abstract concepts (Blackwell, & Green, 1999; Mayer, 1975; Microsoft, 1995; Taylor et al., 2018, p. 566), and potentially increases participant motivation (Landau et al., 2014).

This concept has been heavily utilized in educational settings globally. Subsequently, I noted a prevalence of entrepreneurial metaphors utilized in various environments from various philosophical viewpoints. For example, Turner's frontier (as cited in Miller & Acs, 2017, p. 77) has been identified as a metaphor for institutionally based entrepreneurship ecosystems (see Table 1), specifically noting the value of "Liberty" or freedom within those ecosystems. Likewise, in their implicit support of a realist ontology, Cho et al. (2017) utilized car racing to show a metaphorical connection between a controllable technology (i.e., car), clearly delineated markets with linear, measurable outcomes that are the same for everybody (i.e., the race), and the dynamics of competitive influences on the customer (i.e., driver; p. 3).

The term "ecosystems" has been heavily used as a systems theory metaphor that is intended to describe and explain entrepreneurial activities within specific settings (Audretsch et al., 2019; Cantner et al., 2021). Smith and Smith (2015; as cited in Cantner et al., 2021) delineated, for the purposes of explanation, the parts of this metaphor when they stated that these dynamic [eco]systems act:

> as a community of living organisms in conjunction with the nonliving components of their environment, where the eco part of the word is assumed to be related to the environment and system implies the function as a collection of related parts that function as a unit. (p. 19)

This popular narrative positions Western Universities as one type of entrepreneurial ecosystem. This metaphor continues to "attract more and more interest" while simultaneously "[spreading] misconceptions and mythologies" about entrepreneurship (Cantner et al., 2021, p. 411). For example, Canter et al. (2021) note that this analogy is flawed due to (a) a lack of understanding of how businesses evolve over time (in contrast to natural systems' evolution), (b) the boundaries that

control entry and exit to natural ecosystems and their replication in business/entrepreneurial ecosystems, and (c) the correlation of governance structures between the two environments. In addition, research notes challenges in tracking metaphorical impact, including the unnatural context of controlled experiments (see Kintsch, 2008) and the value of a linear/nonlinear versus a salient/non-salient comprehension (see Giora, 2008).

Regardless, entrepreneurial metaphors at post-secondary institutions are influential, as it is widely accepted that "metaphor matters in education" (Botha, 2009) by making things more "exciting and understandable" (Low, 2008, p. 212). These metaphorically based narratives can act as "an extension of the range of what language can express" (Kintsch, 2008, p. 141). The hero's journey narrative, an "…all-embracing metaphor for the deep inner journey of transformation that heroes in every time and place seem to share" (Voytilla, 1999, p. 1), is often utilized in business and management contexts (see Milne et al., 2006). This narrative approach is used to take audiences beyond mere recognition of entrepreneurialism as it is promoted toward an innate comprehension of the required transformational process that turns otherwise unimpressive individuals into heroic entrepreneurs.

THE HERO'S JOURNEY

> There are only two or three human stories, and they go on repeating themselves as fiercely as if they had never happened before. (Willa Cather, in 'O Pioneers' cited in Vogler, 2007, p. 3)

Since its original proposal, "Mankind's one great story" (Campbell, 2008, p. xi), or the hero's journey, has entered the lexicon of Western culture as an outline of the segmented characteristics of the greatest myths and most profound stories of our time. As outlined by Campbell (1968), this "monomyth" follows a consistent

"structural template" (Williams, 2019) despite the variety of contexts in which it is utilized:

> The standard path of the mythological adventure of the hero is a magnification of the formula represented in the rites of passage: separation-initiation-return, which . . . names the nuclear unit of the monomyth. A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered, and a decisive victory is won: the hero comes back from the mysterious adventure with the power to bestow boons on his fellow men. (cited in Morong, 1992a, p. 5)

The underlying ideals of the journey are noted within an implicit individual awakening or an opening to achieve the best of yourself (Gilligan & Dilts, 2009) are powerful. Vogler (2007) further encapsulates the value of the standard monomyth outline, provided in what might be "one of the most influential books of the 20th century . . . Joseph Campbell's The Hero with a Thousand Faces" (p. 3) when he noted,

> The pattern of the Hero's Journey is universal, occurring in every culture in every time. It is as infinitely varied as the human race itself, and yet its basic form remains constant. The Hero's Journey is an incredibly tenacious set of elements that springs endlessly from the deepest reaches of the human mind, different in its details for every culture, but fundamentally the same. (p. 4)

While there are endless unique instantiations, based on context, that can add diversity to this universal storyline, it is essential to note that the story is "always a journey" (Vogler, 2007, p. 7) that follows a permeable trajectory (Campbell, 1968; Vogler, 2007) through key steps, outlined in Table 2, for all the characters of the story.

Nicholls (2013) emphasized the appeal of these types of mythological storylines to explain why humanity finds them meaningful when he stated,

> A glance at ancient stories across the world shows us that heroic myths provide attractive narratives irrespective of the context or other historical variables. From Beowulf to Rama to Liongo, heroic individuals (often, but not always, male) have featured as the central characters in foundational texts that provide key cultural and institutional material for entire civilizations. (p. 109)

Through these lenses, no doubt due in part to their powerful narratives, our collective cultures have proposed multiple approaches to the concept of a storyline (i.e., Volger's adaptation for writers, or the Writer's Journey, reviewed in Table 3) or what Voytilla (1999) described as the "character's actions and decisions […] or phases of growth that a character experiences during the course of the story" (p. 1).

Campbell (2008) referenced the subconscious, long-lasting influence of these types of narratives:

> The unconscious sends all sorts of vapors, odd beings, terrors, and deluding images up into the mind – whether in dream, broad daylight, or insanity; for the human kingdom, beneath the floor of the comparatively neat little dwelling that we call our consciousness, goes down into unsuspected Aladdin caves. There are not only jewels but also dangerous jinn abide: the inconvenient or resisted psychological powers that we have not thought or dared to integrate into our lives. And they may remain unsuspected, or, on the other hand, some chance word, the smell of a landscape, the taste of a cup of tea, or the glance of an eye may touch a magic spring, and then dangerous messengers begin to appear in the brain. These are dangerous because they threaten the fabric of the security into which we have built

> ourselves and our families. But they are fiendishly fascinating, too, for they carry keys that open the whole realm of the desired and feared adventure of the discovery of the self. (p. 5)

The powerful psychological influence of these "maps of the psyche" (Vogler, 1985, p. 3) can both destroy the preconceptions that various individuals can have towards new understandings (see Campbell, 2008), or they could reiterate current perceptions into immovable, even formalized, mental models.

THE ENTREPRENEURIAL JOURNEY AS HEROIC

> The truth is, like the Greek Heroes in the parables, the modern day entrepreneur inevitably faces near hopeless situations on the path to success. Instead of overcoming supernatural beasts, entrepreneurs face do or die decisions about investment rounds, product failures and HR catastrophes, sometimes in the same week. However, the successful entrepreneur finds the strength, courage and wisdom to overcome every obstacle, and for that perseverance, they deserve to be wildly celebrated. (Vrionis, 2017)

It has been suggested that "entrepreneurs can be seen as a manifestation of the human psychological condition, the desire for individual creativity" (Morong, 1992a, p. 1). In turn, our society's collective narrative positions the entrepreneurial journey as a type of mythical Hero's Adventure (Morong, 1992a; Nicholls, 2013). After his previously noted comment, Nicholls (2013) suggested that the presentation and narrative around socially impactful entrepreneurship "remain firmly rooted in hero myth" (p. 109). De Vries (1977) observed that "Prometheus and Odysseus have been replaced by that folk hero of the industrial world, the entrepreneur" (p.34). Indeed, much like mythological heroes (Morong, 1992a, 1992b), rock stars (Katila et al., 2019), and [credible] social influencers (Crittenden et al., 2023; Rudeloff & Damms, 2023), entrepreneurial founders are a version of celebrity that Western

society has glorified (Claire, 2012). This positions these "hero-preneurs" (Papi-Thornton, 2016) as cultural icons on a noble journey, a belief that can potentially impact the rate of entrepreneurial behavior (Malach-Pines et al., 2005).

Supporting the entrepreneurial narrative through the narrative of a literal journey is not new. Utilizing an institutionally created visual adaptation (see District3, 2023), I can outline the popular, linear sequence of available touchpoints on the entrepreneurial journey (Marquez, & Downey, 2015; Marquez et al., 2015; Rosenbaum et al., 2017; Stickdorn, & Schneider, 2011; see Figure 1 and Appendix A).

Overlapping this visual depiction of the entrepreneurial experience with the hero's journey, as done in Figure 2, exemplifies the relationship in the narrative between the experiences of an entrepreneur and that of a hero.

When mapping this version of the journey, it can be easier for post-secondary entrepreneurial institutions, defined as those seeking to promote entrepreneurial behavior, to treat the process as an entrepreneurial supply chain. While the journey of entrepreneurialism is of unique interest, this desire allows for a subtle shift in focus: from focusing on the process of entrepreneurship to empowering the drivers of entrepreneurialism and repositioning these institutions at the center of the entrepreneurial narrative.

The prevalence of the entrepreneurial journey narrative can be seen through a review of the three stages, and Vogler's (1985) 12 steps, of the hero's journey and their relevance to common themes and narratives within entrepreneurial literature as outlined within Table 4. However, the reorientation of entrepreneurial institutions represents a subtle shift from process-oriented, where institutions create an environment that supports entrepreneurial development, to individual-oriented development that replicates what is referred to as the "character arc". This shift

alters the entrepreneurial development narrative by suggesting that a given institution can develop the 'main character' (or hero) of an entrepreneurial storyline by controlling, and implementing, the traditionally gradual learning steps of their journey (Vogler, 2007, pp. 238-239). In these approaches, each of the key characters' steps equates to one of the stages of the hero's journey as visually depicted in Figure 3.

This shift also represents a philosophical belief that permeates our collective understanding, comprehension, and interaction with the entrepreneurial process. To aid in our understanding of the entrepreneurial journey from the philosophical viewpoint of the main character, the following is a brief overview of the stages of the character arc outlined by Vogler (2007, pp. 99-263) and their alignment with the [Western] cultural narrative of an entrepreneur.

LIMITED AWARENESS

In what is referred to as the ordinary world, this stage of the journey requires the main character's "problems and conflicts [to be] already present . . . waiting to be activated" (Vogler, 2007, p. 105). Often, the "common denominator" (p. 108) among future heroes is their noted lack of access to, or removed access from, something of importance to them.

I note several similarities in the stories of entrepreneurs, both those who succeed and those who fail. After reviewing some examples of the rise and fall of entrepreneurs, De Vries (1977) noted that entrepreneurial stories often "contain a number of common, rather familiar themes" (p.35). In particular, he notes that in the entrepreneurial character storyline, the audience is:

> usually introduced to a person with an unhappy family background, an individual who feels displaced and seems a misfit in his particular environment. We are also faced with a loner, isolated and rather remote from

> even his closest relatives. This type of person gives the impression of a "reject," a marginal man, a perception certainly not lessened by his often conflicting relationships with family members. The environment is [also] perceived as hostile and turbulent . . . (p. 35)

Built into this environment and replicating Schumpeter's (1942) description of "creative destruction" (as cited in Croitoru, 2012, p. 146), Campbell (2003) noted,

> Life depends on tension, and as soon as the polarities begin to dissolve, we move into an androgynous situation [… where] everything is gone back into the anthropological soup, and it's time for the world to come again. (p. 13)

This narrative uniquely positions entrepreneurship as a key ingredient towards empowering individuals to break free from the inequalities "and existing constraints within their economic, social, technological, cultural, and/or institutional environments" (p.81) if only those individuals would recognize their opportunity as potential entrepreneurs. This traditional Western belief has been seemingly exported around the world between diverse political regimes. This includes the "derivative regimes of control [whom] don't have property rights and ownership as tenets (other than for those in the inner circle or elite ranks)" (Roth, 2023, p.58). These philosophically divergent views on individual ownership, or in other words the ability for entrepreneurs to control their means of production, haven't interfered with the ideological benefits of entrepreneurship. Take, for example, China; where, it is worth noting, as a communist nation state that places intentional limitations on the protection of property and individual ownership, they still value entrepreneurialism as a tool of emancipation, as represented in the first sentence of Chen, Zheng, Chen, & Tian's (2023) research paper, which states:

> Extreme poverty can be alleviated through entrepreneurship, but starting a business can be elusive among impoverished people, partly due to a lack of

> access to entrepreneurial opportunities. In the current literature, the source of entrepreneurial opportunity for the poor remains unclear. (p.01)

INCREASED AWARENESS

The previously noted lack of access positions certain individuals in what could be considered a broadly common position, but their unique traits will lead them towards action with only "a little new energy to germinate them" (Vogler, 2007, p. 119). There are multiple ways that this new energy can be added to the storyline, but the energy creates an increased awareness of the situation – and drives the character towards making a needed change. Vogler (2007) noted that this added energy could even come "in the form of a loss or subtraction from the hero's life in the ordinary world" (p. 123).

The entrepreneurial landscape is littered with literature studying the concept of new energy to germinate entrepreneurial action. Often referred to as entrepreneurial antecedents, this literature can then be utilized to create programming that enhances the likelihood of a character starting their individual entrepreneurial journey. Take, for example, research surrounding the concept of the Social Entrepreneurial Antecedents Scale (SEAS). This scale, proposed by Hockerts (2015), is intended as an accumulation of research that helps identify the "variables" that promote desired entrepreneurial action. Its stated purpose is to assist in the "crucial task for social entrepreneurship researchers [of understanding] what interventions can actually impact the likelihood of social entrepreneurship behavior occurring" (p. 261).

RELUCTANCE TO CHANGE

Vogler (2007) suggested that the call to action "is a process of selection" (p. 104) where, in response to the lack that is noted, various parties can act (p. 125) but must decide "how to respond to the call" (p. 129). Inevitably, there are some

who willingly accept the opportunity, others who are not as interested and often require multiple instantiations of energy to encourage them to take the initial steps, and finally, there are others who will not, for whatever reason, take action. This vital step represents the "symbols of human curiosity, [showing the] powerful drive to know all the hidden things" (p. 112) around us.

While I recognize the challenges of entrepreneurship at the rate of engagement, this unique audience of entrepreneurs only includes 1-2% of the workforce yearly on average (Kritikos, 2014). Furthermore, in popular culture, the battle between entrepreneurial reluctance and intentions can often be summed up in popular terms that refer to the diverse types of engagement that an individual can have with entrepreneurialism. These terms include, but are not limited to, unintentional (Reedy, July 2021), imitative (Joshi, January 2023), and unwilling (Amin, October 2009) entrepreneurs, and even the possibility of some individuals actively seeking out entrepreneurial action through serial entrepreneurship.

OVERCOMING

Despite the reluctance of the main character(s), there will be a moment where the challenges are overcome in preparation for action. These moments are often influenced by a "wise, protective figure" who can furnish the necessary "supplies, knowledge, and [promote the] confidence needed to overcome fear and commence the adventure" (Vogler, 2007, p. 139).

Increasingly within post-secondary entrepreneurial narratives, the institutions themselves are being placed, arguably with intentionality, as the support that allows entrepreneurs to overcome their entrepreneurial reluctance—and ultimately support growth. This is represented in the concept of opportunity co-creation (see Chen et al., 2023), which suggests entrepreneurs can lower hurdles to entrepreneurship by partnering with governments and formal institutions.

These same institutions control the entrepreneurial narrative further as they create (by their own selection and vetting) networks of mentors to support each participant's entrepreneurial journey. It is worth noting that even the epithet mentor comes from the ancient Greek poem The Odyssey. In this story, Athena, one of "the most powerful anthropomorphic creation[s] of the Greeks" (Deacy, 2008, p. 4), came in disguise to help a hero of the story [Telemachus] hidden behind the name of her created disguise: "Mentor" (Vogler, 2007, p. 43). Deacy (2008) also noted Athena's (and subsequently read as: "mentors") exceptional versatility, being noted as "a goddess of war, . . . a goddess of women's work," a "virgin goddess," and with "roles [that] covered aspects of male existence," including metalwork and horsemanship, but also a patronage of women's work" as a "maternal figure" (pp. 5-6).

The narratives of diverse, all-encompassing experiences are appealing to characters who utilize personal knowledge to help any entrepreneurial hero in their unique contexts. In response, institutions promote entrepreneurial learning that is "well served through a mentoring relationship where [entrepreneurs] are encouraged to engage in reflective learning and where "just-in-time" support is available, often to consolidate earlier knowledge and learning" (Sullivan, 2000, p. 172).

Lastly, it is philosophically relevant to note that despite the propensity of the current entrepreneurial systems to focus on the concept of a singular entrepreneur with an overarching guide who provides accumulated knowledge, there were actually multiple heroes in this Greek poem (Clark, 2022), suggesting a more apt application of the concept would be a marketplace of entrepreneurial participants and targeted mentors (each with deep knowledge in one area) who can interact with each other unincumbered.

COMMITTING

In this stage, Vogler (2007) noted that while the heroic character(s) have travailed to get to this point in the narrative, this is the moment when an "act of [their] will [ensures that] the hero commits wholeheartedly to the adventure" ahead (p.151). This is a transition moment in the storyline, moving from one act of the narrative to the actual adventure itself. It should be noted that while the hero(s) have made this decision, often with the help of their mentor(s), they do not necessarily embark on their journey peacefully. This stage of the narrative can be, as Vogler (2007) noted, represented through an emotional, mental, or even literal crisis that needs to be overcome through perseverance and determination (see p.155).

This is the stage of an entrepreneur's development arc where they utilize "innovative rebelliousness . . . ability to break away, to show independence of mind (De Vries, 1977, p. 35). The literature also delineates between early-stage and latent entrepreneurs, referencing the concept of nascent entrepreneurs, defined as those who have committed to actively launching a new business. Nascent actors are heavily utilized as a key entrepreneurship metric to measure (and understand) the different rates of entrepreneurialism between demographic subgroups (Wagner, 2006) and countries (Delmar & Davidsson, 2000). The concept of delineating between those who have committed to an entrepreneurial journey and those who have not is also popular (Carter et al., 2003).

EXPERIMENTING

While the hero(s) were in many ways heroic to get to this point in the story (in part noting that everyone cannot, or did not, embark on this journey), they are once again thrust into the role of newcomer to this unique world. In their efforts to adapt and grow to the challenge, the hero(s) must learn new skills through a series of tests and trials, often finding a group of allies to support them in this journey and having to vanquish enemies who would stop their progress. This stage can also

include the introduction of sidekicks or teams that support the hero(s) (Vogler, 2007, pp. 159-166), new rules that need to be understood, and new environments that need to be tamed. Often, these additional characters can exhibit heroism themselves (see Clark, 2022).

In literature, the concept of a support network can relate to the idea of an entrepreneurial network. These networks are "organized formal or informal association[s] of entrepreneurs whose purpose it is to support its members to increase the effectiveness of their business activities" (Abu-Rumman et al., 2021, p. 5). The same study suggests that "the development of . . . entrepreneurial networks is essential for entrepreneurial mind grooming, which enhances performance" (pp. 12-13). The networks include popular organizations for every age, from the Young Entrepreneurs Council (YEC) to the Entrepreneurs' Organization (EO), the Global Entrepreneurship Network (GEN), the National Association for the Self-Employed (NASE), and could include other organizations that merge new with existing business leaders like Vistage, among others.

PREPARING

> Readying for the potential challenges ahead, Vogler (2007) explained,
>
> Heroes at this point are like mountaineers who have raised themselves to a base camp by the labors of testing and are about to make the final assault on the highest peak. (p. 169)

In this state, the heroes are often out of their depths; they are in a territory beyond their previous experiences in this new world. Here, the heroes must often reorganize, soldier on, and prepare for the inevitable changes ahead. This drama is replicated in the challenges entrepreneurs face as they look to evolve their new business into a more lasting entity. Often cited in the challenges of scaling, which is the "phase where most startups fail" (Landry, February 2019), the need for a shift in

strategy (sometimes including leadership) is often presumed to be an essential step in the entrepreneur's character arc.

BIG CHANGE

Despite all the challenges the characters have endured and all their subsequent growth, they are facing their biggest challenges yet. Often, the heroes "[f]ace death or something like it: their greatest fears, the failure of an enterprise, the end of a relationship, the death of an old personality" (Vogler, 2007, p. 183).

Importantly, Vogler (2007) noted that this stage is "the mainspring of the heroic form and the key to its magic power" (p. 183), noting that this is often the instigation of the audience's favorite part of the narrative, as the characters must endure this crisis to achieve their true potential in the story.

In the development arc of an entrepreneurial founder, this narrative may be more challenging, but it is very commonly discussed in popular media and research. Common topics of conversation, albeit often without reliable research data to support the presumptions, suggest a higher prevalence of suicidal ideation among self-employed individuals when compared to those who are not self-employed (Min, Kim, Park, Hwang, & Min, 2019), a massive 72% of founders who suffer with mental health challenges (Hennessey, 2023, April 18), higher entrepreneurial divorce rates (noted expressly between couples who start/build a business together) than the general population (see Sayer Regan & Thayer, 2023), and the most cited statistic related to the "disappointingly high" rates of company failure (Chesbrough, 2007, p. 15). Kaplan and Norton (2001) reported a 70-90% business failure rate, while Kalyanasundaram (2018), along with Krishna et al. (2016), cited the "industry standard" that 90% of startups fail eventually. Note that, even in innovation-leaning environments, an economy can expect that only 1-2% of its workforce will start a business in any given year, on average (Kritikos, 2014).

Kritikos (2014) noted that 5 years are particularly challenging for new businesses, where 40-50% will fail within 5 years. All these varied data sources play to the social narrative around the concept of the entrepreneur's big change and inevitable crisis and the requirement for true entrepreneurs to endure the major changes on their journeys.

De Vries (1977) noted that in his interviews,

> Desertion, death, neglect, and poverty are themes which continue to be brought up in conversations with entrepreneurs. And in these conversations, facts and fantasies about hardship intertwine and become indistinguishable. This pattern seems to belong to entrepreneurial mythology, and the entrepreneurs usually oblige. It is worth realizing that as far as personality dynamics are concerned, the difference between perceived and real hardship is rather slim. For the impact of personality, it is perception that counts, even if distorted. (p. 45)

CONSEQUENCES

In this stage of the character arc, there is likely to be a celebration of the success of the character's endurance through the change and an opportunity for the heroes to receive a reward or take possession of a treasure earned through their efforts. This can also include the character's self-realization, which may be negative as the character's success to this point could induce cockiness, self-inflation, and boasting regarding their outcomes (see Vogler, 2007, pp. 205-216).

It is popular to cite that "entrepreneurs, particularly innovative entrepreneurs, are vital to the competitiveness of the economy" (Kritikos, 2014, p. 1). Some would assume that (for entrepreneurship) this vitality refers only to monetary outcomes, i.e., emancipation or growing wealth. However, Kritikos (2014) suggested that the consequences of entrepreneurial transitions have been popularly cited to include

their ability to "create new technologies, develop new products or process innovations, and open up new markets" (p. 2) along with generating "economic growth" (p. 2) through an increase in competition and economic productivity (p.3) that benefits consumers. This is in addition to the social benefits often highly sought among social ventures.

However, De Vries (1977) noted, "as in Greek myths, success may lead to hubris or excessive pride and might come to fall. And as we can see in the case of many entrepreneurs, success is a very fragile state, easily followed by failure" (p. 34).

REDEDICATION

In the development of the individual hero, this stage is where the character(s) must decide if they are going to return to their ordinary world or remain in the unique world where they have survived, even conquered. These characters are still developing, and at this point they "[g]ather up what they have learned, gained, stolen, or been granted in the Special World [and] set themselves a new goal, to escape, find further adventure, or return home" (Vogler, 2007, p. 226).

Admittedly, in the lifecycle of an entrepreneur, this pattern plays out more internally and not on the public stage. However, organizational researchers speak to an entrepreneur's crisis and rededication when they point to the transition [out] of entrepreneurial leaders within growing organizations due to "a critical difference between starting a successful firm and managing a successful firm" (Boeker & Karichalil, 2002, p. 818). De Vries (1977) noted, "given the rigidity in attitudes, the inability to modify behaviour, abdication, and succession is often the only alternative if the continued growth of the enterprise is a major goal, given the self-limiting nature of the entrepreneur's leadership style" (p. 55).

Further, such actions are rarely easy and often fraught with interpersonal dynamics that make such shifts exceptionally challenging. It has even been suggested that once-entrepreneurs who want to return to traditional employment face challenges bordering on discrimination (Stillman, 2013).

THE FINAL ATTEMPT

Vogler (2007) suggested that "this is the last 'purging and purification" (p. 229) of the characters before they return to the ordinary world that they came from. This last challenge needs to turn the character into someone who has clearly been changed by the journey, becoming even better than they were.

The entrepreneurial character architecture was outlined by De Vries (1977) when he explained,

> Failure is expected and success is often only perceived as a prelude to failure. Interrelated with this strange pattern of elation and despair, of successes and failures, we also observe a kind of person who demonstrates a remarkable resilience in the face of setbacks, with the ability to start all over again when disappointments and hardships come [their] way. The person we are describing […] is a highly complex individual, certainly not the simpleton or automaton which many economists would like us to believe that he is. . .. On the contrary, we are dealing with an individual often inconsistent and confused about his motives, desires, and wishes, a person under a lot of stress who often upsets us by his seemingly "irrational," impulsive activities. (pp. 35-36)

MASTERY

In this stage of development, characters are now seen to hold the potential of heroism, with an ability to achieve mastery of oneself through their journey. Within the storyline and social rhetoric, this stage's actual value lies in the elixir concept

that empowers those same characters to achieve heroic status by blessing the ordinary world due to their experience(s).

> Having survived all the ordeals, having lived through death, [these characters] return to their starting place, go home, or continue the journey. But they always proceed with a sense that they are ever different because of the road just travelled. If they are true heroes, they Return with the Elixir from the Special World, bringing something to share with others or something with the power to heal a wounded land. (Volger, 2007, p. 249)

A fundamental reason our Western narrative believes in the entrepreneur-as-a-hero mythological structure is the concept of entrepreneurial philanthropy. This term derives from the Greek philanthrōpos, which positions philanthropy as a literal "love of mankind" (see Acs & Philips, 2002, p. 190). This uniquely Western concept, often correlated with altruism, inspires a brand of capitalism that historically focuses on both wealth creation and redispersion (Acs & Phillips, 2002). This form of investment altruism, often coupled with the implementation of diverse institutions (i.e., entrepreneurial incubators and accelerators) coordinated from the philanthropists' nation, can be aggressively spread into foreign environments in an effort that can include investment and mirror economic imperialism. This can create an environmental juxtaposition in the marketization of philanthropy (Bajde, 2013), where the market plays a role in the disbursement of philanthropic funds (i.e., the Kiva platform). Traditionally, charitable donations come from individuals who have experienced a heroic journey towards extreme wealth. These individuals, Gordon et al. (2016) noted, do "not see themselves as simply disposing of surplus funds, but rather as actively investing their resources (money, know-how, time, social connections, reputation, and prestige) in projects that promise high social returns" (p. 425).

Such is society's love of these individuals that they are idolized through their dispersion of capital, revering their opinions even in realms outside of their personal experience (i.e., social issues, political decisions) based on the elixir of success that they have obtained from their entrepreneurial journeys, and now carry; Figure 4 briefly outlines the types of entrepreneurial capital. The character development achieved, along with the collaborative nature of the hero's journey, can be a powerful metaphorical tool that creates a "form of shorthand communication among [a] group" (Goldstein, 2005). When applied to entrepreneurialism, this communication has moved social narratives toward empowering individuals and groups to engage in entrepreneurial transitions through emotional, moral, and even spiritual means (Brown & Moffett, 1999).

RESEARCH PLAN

> The creation of a new venture is a multidimensional phenomenon; each variable describes only a single dimension of the phenomenon and cannot be taken alone … entrepreneurs and their firms vary widely; the actions they take or do not take and the environments they operate in and respond to are equally diverse - and all [of] these elements form complex and unique combinations in the creation of each new venture. (Gartner, 1985, p.697; as cited in Limpkin, & Dess, 1996)

Despite the realization of dynamic human interactions, and the importance of complexity within the entrepreneurial process, popular narratives suggest that entrepreneurs are global economic heroes (Wooldrige, 2009) who traverse predictable journeys, accumulating knowledge that will ultimately benefit the societies they interact with. This metaphor has become a part of the [Western] social fabric through the power of narrative. An example of this is the concept of the "entrepreneurial journey," a standard narrative that equates an entrepreneur with a

hero who takes a predictable journey towards a prescribed outcome. The journey narrative is reductive as it "break(s) [often] complex systems into manageable parts" (Tesson, 2006, p. 40).

Much like the debates around economic philosophies, this side of entrepreneurial narratives relies on objective approaches that promote the nature of reality as a series of inherent truths that can be discovered. This positions programmatic structures on replicable journey narratives and allows hierarchical institutions to provide consistent entrepreneurial programming to individuals from diverse contexts. Finding and utilizing the key variables that stimulate entrepreneurship can be helpful in complex systems (Bruno & Tyebjee, 1982). To this point, Tesson (2006) noted,

> A system that has been analysed reductively is often characterised by the exposition of linear relationships between elements and by hierarchies. Hierarchies within a system are significant, as they engender a structure where some elements of the system take precedence over others. Hierarchies, whether real or imposed, suggest that parts of a system are more powerful than others. A key goal of reductionism and classical analysis is to produce an understanding of systems that permits their behaviour to be predicted. Once the behaviour of a system can be predicted and cause-and-effect relationships within it are understood, one has the potential to exert control over it and to have influence over its future behaviour. (pp. 39-40)

Subsequently, entrepreneurial post-secondary institutions have often utilized narratives that suggest entrepreneurial reality as a known structure that can be traversed with prescribable skills via manageable steps. This narrative allows for a complex system to be understood in a way that enables prediction, control, and, ultimately, replication into every context. These narratives implicitly promote the

concept that an individual or entity can anticipate an ideal entrepreneurial journey framework. Accurate anticipation justifies administrative prescriptions, where an authority can propose more effective routes to achieve desired outcomes. The next logical step calls for administrative intervention in building ecosystems that limit the inefficiencies of framework implementation. Once achieved, these approaches are then exported, often benefiting the home institution. These narratives, frameworks, and ecosystems result in broad institutional assumption(s) that adequate processes, often administered by an altruistic authority, can efficiently direct entrepreneurial behaviors and transitions within diverse contexts.

While they may potentially be an implicit belief, recognizing the underlying philosophical paradigms remains essential, as they suggest a bias towards "view[ing] the world in a particular way" (Burrell & Morgan, 2019, p. 24; cited by OCC, 2017). These biases can impact programmatic intent, along with the implicit and explicit assumptions that alter core ontological assumptions, the beliefs relating to human nature, epistemological stance, ideal research methods to utilize for future understanding, and even preferred metaphors (Morgan & Smircich, 1980).

For instance, the spectrum between subjectivity and objectivity is a fundamental philosophical delineation. The noted objectivity can create an environment where the prescribed steps of an entrepreneurial journey are deemed sufficient in and of themselves. This belief leads to a prevailing suggestion that noted inefficiencies are likely to come from those who do not traverse the journey correctly, the inadequate contexts of the entrepreneurs, and parallel systems (i.e., informal cultures, formal institutions, etc.) that contend with the prescribed journey, not in the once-validated journey that is being prescribed.

These default narratives prioritize one end of the aforementioned ideological spectrum, which biases specific beliefs regarding the theoretical background of

entrepreneurial behaviors and transitions. For example, an objective system that is understandable, controllable, and replicable leads to support for concepts like the General Equilibrium Framework. Shoven and Whalley (1992) explained that the neoclassical General Equilibrium Framework suggests that the exchange of value and the creation of new value are natural processes. These processes help a market achieve "equilibrium" where producers are "maximizing prices" to the level that consumers "maximize [value] subject to their budget constraints" (p. 9).

This forms the basis of objective ontological economic approaches like utility maximization, or optimal decision problem, originally proposed by Jeremy Benthem and John Stuart Mill. In this type of economic model, an individual is always attempting to achieve a personal equilibrium by obtaining the highest level of satisfaction from the use of their resources through a series of economic decisions.

These related approaches would argue that new value is often exchanged in response to "opportunities" that Alvarez and Barney (2014) noted are created by competitive imperfections (Alvarez & Barney, 2007), market inefficiencies, and problems that represent a failure of the system (Wolf, 1987).

Schumpeter (1942) argued that while individual intuition may seem vital within entrepreneurship, "the more perfect our control of the facts becomes, and the greater the extent, with time and progressive rationalization, within which things can be simply calculated and indeed quickly and reliably calculated, the more the significance of [intuition] decreases" (pp. 85-86; as cited in Croitoru, 2012, p 143).

This proposes that entrepreneurial opportunities to create new value could be predicted based on the knowability of the future (Buchanan & Vanberg, 1991, p. 381). That knowability would empower a concrete mathematical exchange equation that can be accurately solved (i.e., equilibrium) through the identification and control of unique variables. Karen Jane Tesson (2006) explains that "the identification of

discrete and finite boundaries … within a system" constitutes a "reductionist approach" (p. 28). In other words, reductionism is the delineation of complex processes into more simple, representative phenomena. Entrepreneurial reductionism constitutes the simplification of the entrepreneurial "process" into key inputs and outcomes.

However, despite the perceived popularity of narratives based on objective philosophical paradigms that support central coordination via administrative actors, economic theory diverges on the reasons or instigations for the entrepreneurial creation of new value. Suggesting that the scant attention paid to the other, subjective, side of the entrepreneurial narratives noted above leaves a gap in the literature that removes an entire school of economic thought from discussion and practice.

In response to philosophical biases implicit within current approaches to the social sciences, Burrell & Morgan (2019, originally written in 1979) suggest that despite the unique insights that different philosophical approaches provide, the debate between unique approaches "can only be fully understood by grasping and appreciating the different assumptions which underwrite the competing points of view" (p. 8). This dissertation attempts to enhance this debate by utilizing the monomythic framework of the entrepreneurial hero's journey toward understanding.

> ***Hypothesis****: A philosophically divergent view of an entrepreneurial hero's journey, based on radical subjectivism, can achieve order through the creation of market disequilibrium engendered by engaging a broader demographic of the rising generation more actively with entrepreneurial transitions.*

Burrell and Morgan (2019) suggested that "each set of [research] assumptions identify a quite separate social-scientific reality" (see Organizational

Communication Channel [OCC], 2017). This divergent reality plays into the growing debate relating to the inadequacy of social science research methods (Morgan & Smircich, 1980). In turn, the authors proposed four mutually exclusive paradigms that present their own unique approaches to the analysis of social science and life: functionalist, interpretive, radical humanist, and radical structuralist (Burrell & Morgan, 2019). These unique research paradigms alter the intent and purpose, along with the underlying ontological assumptions as well as epistemological approaches, of completed research.

In their original research paradigms (1979/2019), Burrell and Morgan noted a pivotal axis (see OCC, 2017). In addition to the objective versus subjective spectrum, they noted regulation versus radical change. This axis suggests a separation in the ontological approaches of researchers between a regulated world that provides a stable canvas to view and analyze, in contrast to a radical change viewpoint that proposes the world should be changed to create more equal arrangements. In the 2x2 paradigm matrix shown as Figure 5, the radical structuralist and functionalist paradigms are based on a belief in a concrete or objective reality within a stable world that has a status quo that can be measured against (OCC, 2017).

Functionalism, the dominant approach in organizational science (Gioia & Pitre, 1990; OCC, 2017), is noted for its lack of new theory generation in favor of "theory refinement" that "takes place in a deductive manner, starting with reviews of the existing literature and operating out of prior theories about organizational culture" validated through "analysis [that are] mainly quantitative" (Gioia & Pitre, 1990, p. 590). Tesson (2006) supported this view by claiming that "today, most scientists implement a mechanistic view in the form of a methodology, where systems of any sort are constructed from 'parts'" (p. 38).

Despite its popularity, Gioia and Pitre (1990) challenged the traditional literary approach(es) in social sciences when they stated that "we can no longer argue that positivist/functionalist theory building applies everywhere with some adjustments and let it go at that" (p. 587). To answer the research question through a new lens, the remainder of this dissertation utilizes the hero's journey framework to propose an approach based on research methods designed to understand pure subjectivity (Morgan & Smircich, 1980) by breaking the basic steps of Grounded Theory research into the three stages of the hero's journey: Separation, Initiation, and a Return (Williams, 2019). This model provides post-secondary institutions with entrepreneurial intent, a new framework with which to approach entrepreneurialism more inclusively.

The proposed journey intends to (I: SEPARATION) understand the current linear narrative, its consequences on institutional entrepreneurial engagement, and the potential for academic institutions to improve; (II: INITIATION) propose an entrepreneurial framework as a structure to support entrepreneurialism within a dynamic system, while remaining sensitive to unique contexts; and (III: RETURN) identify the outcomes and challenges of this new approach, with suggestions on future research.

> ***RQ1****: How are current entrepreneurial narratives limiting the potential of entrepreneurship as an instigator of inclusive economic empowerment?*
>
> ***RQ2****: What are the current philosophical assumptions engrained within Western Public HEIs that implement and reinforce limiting entrepreneurial narratives?*

One limitation of utilizing the objective approach is the implicit over-individualization of the entrepreneurial process. This assumption is seen in entrepreneurial sampling bias, where most research focuses primarily on those with

entrepreneurial experience(s). This is exacerbated when, as noted by Rosenbaum et al. (2017), popular Customer Journey Mapping (CJM) approaches make the broad assumption that every stage (aka "touchpoint") of a particular journey is equally important to the individuals that go through an entrepreneurial transition.

However, this is not the case in real life, where "a single individual or a set of people" (Shane & Venkataraman, 2000, p. 220) act entrepreneurially by co-evolving with their unique social systems as their "actions alter structures and as these changed structures are open to re-interpretation" (Sarason et al., 2006, p. 294).

The limiting view of a singular founder is reiterated as Berner et al. (2012) acknowledged the different social contexts in which entrepreneurs can operate, citing different categorical differences between entrepreneurial transitions:

> Conventional economic theory states that entrepreneurs are supposed to take risks, specialize, maximize profits, accumulate, and do everything necessary to make their business grow. However, the survival entrepreneurs we met . . . seem to obey a very different form of logic, preferring to minimize any risk that would jeopardize their household's survival. This means diversifying their economic activities in order to cushion income loss from any one source. They are also prevented from capital accumulation by reciprocal obligations, which, in the case of success, make them subject to claims by less fortunate relatives, [neighbors], and friends. The result of these factors is that entrepreneurs often face insurmountable barriers to growth and graduation out of poverty. Priority for security and obligation to share are essentially cultural values, but not specific to any place or ethnic/religious group. They are fundamental elements of a universal "culture of poverty" . . . that determines the activities of a large majority of entrepreneurs anywhere in the world. (p. 3)

This concept of economic subcategories and dualistic intentions behind entrepreneurial transitions is not new. Audretsch et al. (2021) argued, "One of the most compelling challenges confronting the academic field of entrepreneurship is to move beyond the singular model and context for entrepreneurship" (p. 1276). This concept was popularized with the "discovery, or invention, of the informal sector by the International Labour Office in 1972" (Berner et al., 2012, p. 3). Admittedly, it has since been noted that in their purest sense, the proposed dichotomy likely does not exist:

> Purely formal or informal businesses do probably not exist; relations with suppliers, workers, and buyers may be characterized by different degrees of formality, and entrepreneurs react to changes in the regulatory environment by various strategies of formalization and informalization. Moreover, degrees of (in)formality do not provide much analytical information in terms of predicting performance. (Berner et al., 2012, p. 3)

Yet, Rogerson (1996) suggested (as cited in Berner et al., 2012, p. 5) that a conceptual distinction could be identified between different versions of entrepreneurial action focused on exiting poverty when he delineated that:

> [f]irst are those survivalist enterprises that represent a set of activities undertaken by people who are unable to secure regular wage employment or access to an economic sector of their choice. Generally speaking, the incomes generated from these businesses, which tend to be run by women, usually fall short of even a minimum standard of income, with little capital investment, virtually no skills training and only constrained opportunities for expansion into a viable business. Overall, poverty and a desperate attempt to survive are the prime defining features of these enterprises. The second category are micro-enterprises or growth enterprises, which are very small businesses,

> often involving only the owner, some family members, and at most one to four paid employees. These enterprises . . . have only a limited capital base and their operators only rudimentary business skills. Nonetheless, many micro-enterprises have the potential to develop and flourish into larger formal small business enterprises. (p. 171)

The types of conceptual entrepreneurial distinctions can also be expanded to include what Audretsch et al. (2021), based on Welter et al. (2019), called the "Silicon Valley" model and niche firms. This term references the "decontextualized "standard model" of entrepreneurship [that has] evolved, which considered entrepreneurship as high-growth, technology driven, and venture capital-backed" (Welter et al., 2019, p.320).

The recognition that varying touchpoints have unique value (Rosenbaum et al., 2017), which likely changes depending on the conceptual distinction of unique interactions that vary via social systems, fundamentally challenges the concept of linear programming that is often popular with public HEIs. Utilizing this approach allows us to spend the first section, much like the hero's initial days (i.e., separation), reviewing the current entrepreneurial situation (Ordinary World) along with the pressures and challenges that individuals and institutions are facing in relation to entrepreneurship. This approach overviews the common teleological structure of current systems and allows for the identification of distortions that are inherent in common teleological (i.e., controlled linearity) approaches due to a dynamic network's intrinsic complexity, especially the increasing difficulty of predicting system losses due to supply chain breakdowns (Mizgier et al., 2013). This initial section is based heavily on extant literature, as well as student data gathered via survey (n = 496) and institutional data from a university entrepreneurship program (n = 786; common research methods in objectivist approaches) that

propose some challenges due to the application of the common, philosophically biased entrepreneurial approaches utilized within the entrepreneurial Higher Education Institution (HEI).

***RQ3**: What philosophical framework could be utilized to allow for dynamic interaction of components?*

***RQ4**: How would a subjective philosophical foundation reimagine the entrepreneurial process "by explicitly equating entrepreneurship to a journey that consists of a set of conditions that must be met, but not in any particular order to proceed …, and a [subjective] goal, and a series of events that may proceed in something closer to chronological order"? (McMullin, & Dimov, 2013)*

Buchanan and Vanberg (1991) suggested that teleological and nonteleological perspectives are the "two critically different perspectives by which efforts to understand the world can be guided" (p. 383). Teleology is based on the Greek tele-, or telos, meaning end, or purpose and is a "doctrine explaining phenomena by final causes" (Teleology, n.d.). This perspective suggests that all things have a purpose and can be measured against or concerning their ability to achieve that purpose. In economics, this approach would suggest support for concepts like equilibrium theory (Buchanan & Vanberg, 1991), which proposed that all markets (supply and demand) can achieve an equilibrium, suggesting that the ends (equilibrium) are both achievable and a sufficient outcome worth measuring the current economy against.

In contrast, a nonteleological perspective is a more subjective view of the future, influenced by the creative-choice process that defers to the current experience (Buchanan & Vanberg, 1991). This prescribes an increased value on the role of open-ended and unconstrained actions (of the current experience) altering

the future, suggesting that no prediction of the future is of value due to participants' ability to change the future through their potential actions.

These separate approaches suggest a delineation in the research paradigms underlying the analysis of the nature of society. In turn, those differences can have a major impact on our understanding of and engagement with different concepts, including entrepreneurialism. Noting these ontological differences between the current paradigms, outlined in Figure 6, Section II proposes and explores the potential of constructivist paradigms to alter the philosophical assumptions and, in turn, theoretical approaches of entrepreneurial research and its prevailing artifacts. This is done in part as our next step (INITIATION) switches to a nonteleological viewpoint and overviews the research and other contexts ([Philosophical] Tests, Allies, Enemies) where a radically subjective philosophical grounding seems ideal. Utilizing a review of extant literature review, supplemented by 21 in-depth interviews with current entrepreneurs, university ecosystem practitioners, and entrepreneurial alumni from Arizona State University (ASU), section II culminates in the proposal of a new entrepreneurial framework.

> ***RQ5****: What is the key challenge(s) that inhibit the transition of this research to application?*
>
> ***RQ6****: How can dynamic public HEI ecosystems "maintain the benefits of breadth, diverse experience, interdisciplinary thinking, and delayed concentration in a world that increasingly incentivizes, even demands, hyperspecialization"? (Epstein, 2019; p. 18)*

In response to White's (2019) call for "more praxis to apply cutting-edge research and test academic theories [in] real-time" (p. 261), Section III (Return) takes up the "pragmatist agenda" called for by Zellweger and Zenger (2021) to "provide meaningful guidance to entrepreneurs seeking to generate novel value,

while also providing guidance about how to build consensus, basic support, or [the] resources necessary to pursue it" (p. 6). This is done by understanding the framing of new models that could enhance entrepreneurial programming and then reviewing the concept of entrepreneurial metaphors to outline how this approach aligns with current entrepreneurial nomenclature, proposing a methodology and related metaphor to communicate dynamic entrepreneurial systems within institutional environments. The ultimate intention of this research is to better understand how the entrepreneurial actions of the rising generation are shaped and can be enhanced by their complex interactions within institution-based ecosystems.

EMPIRICAL SETTING

Founded in 1886 as the Territorial Normal School, Arizona State University (ASU) has grown into the largest public university in the United States. Utilizing multiple locations, including digital immersion, the university boasts 142,616 students enrolled in Fall 2022 (Arizona State University, 2023a). This constitutes a 28.2% enrollment growth rate since 2018, and with more than 68,789 applications for first-year campus immersion enrollment in 2022, at an 89.75% acceptance rate (Arizona State University, 2023e), the potential for continued growth remains strong.

This exceptional growth rate has happened in tandem with an increasing focus on broad educational inclusion and access; ASU President Michael Crow has stated that "for our society to achieve its ideal, there cannot be an unequal distribution of its most important asset—education" (Arizona State University, 2023a). In return for their efforts towards promoting educational inclusion, the University notes 33% (n = 37,780) of their undergraduates are first-generation students, while 48% (n = 6,764) first year on-campus students identify as a "minority" (Arizona State University, 2023a). Ensuring that students can attend regardless of funding access is also an essential focus of the university, with 33% (n

= 37,780) of undergraduates reportedly receiving a Pell Grant (Arizona State University, 2023a), a type of Federal funding usually only "awarded to undergraduate students who display exceptional financial need" (Federal Student Aid, 2023), while 85% of all undergraduate (n = 97,312) students received some form of financial assistance in Fall 2022 (Arizona State University, 2023a).

This broad focus on inclusion is similarly matched by a focus on innovation and entrepreneurship. For example, ASU has been ranked #1 in the United States for Innovation 9 years in a row (2016-2023; Arizona State University, 2023b) while being recognized by Newsweek as "One of the Best Maker Schools in Higher Education," by the Milken Institute Report (2017) as a "National Leader in Technology Transfer" along with recognitions by the U.S. News & World Report as well as the Princeton Review for Business programs/training, and by Poets & Quants/Inc. Magazine for entrepreneurship.

Additionally, organizations and the society that supports them continue to raise expectations of these institutions. Take comments made by the Ashoka Organization, known for supporting social entrepreneurs and changemakers, which stated, "In a world where the only constant is change, where the emerging polycrises threaten stability, inequities increase, and technology outpaces our adaptations, higher education has an increasingly vital role to play" (H. MacCleoud, personal communication, July 17, 2023).

This context, with the increasing social expectations that are coupled with a desire to "build a world where everyone is a changemaker" (H. MacCleoud, personal communication, July 17, 2023), makes institutions an ideal context for this research and ASU, with its unique culture of innovative engagement (Crow & Dabars, 2015; Maynard, & Garbee, 2019), an ideal public HEI.

CHAPTER 2

SEPARATION

A sizable proportion of Western entrepreneurial institutions' current approaches to entrepreneurial programming are biased towards objectivistic, epistemologically positivistic approaches. These types of philosophical foundations encourage a predilection towards deliberative, disciplined (Aulet, 2013), linear narratives. Narratives that prioritize the power of the individual and their experience over incumbent, communal demand, and desire. This bias limits the possibility of communal engagement, and democratization of entrepreneurial systems, in any context.

In an entrepreneur's heroic journey, the first stage of their journey (i.e., separation) is recognized by the:

> growing awareness that something is not quite right; life is somehow lacking. The cons […] are beginning to, or have for some time, outweighed the pros. Sometimes clients have some inkling of a problem, but little awareness of its significance or motivation to examine it further. (Williams, 2019, p. 527)

In many ways, the future heroes of a narrative "cling to their Ordinary World" (Williams, 2019, p. 527). Similarly, our societies face an ordinary world where entrepreneurs are called on to tackle a history of economic inequality, often supported by narratives that reinforce current power dynamics. Piketty (2017) identified the influence of these narratives and the power dynamics at play in them:

> The history of inequality is shaped by the way economic, social, and political actors view what is just and what is not, as well as by the relative power of those actors and the collective choices that result. It is the joint product of all relevant actors combined. (p.48)

This represents a critical, cultural contradictions in that the western societies generally acknowledges, and even abhors, the presence of severe wealth inequality, and simultaneously celebrates, and exports the inaccurate, individualistic model of entrepreneurialism that could be a key ingredient of that inequality.

THE ORDINARY WORLD

One could argue, in support of McKibben (2007), that since Thomas Newcomen developed the "first practical steam engine" in 1712, Western civilization has pursued an insatiable appetite for economic growth. Adam Smith (1776) noted that "it is not the actual greatness of national wealth, but its continued increase" (as cited in McKibben, 2007, p. 16) that drives our collective economic improvement via, among other things, rising wages.

Despite disparate views, researchers who regularly critique neoliberal paradigms can find similar ground, as Piketty (2017) seems to align with Adam Smith on the belief that "knowledge and skill diffusion is the key to overall productivity growth as well as the reduction of inequality" (p. 49). However, despite this concept of economic growth becoming more solidified into our social psyche after World War II and its continued importance until the present day (McKibbon, 2007), more researchers are now recognizing that growth, "at least as we now create it, is producing more inequality than prosperity, [and] more insecurity than progress" (McKibbon, 2007, p. 21).

In the United States, for example, where the Economic Policy Institute (2023), utilizing data from the Bureau of Economic Analysis (see Appendix B), reported that the share of corporate-sector income received by workers is decreasing, as shown in Figure 7, and as Lardner and Smith (2005) reported, the real income of the bottom 90% of American's decreased from $27,060 to $25,646 real dollars between 1979 and 2005 respectively (as cited in McKibbon, 2007). The

Economic Policy Institute (Mishel & Kandara, 2020) also suggested that between 1979 and 2019, using 2019 dollars, the wages of the bottom 90% grew from $30,880 to $38,923 (a 26.046% increase) while the top 0.1% grew from $648,725 to $2,888,192 (a 345.211% increase). This inequitable distribution of wealth is seen as an increasingly problematic trend.

In tandem with this decreasing equality of earnings disbursement, a similar extension of the overall inequality crisis has likewise attracted attention. In 2016, Oxfam International (Hardoon, et al., 2016) reported new extremes of global inequality while noting that the wealth of the wealthiest 62 individuals equals the poorest half of the global population, shrinking from 80 individuals in 2014, and 388 in 2010. This suggests a dramatic increase in the centralization of global wealth.

However, utilizing improved data, those numbers were disputed the following year, arguing that "just eight men own the same wealth as the poorest half of the world" (Hardoon, 2017, para. 1) and prompting the United Nations (2016) to identify inequality as a "universal challenge." Ogola and Thériault (2023) reported that the "richest 1 percent grabbed nearly two-thirds of all new wealth worth $42 trillion created since 2020, almost twice as much money as the bottom 99 percent of the world's population," while capturing around half of all new wealth in the past decade. According to the World Inequality Report (2022),

> The richest 10% of the global population currently takes 52% of global income, whereas the poorest half of the population earns 8.5% of it. On average, an individual from the top 10% of the global income distribution earns €87,200 (USD122,100) per year, whereas an individual from the poorest half of the global income distribution makes €2,800 (USD3,920) per year. (p. 10)

Thomas Piketty (2017), utilizing data primarily from the World Inequality Database (https://wid.world/), argues that this delineation of wealth creates lasting problems, particularly "in slowly growing economies, [where] past wealth takes on a disproportionate importance, because it takes only a small flow of new savings to increase the stock of wealth steadily and substantially" (pp. 54-55).

Saez and Zucman (2016) supported this finding further by concluding, in part, that "wealth inequality is high and rising fast in the United States: [where] the top 0.1% share has increased from 7% in the late 1970s to 22% in 2012… [and] the combination of rising income and saving rate inequality is fueling wealth inequality" (p. 573).

McKibben (2007) likewise suggests that our current economic approaches may be backward because our societies remain concentrated on the "ends" (i.e., economic growth) instead of noting issues with the "means" (i.e., economic participation) of our attempts to attain that desired end. Regardless of the ongoing debate regarding the actual extremities of wealth inequality, presumably fueled by the recognition that "economic inequality is out of control" (Lawson et al., 2020), it is increasingly evident that "the current economic system is not working when it comes to solving the key problem we have to solve – the problem of rising inequality" (London School of Economics, 2020).

Smith (2010/1756) drew attention to an additional, if often undiscussed, challenge of wealth disparity when he states that the

> [d]isposition to admire, and almost worship, the rich and powerful, and to despise, or, at least, to neglect persons of poor and mean condition, though necessary both to establish and maintain the distinction of ranks and the order of society, is at the same time, the great and most universal cause of the corruption of our moral sentiments. That wealth and greatness are often

> regarded with the respect and admiration which are due only to wisdom and virtue; and that the contempt, of which vice and folly are the only proper objects, is often most unjustly bestowed upon poverty and weakness, has been the complaint of moralists in all ages.
>
> We desire both to be respectable and to be respected. We dread both to be contemptible and to be condemned. But, upon coming into the world, we soon find that wisdom and virtue are by no means the sole objects of respect; nor vice and folly, of contempt. We frequently see the respectful attentions of the world more strongly directed towards the rich and the great than towards the wise and the virtuous. We see frequently the vices and follies of the powerful much less despised than the poverty and weakness of the innocent. To deserve, to acquire, and to enjoy the respect and admiration of mankind are the great objects of ambition and emulation. (pp. 61-62)

Subsequently, wealth disparity has been an increasing focus of Governments, Non-Governmental Organizations (NGOs), and other institutions. A sustained disproportionate distribution of value has been seen as exacerbating economic and social constraints—from a sitting U.S. President stating that the trend of "dangerous and growing inequality and lack of upward mobility" constitutes "the defining challenge of our time" (B. Obama, public communication, December 04, 2013) through a Special Meeting on Inequality by the Economic and Social Council (ECOSOC) on March 30, 2016. Of the 2,668 wealthiest individuals noted by the Forbes billionaires list (LaFranco & Peterson-Withorn, 2023), representing a collective $12.2 trillion, the mean age is 65 years old, only 337 (12.63%) are female, 812 (30.4%) come from the three countries of North America. Over 63% (n = 1697) come from 5 countries (United States: 735, China (including Hong Kong and Macau): 495, India: 169, and Germany: 126), while ~31% (n = 8,606) of the list comprises

individuals who inherited their wealth. Hardoon et al. (2016) suggested that the "fight against poverty will not be won until the inequality crisis is tackled" (para. #1).

The ultimate challenge is identifying how. Hart (2009) offered a refreshingly balanced history of the shifting macroeconomic approaches between welfare-state democracy and neoliberalism, concluding that "we are now witnessing the start of another long swing back from over-reliance on the market to increased state intervention in some form or another. So, the state/market pair has not faded away." Hart's underlying suggestion is that neither approach, in the extreme, has or will ultimately prove the best solution to our economic juxtapositions.

Kenton (2022), explaining these interrelationships, noted that the economy is an "economy is a complex system of interrelated production, consumption, and exchange activities that ultimately determines how resources are allocated among all the participants" (para. 1).

The fundamental role of this economic equation in our modern societies fuels the widely held belief that both economic and social challenges can be "solved," much like an equation, using economic levers. In turn, popular rhetoric suggests that our collective future(s) would be served by a rejuvenated push toward balancing the economic equation.

CALL TO [ENTREPRENEURIAL] ADVENTURE

One of the fundamental concepts of our economic exchange equation includes the concept of improvement within the system [i.e., enhancing the exchange equation]. Depending on the theorist, this improvement can be discovered through an individual's alertness to recognizing economic disequilibrium (Kirzner, 1985, as cited in Leibenstein, 1988), created through a process of "creative destruction" (Schumpeter, 1942, as cited in Croitoru, 2012, p. 146), or combined via the "creative reassembly" (Hwang & Horowitz, 2012, p. 40) of resources. Cumulatively

representing processes whereby individuals voluntarily shift resources to create and exchange new value(s). Called entrepreneurship, this process of new value creation is an economic transition (Jeon, 2022) based on individual initiative (Davidsson et al., 2008).

"Entrepreneurship may be defined in the simplest terms as the utilization by one productive factor of the other productive factors for the creation of economic goods" (Cole, 1946, p. 33). The entrepreneur is the economic agent who:

> unites all means of production-the labor of the one, the capital or the land of the others-and who finds in the value of the products which result from their employment the reconstitution of the entire capital that he utilizes, and the value of the wages, the interest, and the rent which he pays, as well as the profits belonging to himself. (Say, 1816, pp. 28-29, as cited in Cole, 1946)

Through the mobilization of resources, an individual transitions away from a current "status quo" towards the enhancement and/or creation of a value exchange, exchanging value that is designed to achieve contextual economic and social wealth (Jeon, 2022; Mitra & Edmondson, 2015; Morris & Sexton, 1996; Sarasvathy, 2001b) for the individual, which then theoretically cascades down to other members of society.

This approach is even more appealing because of its direct contrast to the typical large-scale, bureaucratic organizational structures found in economies that "discourage entrepreneurship" while generating high levels of market power that "depress investment, stifle innovation, reduce job creation, and exacerbate income inequality" (Hamel & Zanini, 2020, p. 13).

Overall, entrepreneurship is seen as having a positive impact on our economy; it is reported that new businesses account for nearly all net new job creation in the American economy (Wiens & Jackson, 2015). And, in a world of

systemic social issues coupled with extreme inequalities, it is understandable that this virtuous economic cycle appeals to individuals and societies.

Entrepreneurship has then been relentlessly promoted as a solution to many issues in various contexts. The United Nations' Department of Economic and Social Affairs (DESA) stated,

> Going forward, the UN will continue to partner with governments and stakeholders to promote entrepreneurship and build the capacities of policymakers and [Micro, Small, and Medium-sized enterprises], which will contribute to economic structural transformations, poverty eradication, and employment creation. (2023)

These types of beliefs also ensure that the concept of entrepreneurship is similarly intertwined with multi-national initiatives like the Millennium Development Goals (Amorós & Cristi, 2011), Sustainable Development Goals, and 2030 agenda. In addition, there is an increasing frequency of calls to activate related networks through the development of entrepreneurial ecosystems. Even academic research is experiencing a "Fourth Wave" of interest in studying the role of these ecosystems in "achieving societal and environmental goals" through an "explicit linkage to [the] SDGs" (Volkmann et al., 2019, p. 1047).

The appeal in this form of economic democratization is at the heart of billions of dollars invested yearly (Oxfam America, 2021) by a variety of actors towards identifying a solution to poverty and income equality (Kimhi, 2010; as cited in Amorós & Cristi, 2011). This includes the over US$1 billion the Skoll Foundation has devoted to supporting social entrepreneurship worldwide (Skoll Foundation, 2023). The danger is that nobody has stopped to ask if the popular Western entrepreneurial narrative and its philosophical foundations are sufficient, let alone ideal, for every

context. Instead, traditional Western assumptions are being exported and implemented in divergent contexts without constraint.

Admittedly, building an ecosystem that can harness local potential toward job creation, innovation, and economic prosperity appeals to governments in developed and developing economies (Spigel et al., 2020). In part spurred by this popularity, organizations are increasingly researching the development and enhancement of traditional ecosystems to encourage entrepreneurship as a benefit to the social good. The Kauffman Foundation (Auerswald, 2015), an international NGO based in Kansas City, MO, along with organizations like the Aspen Network of Development Entrepreneurs (see Aspen Network of Development Entrepreneurs, 2022) based in Washington, DC (with hubs in 8 countries globally) and the New York, NY-based United Nations (see United Nations, 2023) report that national governments all over the world, in concert with key development institutions like USAID (United States), the Organization for Economic Cooperation and Development (OECD; France) as well as a host of public and private organizations (i.e. Mastercard Center for Inclusive Growth (United States)) has promoted the benefits of entrepreneurial ecosystems extensively, even aggressively.

Nobody would suggest nefarious intent behind the well-intentioned promotion of entrepreneurialism. At least in part, these ecosystem investors often hope their investments will promote development through incremental improvements in social education and economic opportunities (Battersby & Roy, 2017) for individual participants and the communities with which they associate, extending economic benefits through entrepreneurial diplomacy.

This view appears in the recognition that the concept of a "market-based solution" (Bruton et al., 2013, p. 687), or entrepreneurialism, is increasingly becoming essential to economic development (Guttentag & Davidson, 2021). The

theoretical approach for this type of entrepreneurship is to democratize the economy by empowering collective value exchange(s) through individual action. By explicitly relying on the basic tenets of capitalism, including self-interest, individualism, and competition (Jahan & Mahmud, 2015; Sutter et al., 2019), this approach implicitly supports Weber's (1920/1988) critique of a Protestant ethic (as cited in Fischoff, 1944) that leaves the power of economic exchanges within an individual's hands through providential behaviors like industriousness and prudence. McMillan (2002) took this idea further by suggesting a religiosity to entrepreneurial economic engagement when he suggested that entrepreneurs "embody and fill the sweet and mysterious consolations of the Sermon on the Mount" (as cited in McKibbon, 2007, p. 20).

However, the philosophical basis upon which these approaches are built is often ignored despite its direct influence on the type of individuals it attracts and includes and the outcomes of the prescribed engagement, including the actualization of approaches that decrease freedom and centralize the control of finite resources within philosophically biased institutions.

Regardless, the entrepreneurial appeal spurs continued calls to increase entrepreneurial engagement among broader audiences, such as the rising generation (Gupta, 2013), to address the wicked challenges of global development.

CALL TO RISING GENERATIONS

This is a zealously promoted and defended form of "creative destruction" (Schumpeter, 1942), positioning entrepreneurs as self-actualizing catalysts who create more productive value exchanges that, in turn, solve economic and social challenges. As noted by Croitoru's (2012) review of Schumpeter's discussion on the topic, in what remains arguably the most famous entrepreneurial theory, these entrepreneurial behaviors "furnish an excellent mechanism for upward social

mobility" (p. 143) and "given the right combination of individual and contextual factors" can function "as a means of emancipation for marginalized groups" (Bruton et al., 2022, p. 38).

In the form of policy influencing research, increasing amounts of evidence have continued to support the entrepreneurial vernacular rags to riches story, which represents a deeply engrained belief that entrepreneurship can empower individuals to emerge from poverty (Banerjee, & Duflo, 2007; Bruton, Ketchen Jr, & Ireland, 2013; Croitoru, 2012; Morris et al., 2020; Schumpeter, 1942, as cited in Amorós, & Cristi, 2011; Sutter et al., 2019). One could argue that this concept was based on Weber's (1920/1988) suggestion in Gesammelte Aufsätze zur Religionssoziologie that:

> minorities which are in a position of subordination to a group of rulers are likely, through their voluntary or involuntary exclusion from positions of political influence, to be driven with peculiar force into economic activity. Their ablest members seek to satisfy the desire for recognition of their abilities in this field. (n.p.)

This finding is reinforced by findings like that of Morris and Lewis (1991), who noted that increasing levels of entrepreneurialism net positively impact an individual on each of the seven dimensions of societal quality of life (as cited in Morris & Sexton, 1996; see also Hofstede, 1980), while "the perceived social status of high-tech entrepreneurs" was consistent across young people in cultures that were different on Hofstede's (1991) criteria (Malach-Pines et al., 2005). The social status surrounding these individual entrepreneurial benefits of skill development, self-efficacy, and giving back (Morris et al., 2020; Shantz et al., 2018), when accumulated in communities, have been widely recognized for instigating disproportionately positive economic (Birch, 1979, as cited in Morris, & Sexton,

1996; Decker et al., 2014; Russell et al., 2008) and social development (World Bank, 2012; Fichter & Tiemann, 2020). This positions entrepreneurial behavior as a tool for empowering individuals and communities to escape poverty with supplemental income sources (Morris et al., 2020). In short, entrepreneurs are often viewed as contemporary heroic actors at the top of a social hierarchy who utilize their efforts to improve an otherwise broken system (Audretsch et al., 2005; Guiheux, 2012; Nicholls, 2013). Who better to improve a broken system than those who will inherit it next?

The United Nations (n.d.) reports that are 1.2 billion youth aged 15 to 24 years old (representing 16% of the population of the planet), with that number expected to rise to 1.3 billion by 2030. While these youth face different challenges based on their specific context, it is generally acknowledged that they almost universally face unique demographic constraints around access to education, employment opportunities, financial inclusion, and poverty.

The United Nations Office of the Secretary-General's Envoy on Youth (n.d.) reported that 1 in 6 adolescents are not in school (65 million in 2013), while United Nations Educational, Scientific and Cultural Organization (UNESCO) reported that "the global number of out-of-school children of primary school age rose by 2.4 million between 2010 and 2013" (2015) and reiterated the challenge when they reported (2019) that "the number of out-of-school children and youth has declined by little more than 1 million per year since 2015" (p. 1), pointing to a stagnation in this area of development as "progress has basically stopped in recent years" (p. 1). Meanwhile, the International Labor Organization (ILO) reported that (2010) approximately 152 million young workers (28% of all young workers globally) came from homes that were at or below the poverty line ($1.25/day). Add in that the World Bank, utilizing data from ILO, reports that the world youth unemployment rate

for 2022 was 15.60%, up from 15.20% in pre-Covid 2019 (2023a), compared to the global unemployment rate of 5.8% (World Bank, 2023d) for the same period. The World Economic Forum (Pierce, 2023) likewise reported that "33% of the unemployed population globally is youth" (para. 5).

The noted constraints, in tandem with research that suggests younger individuals are more interested in social impact entrepreneurship (Stephan et al., 2015) suggested a key reason that organizations identify the benefits of promoting entrepreneurship as a key policy approach (International Labor Organization, 2010; UNCDF, 2014). Namely, to drive youth self-employment towards "the eradication of poverty, for sustainable development and for lasting peace" (Rosas, & Rossignotti, 2005, p. 1). Table 5 provides a synopsis of some features of popular youth employment programs; including their advantages and disadvantages based on the likelihood of improving participants' chances of obtaining a job. These efforts represent a reiteration of the "growing trend across the USA of training and empowering the next generation of entrepreneurs as key drivers of economic growth and prosperity" (Maynard, & Garbee, 2019, p.488). Often, these narratives from the United States are then exported, as they are a model of entrepreneurialism due to the narrative around communities like Boston, MA, Seattle, WA, New York, NY, Austin, TX, and the most famous: California's Silicon Valley.

On this canvas, the rising Generation Create (Pineda, 2020; Pont, 2014) has been painted as a driver towards positive economic outcomes (Maynard, & Garbee, 2019; Miao et al., 2020), often considered assets in helping solve global challenges through innovative and entrepreneurial means (Gupta, 2013). Sherman's (2021) comment encapsulates this widely held belief:

> Entrepreneurship is a powerful means of engagement and activism for youth. Political systems and policymaking channels widely marginalize or entirely

> exclude the role of young people. Instead, entrepreneurship puts youth in control of their future and success . . . [and] will advance goals to end poverty, create decent work and economic growth, and support industry, innovation, and infrastructure.

Pierce (2023), writing for the World Economic Forum concerning the Green Economy (and the future of our planet), restated this belief clearly when writing "to challenge the status quo and deliver the kind of empowerment that will bring transformational change, young people need access [and] representation in formal decision-making spaces to harness the power and influence over our lives and our shared future" (para. 16).

These beliefs merge with the call for "comprehensive training and education systems" to play a "critical role" in these shifts (Pierce, 2023, para. 17). They also inform the social rhetoric regarding the fundamental importance of institutions in helping to instigate entrepreneurial behavior and transitions among the rising generation specifically (Dodgson & Gann, 2020; European Commission, 2004; Europejska, 2006; EC, 2008). Leading to the realization that, as Higgins et al. (2018) noted,

> Enterprise education has been championed in international policies, adopted by national governments, delivered by enterprise promotion groups, and prescribed to teachers as an effective way of inspiring students to develop skills for, and interest in, the world of work and business. (p. 26)

Despite the recognition that "firms created by students have been the subject of little research" (Breznitz & Zhang, 2019, p. 855), the inclusion of enterprise within educational systems is now a "global phenomenon" (Higgins et al., 2018, p. 25). The risk is that researchers have not critically analyzed the approaches of Western institutions to entrepreneurialism and are unable to qualify whether those

approaches are the best model for every Western context, let alone other locations and their unique contexts.

Regardless of this glaring omission, society has promoted the value of entrepreneurial engagement. In the West, due to its interactions with these demographics and the positive public sentiment behind much of their funding, the public HEI has, often through a reductionistic approach, increased resources invested towards the study, creation, and scaling of entrepreneurial behaviors, including promotion of the antecedent socioeconomic benefits of entrepreneurial transitions.

This positioning may be an appealing proposition for these institutions. They are well positioned to build engaged communities of entrepreneurial actors who can help harness local knowledge and engage locally (even internally) created innovation towards the co-creation of new [or enhanced] value (Feld, 2012; Spigel et al., 2020). The prevalence of these HEIs in multiple countries worldwide speaks to their potential as hubs supporting entrepreneurial ecosystems and diplomatic exporters of Western entrepreneurial ideologies.

REFUSAL OF THE CALL

***RQ1**: How are current entrepreneurial narratives limiting the potential of entrepreneurship as an instigator of inclusive economic empowerment?*

Despite its prevalence, entrepreneurship and its related programming are not equally accessible. For instance, the Global Accelerator Learning Initiative (GALI) notes that among the accelerator programs that have been expanding globally, thanks in part to philanthropic investment, all women teams (13%) are severely underrepresented against all-male teams (52%), ventures that are more geared towards high-growth (i.e., technology-based) are more likely to disproportionately benefit from programming. At the same time "some participants may not see benefits at all" (p. 2, as cited in Guttentag, & Davidson, 2021).

As a litmus for the assumption of disengagement at public universities, I surveyed current students at ASU and received access to data from Venture Devils, ASU's largest student pitch competition for students and alumni. After reviewing the survey data (n = 500), I removed all those who did not consent to utilize the survey results for collective data analysis and analyzed the remaining responses (n = 496). This data was paired with undergraduate and graduate student-led ventures who joined Venture Devils between Fall 2016 and Fall 2023 (n = 786). While no statistical significance was sought or reported in this data, this initial research was intended to review the current context of public academic institutions to see if contextual data supported literature that outlined some of the limiting trends of entrepreneurial action.

In attempting to review why students refuse the call to engage with entrepreneurship, I focused this research review on three commonly held assumptions around entrepreneurial engagement among the rising generation: the belief that the rising generation is innately interested in entrepreneurialism, the belief that this audience will engage with entrepreneurship, and the debate regarding the impact of wealth on engagement.

Relating to general interest, data collected via survey at ASU supported the recognition of "a high level of students' entrepreneurial intentions" that could be manifested "through both entrepreneurial career choice and intention to become an entrepreneur" (Herman & Stefanescu, 2017, p. 324). Of the 486 survey respondents to this series of questions, only 62 (12.76%) expressed no interest in engaging in any entrepreneurial activity. The remaining 424 (87.24%) respondents all expressed interest in entrepreneurial engagement.

Despite the broad recognition of entrepreneurial interest, not all respondents wanted to be the initial entrepreneur or founder. Only 10.08% (49) of respondents

self-identified as being "only interested in starting my own business." Instead, a larger population (89 respondents, 18.31%) were exclusively interested in helping someone else turn their idea into a new venture. In contrast, 58.85% of respondents (286) were open to the above options.

This overlaps with the cited motives of students to "[make] better use of my abilities" (Franco et al., 2010, p. 269) within an entrepreneurial context. However, contrary to the assumption that Franco et al. (2010) made that such motivations "demonstrate a rather negative influence on the intention to pursue entrepreneurial paths" (p. 269), this research would suggest that such motivations show potential for increasing entrepreneurial engagement by decentralizing the narrative around entrepreneurial engagement (i.e., moving away from the concept of a founder towards a team or community approach). This was further supported by the recognition that "the vast majority of students have not yet made the decision about stepping into self-employment, though not necessarily discarding this option" (Franco et al., 2010, p. 270).

This intention is often assumed to be a precursor to entrepreneurial transitions. However, there is an apparent drop-off between the intentions noted and actual entrepreneurial transitions. For example, researchers often suggest that discipline impacts engagement with entrepreneurialism. For instance, engineers are regularly seen as a critical input into entrepreneurial ecosystems. Duval-Couetil et al. (2012) replicated this mentality for institutions when they noted that "engineering students seem to be very well suited to become entrepreneurs" (p. 426).

Cho et al. (2017) supported these claims by referencing popular statistics suggesting that "73% of engineering students have identified that they are interested in some level of entrepreneurial education" (p. 1). This is connected to, and inaccurately cites research that alumni of the Carolina State University

Engineering Entrepreneurs Program [EEP] "were 73% more likely [than a control group] to have started a new company" (as cited in Duval-Couetil et al., 2012. p. 426). While it has also been reported that 60% of engineering alumni are strongly interested in entrepreneurship (Duval-Couetil et al., 2012).

In 2022, 30,297 students were enrolled at ASU's Ira A. Fulton School of Engineering (Arizona State University, 2023c). If previous suggestions were accurate, a range between 18,178 (60%) and 22,117 (73%) engineering students would be interested in entrepreneurship. However, something is amiss between assumption and application, with only 786 students registered in the Venture Devils program overall (including 122 new student founder registrations in 2022). If all student registrations were engineering students (they were not), actual participation would be closer to 2.59%, representing a gap between proposed interest and actual engagement between 57.41% and 70.41% of engineering students (approximately 17,394 and 21,333).

While it is notably more challenging to identify literature that suggests specific numbers of business students who are interested in entrepreneurialism, research has suggested that "business administration students prefer significantly more to be self-employed than their counterparts in other disciplines" (Franco et al., 2010, p. 267), and have reported (this research is based in Romania) higher effectiveness of entrepreneurial education that their counterparts in engineering programs (Herman & Stefanescu, 2017). Yet, despite the presumed higher interest, survey data collected from students who are affiliated with the W. P. Carey (WPC) School of Business (n = 458) noted that of all respondents who self-identified as interested in entrepreneurial engagement (n = 398, 86.89%) only 14.82% (59 respondents) reported that they were actively engaging in entrepreneurship. If all Venture Devils

participants were from WPC (which they are not), actual participation in the formal entrepreneurial programming would hover around 3.64%.

Adding the 21,595 students attending the W. P. Carey School of Business (Arizona State University, 2023d) to the Ira A. Fulton School of Engineering in the same year (2022) would drop the entrepreneurial representation in the main program, Venture Devils, to approximately 1.515% of students. While this represents a significant drop in the number of students cited with self-reported entrepreneurial interest, it does not tell the whole story; Venture Devils is the most extensively promoted program through university-wide newsletters, websites, and event announcements. Actual participation rates suggested that only 0.55% of the 142,616 registered ASU students in 2022 formerly participated in the most extensive extracurricular entrepreneurial program at ASU. This data, at a minimum, would suggest that there is a significantly underserved market of students who are either misunderstood to be interested in entrepreneurial programming or are interested in choosing not to participate.

Davidsson et al. (2008) noted one reason for this disparity between interest and action when they noted "a massive overrepresentation of previous business founders among those who start new firms" (p. 2). This concept is particularly salient to public academic institutions, where students often do not have previous experience founding a new venture. This discrepancy could explain internal survey data suggesting 269 ASU respondents (55.46%) would not know where to start if they pursued an entrepreneurial transition.

Extant literature also suggests that those who "are in a position of subordination" and who experience "voluntary or involuntary exclusion" may "be driven with peculiar force into economic activity" (Weber, 1920/1988). This idea, commonly referred to as entrepreneurship as emancipation, seems to also be

replicated within the student body at ASU; where, of the 290 survey respondents who identified as experiencing financial stress, a full 269 ASU respondents (55.46%) would not know where to start if they had finances; while 240 (82.75%) suggested they would, or potentially would, consider creating a new business while attending university as a potential source of additional financial resources that could lower their financial stress(es). Additionally, of 148 students who self-identified as needing some form of financial support (i.e., fellowships/scholarships) to finish their education, 83.11% (n = 123) suggested that they consider entrepreneurship a potential source of financial support while at university. In contrast, the data indicates that of the students who identified as not needing any financial help to pay for their education, 25.32% (n = 39) stated that they would not consider launching a new business as a potential added source of financial support (the largest percentage between the three groups), with 39.86% (n = 59) unsure. ASU declined to allow statistical analysis of Pell Grant recipients to see how many participate in entrepreneurship.

While this data provides initial support for entrepreneurship as emancipation, it is also important to note that scarce resources play a fundamental role in the outcomes of entrepreneurial-based development (Saxton et al., 2016). In other words, the audiences that show a greater interest in entrepreneurship are also more likely to have lower access to resources, which can increase the difficulty for them to participate in an entrepreneurial process that is already uniquely challenging and unpredictable (McMullen & Dimov, 2013).

Potential and continued engagement with entrepreneurialism is inherently difficult, in part because, as Sarkar et al. (2018) noted, participating individuals are crossing two entrepreneurial thresholds: (a) beginning self-employment and (b) becoming an employer, that each requires uniquely "assembling combinations of resources . . . that can sustain entrepreneurial action" (p. 279). Morris et al. (2020)

helped formalize the challenging nature of entrepreneurialism by identifying the liabilities of newness (where unfamiliar operations are often initially inefficient and unproductive) and smallness (referencing the challenges created by limited capabilities and initial access to resources) of the new venture itself. Aside from motivation, new entrepreneurial action would then require domain, task-specific social capital, and extensive human capital (Davidsson et al., 2008). Suggesting that "the combinations available to some individuals may simply be insufficient to cross one or both [of those entrepreneurial] thresholds" (Sarkar et al., 2018, p. 279).

As Morris et al. (2020) noted, "poverty imposes an additional liability on someone attempting to launch a business" (p. 44), leading some of the most economically at-risk populations to face additional challenges (McMullen, 2011; Alvarez & Barney, 2014) and a significantly higher rate of failure (Bekele & Worku, 2008; Fairlie & Robb, 2008) than their non-socio-economically constrained counterparts, leaving the most valuable entrepreneurial exchanges to those with access to the required skills and resources (Alvarez & Barney, 2014), leading Morris et al.(2020) to propose an additional entrepreneurial risk for individuals experiencing a "liability of poorness" (p. 42) represented in Figure 8.

While it is likely that entrepreneurs can be susceptible to multiple entrepreneurial 'risks' (Banerjee & Duflo, 2007), those who experience poverty are more likely to experience them 'in tandem' (Morris et al., 2020), suggesting that by leaving "more people in poverty, where [formal] self-employment is out of reach" (Sarkar et al., 2018, p. 293) economic inequality [severely] constrains certain demographic's entrepreneurial engagement. Koellinger et al. (2013) suggested that some of these liabilities (i.e., lower entrepreneurial confidence and fear of failure) are higher in female entrepreneurs, subsequently sub-marginalizing groups out of entrepreneurial action.

At ASU, this group is counted using the number of students who seek additional funding to help them complete their journey and their interest in entrepreneurialism, with the juxtaposing number of students who do not engage despite a desire or consider the process too complicated or unknown to begin. This perception is also interesting when mapped onto a linear journey, where the restrictions of the individual components of the liability of poorness could disproportionately increase the difficulty of entrepreneurs traversing the process from beginning to end. For example, if a student within a Public HEI is facing challenges due to their entrepreneurial literacy gaps, they could disengage with the process of entrepreneurialism early in the process and miss out on potential value that they might be able to add later in the process where literacy gaps may not be as pronounced (i.e., in latent exploration); likewise, if the same student is challenged with a "Lack of Financial Slack," it could stop their progress before they validate their concept, which if validated, may have been able to generate some financial slack; Figure 9 visualizes the impact of entrepreneurial constraints, including financial slack, on a linear journey. While everyone's journey is unique, additional hurdles in the entrepreneurial journey increase the likelihood that individuals will refuse the entrepreneurial call. It also limits the success of entrepreneurs who heed the call.

Often, well-intentioned public HEIs focus resources on removing those barriers or, at minimum, shifting them further along the entrepreneurial journey to embolden unrestrained entrepreneurial participation. Yet, these constraints act in tandem with personal preferences. To understand how personal preferences, exacerbated by situational constraints, impacted entrepreneurship action among students, I asked to identify which 'entrepreneurial skillsets' survey respondents believed they already possessed, potentially providing an entry point to entrepreneurial engagement (see Table 6). While the list of skills is not exhaustive,

when the results are applied to the linear entrepreneurial journey, it suggests that there are dramatic consequences, as potential participants will opt out of entrepreneurial participation when programming becomes linear. To visualize the impact, I attributed some of the self-reported data to the linear process. Of the 142,616 students at ASU, 97.97% of participants (139,720) should have had the skills to add value to the entrepreneurial process. Holding all other variables constant (i.e., personal desire, liability of poorness), these interested participants would hit a point where they needed to identify opportunities. Of the participants who made it to that stage, an average of only 19.19% (i.e., 26, 812) would be able to participate (with an idea) in most of the entrepreneurial applied programming at institutions. When exacerbated by personal preferences, the cumulative effect of these constraints is that only a very few potential participants will get to engage their skill sets to add meaningful value to the entrepreneurial process, resulting in a focus on learning skills and accessing resources, delaying entrepreneurial action, or simply opting out of the process entirely.

This critique suggests that students may not voluntarily opt out of their unique entrepreneurial journeys. Instead, these low numbers may result from institutions inadvertently creating systemic bottlenecks to entrepreneurialism in the name of efficiency. Other constraints on students would impact on these general numbers (i.e., entrepreneurial desire, time availability, etc.). Yet, the purpose here is to show that the current participation rate of <1% is drastically lower than it might be with a new approach—student responses to the survey support this assumption. When asked if they could start this process on their own, they were able to add additional clarifying text. Some voluntary comments follow:

Slightly, but only because I went through Founders Lab (an applied entrepreneurship program at ASU). I think there is still a ton to learn, and I've only touched the tip of the iceberg.

I have a general idea, but I don't think I'm equipped to figure every detail out by myself.

I believe that I have a good base knowledge, but I do not have any in-depth knowledge that would help me take those steps.

I think I would know some of the steps, but I would have to learn about other steps along the way.

I know some of the steps but would need guidance, particularly with legal and finances.

I have an idea after watching my parents do it, but I don't think I would be fully prepared to do it on my own.

I have a [general] idea but no experience.

I have somewhat of an idea, but I don't know all the specific steps.

I have a general idea but may find some shortcomings if actually trying to do so.

Notice the deference to a narrative journey or "steps" required. Could the narrative around these prescribed "steps" be central to the lower engagement rates? The idea that students are interested in entrepreneurship but are being systemically removed (as "inefficiencies" in the system) is also noted by the response rates of a

question asking, "which of the following would encourage you to engage with entrepreneurship (select all that apply)?" Of the top responses which garnered over 100 selections, depicted in Figure 10, were the requirement for an idea (the highest hurdle, above money), 165 students suggesting that they need more skills (also read: the process requires too many unique skills) to participate, while 126 selected that formal classes should train in more of the required skillsets.

Note that of all the reasons for lack of participation, the participants recognize themselves as the critical deficiency in the system. Most of the top selections were self-deficiency: 'I need a better idea,' "I need more money/funding," and "more required skills." Of the 165 respondents who noted they needed more skills, few put the responsibility on the system to train those skills: if entrepreneurship were discussed more on campus' (70 responses), if lots of professors are entrepreneurs (62 responses), if more students participated (55 responses) if more entrepreneurial physical space exists (47 responses), and if there is more competition (46 responses). The relevance of the scarcity mindset and a lack of financial capital in the top responses suggests a correlation between a real or perceived liability of poorness and the proportionate number of potential participants opting out of participation.

MEETING WITH THE [WESTERN] MENTOR

And just because you have colleges and universities doesn't mean you have education (X, Malcolm, 1970).

Present in the United States for almost 250 years, HEIs are seen as having a fundamental public purpose (see Appendix C for a selection of public institutions, including home-state and size), including the "creation of the future" (Whitehead, 1968, p. 233). Historically, these institutions were built on the model of the British College with contextual relevance to the locality, and over time, they became

Americanized (Miller & Acs, 2017, p. 78) through further cultural additions and approaches that occurred in tandem with alterations based on "local economic and cultural norms and needs" (p. 78).

These institutions have valued creating and transferring knowledge throughout this evolution, often conflated with entrepreneurialism without formalizing systems thinking and dynamic coordination. For example, Hwang and Horowitz (2012) outlined the proceeds gathered from the sale of federal lands that had been utilized to create agricultural colleges through the Morrill Land Grants of 1862 and 1890. The knowledge generated from the 106 agricultural colleges was then spread beyond the university walls through the 1914 Smith-Lever Act-funded cooperative extension program (Hwang & Horowitz, 2012, p. 24). These and similar programs are examples of how HEIs are often built on the idealization of producing and disseminating new knowledge and ensuring public benefit (Calhoun, 2006).

Entrepreneurialism and higher education are "two societal institutions crucial to economic growth, job creation, and increased standards of living in the USA" (Miller & Acs, 2017, p. 76). Increasingly, it is suggested that HEI's "fundamental responsibility" to drive transformational societal change (Seckel, 2020) aligns with a moral obligation (Kwong, Thompson & Cheung, 2012) and the expectation that they stimulate nascent entrepreneurial activity through various interventions (Aldrich & Yang, 2014; Anderson et al., 2014; Gibb, 2012; Katz, 2003; Watson & McGowan, 2019; Young, 2014).

These calls are being taken seriously, as seen in the increasing investments of educational institutions toward the socioeconomic value of innovation and value exchange. In fact, according to the National Center for Science and Engineering Statistics (Gibbons, 2021), the total FY2019 investment in Research and Development (R&D) at United States academic institutions increased by 5.7% to a

combined total of $83.7 billion. Federal funding (approximately 53%) and internal institutional investments are the two most prominent investors in this type of R&D (Gibbons, 2021). Funding in this space could also include grants from the Small Business Administration (SBA), whose stated intent behind their ~$2.5 billion in yearly investments is, in part, to "promote entrepreneurship and certain businesses" (SBA Grants) in the United States. By contrast, the Department of Housing and Urban Development estimated that ending homelessness in America would cost $20 billion (Adler, 2021), less than one-quarter of the research funding provided to educational institutions in one year.

Despite these extensive investments, there is little proof of the social efficacy of a general HEI acceptance surrounding an entrepreneurial approach to innovation and commercialization. The data suggest the opposite: a continued pattern, even a decrease in the rate of entrepreneurial engagement in general, and dismal levels of success for the younger entrepreneurs (Azoulay et al., 2020) that comprise a large majority of HEI ecosystems. These organizations fail to engage diverse populations or adequately measure entrepreneurial-inspired social impact/value (Mulgan, 2010).

In turn, the noted doubling between 1985 and 2008 in the number of new students (i.e., freshmen) identified as wanting to own their own business (Pryor & Reedy, 2009) creates a societal juxtaposition. This entrepreneurial popularity is in direct contrast to the "considerable uncertainty as to whether entrepreneurs are born or made, which has led to an ongoing debate in the entrepreneurship academy about whether we can teach individuals to be entrepreneurs" (Henry et al., 2005). Subsequently, researchers have argued that educational institutions aren't the place(s) to learn or experience entrepreneurialism. Arguments that suggest entrepreneurial exclusivity based on specific traits and behaviors and the belief that only particular environments can catalyze the required entrepreneurial behaviors

support this view. One example of the actualization of this belief is the Thiel Fellowship, a program that paid aspiring entrepreneurs to pursue their entrepreneurial ideas and forgo post-secondary education (Wauters, 2011).

Some valid arguments challenge public HEIs' efficacy and entrepreneurial programming, especially their historic ability to drive successful entrepreneurship. However, despite the potential challenges, research points to the value of entrepreneurs' interactions with institutions (Miller & Acs, 2017), noting that entrepreneurial learning and action can be creatively validated through scientific methods (Reis, 2011). Zellweger and Zenger (2021) add that the use of approaches to "understand[ing] problems and [creating] solutions in a science-like manner" (p. 2) positions entrepreneurs as scientists. Cumulatively proposing that while HEIs may not be specifically designed to drive social good through entrepreneurialism, they should, or at least could, be their entrepreneurial ecosystems (Miller & Acs, 2017; Rice et al., 2014) by instigating nascent entrepreneurialism in response to the growing burden of expectation.

In turn, HEIs are investing in building engaged communities of actors who can help harness knowledge and activate created innovations to co-create new or enhanced value (Feld, 2012; Spigel et al., 2020).

THE MENTORS [REDUCTIONIST] NARRATIVE

***RQ2**: What philosophical assumptions are engrained within Western Public HEIs that implement and reinforce limiting entrepreneurial narratives?*

Despite the reality that it "can be difficult to assess which approach is best for a venture's particular business model and stage of maturity" (Guttentag & Davidson, 2021, p. 4), entrepreneurial research and practice continue to advocate for entrepreneurial stages, or phases as outlined in Figure 11, delineated by specific validation milestones.

This reductionist approach helps programs focus on understanding the key actions that can instigate and enhance entrepreneurial transitions, presumably increasing programmatic efficiency by decreasing superfluous resource allocations.

Canter, Cunningham, Lehmann, and Menter (2021), along with Lehmann and Menter (2022), applied this reductionist linearity by proposing an organizational architecture to an entrepreneur's journey through stages, as noted in Figure 12a.

As a natural extension of this approach, improved programming coordination through enhanced participant tracking can be implemented by stage with knowledge of the participants' interactions. In the research noted, this is accomplished as stages are supplemented by proposing the "Motivations and Needs" along with the potential "Activities and Supports", outlined in Figure 12b, that could be supplied by the institution.

Once these stages are delineated, planning, and dividing the most strategically beneficial resources to enhance each stage is a natural step. Cunningham et al. (2022) provided a conceptual framework for "entrepreneurial universities" (p. 16) by identifying the internal institutions that can support entrepreneurial endeavors at each of the predefined entrepreneurial stages, as outlined in Figure 12c. This framework mirrors Niiniluoto's (1999) suggestion that "ontological realism claims that at least a part of reality is ontologically independent of human minds" (p. 21), proposing an objective reality beyond the individual context and perception of the "reality is interaction" (Rassokha, 2022, p. 1434) perspective of ontological relativism. In entrepreneurial thought, a realist ontological view can lead to the idea that an obtainable outcome or equilibrium can be attained beyond individual context or perception if the correct processes are followed. As such, these discussions would suggest an efficient way to minimize the complexity of human minds by limiting the initial entrepreneurial engagement to a singular journey

explicitly controlled by an individual or small group that attempts to obtain the desired outcome. They promote the concept of both founder-centric and linear approaches to entrepreneurialism.

Once the institution delineates the resources, it is much easier to reference its key user metrics (i.e., participant actions, touchpoints, engagement, pain points, etc.) that would theoretically improve an individual's (read: the customer in the experience) journey through the aligned process. The resulting artifact, called a Customer Journey Map (CJM) exemplified in Figure 13, is a research methodology of increasing popularity that is "praised by both academics and practitioners for its usefulness in understanding an organization's customer experience" (Rosenbaum et al., 2017, p. 143) from the perspective of the user. The CJM intends to understand actual user behavior from the user's perspective (Marquez et al., 2015) beyond appointed structures, which ultimately involves the user in refining those experiences (Marquez & Downey, 2015; as cited in Marquez et al., 2015).

When applied to entrepreneurial programming, this approach focuses on identifying prescribed "stages, steps, and touchpoints" (Marquez et al., 2015) that, for example, a burgeoning student entrepreneur should pass through on their entrepreneurial journey.

Institutions are particularly effective at mapping out linear paths and designing programming to fit those paths more effectively. Aside from the CJM, the work of Shostack (1984) proposes a method of designing a process "in which the tangible and intangible elements of the service are incorporated into the final offer" (Johne & Storey, 1998, p. 207). This molecular modeling (Shostack, 1982, as cited in Johne & Storey, 1998), more commonly known as Service Blueprinting is visually depicted in Figure 14. Originally designed to help identify failure points in a service operation (Bitner, Ostrom & Morgan, 2008), "provides a common platform for

everyone . . . to participate in the service innovation process" (Bitner et al., 2008, p. 87). This methodology emphasizes physical infrastructure, onstage/visible contact employee actions, backstage/invisible contact employee actions, and supporting linear processes.

Admittedly, multiple unique methodologies are centered on a human-centric approach to understanding and improving a user's experience through the linear-bound, heroic [entrepreneurial] journey. Each of these approaches supports the concept of a process supply chain, defined by Mentzer et al. (2001, p. 4) as "a set of . . . entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer." This definition suggests that an "ultimate supply chain includes all the organizations involved in all the upstream and downstream flows . . . from the ultimate supplier to the ultimate customer" (p. 4).

In turn, approaches that utilize the narrative of a supply chain in controlling the system suggest that it is required to understand a system so effectively as to embark on a process of measuring and improving throughput. Admittedly, in the case of entrepreneurial programming, the best measure of quality outcome is presently debated. The shared basis of the user's experience (Bitner et al., 2008; Rosenbaum et al., 2017) suggested that these two separate methodologies can be complementary, allowing for the merging of overlapping stages to give a more holistic view of a linear support structure (see Appendix D).

Regardless of the specific approach, the underlying concept of process [entrepreneurial] reductionism, based on the philosophical assumption of positivism, leads to an epistemological foundation that prioritizes roadmaps (popularly utilized at many HEIs) that predict and subsequently provide the needed resources to ensure entrepreneurial success. For example, Aulet (2013) created a "logical linear process"

(p. xiv), shown in Appendix E, to provide guidance through the otherwise "messy and sometimes confusing process" (p. xiii) of entrepreneurship.

Likewise, Cho, Chomina-Chavez and Bronowitz (2017) propose ten steps, shown in Appendix F, designed to help an engineer understand "the path through the startup process," (p. 1) thereby decreasing system variability while increasing participant confidence. This positivist approach to entrepreneurship also criticizes the "lack of uniformity in instruction" (p. 1), supporting more entrepreneurial objectivism towards uniformity (read: positivism; Cho et al., 2017).

Furthermore, this supports the implicit assumption that the individual (an independent variable) "causes" entrepreneurship (Gartner, 1988) by traversing a "systematic and predictable" (p. 2) process (Cho et al., 2017). Through an objectivist lens, these maps identify the individual (i.e., the entrepreneur) as a single actor external to the entrepreneurialism process. In turn, the value of these maps is in their ability to direct any independent, individual actors. Both previous maps focused on engineering schools/programs) through the execution of prescribed behaviors to successfully achieve entrepreneurship through predetermined stages. The explicit argument is that "the [entrepreneurial] order is not arbitrary—it is predictable and systematic—in this predictability, we find the order of entrepreneurship" (Cho et al., p. 3), with their focus on inclusion matched with a prevalence towards entrepreneurship, cited as one of its eight design goals (Cho et al., 2017), and innovation positions ASU as a unique location for this research.

The prevalence of linear, philosophically objectivist programming is also present at ASU. For example, the Thunderbird School of Management, a 2014 collegiate addition to ASU (Wiles & Ryman, 2014), officially partners with the Arizona Hispanic Chamber of Commerce (AZHCC) to implement the Freeport-McMoran Foundations DreamBuilder program ("Financing Your Dream," 2018); a program that

boasts sharing "*the proven* 13-step process for creating an *effective* business plan" (Arizona Hispanic Chamber of Commerce, 2023; italics added; see Figure 15) with aspiring Hispanic female entrepreneurs worldwide (DreamBuilder, 2018) and through connections to the Mexican Embassies in the United States. Similarly, the previously discussed Startup Map (see Appendix F) was created by three authors connected to ASU's Technology, Entrepreneurship, and Management (TEM) program.

This model is pervasive at HEIs, in both application and through research (Gartner, 1988). It was noticed as recently as Daniela Pai-Thorton's (2016) call to end our cultural obsession with the individual as a critical input (popularly referred to as "heropreneurship"), and as far back as Schumpeter (1942), who suggested that new value can be exhibited through five specific outcomes (or dependent variables): (a) new [or higher quality] goods, (b) new methods of production, (c) [the opening of] new markets for the product/service, (d) new sources of supply, and (e) new organizational forms (as cited in Morris & Sexton, 1996; Croitoru, 2012).

While it may be an "intuitively appealing" assumption that key inputs and outcomes *are* entrepreneurship, Gartner (1988) pointed out that this approach inevitably "leads to the problem of identifying [which individuals, or] which firms in an industry are the [entrepreneurial] ones." Gartner further laments that once identified, often utilizing at least some level of debatable logic, researchers find themselves in the unenviable position of trying to 'reverse engineer' what makes those individuals and firms entrepreneurial.

This encapsulates the current entrepreneurial zeitgeist; for example, the belief that entrepreneurs, "characterized by their attitudes to be imaginative, innovative, authoritative, and risk-taking, drive innovation and technological change in the economy" (Yanya et al., 2013, p. 331) invades our cultural mindsets. Miller and Acs (2017) supported this notion by prioritizing the role of the individual in their

proclamation that the "campus entrepreneurial ecosystem . . . is constrained only by the creativity of the students, faculty, and staff, and their supporters and partners" (p. 94). This approach minimizes the dynamics of the system and directly contrasts with Gartner's (1988) realization that "it is not possible to differentiate entrepreneurs from managers or the general population based on the entrepreneur's supposed possession of such traits" (p. 58). In management literature, this realization follows the concept of managerial thinking (Sarasvathy, 2001b), where one can take their given means and achieve a targeted outcome (i.e., a pre-defined equilibrium) through a "disciplined" (Aulet, 2013; Sull, 2004), causal path of action as represented in Figure 16.

When utilized at post-secondary institutions, an objectivist philosophy-of-choice approach to entrepreneurial cultivation concentrates resources on key variables while, often ignoring the dynamics and "potential interactions among these variables [that] further complicate prediction" (Sull, 2004, p. 72). The larger issue is that these philosophically biased predictions are often scaled to new contexts far beyond their local institutions' borders, which leads to fallacious programming, often implemented by contextually naive centralized decision-making authorities. Such a structure does little more than intentionally decrease participants' 'random' actions that could otherwise bring true entrepreneurial value.

Objectivism and the positivist philosophical assumption that it engenders lead to formalized experiences (often backed by extensive expenditures) designed to provide needed resources toward entrepreneurial success. These resources are often identified and implemented by an overarching, centralized authority for easy coordination.

THE MENTOR'S PRESSURES & BIASES

The increasing appeal of holistic policies towards entrepreneurship and innovation has not gone unnoticed (Audretsch & Belitski, 2016). Despite the importance of contextual inputs on the development of entrepreneurial ecosystems, public HEIs from different socioeconomic, informational, and institutional environments often find themselves creating similar ecosystems. Paradoxically, ecosystems that, while focused on identifying and enhancing the key variables of entrepreneurship, are not, as noted, particularly effective in engaging and/or supporting many individuals within their ecosystem(s).

In response to the noted efforts to engage individuals around entrepreneurialism, these same institutions face additional challenges due to their unique ecosystems, and the (internal and external) influences exerted by the relationships forged between HEIs.

While copying others to join their crowd is a generic form of social behavior (Han, 1994), it is also common for specific organizations to change their unique characteristics in a seeming effort to increase internal compatibility with their environment (DiMaggio & Powell, 1983). The Encyclopedia Britannica explains that a "one-to-one correspondence (mapping) between two sets [of data] that preserve binary relationships between elements of the sets" is called an Isomorphism (Hosch, 2009).

In sociology, "isomorphism" explains a similarity in the structures or processes between two or more organizations. This organizational homogenization process is called institutional isomorphism, which refers to instances where a given organization is forced to resemble other units or organizations (Cardona et al., 2020) through various types of pressure. In practice, it is argued that there are three types of pressure towards forced homogenization: Mimetic, Normative, and Coercive.

Mimetic, a word that means imitative (Mimetic, n.d.), pressure refers to the tendency of one organization to homogenize its structure to that of another organization due to a belief in the structural benefits of the imitated organization. In other words, an organization's efforts to deal "with uncertainty and constraint often lead, in the aggregate, to homogeneity in structure, culture, and output" (DiMaggio & Powell, 1983, p. 147). This outlook holds that an institution's poorly understood organizational technologies, ambiguous goals, and environmental uncertainty (DiMaggio & Powell, 1983) encourage them to imitate other 'trusted' approaches to the shared uncertainty or constraints, which could be one of the reasons that popular approaches in one institution can become standard procedures in other institutions despite dramatic contextual differences. For example, Aulet's (2017) Disciplined Entrepreneurship has become a cult classic within educational institutions, especially engineering schools; and after direct outreach to the customer service at Wiley, the books' publisher, and calculations based on sales x cost (listed on Amazon) it is noted that this methodology has sold over 58,000 hard copy books and generated over $1.1M in revenue (these numbers do not include the online sales, or other versions with a unique ISBN).

When replicated by multiple organizations, this mimetic behavior increases the mimetic pressures between institutions (i.e., public HEIs). It also leads to normative pressures, defined as the presence of widely accepted norms and standards (Normative, n.d.), which encourage homogenization between organizations. DiMaggio and Powell (1983) suggested that the presence of (a) a cognitive basis created through formal education and (b) the proliferation of professional networks, including the "filtering of personnel" (p. 152), instigated this type of pressure. Through research sponsored by the Kauffman Foundation, Morelix

(2015) recognized some of the representations of these normative pressures through his "evolution of entrepreneurship on College campuses" timeline (see Figure 17).

Morelix's (2015) report acknowledged that through the 31 years between 1975 and 2006, the number of entrepreneurship degrees and diplomas in the United States increased five-fold (Torrance et al., 2013) from 100 to 500. Further, recognizing a 1900% increase from 250 to >1500 entrepreneurship courses offered between 1985 and 2008 (Torrance et al., 2013); this represented an average of over 200 new courses per year that were taught by about 9,000 faculty members (Torrance et al., 2013) able to collaborate at conferences and filter between organizations.

This form of normative pressure is matched by coercive pressure on students, and entrepreneurship is now a required topic for many programs, including at ASU (Torrence, 2013). As the term "coercive" suggests, this pressure is based on a power difference between entities. Whether by dependence or cultural norms, this refers to instances in which organizations are influenced by "both formal and informal pressures" to pursue homogenization (DiMaggio & Powell, 1983, p. 147).

Cardona et al. (2020) presented a clear example of this by pointing to the ability of the state to encourage institutional homogenization through financial and regulatory mandates. In other words, if an entity like an HEI wants to stay legal or access specific government funding, it must homogenize.

Where institutions do not have explicit knowledge, experience, or metrics related to the most contextually beneficial approaches to promoting entrepreneurial transitions, hierarchical institutions (i.e., governments, HEIs, etc.) can ultimately create programming that is not agile—or responsive—to entrepreneurial needs (Wilson, 2016). This results in an institutional inability to adequately measure their efforts' entrepreneurial-inspired social impact/value (Mulgan, 2010). This cumulative

ambiguity can lead to further issues through the damaging increase of even more mimetic, normative, and coercive isomorphic institutional pressures.

For instance, the educational juxtaposition in which public HEIs operate makes it relatively simple for these organizations to recognize the potential advantages of mimetic behavior. This belief can lead to direct "modeling" (DiMaggio & Powell, 1983, p. 151) of economic approaches that are popular and successful in broader society and at other institutions operating within a different context (i.e., private, or for-profit HEIs).

Initially, this lack of public HEI innovation, seen in a reluctance to create entirely new or even contextually relevant entrepreneurial programs, may seem beneficial. Focusing on these approaches increases the visibility of HEIs while minimizing the time and financial resource commitments that new, unique approaches may require to develop and implement, as Cyert and March (1963) suggested (as cited in DiMaggio & Powell, 1983).

These dysfunctions combine to suggest that, despite their potential and reach, HEIs "are central institutions in which the structuration processes of inequality unfold" (Bruton et al., 2022, p. 40). While isomorphism is not a new concept within the literature, little has been written regarding the specific role of isomorphic relations within entrepreneurial ecosystems. Notably, isomorphic pressures are not inherently bad. However, the reality of heavily influenced, even forced, homogenization based on singular variables from contextually biased environments proves problematic. In HEI environments, rankings are one example of systems that can be influential in perpetuating these isomorphic pressures. Leading to the exportation of biased models to other countries.

Rankings. Considering their reductionist approaches and subsequent simplification of the antecedents (read: inputs), processes, and outcomes of

institutional entrepreneurialism as an economic activity, public HEIs are arguably one of the most extreme examples of creating institutional isomorphic barriers to entrepreneurial participation. These extremities can often be seen through various rankings targeting institutional entrepreneurialism.

While rankings may have initially been intended to be student-focused and/or informative, they have often become policy instruments (Dill & Soo, 2005). When the rankings become policy instruments, they, in turn, become a form of coercive pressure (Anafinova, 2020) on peer institutions that are often based on reducing the contextual dynamics of entrepreneurship into specific, measurable antecedents and outcomes. In response to these overwhelmingly influential pressures, HEIs can find themselves pressuring other institutions to imitate their untested homogenization.

From an institutional point-of-view, one may be surprised to note that popular U.S. HEI entrepreneurship and general school rankings (i.e., Poets & Quants) are influentially (approximately 30%) based on untested assumptions like "square feet of incubator or accelerator space available," "Ratio of entrepreneurs in residence," and the role of competitive or "startup award money available" (Allen, 2021). Other popular rankings (i.e., U.S. News & World Report) prioritize (40%) peer and recruiter assessments (Morse et al., 2021), turning rankings into an example of the institutionalized normative pressures associated with popularity.

The isomorphic pressures exerted through ranking approaches can create unique challenges. As noted, one of those challenges comes through the explicit reductionism utilized to identify key variables. Paying little or no attention to how those variables interact creates an environment where HEIs pursue specific ranking metrics (often at a high cost) regardless of the unvalidated nature of their philosophical assumptions and the tenuous, at best, connection between the

individual ranking criteria and its explicit impact on the entrepreneurial strength of the institution.

As an example of this challenge, often referenced in the popular statement that correlation is not causation, the ranking, and review previously noted (Crews et al. 2021) suggested that "we find that the miles of coastline as well as the number of mountains is a strong factor when it comes to quality of place and its impact on entrepreneurship" (p. 7). These variables show that the physical geology of a location somehow increases its quality along with its subsequent appeal to entrepreneurs and the outcomes of entrepreneurship.

For example, the danger of isomorphic pressures in this instance could suggest that institutions either expand to certain geographic regions or replicate specific geology to drive improved entrepreneurial rankings despite the absence of proof that such locations are the cause or instigation of improved entrepreneurial practices. Institutions could simply give up on any entrepreneurial ambitions. The context of the assumption would not work with rugged, mountainous, or beach/coastline terrain. Furthermore, even if this assumption were proved accurate, it still biases certain locations as it specifically notes "miles of coastline" as a comparison. So, for instance, a small island surrounded by coastline (which would be presumably appealing) is still unable to compete with a region that covers longer coastline ranges, even if those ranges aren't physically accessible to the entrepreneurs that this presumably appeals to. Transferring these rankings outside of the United States will make the issues even more pronounced, as geography is not something that most nations can control, especially those who are seeking the benefits of entrepreneurial emancipation.

With their access to knowledge-generation resources and funding, academic institutions could lead in promoting entrepreneurial transitions within their unique

contexts. Yet, while entrepreneurialism is seen as an opportunity to empower the rising generation and tackle some of the central challenges of our time, those within these same institutions aren't deferring to entrepreneurialism as an option despite the concept's popularity. While Carnevale et al. (2015) reported that over 70% of all college students are working while attending post-secondary education (in 2015), little data suggest that these same students are availing themselves of the extensive resources that their institutions are devoting towards promoting entrepreneurialism, and/or training entrepreneurs.

I theorize that one reason may be the presence of reductionist-based entrepreneurialism, exacerbated by institutional isomorphic pressures, which conflate to create critical challenges to entrepreneurial programming within public HEIs. There are potential difficulties in mimicking other systems that don't consider the local ecosystem's cultural nuances. In other words, by imitating popular economic approaches HEIs become increasingly susceptible to internally reproducing the same external biases and limitations.

For example, HEIs are modeling engagement approaches from popular incubators, accelerators, and government-sponsored economic programming, where their data suggests that the highest rate of new entrepreneurs are those not connected to educational ecosystems. Specifically, current entrepreneurial data identifies that successful entrepreneurs are likely among the least educated populations (Fairlie, Robert, Desai & Herrmann, 2019). These systems are also seeing dismal entrepreneurial engagement levels for younger (Azoulay et al., 2020), female (Malach-Pines & Schwartz, 2008), and minority students who collectively represent much of the public HEI ecosystems. In short, the systems being mimicked have a dramatic misalignment with the purposes, audiences, and objectives of public HEIs, as can be seen in many HEI processes, including but not limited to the internal

challenges that are created by mimicking competitive exclusivity and confusing (i.e., over-theorized) language.

Competition(s). Social entrepreneurship competitions are among the top metrics in rankings and a popular concept at HEIs. This practice has garnered some attention for the noted challenges with academic institutions utilizing competitive gamification to help bridge "the valley of wasted knowledge" (Global Institute of Sustainability and Innovation, 2019) to get new ideas, even academic research, into the hands of practitioners. Despite their popularity, and in contrast to widespread assumption(s), entrepreneurial competitions, often called Business Plan Competitions (BPC), have yet to prove adept at driving social good through entrepreneurship along either key public HEI metric (accessibility or quality). Whether focused on entrepreneurial excellence (i.e., implementation, impact, jobs created, financial sustainability, etc.) or engagement (i.e., participant number and diversity [gender, scholastic], etc.), the utilization of entrepreneurship competitions for social good outcomes is worthy of further investigation.

A key challenge is encapsulated in the purpose (i.e., behavioral change, even habit formation, towards entrepreneurial action) of these competitions. The concept of goal-direct behavior leading to habitual behaviors is not new (Miller et al. 2019). Yet, while habits can be formed in response to stimuli (Miller et al., 2019), extrinsic rewards must be strategically deployed so as not to lower intrinsic motivation (Shiota et al., 2021). Verplanken and Wood (2006) suggested these behavioral interventions are not as effective as disrupting the current environmental factors that drive habitual behavior. They propose two types of interventions that could work: Downstream and Upstream.

Downstream focuses on providing information at critical points where habit changes could occur, including changes in everyday routine. This information could

overlap with entrepreneurship as emancipation when additional constraints (i.e., losing employment) change routine and make habit changes (i.e., entrepreneurial action towards income) appealing. Upstream interventions attempt to drive new behaviors by creating new pathways. Competition could be seen as attempting this approach; however, competition prize money can become a habit. If this occurs, it creates a danger in that "as habits develop, people form expectancies for certain outcomes and are especially receptive to these outcomes when they occur in the future" (Verplanken & Wood, 2006, p. 92), positioning the institution in the place of the market, which can lead to participants seeking further prize funding without connecting to their ultimate market. These challenges lower overall participation and limit positive competitive outcomes. Dr. M. N. Shiota (personal communication, September 6, 2022) accumulated these challenges when she stated, "If HEIs are offering one-off prizes, that may stimulate one-time behavior with impact but is unlikely to lead to lasting behavior change."

Aside from the skepticism surrounding the current outcomes of entrepreneurial competitions, the pedagogy of such an approach toward socially impactful entrepreneurship is uniquely problematic. Indeed, at a minimum, social entrepreneurs would require additional resources beyond the current traditional entrepreneurial training (Tracey & Phillips, 2007). Furthermore, universities can often struggle with attracting relevant experts to support the fundamental and sought-after experiences of mentorship (Lange, 2018), comparative unbiased judgment, and even the disbursement of prizes. The absence of these experts can detriment the outcomes of the BPC (Gailly, 2006), and when combined with the lack of diverse engagement, these competitions can serve to minimize and even negate the benefits of grassroots knowledge and cross-disciplinary collaboration that should

empower the complementary, but unique, entrepreneurial functions of innovation, enterprise, and funding (Dey, et al., 2019).

Most importantly, the key additional stakeholders, often the vital voices of the recipients of these entrepreneurial proposals, must be included in developing any business solution (Tracey & Phillips, 2007) but are rarely built into the current competitive processes utilized at HEIs. These flaws combine to make socially focused BPCs diabolically successful at promoting a universalistic version of Western ethnocentricity that paradoxically does not benefit the individual participants or society in general.

For example, "the enduring deployment of competitions in educative practice" (Watson & McGowan, 2019, p. 35) is built on taken-for-granted assumptions (Brentnall et al., 2018; Watson et al., 2014) that are magnified when utilized towards the ill-defined concept of social entrepreneurship, which creates a series of previously mentioned issues exacerbated at public HEIs by what Watson and McGowan (2019) called a limited empirical critique of the BPC methodology (Gailly, 2006).

This limited critique is represented by a generally recognizable (a) dearth of peer-reviewed literature about [social] competitions' impact (Huster et al., 2017) and (b) limited data to suggest that HEI-based entrepreneurial competitions increase the respective rate of social solutions being implemented. These limitations ensure assumptions are not tested, systemic flaws are not identified, and practitioners cannot improve programming beyond mimicking popular economic and cultural approaches.

These BPCs are increasingly focused on venture capital (VC) concepts (Bell, 2010) like technology and scalable growth. Utilizing VC methodologies like pitch decks that are not too valuable outside of that specific VC context is also a concern.

This approach often aligns with the belief that Entrepreneurial Ecosystems and development-oriented entrepreneurship should promote the creation of scalable or high-growth firms (HGF). This approach can decrease participation in public HEIs by realizing that the primary assumptions upon which the programs are built are false in several ways. First, the realization that HGFs are not primarily high-tech or even built on university-based technologies (Brown et al., 2017) suggests that public HEIs that promote this type of entrepreneurial approach are creating ecosystems that "exclude large numbers of entrepreneurs" (Spigel et al., 2020, p. 487). Secondly, it is suggested that any type of entrepreneurship, including creating "a hobby project, a side hustle, maybe a student club," is some of the best life and career preparation (Tamaseb, 2021, p. 68). HEI ecosystems that only incentivize founder engagement encourage hyperbolic discounting among their students by encouraging them to disproportionately weigh immediate consequences (i.e., grades, prize money, etc.) related to potential future consequences (i.e., successful entrepreneurship, learning processes, social benefits, etc.).

Confusing Language. "All change begins with language" (Heller, 2018). The choice and utilization of words within an intentional narrative is a powerful tool. Even a simple term that is misunderstood or misused could prove problematic. Take a term as "alluring" as that of "Social Entrepreneurship," coined by Bill Drayton in the 1980's (Light, 2009). Heavily utilized on public HEI campuses and within academic literature, utilization of this terminology can create confusion (Dees, 2001) within those ecosystems.

Built on a lack of collective consensus or a generic definition of entrepreneurship (Klofsten, 2000), this "unique [social] species in the genus entrepreneur" (Dees, 2001, p. 2) remains an ill-defined concept (Weerawardena & Mort, 2006), which leads to an ever-increasing likelihood of confusion and vigorous

debate (Dorado, 2006) around the broad range of entrepreneurial models, methodologies, and definitions that merge business and social outcomes. Grassl (2012) added to this debate by noting that the term "already implies that the solution to social problems is to be found in private (and usually individual) initiative" (p. 37).

What might have originated as a problematic lack of clarity has turned into fields of literature backlogged with authors who add to this confusion through the creation of many [new] different definitions (Omisakin et al., 2016) or those who vigorously defend their preferred versions of social entrepreneurship. These debates span disciplines and are often delineated by their use of differing terminologies with varying reference to the type of "issues" tackled, the relevance of social benefit (Dees, 2001) to the entrepreneurs themselves, and the ultimate economic outcomes of the entrepreneurial action in question (Botelho et al., 2021).

While agreement on a universally accepted definition is unlikely, one could also argue that the term social entrepreneurship is too broad to be ideally placed under the umbrella of entrepreneurial literature at all. Even the belief that social entrepreneurialism is a unique subtopic of entrepreneurship is also open for debate. For example, research has suggested that social entrepreneurs rarely follow the same governance functions implicit in research focused on general entrepreneurship (Dorado, 2006). Aside from the claim that their social mission is explicit and central (Dees, 2001, p. 2), they often do not follow the same growth strategies and can pursue different types or forms of financing (Tracey & Phillips, 2007). Once these "social" ventures are created, they may exhibit increased instability and fragility compared to similar profit-focused startups.

As Dorado (2006) explained, and others have exemplified, this general confusion has led to social entrepreneurship referring to completely disparate

concepts. A social entrepreneur can be the instigation of non-profit (NFP) organizations (Weerawardena & Mort, 2006), for-profit businesses, benefit corporations, or UK-based community interest companies (Cohen, 2020). Furthermore, definitions have expanded to include Social Entrepreneurial Ventures (SEV; Dorado, 2006), Bio-preneurs (Flinn Foundation, 2022), as well as more general innovative (Acs, 2010), sustainable (Fichter & Tiemann, 2020) transformational (Ratten & Jones, 2018), and impact entrepreneurs (Bussgang, 2017; Cohen, 2020), potentially becoming "socially responsible companies" (Dorado, 2006. p. 322), public-private partnerships, social enterprises (Dorado, 2006), as well as mission-driven (Boschee, 2001), or affirmative businesses (Boschee, 2001). These approaches can be further delineated (and access unique funding) by utilizing regular, double (Dorado, 2006), or triple-bottom-line accounting frameworks.

The sheer breadth of related definitions engenders confusion (see Table 7) and challenges research, discussion, and application. Without a clear definition of the term, different examples (often with competing ideals) are used to justify each type of approach. For example, Cohen (2020) identified Elon Musk as the strongest impact entrepreneur due to the environmental impact of his firm Tesla. Is a firm worth more than $1 trillion dollars a social venture (Isidore, 2021)?

While debate and discussion can be healthy, a common lexicon, or entrepreneurial language (EL), is potentially vital to entrepreneurial success (Davis, Johnson, Ingram & Williams, 2022). How do HEI participants utilize a concept that is confusing and too broad (Eppler, 2012), such as social entrepreneurship? Or should they use the term? Student opinions have suggested that the prevailing confusion justifies that society "retire the term from our lexicon" (Eppler, 2012, para. 7).

While this social version of entrepreneurialism is discussed, it remains poorly (even contentiously) defined, and an increase in topical confusion may decrease the

appeal and levels of engagement of entire ecosystems. Suggesting that if HEIs will drive socially relevant entrepreneurialism, the blind utilization of terms created by external organizations like Ashoka (Light, 2009) is an insufficient approach.

CROSSING THE THRESHOLD

It may not seem surprising that a growing body of research indicates "the economic impact of entrepreneurship on poverty has been mixed" (Alvarez & Barney, 2014, p. 160), with "no [proof of any] significant relationship between the number of new firms and income of the poor and income inequality" (Yanya, et al, 2013, p. 339). Further, "magazines often exhibit a rather obvious ideological bias in favor of entrepreneurs and do not … hide their wish to celebrate them, even if it means exaggerating their importance" (Piketty, 2017, p. 581). Ultimately, these insights challenge "the effectiveness (or lack thereof) of policy and programs aimed at enhancing entrepreneurial activities in [development contexts]" (Amorós & Cristi, 2011, p. 225).

One of the reasons hypothesized for entrepreneurship's lack of economic impact on people experiencing poverty is the reality of the different types of businesses that people with low incomes traditionally create and their diverse outcomes (Alvarez & Barney, 2014). The reality of different types of businesses (i.e., survival, lifestyle, managed growth, and aggressive) and the related levels of entrepreneurial orientation are recognized (Morris & Kuratko, 2020), along with the different infrastructure and outcomes (Alvarez & Barney, 2014). However, I agree with the proposition that any size venture can play an essential role in economic development (Morris et al., 2015) and therefore share the term "poverty entrepreneur" with Morris et al. (2015).

Institutions are imperfect entities, and no one would expect them to be. However, their current structures and power dynamics could be one of the

fundamental causes of entrepreneurial biases. They then play a key role in exporting those biased models to other contexts, to the detriment of those contexts. In many respects, publicly funded 4-year Title IV HEIs are one of the most conspicuous places to view this distortion, specifically through the methodologies and metaphors commonly utilized in these environments.

One reason for these implicit and occasionally explicit biases within HEIs is the presence of reductionist-based entrepreneurialism, exacerbated by institutional isomorphic pressures that conflate into the communal adoption of philosophically biased programming. When coupled with the influences of popular culture, these forces tend to perpetuate the idea of entrepreneurial linearity. Enacted through programming that, due to the assumptions surrounding the importance of specific variables that can be individually tracked and controlled, inevitably defers HEIs towards centralized formality, due in part to HEI efforts to understand, build, and ultimately measure (through comparison) these ecosystems.

These efforts often utilize research and experience to precisely delineate and predict the best methodologies to incite various forms of entrepreneurial behavior. These approaches represent what researchers, practitioners, and administrators perceive to be entrepreneurial "truths" and are a type of belief that can be referred to as a philosophy (Ryan, 2018). Often utilized to delineate research approaches within HEIs, these same philosophies can have enormous implications for how entrepreneurial programming is designed and implemented.

Despite a clear understanding of the underlying philosophies or their impact on the institutional programming and participants, common narratives are buoyed by extensive startup catalyzing investments into "university entrepreneurship center resources, including incubation spaces, accelerator programs, and pitch competitions" (Illinois Science & Technology Coalition, 2019, p. 5); and these

resources are increasingly being implemented within entrepreneurial institutions underlined by the belief that "direct university investment bridges [any] funding gap" (p. 14).

One example of this narrative, noted by the University Entrepreneurship Index (Illinois Science & Technology Coalition, 2019), is the State of Illinois, where universities invested ($10,000 median) "$7.2 million in 220 startups founded from 2014 to 2018" (p. 14). Later, the same location reported (Illinois Science & Technology Coalition, 2022) that of the 760 startups created on Illinois campuses between 2018-2022 (p. 1), they created 2,281 jobs in the United States (p. 6) with the $9.8 million in university funding, that was matched 14:1 in follow-on funding ($137M) from sources outside of the university (p. 11). This suggests that in search of the popular entrepreneurial narrative, there was an average of $190,526 ($10,263 of public funding, and $180,263 external, follow-on funding) invested per venture. This investment led to the creation of 3 jobs per startup, or approximately $63,509 per job, over that period. While beneficial, rarely does our institutional structures review these investments to see if that money could have been more productive if invested through alternate programming, supporting, potentially, other philosophical and epistemological ideologies.

CHAPTER 3

INITIATION

After understanding the constraints of the current approaches and resolving to continue their journey, the "adventurer" in the hero's journey crosses the "first [inter-world] threshold" (Williams, 2017; p. 3, 46) by learning of critical challenges and improving themselves via a new environment. Williams (2017) explained,

> The journey of initiation (Action 2) then begins with this crossing towards a world still unknown, in which he advances by trial and error by confronting himself with new tasks. The adventurer pursues his way and reaches the culminating point . . . where he undergoes the main obstacle. (p. 46)

Vogler (1999) confirmed that at this point in the journey, by "having crossed the threshold" and accepted the potential challenge(s), an adventurer then "faces Tests, encounters Allies, confronts Enemies, and learns the [new] rules" of the world they've entered (p. 4).

As Sarkar et al. (2018) noted, the culmination point of a review of the foundations of institutionalized entrepreneurialism can be found in "one of the most important questions in the literature on business venturing": "why some people become entrepreneurs while others do not" (p. 278). Without a deep understanding of the philosophical roots of this culminating question, many institutions devote valuable resources through time-intensive efforts to identify and mimic popular entrepreneurial approaches. Approaches that are deliberatively designed to control a system in pursuit of targeted numbers of entrepreneurial transitions (i.e., participation rate). This approach ignores the dramatic influence of underlying assumptions on programming. Exacerbated by institutional isomorphism, it also counters internal objectives, limits participation, and removes local audiences and contextual considerations that should be fundamental to any version of

entrepreneurialism. Then, through popular institutional programming, these ideals are exported into "diverse contexts where those with entrepreneurial power exercise power over others" (Kohn & Reddy, 2006) through the imperialistic implementation and maintenance of popular narratives and approaches. Often, these narratives directly benefit the current power structures economically.

[PHILOSOPHICAL] TESTS, ALLIES, AND ENEMIES

I propose instigating or renewing a study of entrepreneurial freedom, which is essential to implementing more impactful and contextually relevant entrepreneurial programming. While such a focus may seem trite and outside the important work of entrepreneurial implementation, the reality is that the philosophical underpinnings behind the interplay of key, interconnected concepts like entrepreneurial opportunities, economic freedom, time, and diverse participation aren't adequately understood or considered.

Take, for example, the common "entrepreneurship is a process" (McMullen & Dimov, 2013, p. 1481) approach that is increasingly taught in our classrooms (Brown & Kātz, 2009; Read et al., 2011, as cited in McMullen & Dimov, 2013). While I take no issue with this concept and would agree with the process orientation, I concur with McMullen and Dimov (2013) that this current entrepreneurial zeitgeist is based on two underlying, incorrect assumptions. First, Dimov (2011) noted that:

> entrepreneurial opportunities [are seen as] a narrative of the entrepreneur as a prescient progenitor following a hidden but linear path. . . this narrative has not only acted as a blinder, directing exclusive attention to the "entrepreneur," but has also made opportunity an elusive construct. (p. 58)

Based on Abbott's (1988) suggestion that an implicit "general linear theory (GLR)" approach "has come to influence our actual construing of social reality, blinding us to important phenomena" (p. 169), and has "limited [our] way of

imagining the social process" (p. 183), a linear narrative leads entrepreneurial academia to "continue to employ linear models that are presumed to occur at a single point in time" (McMullen & Dimov, 2013, p. 1481). In turn, and as previously noted, popular entrepreneurial narratives then reduce our narratives to "linear combinations of discrete variables [that]… inevitably leads to pruning away the peculiarities of their context and to collapsing their time into singular moments" (Abbott, 1988; Dimov, 2011, p. 59).

This underlying assumption alters how researchers study the concept of entrepreneurship, such as initial opportunity, and the potential explanations of their findings, ultimately altering the type of proposed actions for those who seek to promote entrepreneurship; and outlined in Table 8. I also submit that this biased view limits the breadth of those who participate, either by explicit removal from entrepreneurial programming through formal requirements or implicit self-removal due to a lack of belief in their ability to participate in a linear process as promoted through popular narrative.

Grassl (2012) also noted this presumptive error, stating that "one of the most entrenched social dichotomies—that of market participants being either consumers or producers (including intermediaries)—is breaking down as value co-creation allows consumers to participate in the production of their goods" (p. 40). Further, the idea of a linear process based on concepts as variant as opportunity discovery has been challenged in different fields for some time. Michael Polanyi has argued that "we still have no clear conception of how discovery comes about" (2013, p. 14). To explain this conundrum, Polanyi paraphrased Plato:

> To search for the solution to a problem is an absurdity. For either you know what you are looking for, and then there is no problem; or you do not know

> what you are looking for, and then you are not looking for anything and cannot expect to find anything. (Polanyi, 2013, p. 14)

The recognition of linearities' singular moments implies the second incorrect assumption that, as McMullen and Dimov (2013) noted, time is "either inconvenient, a source of noise in variance-oriented designs, or irrelevant," which "[diminishes] the role of time in the entrepreneurial process" (p. 1482). While time is "conspicuously absent from empirical work supposedly devoted to understanding the emergence of new ideas, products, firms, [and] industries" (McMullin & Dimov, 2013, p. 1482), it is still an essential characteristic of entrepreneurialism.

McMullin and Dimov provide an overview of the misalignment of this type of approach and its direct connection to a misaligned focus on the "founder" and misrepresentation of the "heropreneur" discussed previously by noting that a linear approach positions the entrepreneurial process as a:

> sequence of discrete events that comprise the history of each entrepreneurial effort [and] is treated as a holistic unit. In other words, the partitioning of the observation space is done horizontally, separating each entrepreneurial effort and treating it as a different observation in its own right. Such partitioning makes the entire span of time inherent to the observation. Everything that happens in between is an indelible part of the explanation of the outcome that emerges eventually. Because explanation in this setting comprises a sequence of events, human capital has no explanatory meaning on its own. It represents static potential and does not constitute an event of any kind. Thus, its usefulness in the explanation is limited to the extent to which it can be shown to contribute to the occurrence of some of the discrete events that lay on the path to the final outcome. (p. 1487)

Instead, a variance approach prioritizing the relationship between variables (McMullin & Dimov, 2013), allowing variables to interact vertically, was concurrently developed. It empowers dynamic shifts in the timing of an entrepreneurial journey. A variance approach also ensures that multiple aspects of an entrepreneurial process are catalyzed simultaneously and can benefit from dynamic variable interaction.

This understanding of the two incorrect assumptions challenges the basis of the epistemological "counterrevolution" (Lavoie, 1985, p. 101), which consists of the crawling growth of objectivism within our economic approaches. This crawling growth appears as institutions seek to promote the belief that entrepreneurial behavior can be socially organized by a central authority who, through horizontal interactions, owns and controls the means of the community as a whole (Merriam-Webster, n.d.).

This problem is exacerbated by institutional isomorphism, objectively identifying the key metrics of new venture success. Then, gaining control (through acquisition, creation, or partnership) of those resources, those same institutions create programming to disburse critical resources to their constituents. In turn, the institutions own and have conscious control over the means of entrepreneurial engagement and the subsequent entrepreneurial transitions within their institutions. This horizontal approach likewise represents Karl Marx's idea of "bringing social production under "conscious control" rather than leaving it to the whims of the "anarchic" forces of [the market]" (Lavoie, 1985, p. 28).

I suggest that such an approach will not work for entrepreneurialism as it treats economic inefficiencies as a maximization problem manageable through a mathematical startup equation. A mathematical approach allows for debate (i.e., rankings) over who can complete the calculation best, built on the belief that "all of the necessary knowledge [and means have been] given and which therefore has a determinate solution" (see Lavoie, 1985, p. 64). Friedrich von Hayek (1937) summed

up this calculation problem and how it impacted the approach of institutions when he wrote (pp. 130-131) that the idea:

> that one central authority has to solve the economic problem of distributing a limited amount of resources between a practically infinite number of competing purposes … constitutes the problem . . . The fundamental question is whether it is possible under the complex conditions of a large modern society [or subsequent institution] for such a central authority to carry out the implications of any such scale of values … with a degree of success equaling or approaching the results of competitive capitalism. (as cited in Lavoie, 1985, p. 149)

Furthermore, controlled systems bias entrepreneurial engagement towards the preferences of the central authority regardless of the benefit it should provide to the actors dealing with the system's economic inefficiencies. In other words, the "preferences of consumers" that "must guide social production" (see Lavoie, 1985, p. 145) can be easily misunderstood or even outright ignored.

In entrepreneurial universities, this bias can take many forms, as noted. For instance, much like literature notes in various economic contexts, public HEI students (often the sole target of entrepreneurial programming) are often in a position of subordination to the institution that owns the essential resources, including finances, knowledge networks (i.e., mentorship, training), and property (i.e., tools, physical spaces [note that universities are ranked on how much of this they own]). The last resource, property, is particularly dangerous. As Friedman (2000; as cited in Roth, 2023) noted,

> The only way in which you can be free to bring your knowledge to bear in your particular way is by controlling your property. If you don't control your property, if somebody else controls it, they're going to decide what to do with

> it, and you have no possibility of exercising influence on it. The interesting thing is that there's a lot of knowledge in this society, but . . . that knowledge is divided. I have some knowledge; you have some knowledge; he has some knowledge. How do we bring these scattered bits of knowledge back together? And how do we make it in the self-interest of individuals to use that knowledge efficiently? The key to that is private property because if it belongs to me, you know, there's an obvious fact. Nobody spends somebody else's money as carefully as he spends his own. Nobody uses somebody else's resources as carefully as he uses his own. So, if you want efficiency and effectiveness, if you want knowledge to be properly utilized, you have to do it through the means of private property.

This concept of personally controlled resources closely connects to the liability of poorness (Morris et al., 2020; Morris, 2020) discussed earlier. These additional constraints could be fundamental in limiting individuals with low economic resources' transition into and continuation through entrepreneurial transitions.

For example, the utilization of pitch decks by public universities directs students towards a particular type of entrepreneurialism, as this modality is unique and predominantly utilized by equity investors. While universities may want this type of outcome, basing programming on this tool pushes potential entrepreneurs at universities to focus on a particular and unique funding model. That focus is especially problematic at public universities, which train economically constrained individuals who are creators, as well as future sole proprietors and small business owners, with a tool they will likely never utilize for funding (or for their business in any way). Further, those pushed into this funding approach face extremely low odds as they are trained to pursue a funding model like Venture Capital (VC). Using data from Pitchbook & the National Venture Capital Association (NVCA), Takahashi (2023)

reported that in 2022, VC investors only made 15,852 deals in the entirety of the United States. If students at ASU received every VC deal reported in the USA, only 11.12% of students would have received funding support. This data coincides with reports that only 0.05% of entrepreneurs raise venture capital (Wood, 2020), making it an explicitly exclusive funding methodology.

Through the deliberative control of philosophically biased programming, a public university mimics a methodology that intentionally limits access despite a public institution's mandate to expand access. This limits the benefits of entrepreneurship to specific audiences and makes engagement more inaccessible to the most economically constrained. Sadly, this positions public institutions as saving the most valuable entrepreneurial exchanges for those with access to the required skills and resources (Alvarez & Barney, 2014). This dysfunctional ecosystem relegates entrepreneurial-based emancipation to a manifestation of wealthy ethnocentrism.

This challenge is unperceived in popular Western HEIs, partly due to society's engrossment in an entrepreneurial revolution. Utilizing data from the U.S. Census Bureau, Tatum (2023) reported that over 5 million new firms started in 2022, and Angell (n.d.) notes that 5.4 million new business applications were filed in 2021, making them the two most popular years for new business creation in the United States since 2004. We've also seen entities worldwide increasingly attempting to coordinate the instigation of nascent entrepreneurialism. Governments are subsequently being called on, with rising regularity, to bolster the prevalence and impact of entrepreneurial support organizations (ESO; e.g., including but not limited to chambers of commerce, entrepreneurship incubators, and accelerators, as well as educational institutions) through investment in increasing their access to "financial capital, technical assistance, experienced entrepreneur mentors, resource networks,

as well as intangible resources like favorable attitudes toward risk and failure, creativity, and the political will to try things differently" (Crews et al. 2021, p. 12).

As these ESOs are generally identified as "essential to create the social capital required for [economic] success" (Crews et al. 2021, p. 8), they are, in turn, being called on (see Crews et al. 2021) or outright created to encourage, and even transition, individuals into entrepreneurialism. This type of entrepreneurial bolstering is common in developed economies and is likewise a behavior often exported into and mimicked by economic institutions within developing economies. This approach to the entrepreneurialization of economies is increasingly pushed from developed into developing economies.

We likewise see a subsequent increase in the prevalence of scientific analysis of entrepreneurial participants, institutions, and ecosystems. Since the 1600s, as introduced by Descartes, scientific research often "seeks to explain the working of complex phenomena by examining the individual parts in detail" (Campbell, 2007). Entrepreneurship research and its related programming are no different; an extensive body of research analyzes the individual phenomena of entrepreneurs and entrepreneurship to identify the fundamental indicators that can maximize the subsequent impact of any potential investments (Campbell, 2007). The common practice of utilizing methodological reductionism leads to identifying and measuring specific variables purported to improve institutions' entrepreneurial nature and outcomes within economic ecosystems.

One outcome of these approaches is the creation and heavy utilization of tools like frameworks that can be utilized to better understand and promote this philosophical approach to entrepreneurship. These frameworks can prove powerful allies of the current narratives and act as enemies to any potential changes needed to improve current systems. Examples of popular frameworks built on

entrepreneurial metrics include Entrepreneurial Intensity (EI), Entrepreneurial Orientation (EO), and the Entrepreneurial Capacity Index (EPI).

EI, an organizational-level variable introduced by Morris and Sexton (1996), "captures the degree of entrepreneurship, the level of commitment, and focus in leading a new [economic] entry" (Liao et al., 2005, p. 32). EI simultaneously proposes that the prevalence of entrepreneurial events can help measure the entrepreneurial nature of an institution and its members. EI, as represented in Figure 18, suggests that by measuring two antecedent variables, the rate of entrepreneurial events (frequency) and their (degree) innovativeness, proactive nature, and level of risk, an institution can predict and improve their economic performance through an increased intensity of entrepreneurialism (Morris & Sexton, 1996; Morris, 2015).

Further research into EI shows some of the assumed benefits of entrepreneurial behavior, as Liao et al. (2005) utilized reductionism to provide some insight into the popularity of planned entrepreneurialism when they note some types of individual outcomes of both inherent and learned entrepreneurial-oriented behaviors, as outlined in Figure 19. Some of these specific outcomes include:

> the ability to start a business, engage in extensive learning behavior, incur broad experiences, acquire high skill, engage in variable activity, develop entrepreneurial competency, engage in personal growth and development, and possess a high EO. This characterization would include having a strategic vision with clarity and a greater probability of implementing the vision. (p. 36)

The degree of entrepreneurship is defined through three dimensions: innovation, proactivity, and risk-taking (Morris & Sexton, 1996). This type of simplified metric can encourage institutions to push students towards entrepreneurial projects in which they are not interested (suggesting that the ideas will not lead to

improved outcomes), have no background or experience with, and are in contention with their full calendars and schedules.

EO, proposed initially by Lumpkin and Dess (1996), breaks entrepreneurial action down into the measurable human variables of "autonomy" (p. 140), "innovativeness" (p. 142), "risk-taking" (p. 144), "proactiveness" (p. 146), and "competitive aggressiveness" (p. 148; also cited in Liao et al., 2005). While Johan Wiklund (1999) argued that "investments in EO may be worthwhile for small firms since they pay off over an extended period" (p. 37) and acts as a complimentary but distinct concept to EI (Liao et al., 2005), this approach defers to the individual entrepreneur. Narratives that focus on individuals can miss the value of teamwork and collaboration and even directly encourage individualistic approaches that could hurt the outcome of entrepreneurial efforts.

Taken together, the EI and EO concepts of autonomy, innovation, risk-taking, proactiveness, and competitive aggressiveness, along with the frequency and degree of entrepreneurial behavior, provide a series of variables public institutions believe will provide an opportunity to measure and ultimately improve (i.e., education) entrepreneurialism. They encourage internal programming that controls the system, hoping to enhance the value of the programming, and yet it limits the participation rate and quality of entrepreneurial action.

Meanwhile, the EPI, utilized by Crews et al. (2021), has reduced entrepreneurship as an economic tool at an ecosystem-level framework that utilizes the components of "Main Street Entrepreneurship" (which is measured by the share of employment provided by private firms who have been operating for five years or less) and "Knowledge Intensive Entrepreneurship" (measure by the share of main street entrepreneurship with a bachelor's degree or higher) to predict, and ultimately

improve, the capacity of a community to strategically support an entrepreneurial economic development strategy (see Appendix G).

While each framework focuses on a separate level of entrepreneurialism, these three examples represent the prevalence of reductionist-inspired efforts to understand and promote entrepreneurial behavior. Formalizing these and other objectivist approaches to entrepreneurship is a crucial challenge to improvements, including new approaches, to entrepreneurial programming in public and unique contexts.

[SCIENTIFIC] APPROACH [TO ENTREPRENEURSHIP]

***RQ3**: What philosophical framework could be utilized to allow for dynamic interaction of components?*

Entrepreneurship can be a powerful tool for impact, which is one reason many communities, institutions, and even whole nations focus resources on promoting and supporting entrepreneurship. These resources contribute to various methodologies, competitions, financing, and unique ecosystems to enhance entrepreneurial engagement.

Up to this point, I've endeavored to show both the role of preferred philosophical paradigms in the approach to entrepreneurial programming, as well as the prevalence of an objectivist approach in HEIs and the inevitable entrepreneurial linearity with all its side-effects that result from such a philosophical approach.

As previously noted, utilizing a linear supply chain approach appeals to institutions and precariously influences the inclusivity of entrepreneurial participation and its outcomes. In many ways, a linear supply chain is beneficial to known systems, as it can help manage inventory more effectively (Giannoccaro & Pontrandolfo, 2002), optimizes both product and labor distribution, allows for improved quality control, and ultimately presumes an ability to lower the monetary

costs associated with implementation and maintenance (Pettersson & Segerstedt, 2013). Although attempting to measure the cost of a supply chain, "based on a calculated standard cost that is too aggregated may present a false impression about how cost-effectively the supply chain is being managed; decisions based on such calculations may, therefore, end up not supporting the most cost-efficient methods . . ." (Pettersson & Segerstedt, 2013, p. 362).

Furthermore, by identifying entrepreneurial activity as a key purpose of a system (see Stam, 2014), through the lens of a linear process, institutions can utilize a disciplined approach to new value creation to create processes that maximize system throughput via "control[ing the system] by enforcing obedience or order" (Discipline, n.d.). Figure 20 shows the perceived benefits of a planned model as noted by Stam (2014).

While institutions all over the world seek this 'entrepreneurial throughput' of new value creating organizations (i.e., startups, corporate ventures), the current approaches continue to show the preference towards an objectivist philosophical foundation by attempting to increase entrepreneurial outcomes via entrepreneurial process simplification. Mapping the entrepreneurial process as a series of key, known variables that can be predicted and controlled towards the desired outcomes.

In contrast to the ideal of perfect individual knowledge and environmental/contextual control, our economic systems see the opposite; and calls continue for entrepreneurialism to tackle economic complexity with a view to changing the current status quo. Creating a currently unknown, but intentionally improved system. As such, a 'disciplined' linear approach to entrepreneurship with its presupposition that an answer (or 'ideal system') can or has already been identified is superfluous to a contextual understanding of a complex marketplace; suggesting forced redundancy for approaches that promote an individual's knowledge as

sufficient for systemic prediction, or the related ability for one person to obtain the knowledge required to remove all systemic complexity.

As Hayek (1974) notes, these approaches that presuppose the presence of perfect system knowledge, and a related ability to centrally prescribe solutions, are ultimately dangerous:

> There is danger in the exuberant feeling of ever-growing power which the advance of the physical sciences has engendered, and which tempts man to try, "dizzy with success", to use a characteristic phrase of early communism, to subject not only our natural but also our human environment to the control of a human will. The recognition of the insuperable limits to his knowledge ought indeed to teach the student of society a lesson of humility which should guard him against becoming an accomplice in men's fatal striving to control society – a striving which makes him not only a tyrant over his fellows, but which may well make him the destroyer of a civilization which no brain has designed but which has grown from the free efforts of millions of individuals. (para. 23)

In response, I argue that entrepreneurialism is instead a unique type of *subjective* engagement within an economic system. A type of systemic engagement that can't be perfectly predicted, or controlled, much less forced; or as McKibben (2007) suggests, a system that isn't driven by overarching leadership, "…but by local desire and necessity" (p.13). Nevertheless, engagement is needed within a dynamic economic system where inequities and imperfections exist. Where, through the creation of new values, often via the destruction of suboptimal incumbents, participants can create contextual, albeit unpredictable, improvements.

There are many justifications for the belief in a subjective system. For example, individuals and communities must realize that no individual system is

representative of all systems. It is for this reason that technologies successfully utilized within one unique environment can fail, or even cause detrimental outcomes, in another environment. This aligns with John Stuart Mills' (1845/2006) suggestion (as cited in McCloskey, 2016) that:

> Ideas, unless outward circumstances conspire with them, have in general no very rapid or immediate efficacy in human affairs; and the most favorable outward circumstances may pass by, or remain inoperative, for want of ideas suitable to the conjuncture. But when the right circumstances and the right ideas meet, the effect is seldom slow in manifesting itself. (p.518)

So, if the systems in which we live are unknowable or uncontrollable, is it our destiny to sit idlily as the system progresses, or can our individuals and communities still engage entrepreneurially in a way that doesn't presuppose an ability to "[prescribe a] conduct or pattern of behavior" (Discipline, n.d.) on others?

It could be argued that the scientific process shares ontological, epistemological, and theoretical similarities with entrepreneurialism. This belief underlies "our insecurity as a legitimate field [which] has propelled us into a world where entrepreneurship is science and the scientific method will yield answers to our most pressing questions" (Neck, Greene, & Brush, 2014, p.7). This narrative is actively promoted to post-secondary students. Take Cox, Kidwell, and Lortie's (2021) entrepreneurship textbook "New Venture Launchpad". While suggesting that a key challenge of entrepreneurialism is the need to "operate almost entirely in "unknowns"" (p.12), the authors propose that this scientific approach can act as "a widely established, well-tested, robust, and rigorous methodology that anyone can apply to find the answers they are looking for" (p.12). They visually represent the scientific method as an objective, linear process as shown in Figure 21.

The authors choose to utilize a linear approach to explain the scientific method. While it may be easier for individuals to understand and replicate, this method is then conflated with the entrepreneurial process; another process that is not linear.

These types of philosophical assumptions have led to an expansion in entrepreneurial research, and practice, that is characterized by the prevailing ontological foundations. To this end Pittaway (2016) laments that the popular theoretical foundations "[tend] to eradicate meaningful interpretations of entrepreneurship from the inquiry as a consequence of the philosophies used" (p.215).

The ontological, epistemological, and theoretical similarities within entrepreneurial research causes gaps in our entrepreneurial understanding, and subsequently biases entrepreneurial practice, as these paradigms influence the growing international community of researchers, practitioners, and administrators (noted by White, Saurav, and Gupta, 2022).

Ontology, as defined by Johnson & Duberley (2000), is "derived from the Greek words 'ontos' (being) and 'logos' (theory or knowledge) […] Hence to consider the ontological status of something is to ask whether it is real or illusionary" (p.67).

In other words, the ontological approach underlies research and acts as a belief system that alters key assumptions and impacts what is narrated as real. Moon & Blackman (2014) suggest two main approaches to research: realism and relativism, that play a role in helping "researchers [and practitioners] recognize how certain they can be about the (nature and existence of) objects they are researching" (p.1170). Table 9 outlines this ontological spectrum.

Understanding the ontological assumptions behind research and programming is one useful way to delineate the philosophical approaches to entrepreneurial

studies, and their practical consequences within programming (Chiles, et al., 2010). This ontological spectrum can, on one end, argue that reality exists beyond the individual, and human beings can [or cannot] gain access to it; or, on the other end, reality is a construct of the "consciousness and cognitions" of human beings (Johnson, & Duberley, 2000, p.67). These contrasting assumptions can impact the beliefs and ideologies about entrepreneurial realities and what can be known.

These assumptions, in turn, influence epistemology. Epistemology is explained as being:

> [derived] from two Greek words: 'episteme' which means 'knowledge', 'information', 'theory' or 'science'; and 'logos' […] In other words, epistemology is the study of the criteria by which we can know what does and does not constitute warranted, or scientific, knowledge. (Johnson, & Duberley, 2000, p.2-3)

"Epistemology is concerned with all aspects of the validity, scope, and methods of acquiring knowledge" (Moon, & Blackman, 2014). Within entrepreneurship, an epistemological approach represents a philosophical belief (i.e., positivism v. interpretivism) which alters the view of how an individual can come to know entrepreneurial 'truth' (Ryan, 2018). The systems alter the theoretical perspective, which directly influences the various instantiations of entrepreneurship, along with the direction and influence of the support and funding systems that are offered. Table 10 outlines the epistemology and theoretical perspective between the philosophical paradigms of Positivism and Interpretivism.

Relevant to the underlying paradigmatic approach of a system, the propensity to believe in one's ability to predict an outcome of action (Realism) can lead to a belief in the ability to adequately control a process. In contrast, the theoretical perspective that an individual, or institution, can only contextually understand the

possible implications of action (Relativism) can shift narratives, and their related behaviors, towards more universal, broadly accessible, democratized types of empowerment (Moon, & Blackman,2014). Chiles, Bluedorn, and Gupta (2007) suggest that these paradigms create a spectrum of economic approaches to understanding and promoting entrepreneurship, outlined in Table 11.

At one end of the spectrum, within a positivist paradigm, realists believe that they can identify reality external to the individual having the experience. This underlines the traditional HEI objectivist approach to searching for singular truths by gathering data to prove their entrepreneurial reality. This also supports positivists' focus on identifying provable facts that are consistent between entrepreneurial individuals and systems (i.e., entrepreneurial traits, ecosystem rankings metrics, etc.) (Ryan, 2018).

A positivist philosophical approach leads to what Pittaway (2016) calls the "mechanistic metaphors to explain how social systems work" (p.216); including previously noted metaphorical terms associated with entrepreneurship like "Disciplined" (Sull, 2004, Aulet, 2013) and the idea of "racing" down a planned, controllable roadway (Cho, Chomina-Chavez, & Bronowitz, 2017).

> Polanyi (2013) questioned the very essence of this approach when he asked: If science is the understanding of interesting shapes in nature, how does this understanding come about? How can we tell what things not yet understood are capable of being understood? The answer I gave here to this question was that we must have a foreknowledge sufficient to guide our conjecture with reasonable probability…[as] to produce an object by following a precise prescription is a process of manufacture and not the creation of a work of art. And likewise, to acquire new knowledge by a prescribed manipulation is to make a survey and not a discovery. (p.14)

Similar approaches also proport value in entrepreneurial processes that "assume the social world exists independent of individuals' knowledge of it" (Chiles, et al., 2010, p.139). This requires that approaches explicitly remove the relationship and interplay between contextually unique variables that are operating within a dynamic ecosystem.

Chiles, et al. (2010) explains that postpositivist approaches likewise presume that "the social world has an actual, substantial existence"; however, that existence can be understood, albeit imperfectly, due to "the contested nature of human knowledge" (p.139). Chiles, Bluedorn, and Gupta (2007) suggest that popular postpositivist approaches to entrepreneurship can be outlined by the theoretical approaches of theorists like Israel Kirzner (1930-present) who suggests that entrepreneurs "correct inefficiencies in disequilibrium" (p.471).

While more recognition is given to the subjective interactions of the individuals (i.e., entrepreneurs) within critical realism, and among theorists like Schumpeter who struggled with the paradox of static equilibrium and dynamic systems (Chiles, Bluedorn, & Gupta, 2007), this philosophical paradigm assumes that "the social world has a material presence apart from individuals' knowledge of it, but they emphasize its changing and structured nature and admit some role for human cognition to influence it" (Chiles, et al., 2010, p.139).

Despite the inherent differences within these separate philosophical foundations, it is noteworthy that they all rely in one form or another on the underlying concept of integration towards economic equilibrium. This purports, at minimum implicitly, the belief that knowledge of systems can be understood, even if imperfect, and processes can be prescribed. It is therefore important to acknowledge that despite their popularity:

> The equilibrium-based approaches that dominate entrepreneurship research [and practice] offer useful insights into some aspects of entrepreneurship, but they ignore or downplay many fundamental entrepreneurial phenomena such as individuals' creative imaginations, firms' resource (re)combinations, and markets' disequilibrating tendencies—and the genuine uncertainty and widespread heterogeneity these imply. (Chiles, et al., 2010, p.138)

Note here that the linearity of the "hero's journey" reiterates these philosophical paradigms. An entrepreneurial hero's travels, as discussed in detail in the introduction, suggests a reality that exists independent of the entrepreneur, where they must understand and interact in a beneficial way – but the underlying objective reality still exists throughout and culminates in adding new value that enhances the current expectations of a system (i.e., back to equilibrium).

Equilibrium-based narratives promote approaches that contain similar theoretical, methodological, and metaphorical biases which lead to simplifying inherently complex systems. This simplification alienates certain entrepreneurial variables and reprioritizes ecosystem power dynamics away from the 'market'. In turn, efforts to scale the impact and participation rates of entrepreneurialism defer to central systems to encourage control of the necessary variables. Understanding that those systems likely don't know all (or any) of the variables, and they likely ignore the contextual dynamics of social interactions around those variables, suggests that they are inherently scaling exclusivity, and decreasing the overall value of entrepreneurialism in the process.

These issues overlap with one of Lavoie's (1985) key challenges to some of the fundamental assumptions of central planning when he stated that "in a world of complexity and continuous change, the central planners would lack the knowledge of the coefficients that go into the [assumed economic] equation" (p.91).

In contrast to realist ontologies that promote objectivist epistemologies, and all the implications of that approach, a subjectivist epistemology with a relativist ontological grounding would purport that "the world is different for different people" (Ryan, 2018, p.2) based on how they 'construct' their reality through a lens of their individual views and experiences. Relativist approaches, in contrast to Pittaway's (2016) "mechanistic metaphors" (p.21), argue that entrepreneurship is "more like a tightly interrelated system" (Campbell, 2007, p.132) based on the noted the importance of freedom and its influence on commerce and commercial superiority (see Esprit des lois (chapter 7), 1872; cited by Weber, 1920/1988). Ryan (2018) argues that these approaches suggest that individual "perceptions, experiences, and feelings" (p.3) play a fundamental role in each personal 'truth' (Ryan, 2018). In turn subjectivists support the possibility of multiple 'truths' based on everyone's unique experiences, and environments.

However, among the rising generation, entrepreneurship and freedom have been disconnected via an overarching bias towards epistemological objectivism that is prevalent among this generation's most influential institutions.

To propose an alternative, subjective, approach to entrepreneurialism within public educational institutions would require building onto common entrepreneurial practitioner beliefs that "when you're running a [new] business, you cannot do it with a linear progression" (S. Wald, personal communication, March 20, 2023). This would suggest that instead of a linear hero's journey, entrepreneurial individuals would be more likely to experience a circular journey that could happen repeatedly over time (see FIGURE ii). Likewise, the individual themselves wouldn't be the main 'character', but instead would encourage the journey as one individual who is a part of the instantiation of a process that they impute added value into. Placing the New Value (i.e., Innovation) being created, along with its exchange with an audience(s),

as the main objectives of the journey. This concept is outlined in the Austrian view of an economic system:

> an "imputations process" in which no evident solution is given to the entrepreneurs who must nonetheless make reasonable judgements and who vie with one another to make more accurate guesses about the "true" value [of what they are adding to the system]. To the Austrian it is only through a competitive clash of many divergent estimates of producer evaluations that those entrepreneurs that survive can approximate the "correct" imputed value that the neoclassical economist assumes is known by each market participant. (Lavoie, 1985, p.64)

These beliefs assumed, entrepreneurial programming would take place in a dynamic, decentralized marketplace that Moon and Blackman (2014) suggest would be based on the "meaning [that] exists within the [context]: [where] the subject imposes [their] meaning on an object" (p.1169) placing "the meanings that constitute an action … as important as the action itself (p.1172). This more directly aligns with UC Berkeley's ("Understanding Science", 2022) suggestion, represented in Figure 22, that the scientific process is circular as opposed to linear.

A subjective approach would inherently "reject the idea that subject and object, observer and observed, or mind and world can be separated" (Moon, & Blackman, 2014, p.1172). This approach purports a separate, circular narrative of the hero's journey; a narrative aligned with Vogler's (2009) representation, replicated in Figure 23, that more directly coincides with Buchanan and Vanberg's (1991) relativistic belief that:

> The market economy, as an aggregation, neither maximizes nor minimizes anything. It simply allows participants to pursue that which they value, subject to the preferences and endowments of others, and within the

> constraints of general "rules of the game" that allow, and provide incentives for, individuals to try out new ways of doing things. There simply is no "external," independently defined objective against which the results of market processes can be evaluated. (p.389)

A relativistic approach to entrepreneurial programming also aligns with the belief, supported by Turner (1894), that unregulated environments can promote entrepreneurial behavior; environments that are "free from social and government constraint" (p. 228) and imbued with access to resources (as cited in Miller, & Acs, 2017, p.77). This approach is formalized in Turner's (1894) 'frontier' metaphoric entrepreneurial idealization of "[rebelling] against the conventional" (p.228) (as cited in Miller, & Acs, 2017, p.77).

I also note, importantly, that while these concepts may seem to generally follows an 'Austrian' economic view, such a statement is too simplistic. While it is generally accepted that the Austrian school of economics is more subjectivistic, Don Lavoie (1985) suggested there is still a spectrum of economic approaches from within the system when he suggests the economic school of thought is shifting away from the "marginalist revolution of the 1870's, [where] all trained economists had been as subjectivistic as [key Austrian economists Ludwig von Mises and Friedrich von Hayek]" (p.100). Lavoie's contention was that we're seeing a philosophical shift where, instead of subjectivist economics, "the modern Austrian school [of economics] contends that a spurious objectivism has crept back into [current economic models]" (p.101).

Table 12 outlines the inherent differences within the economic approaches of Israel Kirzner (1930-present), Joseph Schumpeter (1883-1950), and Ludwig Lachmann (1906-1990), three influential Austrian economists.

While there is some overlap in approaches, Lewin (2012) notes that one of the main differences relates to their discordant views on "the question of [the] equilibrating tendencies [of the economy]" (p.13). Lachmann, in contrast to his colleagues, was identified as the "radical subjectivist" (Lewin, 2012, p.12). This moniker was due to Lachman belief that while multiple people were learning, they were learning different, discordant things; this meant that any proclivity for one individual's actions to lead to any form of economic equilibrium was inconceivable.

CENTRAL ORDEAL: RADICAL SUBJECTIVISM

> ***RQ4****: How would a subjective philosophical foundation reimagine the entrepreneurial process "by explicitly equating entrepreneurship to a journey that consists of a set of conditions that must be met, but not in any particular order to proceed …, a [subjective] goal, and a series of events that may proceed in something closer to chronological order" (McMullin, & Dimov, 2013)?*
>
> The future is unknowable, though not unimaginable. Future knowledge cannot be had now, but it can cast its shadow ahead. In each mind, however, the shadow assumes a different shape, hence the divergence of expectations. The formulation of expectations is an act of our mind by means of which we try to catch a glimpse of the unknown. Each one of us catches a different glimpse. The wider range of divergence the greater the possibility that somebody's expectation will turn out to be right. (Lachmann, 1976b, p.59)

Broadly based on the belief that entrepreneurship is a process of creating new order(s), not achieving equilibrium (McKelvey, 2004), it should be noted that many of the Austrian economists realized that equilibrium was never to be sustainably achieved. However, Lachmann was "alone among his contemporaries and predecessors in the Austrian School, hence the appellation 'radical subjectivist'," due

to his insistence on the disequilibrating forces of both knowledge inaccuracies and changes over time. This led to the "Lachman problem" proposed by Kopple (1998, p.61), where the juxtaposing concepts of the "spontaneous activity of the free human mind" challenged the economist's ability to create a "theory of expectations" (p.61).

In other words, how does the goal-oriented entrepreneur act in a "kaleidic" (Lewin, 2012, p.13) world where the different and competing expectations of other entrepreneurs ensure that economic "error is thus inevitable and ubiquitous" (p.12)?

In response, Chiles, Bluedorn, and Gupta (2007) utilized Lachmann's contributions to "jettison neoclassical economics" (p.472) towards a radical non-equilibrium theory of entrepreneurship. This 'radical subjectivism' is based on "experience or knowledge as conditioned by personal mental characteristics or states" (Merriam-Webster Dictionary: Subjective, n.d.), and encompasses a heterogeneous amalgamation of theories united in their broad disagreement with an equilibrium-based epistemology (Buchanan, & Vanberg, 1991).

A Lachmannian approach to radically subjective entrepreneurialism would have to ensure that the economic expectations of the entrepreneurs themselves meet three criteria, as Koppl (1998, p.64) identifies; namely, first, it must position expectations and assumptions as key outcomes, second, it must be consistently subjective in prioritizing the unique active minds of participants, and third, entrepreneurial expectations must be endogenous to the market process.

A central tenet of Lachmann's approach to economics is the idea that "knowledge is continuously changing in a society" (Lachmann, 1976a, p.127), and in turn the market process is the consequence of an interminable creation of new knowledge (see Lachmann, 1976a). This belief positions entrepreneurship as a broad general topic that merges multiple disciplines to understand and promote the varying

types of new knowledge that is created. Gartner (1988) supports this proposition when he explains that "the creation of an organization is a very complicated and intricate process, influenced by many factors and influencing us even as we look at it. The entrepreneur is not a fixed state of existence. . ." (p.64).

This complexity ensures that entrepreneurship garners a wide array of definitions that alter the concept, in some cases dramatically; Table 13 outlines popular definitions of entrepreneurship, exemplifying that a discussion of entrepreneurship so contextually diversified that it can be beyond the possibility of comparison. This leaves no one definition as a wholistic accumulation; instead creating an environment in which each definition covers some of the complete definition, but never the whole thing (Low, & McMillan, 1988).

To overcome the challenges incumbent in this environment, Low and McMillan (1988) encourage "that the specific purpose of [any] study be explicitly stated at the outset [of any study]" (p.142).

Herein, entrepreneurship is defined as the transitions towards a direct economic interaction through the new exchange of value with an audience. This delineates from the proposed definition of innovation (the creation of new value) that can happen without any level of direct audience exchange. These definitions allow for innovation without entrepreneurial action, and entrepreneurial action without the need for innovation.

To identify how a radically subjective approach could be merge into a process-oriented model, and answer the noted research question(s), I utilized extant literature in partnership with 22 interviews with current entrepreneurs, students who have participated in public HEI entrepreneurial programming at ASU, and entrepreneurial program managers from a variety of national institutions. I utilize

these interviews to act as a support for the literature review that underlies my approach.

Beginning with Lachmann's market process theory, I suggest that entrepreneurs make evolving plans due to the diverging expectations that arise from experience and subjective assumptions of the future (Chiles, et al, 2010). This creates a system cumulative of a "sequence of individual interactions, each denoting an encounter (and sometimes collision) of a number of plans, which, while coherent individually […] are incoherent as a group" (Lachmann, 1976a, p.131).

This belief would suggest that predicting where entrepreneurship will emerge, and how, is a waste of effort; and any devotion to such a process would only prove limiting to entrepreneurial transitions. Alternatively, at any given time approximately 8 billion people are on this planet and are interacting in one way or another, either directly or indirectly, with others, visually depicted in Figure 24.

As these individuals communicate, it is inevitable that collections of individuals will delineate themselves (i.e., nodes) and new value(s) will be discussed, tested, and even created. When a node decides to exchange that value with others, they have entrepreneurial intentions (or an entrepreneurial mindset) and become entrepreneurs when action is taken towards exchanging value that is new, with others. Hwang and Horowitz (2012) identify two traditional approaches that are taken to support these types of interactions. Institutions, including governments, major corporations, and how "most American Universities operate their technology transfer offices" (p.182) defer to a centrally organized unit that brokers interactions via a "first derivative approach". This type of approach, noted in Figure 25, places a central, coordinating unit within the entrepreneurial process. Such an approach to entrepreneurialism creates a system that is dramatically impacted by interaction distance, community trust, agency influence, and "perhaps most importantly, the

moment that the agency in the middle is no longer there, the entire process grinds to a halt" (Hwang, & Horowitz, 2012, p.183).

In response, Hwang, & Horowitz (2012) suggest a third derivative approach that seeks to "yield immense impact, is low-cost, and generates internal sustainability" (p.183). This aligned with a radical view of the system, where the actors within this system (read: entrepreneurs), their interactions with others, and the actions that are taken can't be predicted, controlled, or replicated beyond creating an environment to support interactions. This type of subjective action is visualized in Figure 26. In this type of system "the only possible way" to achieve sustainable, low cost, impact is through the enhancing the number and quality of interactions of individuals, which lead to "the creation of trust, social norms, connectivity, and diversity" (Hwang, & Horowitz, 2012, p.183).

This also suggests that those who engage in entrepreneurial action effectively must remain agile and alter their plans to delineate what they will take away from the "abundance" of new information that their market consistently generates over time (personal interview, January 16, 2024).

Particularly relevant to this view of entrepreneurialism, these beliefs align with emerging effectuation research (Sarasvathy, 2001a; Sarasvathy, 2001b), that suggest entrepreneurial action often occurs in situations where the future is truly unknowable, positioning human agency, action, and contextually 'given means' as of primary importance to 'effectual thinking'. The process, represented an entrepreneurial utilization of their means towards imagined ends, is represented in Figure 27.

In turn, "effectual" approaches claim to be more effective at instigating entrepreneurial transitions because of an (a) decreasing focus on prediction of an unpredictable future, and (b) an increasing dependency on personal control of one's

contextually relevant behavior(s) (Sarasvathy, 2001b). This aligns with a radically subjective approach as it positions the interaction of individuals, with their varied skillsets, opinions, and resources, as central to the process of entrepreneurialism. Magnifying those personal resources through the dynamic, constantly evolving interactions between diverse individuals. This approach acknowledges that every unique individual has their own skillset(s), resources, and objectives.

Figure 28 outlines the dynamic model of effectuation and new market creation shared by Sarasvathy & Dew (2005), where the network is initiated through an effectual commitment that sets in motion two concurrent cycles of expanding resources and converging constraints that result in the new market" (Sarasvathy, & Dew, 2005, p.533).

The current approaches to entrepreneurship support the belief that entrepreneurship is accessible only to a subset of society who self-identify as entrepreneurs and have access to certain resource(s). This traditional approach, especially when applied within institutions, limits access to many innovative individuals and often leads to biased levels of engagement.

An effectual approach is more in line with the concept of radical subjectivism, where everyone who is engaged in the "vast network of communications" that makes up the market (Lachmann, 1956, p.21) "may or may not start with an "opportunity". Instead, they start with who they are, what they know, and whom they know, and begin acting upon whatever they can afford to do" (Sarasvathy, & Dew, 2005, p.543; see also Sarasvathy, 2001a). This is supported, in part, via the realization that most successful entrepreneurs don't acknowledge a 'problem' to start but instead focus on identification and application of their 'given means', meaning that venture goals develop over time through action-oriented research (Sarasvathy, 2001a; Sarasvathy,

2001b). This research supports a more dynamic, broader, and more inclusive approach to entrepreneurial engagement.

Effectual, or entrepreneurial, thinking is a type of orientation behavior that is at the core of the entrepreneurial hero's journey.

Using this approach allows individuals to orientate themselves within the market by more effectively communicating and actualizing proposed value to a value consumer. This orientating behavior of entrepreneurs occurs on three separate levels (Lachmann, 2007; Endres, & Harper, 2013, p.317): First, via the "anonymous mass action" consisting of "the common elements of norms, institutions, and … the general environment in which all these plans have to be carried out" (Lachmann, 2007, p.21); Second, via the "properties and capabilities" of the individuals who influence the first level (Endres, & Harper, 2013, p.313); and Third, via materialization of goals and assumptions into the concrete actions of the individuals and groups that are interacting.

Utilizing the non-linear hero's journey as a visual representation, these propositions would suggest that a radical viewpoint would position multiple [entrepreneurial] individuals in the center of the journey. Figure 29 shows how this approach would allow for interaction between individuals and would empower everyone to add their own unique value to different parts of the process. This would cumulatively increase the quantity of participation while simultaneously improving the [collective] quality of the participation.

Low, and McMillan (1988) suggest that a common "building block" for understanding entrepreneurialism is a comprehension of "the notion that startups move through predictable stages [of development]" (p.152). This concept, supported by Cunningham, Lehmann, & Menter (2022) (see Figures 12a, 12b, and 12c) as well as the concept of entrepreneurial thresholds proposed by Sarkar, Rufín, & Haughton

(2018), is important to entrepreneurial practice. Low and McMillan clarify the importance of this concept when they note that:

> Start-ups move through distinct phases, with different management and strategic issues paramount in each phase. Effort must be taken to ensure that resources are spent on the areas most critical to the firm's success, given its stage of development. And care must be exercised to think through how short-term actions might be planting the seeds of future problems. (Low, & McMillan, 1988, p .156)

Note that Lachmann, and the concept of radical subjectivism explicitly expects the continuity of knowledge production, and the requirements of continuous reinterpretation of circumstances; cumulatively suggesting the while entrepreneurs may endure general stages, the prediction of the future is still beyond any human's ability. The concept of the unpredictability of the future is encapsulated in Lachmann's Law (1977, p.92; as cited in Chiles, e. al., 2010) where "As soon as we permit time to elapse, we must permit knowledge to change" (p.483).

Any actions, often from well-meaning administrators, that limit this agility decreases the value (and potential breadth) of entrepreneurial outcomes from the system. For example, popular assumptions that require the individual to plan (often on their own) towards the creation of a business plan is a popular belief that can hurt the dynamics of the system if it limits interaction(s). This was suggested by Blank (2017), when he noted that:

> conventional wisdom, [suggests that] the first thing every founder must do is create a business plan – a static document that describes the size of the opportunity, the problem to be solved, and the solution that the new venture will provide… A business plan is essentially a research exercise written in isolation at a desk before an entrepreneur has even begun … (p.5)

In response to conventional wisdom, industry is adopting concepts like "Lean Start-up" (Blank, 2017) that prioritizes solving a series of untested business hypothesis through systemic interactions and agility. This approach aligns with the concept of radical subjectivism as they both suggest that while the level of information and resources available may seem "overwhelming" (personal interview, November 30, 2023), effective programming should look to shift away from academics and "plant the seed" (personal interview, November 24, 2023) by garnering more active participation in the ecosystem (i.e., through gamification to induce consistent behavior change (Ro, et al., 2017; Shiota, et al., 2021) and unpredictable rewards (Miller, et al., 2019; Shiota, et al., 2021)).

Notedly, within a radical viewpoint, a dynamic system can't be predicted, controlled, or replicated beyond creating an environment. The aforementioned actions instigate an entrepreneurial environment by increasing the amount of new knowledge being exchanged between actors, thereby minimizing the number of potential failures of the system. Additionally, within an HEI, such active engagement from a more diverse audience can help to lower the social stigma against entrepreneurship (in contrast to formal career search), thereby improving the interaction of the system even further (personal interview, November 17, 2023). An increase in knowledge exchange creates more opportunities for entrepreneurialism and enhances communications between potential entrepreneurial actors and their market. This positioning is essential to the structure of radically subjective entrepreneurial action in that it places entrepreneurial actors as instigators of a "communications infrastructure" where they interpret, extract meaning that could be acted on, and transmit meaning through actionable economic exchange (Endres, & Harper, 2013, p.307); Table 14 outlines this Lachmannian interpretive of entrepreneurial behavior. This supports Barrett's (2022) suggestion that innovation

policy should encourage "co-operation and collaboration between industries (private sector), institutes of learning (academia), public sector institutions (public sector), R&D institutions, and civil society…" which would increase the breadth and depth of interactions, improving the communications infrastructure overall.

This process of interpretation and transmission occurs through experimentation, or "learning by doing" (Lachmann, 1963, p.169; as cited in Endres, & Harper, 2013, p.307), through a non-linear sequence.

Endres and Harper (2013) clarify that for entrepreneurship to effectively communicate within the "vast network of communications" that make up the market (Lachmann, 1956, p.21), they need to both create goals through the assessment of opportunities by using "instruments of interpretation" (Endres, & Harper, 2013, p.317) *and* implement plans to actualize those goals.

This aligns with research that suggests business models are delineated into four dimensions: value proposition, value creation, value delivery, and value capture (Mikl, Herold, Cwiklicki, & Kummer, 2020; Skaja, & Holcomb, 2023). A radically subjective approach suggests that the subjective interaction of individuals will help to identify the proposed value that can be exchanged. In turn, key outcomes of entrepreneurial actions need to identify, through interaction, how the proposed new value is to be tested and exchanged (i.e., the material), the audience(s) that the new value is to be exchanged with (i.e., the market), and the economic instrument through which that value is to be exchanged (i.e., the method). Value Creation, Delivery, and Capture in a subjective approach (utilizing the circular, non-linear journey discussed) could be done as noted in Figure 30, where necessary entrepreneurial actions are done uniquely, with an opportunity for them to interact with one another around meaning that is extracted from the market.

This concept is allied with Reis' (2011) suggestion that the "role of [entrepreneurial] strategy is to help figure out the right questions to ask" within their unique economic contexts (p.81); or what Lachmann (1956) refers to as the subjectivism of experience that "yields provisional judgments to be confirmed by later experience, imperfect knowledge capable of being perfected" (p.21). To achieve this, entrepreneurial nodes must make economic assumptions about each of the key requirements of new economic exchange, and systematically test those assumptions to validate knowledge (see Reis, 2011, p.81-83).

It can be argued that the theoretical perspective that is utilized is a fundamental attribute of any approach to entrepreneurial scholarship (Chiles, Bluedorn, & Gupta, 2007). Lachmann's theoretical approach always revolved around the "continuously disequilibrating forces of entrepreneurship" (Chiles, Bluedorn, & Gupta, 2007, p.477). These forces, which come through the interactions of divergent expectations, can arise due to the economic dynamics of unit of agency and context.

This is centered in what Lachmann (1990) refers to as the "network of constantly renewable meaningful relations between person and groups of persons who may not all ascribe the same meaning to the same set of relations" (p.275). A concept that is further clarified as, citing research by Lachmann (1977), Chiles, et al. (2010) outline that "radical subjectivist economists are constructivists: They see much of the social world as actively created and continually recreated by entrepreneurs' subjective imaginations, creative actions, and unstable interactions in markets characterized by genuine uncertainty, widespread heterogeneity, and continual disruption" (p.143).

This cumulatively supports Pittaway's belief that "philosophies based on human action would appear to be relatively important when conceptualizing how "entrepreneurship" impacts the developments of new economic and social realities"

(2016); along with the connected belief that "the creation of [a new] organization [is] a contextual event, [and] the outcome of many influences" (Gartner 1988, p.57). Radical subjectivism is based on the underlying presumptions that (a) the future of the market is unknown, (b) the actions of entities within the market can't be known, and (c) that successful entrepreneurship is a "multidimensional phenomenon" (Gartner, 1985) that uniquely "depends on the effective work of multiple and interconnected actors" (Bouncken, & Kraus, 2022).

In a radically subjective approach to entrepreneurialism, one must understand the marketplace beyond linearity to realize that new economic value is socially constructed through actions that are embedded in personal networks (Granovetter, 2018a), and yet are not devoid of coordination. In other words, despite its confounding nature on the study of economic models, social structures impact [they do not singularly create] economic outcomes (Granovetter, 2018b; Swedberg, 2018). However, the study of these impacts often leads to extreme views on the role of human action in economic outcomes. There is a danger that some may assume, incorrectly, that no intervention is a suitable response to centralized control; or a completely subjective system would work. Granovetter (2018a) clarifies these juxtaposing viewpoints by arguing against the extremes of both under socialized and over socialized approaches. On the one hand, he notes that "classical and neoclassical economics operate with an atomized, undersocialized conception of human action, continuing in the utilitarian tradition" (see Granovetter, 2018a).

These theoretical arguments disallow by hypothesis any impact of social structure and social relations of production, distribution, or consumption, as "in competitive markets [these approaches suggest that] no producer or consumer noticeabl[y] influences aggregate supply or, therefore, prices or other terms of trade" (see Granovetter, 2018a, p.483-84).

On the other hand, Granovetter (2018a) suggests "embeddedness" (p.22) when he explains that, in contrast to rational, self-interested economic behavior, some economists argue "that the behavior and institutions to be analyzed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding" (p.482).

As well-meaning as these juxtaposing viewpoints are, these approaches either limit economic engagement into their component, measurable parts (positivism) or completely remove any value of economic analysis (complete subjectivism). This can either reinforce the importance of centralized authorities' ability to implement arbitrary limitations on individuals and networks (under socialized), or it could suggest that there is no point in trying to understand the market because it is so contextual as to render any analysis insufficient, and non-transferrable.

However, I propose that a more nuanced approach integrates adequate levels of complementary support from formal and informal institutions (Stephan, Uhlaner, & Stride, 2015). This cumulatively supports Granovetter (2018a) in proposing a middle ground of meaningful social relations:

> A fruitful analysis of human action requires us to avoid the atomization implicit in the theoretical extremes of under- or oversocialized conceptions. Actors do not behave or decide as atoms outside of a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations. (p.26)

REWARD

Utilizing a heroic narrative to discuss, understand, and/or promote entrepreneurship has created two distinct outcomes:

First, the ‘monomyth’ approach to entrepreneurialism can be applied directly to the instigating participants (i.e., Founders), equating these economic actors as “closely resemble[ing] the characteristics of the hero in mythology” (Morong, 1992a, p.1). Morong (1992a) explains these parallels further by noting how:

> both the entrepreneur and the hero must go through separation. For the hero this may mean leaving his native land. For the entrepreneur it may mean leaving a present job or company to start out on his own. The hero is usually initiated by a mentor who teaches him the use of some supernatural aids. The entrepreneur may need to learn from his mentor how to manage and organize people and production (once the product has been developed) or perhaps some technical or research skills necessary to develop the new product. In the return stage the hero brings back a "boon" to mankind. . . The entrepreneur steps out of his workshop and returns with an idea that may also be a boon to mankind. (p.9)

An argument can be made that a significant portion of entrepreneurial literature has been tainted by the same individualistic colonialism, recognizing that the entrepreneurial discussion often focuses on how to improve the efficacy of entrepreneurial programming through a focus on individual leadership styles (for example, see Felício, Gonçalves, & da Conceição Gonçalves, 2013), mythical personality traits, and characteristics (Nicholls, 2013).

This bias leads to gaps within entrepreneurial systems where the targeted participants, often due to personal constraints, don’t view entrepreneurship as a relevant opportunity to their personal journey (personal interview, December 7, 2023). This limits an institution’s ability to teach the action-based skillsets that underline entrepreneurship, in part due to systemically ignoring those who don’t

have the resources or can't follow traditional assumptions, often originating in different, unrelated contexts (personal interview, January 18, 2024).

The radically subjective entrepreneurial framework, as described, benefits educational outcomes on multiple levels. To start, it allows participants to see, more clearly, how their unique addition benefits the entrepreneurial process, which can lead to more 'imaginative engagement' (Holmes, 2007). Further, the framework ensures that the economic expectations of individual participants meet Koppl's (1998) noted criteria. This is achieved as the subjective model shifts the entrepreneurial narrative within institutional environments to frame the key outcomes around initial entrepreneurial expectations (i.e., assumptions) and their rigorous testing; the proposed framework also remains consistently subjective by positioning individual interactions, networks, and ecosystems (i.e., unique contexts) at the core of every entrepreneurial assumption, test, and action. Similarly, the feedback of the market, considering each participants' unique context, is the fundamental ingredient in the scientific journey of every participant. Ensuring that expectations and market processes are endogenous.

This framework is more than simply functional. Utilizing the seminal work of Low and McMillan (1998), which argued for an acknowledgement that entrepreneurialism should be understood through multiple levels of complimentary analysis (Davidsson, & Wiklund, 2001), we can review the academic merit of a radically subjective framework. In particular, the proposed six research design specifications: purpose, theoretical perspective, focus, level of analysis, time frame, and methodology (Low, & McMillan, 1998, p.139) were covered:

Purpose. As noted by Sarkar, Rufín, & Haughton (2018), the most important question of entrepreneurial literature (i.e., why some become entrepreneurs while others don't) suggests why institutions spend extensive time and effort in identifying

and implementing programming designed to instigate a targeted participation rate in new business venturing. The link between entrepreneurship and economic freedom can provide a unique understanding, based on the concepts' deep philosophical roots, suggesting where public educational institutions should be spending more time to help entrepreneurship "be brought into a broad but unifying arena" (Low, & McMillan, 1998, p.156) beyond the current limiting narrative at public HEI's (personal interview, January 11, 2024).

Theoretical Perspective. Entrepreneurial literature, and frameworks, utilized within formal academic institutions are often biased towards objectivism. The outcomes of these approaches have led to popular programs (and research) that are openly discussed within literature and practice. A subjective approach to entrepreneurialism isn't something that has been discussed, let alone practice with near the same frequency. I have made a consistent case for a new, subjective viewpoint on entrepreneurialism and its potential benefits on the unique audiences of an academic institution.

Focus. Low & McMillan (1998) noted that:

> Recently, there has been a trend towards more contextual and process-oriented research. This is an important advancement and moves the field [of entrepreneurial research] closer to a position of being able to explain rather than merely document the entrepreneurial phenomenon. (p.156-157)

This framework has not only continued in a similar vein but has suggested an approach that intrinsically biases future approaches towards contextual explanation.

Level of Analysis. Questioning the broadly instituted assumption of entrepreneurial linearity challenges the underlying structure, and supporting literature, behind entrepreneurial programming at many public educational institutions. For this reason, a more multi-level approach was required, where

individuals (i.e., current, and former students), groups (i.e., academic disciplines), organizations (i.e., university administrators) and society (i.e., the marketplace) were all engaged to understand and propose an inclusively engaging framework.

Time frame. In this framework, time frame is inherent as processes take time. However, the study only covered a short period of time and in future would benefit from a longitudinal review of the theories and propositions to better understand the proposed frameworks impact.

Methodology. While this research utilized a mixed approach through surveys and interviews, it is noteworthy that Low & McMillan (1998) lament the lack of research that "address issues of causality" (p.158). This research, and by extension the proposed framework, does not suggest causality. In fact, it suggests the exact opposite. The simple belief that you can understand causality within a dynamic, contextual environment is the antithesis of this research. In contrast, this research suggests that scientifically testing business hypothesis within unique contexts will garner unique results that can't be utilized to predict other outcomes.

By utilizing this framework, in a similar fashion to other academic researchers (see Chiles, Bluedorn, & Gupta, 2007), this proposed framework garners a "more meaningful and insightful" understanding (Low, & McMillan, 1988, p.157) of Radically Subjective entrepreneurialism; a related framework; and its potential impact on the ecosystems of educational institutions, particularly post-secondary.

CHAPTER 4

RETURN

Williams (2019) suggests that after the heroic journey, the increased awareness of the hero allows them to view experiences in a way that morphs the chaos and challenges of life into a sequence that engenders more meaningful purpose (see p.536). This doesn't remove the challenges inherent in a heroic experience with significant challenges still awaiting the hero. However, the new knowledge alters the narrative to empower the heroic actor towards new, previously unobtainable, achievements. This new dynamic ultimately positions the hero as someone who can lead others towards better outcomes.

Rarely is there any consideration given to the possibility that the hero indeed failed, learned something incorrectly, or was more reliant on their community than anyone realized; or that the individual in question is not the hero of that journey. I propose that these perception biases normalize exclusivity and limit learning by failing to recognize the role of discontinuous events, in contrast to "more routinized, habitual, 'lower level' learning" (Cope, 2003, p.429) in the entrepreneurial journey.

Powered in part by a bias towards linear individualism that pervades current entrepreneurial narratives, current entrepreneurial instantiations include, and even celebrate, negative outcomes. Take, as an example, the exclusivity inherent in popular cultural suggestions around the rate of 'entrepreneurial failure'. No other skillset is promoted, with such force, within public HEI's that is simultaneously influenced by a narrative that 'most people fail'. Why train inexperienced individuals, especially for increasing fees, at something they are likely to fail at? Furthermore, how does a public HEI define entrepreneurial failure? The definition of failure can encompass both objective and subjective metrics, noting personal exposure and business terminology (see Cope, 2011). Jenkins and McKelvie (2016) identify the

assumptions underlying the popular narrative when they note that "to capture the different situations that can be conceptualized as [an entrepreneurial] failure, we suggest that failure should be viewed as a multi-faceted phenomenon where there is scope for more than one conceptualization of failure" (p.185). Figure 31 outlines some of the classifications of entrepreneurial failure within literature.

This, often unclarified, entrepreneurial model is then instituted either directly or indirectly, among disparate audiences without consideration for their unique contexts. Public HEI's, particularly those is wealthier contexts, directly support both approaches as they (indirectly) train students on methodologies that are carried to other contexts, and (directly) host entrepreneurial training instantiations (i.e., certificates, degrees, incubators, accelerators, etc.) based on philosophically biased narratives, in diverse contexts.

This research has suggested an approach that is based on the contrasting opinion that a more beneficial entrepreneurial process requires broader engagement. The more participation, the better the ultimate outcomes as various participants engage with different audiences to create more interactions and a more contextualized system. However, there remains an inevitable struggle to implement an alternative philosophical approach to entrepreneurialism within public HEI's.

THE ROAD BACK

***RQ5**: What is the key challenge(s) that inhibit the transition of this research to application?*

Future entrepreneurial achievement is limited by a singular narrative, and an underlying individualism. This is especially true of any narrative, and programmatic framework that processes students through linear steps. If an academic institution, such as ASU, has multiple colleges with varied student demographics and, as Locke and Baum (2014) suggest, the process starts with a good idea (see p. 62): what if

only certain academic departments empower their students to identify, or imagine, "good" ideas? Without delving into the power dynamic that must be present in any measurement of a subjective definition of "good", this hypothetical instance already shows the imminent participation constraint due to the linear narrative at the philosophical core of popular HEI approaches. Then, what if the students who created the idea needed to complete some market research, to validate potential? Now, what if the students that have the ideas aren't effectively trained in market research? These two brief stages show the potential consequences of a linear narrative within an individualistic entrepreneurial approach. Even a linear process encapsulating an entrepreneurial process of five stages, as outlined by Oboidhe (2023), removes many potential participants, each holding skills that may be valuable later in the entrepreneurial process. The larger the institution, the larger the number of participants (i.e., students, staff, and/or faculty) that are removed from the entrepreneurial system while simultaneously limiting the potential of any one individual being a 'perfect' entrepreneur due to these exacerbating constraints. This process is theoretically outlined.

It should also be noted that in addition to limiting participation, an individualistic narrative can similarly limit the potential of venture success. Manimala Mathew (1986) suggested that there is growing proof that founders could be the most influential factor in creating business culture, while business culture is also identified as the most important determinant of business success (Manimala, 1986). In turn, suggesting that if new businesses are not starting or are failing at a high rate, there is at least some culpability for the 'hero-preneur' at the center of the founder-influenced culture of those ventures.

Nevertheless, powered in part by the belief that savings are "relatively insignificant" to the initiation of entrepreneurial actions (Schumpeter, 1942; as cited

in Croitoru, 2012, p. 142), the narrative of an individualistic entrepreneurialism is being repetitiously exported to new, diverse contexts. Popular entrepreneurial narratives traditionally based in developed economies, often linear and individualistic, have been propagated and efficiently disseminated into developing economies (Guttentag, & Davidson, 2021).

Yet, savings, wealth, and the network of resources that these approaches rely on are important, often unrecognized, considerations. In addition to the evolving concept of the previously discussed 'liability of poorness' (Morris, Kuratko, Audretsch, & Santos, 2020; Morris, 2020), which suggests that income and wealth do play a role in entrepreneurialism, there is also the idea of "insider entrepreneurship". In studying the idea of transitioning economies, Estrin & Mickiewicz (2011) proposed that centralized approaches, specifically within the unique contexts of transitioning economies, can prioritize "insiders" by placing additional hurdles in the way of other potential entrepreneurs. For example, the authors note that "outsiders (i.e., those without previous business connections) are less likely to create new ventures" (p.203).

Despite the popularity of individualistic narratives that idealize the process of a singular entrepreneur who traverses the 'journey' on their [often his] own, the challenges to these popular approaches suggest a needed entrepreneurial shift towards engaging narratives that democratize entrepreneurialism to be more accessible to multiple participants ("entrepreneurs"), who can all add their own value to the process. This concept isn't without a foundation, noted as Gartner (quoted in Harper, 2008) stated that "the entrepreneur in entrepreneurship is more likely to be plural, rather than singular. The locus of entrepreneurial activity often resides not in one person, but in many" (p.623).

While any team is admittedly made of individuals, I suggest that there is a pressing need for the democratization of economic participation along with a subsequent need to condition participants for engagement with dynamic systems. This hypothetical shift could increase entrepreneurial participation, democratizing access to the value, including wealth, of entrepreneurial action. In other words, if our collective communities are to garner the most benefits from the proposed non-linear systems and increase the overall potential of every economic system through participation, systemic entrepreneurial programming must alter the narrative of the singular founder, or 'hero'.

Likewise, how an increasing number of potential entrepreneurs interact is worth consideration. Adam Smith (1776), a uniquely influential economist that strongly supported the concept of labor division, discussed the potential of increasing the quantity of 'work' that came out of any dynamic system. What was particularly unique in this instance is that Smith noted three specific methods to increase the quantity of outcomes, *despite* the number of people within the system. Specifically, Smith (1776) suggested that even "the same number of people are capable of performing [an improved quantity]" of outcomes, if the system can:

> First, … increase the dexterity in every particular workman; second, …saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour and enable one man to do the work of many. (p.17)

This approach to the division of labor suggests benefits of scale by developing and honing specialized skillsets. Reiterating this idea, Smith (1776) then suggests that an individual is "much more likely to discover easier and readier methods of

attaining any object, when the whole attention of their minds is directed towards the single object, than when it is dissipated among a great variety of things" (p.20).

While I agree with the conceptual framework of a division of skillsets that Smith (1776) is suggesting, I challenge that such a solution is too simplistic. For example, I have repeatedly suggested that increasing the number of participants is a measurable way to track potential dynamism within a subjective system. However, I note that this proposal creates an issue in that a dramatic increase in the participation rate within any system can make current processes of interaction obsolete, requiring a reimagining of the methods of systemic coordination.

This is especially important within a system that acknowledges the radically subjective approaches that different individuals, unpredictably, choose. Coupled with the implicit assumption that specialization will increase the quality of outcomes, most ecosystems defer to the ideals of specialization by promoting repetition, reinforcement (i.e. prizes, awards), and related training.

However, the same Adam Smith (2010/1759), somewhat paradoxically, identifies a systemic flaw within this assumption when he writes that one of the challenges individuals face within any context is that their "sympathy with the grief or joy of another, before we are informed of the cause of either, is *always* extremely imperfect" (p.11, italics added). Schwartz (1982) famously suggested, through a series of seven experiments, that:

> reinforcement can create stereotyped, functional behavioral units. These units will be efficient in circumstances in which merely doing what has succeeded in the past is an effective strategy. However, they may be inefficient—indeed, counterproductive—in situations in which future repetition of past successes is inappropriate. (p.48)

The implications of this on entrepreneurialism, a methodology in which effective means of exchanging new value are identified through testing, suggests that reinforcement-based training could hurt a student's ability to identify novel solutions; thereby decreasing the potential quality of the outcomes.

While it should be noted that research has challenged this, it remains problematic to the quality of entrepreneurial programming. For example, Eisenberger & Cameron (1996) suggested that the negative influence of rewards on intrinsic task interest may be overstated and suggested that effectiveness of rewards on task interest may be correlated to "the task's compatibility with the individual's personality and avocational interests" (p.1164). Questioning the efficacy of reinforcement-based training and suggesting that the outcome quality of training is impacted by personality, questions the ability of any centralized system to ensure output quality where a drastic increase in the diverse quantity of outcomes is present.

RESURRECTION

> ***RQ6****: How can dynamic public HEI ecosystems "maintain the benefits of breadth, diverse experience, interdisciplinary thinking, and delayed concentration in a world that increasingly incentivizes, even demands, hyperspecialization"? (Epstein, 2019; p. 18)*

According to Ostrom (2016), it was a common mid-twentieth century view that "the dominant scholarly effort was to try to fit the world into simple models and to criticize institutional arrangements that did not fit" (p.195). More modern approaches have pushed back on those assumptions and have pointed to:

> the market . . . as the optimal institution for the production and exchange of private goods. For non-private goods, on the other hand, one needed "the" government to impose rules and taxes to force self-interested individuals to

contribute necessary resources and refrain from self-seeking activities. (Ostrom, 2016, p. 195)

I suggest that the presence of multiple examples where public and private institutions create partnerships, as well as the interaction of formal and informal economies, suggest that a binary view 'optimal institutions' is inadequate. Thankfully, Ostrom (2016) notes, that "scholars are slowly shifting from positioning simple systems to using more complex frameworks, theories, and models to understand the diversity of puzzles and problems facing humans interacting in contemporary societies" (p.216).

This includes the complex, interdisciplinary systems within HEIs that formally and informally exchange common, private, public and toll goods. Figure 32 visualizes Ostrom's (2016) delineation around these four types of goods. Such complexity around institutions of knowledge dissemination draws to Epstein's (2019) suggestion that expertise, and its relationship with experience, is contextual to the domain; with more subjective processes that attempt to engage in forecasting systemic behavior, like entrepreneurialism, less likely to benefit from specialization. The application of this belief posits danger in current entrepreneurial methodologies, where "overspecialization can lead to collective tragedy even when every individual separately takes the most reasonable course of action" (Epstein, 2019, p. 17).

Beyond the subjectivity of the individuals, it is also important to note that the type of value being exchanged also impacts the process and outcomes of interactions. Ostrom (2016) suggests that value, utilizing the term "goods", can be delineated between the rate at which their use subtracts from the available remaining resources, and the level of difficulty in excluding potential beneficiaries from access, as outlined in Figure 32.

To limit exclusion and ensure that public HEI entrepreneurial ecosystems can benefit from both a wider breadth and more meaningful depth of entrepreneurialism, in their unique contexts, I propose dynamic system configurations.

A concept built from supply chain processes, dynamic configurations refer to a distributed system's ability to modify itself, towards improvement, while it is running (Kramer, & Magee, 1985). While studying dynamic research configurations within 'competing claims' environments, Schut, van Paassen, Leeuwis, and Klerkx (2014) noted that dynamic configurations also interacted through multiple levels of administration (i.e., for public HEI's this could include supranational, national, state, university, college, department, team, and individual levels) where program "developments at one administrative level can both enable and constrain developments at other administrative levels, although local decision-making is often constrained by decisions or policies developed at higher levels" (p.210). A dynamic approach therefore "advocates [for] different internal organizational structures to address the fact that we need different supply chains to satisfy the different markets most effectively" (Miles, 2023).

This dynamic approach to active process configuration is "also useful during production of the system to aid incremental integration of component parts, and during operation to aid system evolution" (Kramer, & Magee, 1985, p.424).

Implementing a dynamic system will shift the power structure of an ecosystem. Often replacing top-down 'command and control' with systems that position "strategic leadership … at the bottom, supporting the organization" (Miles, 2023). This dynamic shift in process allows for a more diversified, democratized entrepreneurial ecosystem, depicted in Figure 33, where individualism is valued in that each individuals' unique actions can benefit the system as whole.

This aligns with the concept of a "composable" business, a term introduced in 2020 by Research and Consulting firm Gartner, which references a decentralized organizational structure based on non-uniform information structures (Scheer, 2023). In practicality, this means "creating an organization made from interchangeable building blocks" (Panetta, 2020) thereby increasing resilience within unique contexts. Identifying unit skillsets and allowing them to interact with the systems as and when needed, repositions entrepreneurship as a dynamic system that can "rearrange and reorient as needed depending on external (or internal) factors" (Panetta, 2020).

In an entrepreneurial institution, building a composable system would suggest breaking the entrepreneurial journey into a series of modular, autonomous hypotheses. This approach would democratize access to a broad variety of skillsets by increasing engagement. Engaging all stakeholders within the system would therefore ensure that modules are responsive to the direct context of the ecosystem. This would include the beneficiaries in the first stages of entrepreneurialism (i.e., interpreting and extracting meaning). Thereby providing opportunities to create and measure their unique perspectives (Christlieb, 2012, p.18) with meaningful metrics, ultimately empowering those who lack the resources or relative power to create their own forms of entrepreneurial engagement (Mulgan, 2010). This empowers diverse engagement from would-be 'entrepreneurs' who can engage as they feel comfortable, by focusing on the identification and application of their 'given means' as venture goals develop over time through action-oriented research (Sarasvathy, 2001).

As individuals are empowered towards increasing levels of engagement, the value they add to the communal system would shift towards a 'Lachmannian material embeddedness', as outlined in Table 14). In this state, multiple individuals would be

able to utilize their diverse skillsets to support the community in dynamically interpreting the market, identifying opportunities, and creating unique entrepreneurial combinations (see Endres, & Harper, 2013) that otherwise (i.e., individually) wouldn't have been recognized.

This positions entrepreneurial founders as a unified collection of individuals who contribute to a holistic outcome by transitioning from their economic status quo (Jeon, 2022) towards a personally relevant exchange with a market. In practice, this would suggest an entrepreneurial narrative of component tasks, contextually identified, being unified into a scientific process of hypothesis testing, implementation, and improvement; visually depicted in Figure 34. This would allow any individual, whatever their experience, to participate where they have the desire and ability. That could include interpreting, extracting, and or communicating important market information through a series of testable hypothesis. Key hypothesis would include an outline of the new value (i.e., Material) and a proposition regarding "how [an entity] aims to provide value to customers" (Payne, Frow, & Eggert, 2017); an identified persona noting the portion of the market that will consume the new value, potentially existing on a spectrum (see Ford, et. al., 2017; Williams, 2020), and those who will exchange for access to that value; and a prediction of the evolving core competence, that includes the tacit competencies, internal processes (see Christensen, 2001) and formal structures that create an economic method to exchange the new value. This process of entrepreneurial hypothesizing, based on contextual information and understanding, represents a philosophically subjective approach that thrives within dynamic networks (as found in public HEIs). Such an approach also allows the unique institutions within a Public HEI (i.e., Colleges, Accelerators) to focus their training on individual modules relevant to

their specializations, creating a unified approach, and clear narrative, within a decentralized system.

In turn, Public HEIs can benefit from a wider breadth of participation, from an interdisciplinary cohort of individuals with diverse backgrounds over unique timelines, as Epstein (2019) asks, due to the coordination of individual specializations.

The concepts of dynamic system configuration and composable business decentralize the power dynamics currently present within entrepreneurial narratives and allow for multiple individuals to add their unique value to the entrepreneurial process.

Likewise, implementing a new methodology for entrepreneurial engagement can decentralize the need for knowledge, and rebalance the power dynamics of entrepreneurial ecosystems while simultaneously increasing the number of dynamic individuals who are able to participate. More participants can increase the potential "supply of ventures, which depends on the formation of new ventures and the exit, including failure, of existing ones" (Hayward, Shepherd, & Griggin, 2006, p.160).

DENOUEMENT

> When discussing the concept of youth participation, Checkoway (2011) recounts the legal framework and protections related to the rising generations when noting that:
>
> The first declaration of rights was adopted by the International Save the Children Union in Geneva in 1923 and endorsed by the League of Nations General Assembly in 1924, as the World Child Welfare Charter. The Declaration of the Rights of the Child was proclaimed by the United Nations in 1959 and was the basis for the Convention of the Rights of the Child adopted by the United Nations General Assembly in 1989.

> Article 12 states that children have the right to participate in decision making processes relevant to their lives and to influence decisions taken in their regard, especially in schools or communities. It affirms that children are full-fledged persons who have the right to express their views in all matters affecting them and requires that those views be heard and given due weight. It recognizes the potential of children to share perspectives and to participate as citizens and actors of change.
>
> This right is related to the right that children should have the necessary information about options that exist and the consequences of such options so that they can make informed and free decisions. Providing information enables children to gain skills, confidence, and maturity in expressing views and influencing decisions. (p.340)

Entrepreneurialism could be seen as an option for the rising generations to express their views and have access to the rights of 'full-fledged persons' through an exchange of value with a marketplace. An exchange that, when done in the local context, can receive 'equal weight' to exchanges occurring around them.

Public, post-secondary institutions play a key role in the process of educating the rising generation and are increasingly focused on promoting the concept of entrepreneurial engagement. Current institutional narratives influence approaches in wealthier Western contexts towards linearity. These approaches are then taught to the rising generation, and subsequently exported to new, foreign environments.

This constitutes a type of entrepreneurial imperialism, as these institutions are benefiting economically by creating a hegemony where their philosophically biased narrative is prioritized and implemented. This approach reinforces uneven power dynamics around 'hero' entrepreneurs and devalues context in favor of resource access.

Removing context from any process involving individuals is dangerous. In an interview discussing research that challenges the benefits of physical exercise on cognition (Ciria, Román-Caballero, Vadillo, Holgado, Luque-Casado, Perakakis, & Sanabria, 2023), one of the researchers, Dr. Sanabria, was asked "Do explanations of psychological outcomes focus too much on the effects on the brain, and not enough on the context?" To which he responded:

> One of the dangers with this issue of measuring the effects of something — and this applies to exercise, mindfulness or whatever — *is that certain very relevant factors are often overlooked, which are the contextual factors*. The best predictor of academic performance and subsequent career success is not cognitive ability, it's the sociocultural context. It's whether your parents have money. Certain ways of interpreting results can send subtle messages, which out the focus on individual responsibility. (Mediavilla, 2023, italics added)

In concert with these internal effects, the impact of socioeconomic context on youth participation (specifically in politics) is noted in that "the most active participants in formal activities are usually higher in income, education, and socioeconomic status, than the general population" (Checkoway, 2011, p.343).

When these internal and socioeconomic realities are applied to entrepreneurialism, an understanding and adaptation to context is likewise essential; any disconnection from the value of localized knowledge within entrepreneurial methodologies can, similarly, over focus on the role (and specialization) of the individual "founder". I argue that it is in this circumstance where many of the challenges that institutions face, in relation to entrepreneurialism, germinate. Constraints stem from a perceived inability to recognize and respond to the underlying, philosophically biased ideologies common approaches are built on.

I propose that objectivist coordination is the challenge at the root of entrepreneurial exclusion; and is a key bias that supports the "Western tendency to single out superstars" (White, 2019, p.262) for inordinate levels of recognition. This belief aligns with Gibb's (2002) observation of the "cultural tendency to over individualize, or even understand as heroic, what remains a collaborative activity" (as cited in Holt, 2008, p.61). Popularly identified as "hero entrepreneurs" (p.142), who improve the equilibrium (Chiles, et. al, 2007) through "heropreneurship" (Papi-Thornton, 2016), this approach biases entrepreneurial engagement towards individuals with access to key resources who exhibit specific mental models.

These challenges represent what Barab (2019) suggested by noting that "most formal learning institutions still consider the ideas as described in the textbooks as what they are teaching and NOT the potential of the learner to achieve goals they care about" (p.1).

Yet institutions push forward. Benefitting from teaching biased entrepreneurial ideologies; expand their reach by teaching their version of economic interaction to larger and larger cohorts of individuals. And, in scaling the reach of their influence, they seem to forget the value of localized, distributed knowledge. Institutions have seemingly forgotten the uniqueness of each individual, where "empirical research supports the conclusions that when students are matched with teaching methods that complement their learning styles their absorption and retention is significantly enhanced" (Bradford, 2004).

Our educational institutions talk about entrepreneurship and invite 'successful' entrepreneurs to talk about themselves on regular occasion, prescribing methodologies to succeed (and avoid failure) that are often copy and pasted by students regardless of their knowledge, community, and broader context. Thereby

prescribing methodologies that are often linear, and grossly oversimplified. Placing ease of narrative over accuracy.

This is problematic because "if the entrepreneurs have over the past concentrated on the wrong contexts, it is typical that the failures [they experience] are from not having a literal understanding of the situation" (Arnold, 2021).

I have attempted, throughout this dissertation, to show that the philosophical roots of our approaches are rarely qualified, much less questioned. In turn, and despite the resources that follow the popularity of entrepreneurialism as a force for good, increasing evidence suggests that our approaches and methodologies are not delivering the value that is expected of specialized programming. These challenges encourage voices, such as Wennekers, et al. (2005, p.306), to increasingly propose that "low-income nations should not consider the promotion of new business as a top priority on their policy agenda" (as cited in Amorós, & Cristi, 2011, p.225).

Noting that a trait-based 'equilibrium' approach is "understandably persistent" (Gartner, 1988), I have argued towards the potential benefits of promoting a philosophically divergent approach. Utilizing the concept of radical subjectivity, and the research of Ludwig Lachmann, I have proposed a new entrepreneurial narrative, and related network, that idealizes the importance of human agency, based on subjective environment, as the key ingredients for more socioeconomic inclusion within entrepreneurial behavior and action.

And I subsequently added a formal framework that aligns with Barab's (2019) suggestion that unlocking the potential of our rising generation requires empowering ecosystems that increase their size, through broad accessibility, and their relevance, through meaningful, contextualized programming.

In conclusion, it should be noted that identifying a metaphor to shift the narrative towards a more subjective, composable entrepreneurial engagement is

beyond the purpose of this dissertation. However, it remains essential if public HEIs are to successfully shift towards localized, democratized entrepreneurial programming. The power of language cannot be understated in contextualizing the entrepreneurial narrative. In his seminal exploratory study of 751 respondents over six countries, regarding entrepreneurial metaphors, Hyrsky (1999) used linguistic methodologies to note several semantic clusters of common entrepreneurship metaphors. Of these various clusters (see Hyrsky, p. 28), many deferred to entrepreneurial narratives that indicated limited control of circumstances by the individuals participating. These narratives implied power dynamics that encourage a deference towards overarching control, bringing entrepreneurial process to a predictable end (i.e., equilibrium) beyond any contextual subjectivity.

Of Hyrsky's (1999) metaphoric clusters, few suggested a level of subjective engagement in the initiation of action. One of the metaphors noted, Nature (i.e., rapids, an aurora, the North Star), continues to be a very popular narrative for entrepreneurialism today and terms like [biological] ecosystems (Kuckertz, 2019), and rainforest(s) (Hwang, & Horowitz, 2012) are popular. Hyrsky's (1999) metaphorical Sport cluster uniquely proposed a subjective narrative among multiple participants, while often encompassing a venue that is influenced by structured laws and expectations, like that of a marketplace. While sports can be a challenging metaphor in that there are often rules on the number of participants, and strict control of those numbers, Hyrsky (1999) notes "orienteering" as an entrepreneurial metaphor.

This metaphor is uniquely interesting in its low-cost accessibility, participation diversity (i.e., individual v. groups), and the contextual dynamics of each sporting instance. Entrepreneurial ecosystem could benefit from future research of orienteering as a controlled metaphor (Eliasmith, 1998; as cited by Tesson, 2006)

that could lead us to "unthought of relation[s]" (Levin, 1982, p.40) that promote more localized, democratized entrepreneurship methodologies.

REFERENCES

Abbott, A. (1988). Transcending general linear reality. *Sociological theory*, 169-186.

Abraham, R. (2012). Doing business at the base of the pyramid: The reality of emerging markets. Field Actions Science Reports. The journal of field actions, (Special Issue 4).

Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link?. *Journal of Innovation and Entrepreneurship*, *10*(1), 1-16.

Acs, Z. J. (2010). High-impact entrepreneurship. In Handbook of entrepreneurship research (pp. 165-182). Springer, New York, NY.

Acs, Z. J., & Phillips, R. J. (2002). Entrepreneurship and philanthropy in American capitalism. *Small Business Economics*, *19*, 189-204.

Adler, S. (2021, April 9). How Much Would It Cost To End Homelessness In America? GlobalGiving. https://www.globalgiving.org/learn/how-much-would-it-cost-to-end-homelessness-in-america/#:~:text=According%20to%20the%20Department%20of,homelessness%20in%20the%20United%20States

Allbritton, D. W. (1995). When metaphors function as schemas: Some cognitive effects of conceptual metaphors. *Metaphor and Symbol*, *10*(1), 33-46.

Allen, N. (2021). The methodology behind P&Q's top MBA programs for entrepreneurship in 2022. www.poetsandquants.com. Retrieved March 26, 2022, from https://poetsandquants.com/2021/10/24/methodology-top-mba-programs-for-entrepreneurship-in-2022/?pq-category=mba-rankings

Aldrich, H. E., & Yang, T. (2014). How do entrepreneurs know what to do? Learning and organizing in new ventures. Journal of Evolutionary Economics, 24(1), 59-82.

Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal, 1(1-2), 11-26.

Alvarez, S. A., & Barney, J. B. (2014). Entrepreneurial opportunities and poverty alleviation. Entrepreneurship theory and practice, 38(1), 159-184.

Amin, M., (2009, October 2009). "Unwilling" entrepreneurs. *World Bank Blogs*. https://blogs.worldbank.org/psd/unwilling-entrepreneurs.

Amit, R., Glosten, L., & Muller, E. (1993). Challenges to theory development in entrepreneurship research. *Journal of Management studies*, *30*(5), 815-834.

Amorós, J. E., & Cristi, O. (2011). Poverty and entrepreneurship in developing countries. The dynamics of entrepreneurship: evidence from global entrepreneurship monitor data, 209-230.

Anafinova, S. (2020). The role of rankings in higher education policy: Coercive and normative isomorphism in Kazakhstani higher education. International journal of educational development, 78, 102246.

Anderson, S., Culkin, N., Penaluna, A., & Smith, K. (2014). An education system fit for an entrepreneur: fifth report by the all-party parliamentary group for micro businesses.

Angell, M., (n.d.). Small-business applicants smash another record in 2022 as more americans turn to entrepreneurship. Inc. Retrieved July 21, 2023 from https://www.inc.com/melissa-angell/small-business-applicants-smash-another-record-in-2022-as-more-americans-turn-to-entrepreneurship.html#:~:text=Millions%20of%20Americans%20took%20the,business%20ownership%20since%202004.

Arizona Hispanic Chamber of Commerce. (2023). *DreamBuilder Program*. https://www.azhcc.com/programs/

Arizona State University. (2023a, July 24). Facts and figures. https://www.asu.edu/about/facts-and-figures

Arizona State University. (2023b, July 24). ASU Rankings. https://www.asu.edu/rankings

Arizona State University. (2023c). *Ira A. Fulton Schools of Engineering: Enrollment and degrees granted*. https://engineering.asu.edu/enrollment/

Arizona State University. (2023d). W. P. Carey School of Business: Facts and Figures. https://wpcarey.asu.edu/about/facts-figures

Arizona State University. (2023e). Arizona State University Campus Immersion Common Data Set 2022-2023 [Data file]. Retrieved from https://libguides.asu.edu/data/citation

Arnold, M. (2021). Understanding Entrepreneurial Learning and Education. *Academia Letters*, 2.

Aspen Network of Development Entrepreneurs. (2022). *Global annual report 2022*. Aspen Institute. https://andeglobal.org/ande-annual-report-2022/

Audretsch, D. B., & Belitski, M. (2017). Entrepreneurial ecosystems in cities: establishing the framework conditions. The Journal of Technology Transfer, 42(5), 1030-1051.

Audretsch, D. B., Cunningham, J. A., Kuratko, D. F., Lehmann, E. E., & Menter, M. (2019). Entrepreneurial ecosystems: economic, technological, and societal impacts. *The Journal of technology transfer*, *44*(2), 313-325.

Audretsch, D., Grimm, H., & Wessner, C. W. (2005). *Local heroes in the global village: globalization and the new entrepreneurship policies* (pp. 67-89). New York: Springer.

Audretsch, D. B., Lehmann, E. E., & Schenkenhofer, J. (2021). A context-choice model of niche entrepreneurship. *Entrepreneurship Theory and Practice*, *45*(5), 1276-1303.

Austin, J., Stevenson, H., & Wei–Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both?. *Entrepreneurship theory and practice*, *30*(1), 1-22.

Auerswald, P. P. (2015). Enabling entrepreneurial ecosystems. Kansas City, MO: Ewing Marion Kauffman Foundation.

Aulet, B. (2013). *Disciplined entrepreneurship: 24 steps to a successful startup*. John Wiley & Sons.

Azoulay, Pierre, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda. 2020. "Age and High-Growth Entrepreneurship." American Economic Review: Insights, 2 (1): 65-82.

Bajde, D. (2013). Marketized philanthropy: Kiva's utopian ideology of entrepreneurial philanthropy. *Marketing Theory*, *13*(1), 3-18.

Balocco, R., Cavallo, A., Ghezzi, A., & Berbegal-Mirabent, J. (2019). Lean business models change process in digital entrepreneurship. *Business Process Management Journal*, *25*(7), 1520-1542.

Banerjee, A. V., & Duflo, E. (2007). The economic lives of the poor. Journal of economic perspectives, 21(1), 141-168.

Barab, Sasha (2019) "Schools as Providing Transformational Goods," The Emerging Learning Design Journal: Vol. 7 : Iss. 1 , Article 1.

Barrett, A. (2022). *Innovation policy formulation for socioeconomic transformation of developing states*. University of Technology, Jamaica Press.

Battersby, P., & Roy, R. (Eds.). (2017). International Development: A Global Perspective on Theory and Practice. Sage.

Bekele, E., & Worku, Z. (2008). Women entrepreneurship in micro, small and medium enterprises: The case of Ethiopia. Journal of International Women's Studies, 10(2), 3-19.

Berner, E., Gomez, G., & Knorringa, P. (2012). 'Helping a large number of people become a little less poor': The logic of survival entrepreneurs. *The European Journal of Development Research*, *24*, 382-396.

Birch, D. L. (1979). The Job Generation Process, MIT, Cambridge, MA.

Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: a practical technique for service innovation. California management review, 50(3), 66-94.

Blackwell, A. F., & Green, T. R. (1999, September). Does metaphor increase visual language usability?. In *Proceedings 1999 IEEE Symposium on Visual Languages* (pp. 246-253). IEEE.

Blank, S. (2018). Why the lean start-up changes everything.

Blinder, A. S. (2008). Keynesian economics. *The concise encyclopedia of economics*, *2*(008).

Boeker, W., & Karichalil, R. (2002). Entrepreneurial transitions: Factors influencing founder departure. *Academy of Management Journal*, *45*(4), 818-826.

Boettke, P. J., Boettke, & Pacey. (2018). *FA Hayek*. Palgrave Macmillan.

Boettke, P. (2021). *The struggle for a better world* (No. 10748). George Mason University, Mercatus Center.

Boschee, J. (2001). Eight basic principles for nonprofit entrepreneurs. *Nonprofit World*, *19*(4), 15-18.

Botelho, T. L., Fehder, D., & Hochberg, Y. (2021). Innovation-driven entrepreneurship (No. w28990). National Bureau of Economic Research.

Botha, E. (2009). Why metaphor matters in education. *South African Journal of Education*, *29*(4).

Bouncken, R. B., & Kraus, S. (2022). Entrepreneurial ecosystems in an interconnected world: emergence, governance and digitalization. Review of Managerial Science, 16(1), 1-14.

Bradford, W. C. (2004). Reaching the visual learner: teaching property through art. *The Law Teacher*, *11*.

Brentnall, C., Rodríguez, I. D., & Culkin, N. (2018). Enterprise education competitions: a theoretically flawed intervention?. In *Creating Entrepreneurial Space: Talking Through Multi-Voices, Reflections on Emerging Debates* (pp. 25-48). Emerald Publishing Limited.

Breznitz, S. M., & Zhang, Q. (2019). Fostering the growth of student start-ups from university accelerators: an entrepreneurial ecosystem perspective. *Industrial and Corporate Change*, *28*(4), 855-873.

Brock, D. D. (2008). Social entrepreneurship teaching resources handbook. *Available at SSRN 1344412*.

Brown, T., & Katz, B. (2009). Change by design: How design thinking transforms organizations and inspires innovation.

Brown, J. L., & Moffett, C. A. (1999). *The hero's journey: How educators can transform schools and improve learning*. ASCD.

Brouard, F., & Larivet, S. (2010). Essay of clarifications and definitions of the related concepts of social enterprise, social entrepreneur and social entrepreneurship. In *Handbook of research on social entrepreneurship*. Edward Elgar Publishing.

Bruno, A. V., & Tyebjee, T. T. (1982). The environment for entrepreneurship. *Encyclopedia of entrepreneurship*, *2*(4), 288-315.

Bruton, G. D., Ketchen Jr, D. J., & Ireland, R. D. (2013). Entrepreneurship as a solution to poverty. Journal of business venturing, 28(6), 683-689.

Bruton, G., Lewis, A., Lopez, J., & Chapman, K. (2022). A Racialized View of Entrepreneurship: A Review and Proposal for Future Research. *Academy of Management Annals*, (ja).

Buchanan, J. M., & Vanberg, V. J. (1991). The market as a creative process. Economics & Philosophy, 7(2), 167-186.

Burrell, G., & Morgan, G. (2019). *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*. Routledge.

Bussgang, J. (2017, January 7). Impact Entrepreneurship. Retrieved from https://www.huffpost.com/entry/impact-entrepreneurship_b_8930582

Calhoun, C. (2006). The University and the Public Good. Thesis Eleven, 84(1), 7–43. https://doi.org/10.1177/0725513606060516

Campbell, A. (2007). Reductionism, Systems Thinking & Entrepreneurship Research.

Campbell, J. (1968). The Hero with a Thousand Faces. Princeton: Princeton University Press.

Campbell, J. (2003). *The hero's journey: Joseph Campbell on his life and work* (Vol. 7). New World Library.

Campbell, J. (2008). *The hero with a thousand faces* (Vol. 17). New World Library.

Canadian Centre for Social Entrepreneurship. (2001). Social entrepreneurship discussion paper No. 1.

Cantner, U., Cunningham, J. A., Lehmann, E. E., & Menter, M. (2021). Entrepreneurial ecosystems: a dynamic lifecycle model. *Small Business Economics*, *57*(1), 407-423.

Cardona, L., Pardo, M. & Dasi, A. (2020). The institutional isomorphism in the context of organizational changes in higher education institutions. International Journal of Research in Education and Science (IJRES), 6(1), 61-73.

Carnevale, A. P., Smith, N., Melton, M., & Price, E. (2015). Learning While Earning: The New Normal. *Georgetown University Center on Education and the Workforce*.

Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of business venturing*, *18*(1), 13-39.

Casson, M., & Giusta, M. D. (2007). Entrepreneurship and social capital: Analysing the impact of social networks on entrepreneurial activity from a rational action perspective. International small business journal, 25(3), 220-244.

Cavallo, A., Ghezzi, A., & Balocco, R. (2019). Entrepreneurial ecosystem research: Present debates and future directions. *International Entrepreneurship and Management Journal*, *15*(4), 1291-1321.

Cerovac, I. (2018). Epistemic Liberalism. *Prolegomena: Časopis za filozofiju*, *17*(1), 81-95

Cha, M. S., & Bae, Z. T. (2010). The entrepreneurial journey: From entrepreneurial intent to opportunity realization. *The Journal of High Technology Management Research*, *21*(1), 31-42.

Checkoway, B. (2011). What is youth participation?. *Children and youth services review*, *33*(2), 340-345.

Chen, X., Zheng, Y., Chen, H., & Tian, Y. (2023). Does opportunity co-creation help the poor entrepreneurs? Evidence from China. *Frontiers in psychology*, *14*, 1093120. https://doi.org/10.3389/fpsyg.2023.1093120

Chesbrough, H. (2007). Business model innovation: it's not just about technology anymore. *Strategy & leadership*, *35*(6), 12-17.

Chiles, T. H., Bluedorn, A. C., & Gupta, V. K. (2007). Beyond creative destruction and entrepreneurial discovery: A radical Austrian approach to entrepreneurship. *Organization Studies*, 28, 467-493.

Chiles, T. H., Vultee, D. M., Gupta, V. K., Greening, D. W., & Tuggle, C. S. (2010). The philosophical foundations of a radical Austrian approach to entrepreneurship. *Journal of Management Inquiry*, *19*(2), 138-164.

Cho, S. T., Chomina-Chavez, A., & Bronowitz, J. (2017, June). A map of technology entrepreneurship: AHA to Exit. In *2017 IEEE Technology & Engineering Management Conference (TEMSCON)* (pp. 148-154). IEEE.

Christensen, C. M. (2001). Competitive advantage. *mit sloan management review*, *42*(2), 105-109.

Christlieb, J. (2012). Measuring social value creation: A quantitative study among social entrepreneurs (Unpublished doctoral dissertation). Universiteit Twente. doi:https://essay.utwente.nl/62631/1/MSc_J_Christlieb.pdf

Ciria, L. F., Román-Caballero, R., Vadillo, M. A., Holgado, D., Luque-Casado, A., Perakakis, P., & Sanabria, D. (2023). An umbrella review of randomized control trials on the effects of physical exercise on cognition. *Nature Human Behaviour*, 1-14.

Claire, L. (2012). Re-storying the entrepreneurial ideal: lifestyle entrepreneurs as hero?. Tamara: Journal for Critical Organization Inquiry, 10(1-2).

Clark, P. (1999). Microenterprise and the poor: Findings from the Self-Employment Learning Project five year survey of microentrepreneurs.

Clark. (2022, September 2). *Odysseus epic reveal: Heroism in the Odyssey*. Ancient Literature. https://ancient-literature.com/heroism-in-the-odyssey/#:~:text=Aside%20from%20Odysseus%2C%20another%20person,The%20Odyssey%20rather%20than%20Odysseus.

Cochran, P. L. (2007). The evolution of corporate social responsibility. *Business horizons*, *50*(6), 449-454.

Cohen, R. (2020). The Age of Impact Entrepreneurship. In Impact: Reshaping capitalism to drive real change (pp. 34–61). essay, Ebury Press.

Cole, A. (1946). An Approach to the Study of Entrepreneurship: A Tribute to Edwin F. Gay. *The Journal of Economic History, 6*(S1), 1-15. doi:10.1017/S0022050700052876

Cole, A. H. (1968). Meso-economics: A contribution from entrepreneurial history. *Explorations in Economic History*, *6*(1), 3-33.

Cope, J. (2003). Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level'learning. *Management learning*, *34*(4), 429-450.

Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of business venturing*, *26*(6), 604-623.

Corley, K. (2020a). *IGD Session 1 - Introduction* [PowerPoint slides]. Canvas@ASU. https://canvas.asu.edu/courses/68185/files/21234124?module_item_id=4241470

Corley, K. (2020b). *IGD Session 2 - Philosophical basis* [PowerPoint slides]. Canvas@ASU. https://canvas.asu.edu/courses/68185/files/22008132?module_item_id=4311595

Cox, K. C., Kidwell, R. E., & Lortie, J. (2021). New Venture Launchpad (2nd ed.). Kendall Hunt Publishing. https://bookshelf.vitalsource.com/books/9781792486234

Crews, J., DeVol, R., Milligan, K., Ratnatunga, M., Shideler, D., & Trivitt, J. (2021). *America's entrepreneurial states: Supporting entrepreneurs to help drive the*

economy. Heartland Forward. https://heartlandforward.org/case-study/americas-entrepreneurial-states-supporting-entrepreneurs-to-help-drive-the-economy/

Crittenden, V. L., Crittenden, W. F., & Kemp, A. (2023). Influential entrepreneurs and entrepreneurial influencers: are they two sides of the same coin?. Journal of Marketing Theory and Practice, 1-16.

Croitoru, A. (2012). Schumpeter, JA, 1934 (2008), The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle. *Journal of comparative research in anthropology and sociology*, *3*(02), 137-148.

Crow, M. M., & Dabars, W. B. (2015). *Designing the new American university*. JHU Press.

Cunningham, J. A., Lehmann, E. E., & Menter, M. (2022). The organizational architecture of entrepreneurial universities across the stages of entrepreneurship: a conceptual framework. *Small Business Economics*, *59*(1), 11-27.

Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Englewood Cliffs, NJ, 2(4), 169-187.

Dabić, M., Vlačić, B., Kiessling, T., Caputo, A., & Pellegrini, M. (2023). Serial entrepreneurs: A review of literature and guidance for future research. *Journal of Small Business Management*, *61*(3), 1107-1142.

Davidsson, P., Terjesen, S., & Yang, X. (2008). How entrepreneurship breeds and kills itself: implications for present-day China. *The International Association for Chinese Management Research*, 1-27.

Davidsson, P., & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship theory and Practice*, *25*(4), 81-100.

Davis, D.M., Johnson, D.W., Ingram, V., Williams, D.E. (2022). Entrepreneur language: A brief introduction. Academia Letters, Article 4857. https://doi.org/10.20935/AL4857.

Deacy, S. (2008). *Athena*. Routledge.

Decker, R., Haltiwanger, J., Jarmin, R., & Miranda, J. (2014). The role of entrepreneurship in US job creation and economic dynamism. Journal of Economic Perspectives, 28(3), 3-24.

Dees, J. G. (2001). The meaning of social entrepreneurship. Kansas City: *The Kauffman Foundation and Stanford University*.

Dees, J. G., Economy, P., & Emerson, J. (2004). *Strategic tools for social entrepreneurs: Enhancing the performance of your enterprising nonprofit*. John Wiley & Sons.

Dees, J. G., Nash, M., Anderson, B., Kalafatas, J., Tolman, R., Kuran, W., & Bloom, P. (2008). Developing the field of social entrepreneurship. *Center for the Advancement of Social Entrepreneurship, Duke University, Oxford*.

Delmar, F., & Davidsson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & regional development*, *12*(1), 1-23.

Dewey, J. (1999). Logic: The Theory of Inquiry, 1938.

Discipline. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/discipline

Dill, D. D., & Soo, M. (2005). Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems. Higher education, 49(4), 495-533.

Dimaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), 147–160.

Dimov, D. (2011). Grappling with the unbearable elusiveness of entrepreneurial opportunities. *Entrepreneurship theory and practice*, *35*(1), 57-81.

District3. (2023, August 1). *Using the startup library*. https://library.d3center.ca/docs/using-the-startup-library

Dodgson, M., & Gann, D. (2020, October 14). Why universities should support more student entrepreneurs. https://www.weforum.org/agenda/2020/10/universities-should-support-more-student-entrepreneurs/

Dorado, S. (2006). Social Entrepreneurial Ventures: Different Values so Different Process of Creation, No? Journal of Developmental Entrepreneurship, 11(4), 319–343. https://doi.org/10.1142/S1084946706000453

DreamBuilder. (2018). *https://dreambuilder.org/programs/*

Duval-Couetil, N., Reed-Rhoads, T., & Haghighi, S. (2012). Engineering students and entrepreneurship education: Involvement, attitudes and outcomes. *International Journal of Engineering Education*, *28*(2), 425.

EC. (2008). Entrepreneurship in higher education, especially in non-business studies. Best Procedure Project: Final Report of the Expert Group.

Economic Policy Institute. (accessed 2023, May 23). *Nominal Wage Tracker*. https://www.epi.org/nominal-wage-tracker/

Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. Journal of small business management, 48(2), 174-196.

Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or myth?. *American psychologist*, *51*(11), 1153.

Eliasmith, C. (1996). The third contender: A critical examination of the dynamicist theory of cognition. *Philosophical Psychology*, *9*(4), 441-463.

Emerson, R. W. (2019). *Self-reliance*. Lulu.com. [1841]

Endres, A., & Harper, D. (2013). 'Wresting meaning from the market': A reassessment of Ludwig Lachmann's entrepreneur. *Journal of Institutional Economics, 9*(3), 303-328. doi:10.1017/S174413741300009X

Entrepreneur. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/entrepreneur

Eppler, I. (2012). The Problem with "Social Entrepreneurship": A Student's Perspective. Stanford Social Innovation Review. https://doi.org/10.48558/F2NA-QN14

Epstein, D. (2019). *Range: Why generalists triumph in a specialized world*. Penguin.

Estrin, S., & Mickiewicz, T. (2011). Entrepreneurship in transition economies: The role of institutions and generational change. *The dynamics of entrepreneurship: Evidence from the global entrepreneurship monitor data*, 181-208.

Europejska, K. (2006). Fostering Entrepreneurial Mindsets Through Education and Learning. Communication from the Commission to the Council, the European Parliament, the European Economic and Social and the Committee of the Regions, Brussels, 13, 2006.

European Commission. Enterprise DG. Information, Communication Unit. Documentation Centre, & European Commission. Enterprise DG. (2004). Helping to Create an Entrepreneurial Culture: A guide on good practices in promoting entrepreneurial attitudes and skills through education (Vol. 25). Office for Official Publications of the European Communities.

Fairlie, R. W., & Robb, A. M. (2008). Race and entrepreneurial success. *Cambridge, MA: The*.

Fairlie, Robert, Sameeksha Desai, and A.J. Herrmann. (2019) 2018 National Report on Early-Stage Entrepreneurship, Kauffman Indicators of Entrepreneurship, Ewing Marion Kauffman Foundation: Kansas City.

Federal Student Aid. (2023, July 24). Federal pell grants are usually awarded only to undergraduate students. https://studentaid.gov/understand-aid/types/grants/pell

Feld, B. (2012). Startup Communities: Building an Entrepreneurial Ecosystem in Your City. Hoboken, NJ: Wiley.

Felício, J. A., Gonçalves, H. M., & da Conceição Gonçalves, V. (2013). Social value and organizational performance in non-profit social organizations: Social entrepreneurship, leadership, and socioeconomic context effects. *Journal of business research*, *66*(10), 2139-2146.

Fichter, K., & Tiemann, I. (2020). Impacts of promoting sustainable entrepreneurship in generic business plan competitions. *Journal of Cleaner Production*, *267*, 122076.

Fischoff, E. (1944). The Protestant ethic and the spirit of capitalism: The history of a controversy. *Social Research*, *11*(1), 53-77. http://www.jstor.org/stable/40982001

Financing your dream module added to DreamBuilder program. DreamBuilder The Women's Business Creator. (2018, September 26). Retrieved March 8, 2023, from https://dreambuilder.org/2017/03/08/thunderbird-school-of-global-management-adds/

Flinn Foundation. (2022, February 4). Retrieved February 24, 2022, from https://flinn.org/bioscience/

Ford, D., Zimmermann, T., Bird, C., & Nagappan, N. (2017, November). Characterizing software engineering work with personas based on knowledge worker actions. In *2017 ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)* (pp. 394-403). IEEE.

Fowler, A. (2000). NGDOs as a moment in history: beyond aid to social entrepreneurship or civic innovation?. *Third world quarterly*, *21*(4), 637-654.

Franco, M., Haase, H., & Lautenschläger, A. (2010). Students' entrepreneurial intentions: an inter-regional comparison. *Education+ training, 52*(4), 260-275.

Freeman, M. A., Johnson, S. L., Staudenmaier, P. J., & Zisser, M. R. (2015). Are entrepreneurs "touched with fire". Pre-publication manuscript. San Francisco, CA: University of California San Francisco. Retrieved from http://www. michaelafreemanmd. com/Research_files/Are% 20Entrepreneurs% 20Touched% 20with% 20Fire, 20, 204-17.

Friedman, M. (2000). *Commanding Heights* Interview. PBS. Retrieved from https://www.pbs.org/wgbh/commandingheights/shared/minitext/int_miltonfriedman.html

Gage, D. (2012, September 20). The Venture Capital Secret: 3 Out of 4 Start-Ups Fail. Retrieved from https://www.wsj.com/articles/SB10000872396390443720204578004980476429190

Gartner, W. B. (1985). A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *Academy of Management Review*, *10*, 696-706.

Gartner, W. B. (1988). "Who is an entrepreneur?" is the wrong question. *American journal of small business*, *12*(4), 11-32.

Gibb, A. (2012). Exploring the synergistic potential in entrepreneurial university development: towards the building of a strategic framework. Annals of Innovation & Entrepreneurship, 3(1), 16742.

Gibbons, M. T. (2021, January 13). Spending in FY 2019, Reaching $84 Billion. NSF. https://ncses.nsf.gov/pubs/nsf21313.

Gilder, G. F. (1984). The spirit of enterprise. *(No Title)*.

Gilligan, S., & Dilts, R. (2009). *The Hero's Journey: A Voyage of Self Discovery*. Crown House Publishing.

Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative science quarterly*, 750-783.

Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of management review*, *15*(4), 584-602.

Giora, R. (2008). Is metaphor unique. *The Cambridge handbook of metaphor and thought*, 143-160.

Global Institute of Sustainability and Innovation. (2019, May 2). Bridging the Valley of Wasted Knowledge [Video]. YouTube. https://www.youtube.com/watch?v=0rlWEyadz4I

Goldstein, L. S. (2005). Becoming a teacher as a hero's journey: Using metaphor in preservice teacher education. *Teacher Education Quarterly*, *32*(1), 7-24.

Gordon, J., Harvey, C., Shaw, E., & Maclean, M. (2016). Entrepreneurial philanthropy. *The Routledge companion to philanthropy*, 334-347.

Granovetter, M. (2018a). Economic action and social structure: The problem of embeddedness. In *The sociology of economic life* (pp. 22-45). Routledge.

Granovetter, M. (2018b). The impact of social structure on economic outcomes. In *The sociology of economic life* (pp. 46-61). Routledge.

Grassl, W. (2012). Business models of social enterprise: A design approach to hybridity. *ACRN Journal of entrepreneurship Perspectives*, *1*(1), 37-60.

Gregory, R. W. (2011). Design science research and the grounded theory method: Characteristics, differences, and complementary uses. In *Theory-guided modeling and empiricism in information systems research* (pp. 111-127). Physica-Verlag HD.

Guiheux, G. (2012). Chinese socialist heroes: From workers to entrepreneurs. In *Towards a New Development Paradigm in Twenty-First Century China* (pp. 115-126). Routledge.

Gupta, A. K. (2013). Tapping the entrepreneurial potential of grassroots innovation. Stanford Social Innovation Rev, 11(3), 18-20.

Guttentag, M., & Davidson, A. (2021). How to Make the Most Out of Business Accelerator Programs for Development. *Stanford Social Innovation Review*. https://doi.org/10.48558/7ET8-6778

Hamel, G., & Zanini, M. (2020). Humanocracy: Creating organizations as amazing as the people inside them. Harvard Business Press.

Han, S.-K. (1994). Mimetic Isomorphism and Its Effect on the Audit Services Market. Social Forces, 73(2), 637–664. https://doi.org/10.2307/2579824

Harding, R., & Cowling, M. (2006). Social Entrepreneurship Monitor United Kingdom. *London Business School.*

Hardoon, D., Ayele, S., & Fuentes-Nieva, R. (2016). *An Economy For the 1%.* Oxfam International. https://www.oxfam.org/en/research/economy-1

Hardoon, D. (2017). *An economy for the 99%.* Oxfam International. https://www.oxfam.org/en/research/economy-99

Harper, D. A. (2008). Towards a theory of entrepreneurial teams. Journal of business venturing, 23(6), 613-626.

Hart, K. (2009). On the informal economy: The political history of an ethnographic concept. *Universite Libre de Bruxelles Working Papers CEB*.

Hartinger-Saunders, R. M. (2008). The history of defining youth: Current implications for identifying and treating delinquent youth.

Haugh, H. (2005). A research agenda for social entrepreneurship. *Social enterprise journal*.

Haugh, H. (2007). Community–led social venture creation. *Entrepreneurship theory and practice*, *31*(2), 161-182.

Hayek, F. A. (1974). The Pretense of Knowledge. *Nobel Prize Lecture*.

Headd, B. (2003). Redefining business success: Distinguishing between closure and failure. *Small business economics*, *21*, 51-61.

Heller, C. (2018). The Intergalactic Design Guide: Harnessing The Creative Potential of Social Design. Island Press.

Hennessey, Z. (2023, April 18). *72% of start-up founders suffer from mental health issues - report*. Jerusalem Post. https://www.jpost.com/business-and-innovation/tech-and-start-ups/article-739560#:~:text=According%20to%20the%20report%2C%20a,suffer%20from%20anxiety%20as%20well

Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship education and training: can entrepreneurship be taught? Part I. *Education+ Training, 47*(2), 98-111.

Herman, E., & Stefanescu, D. (2017). Can higher education stimulate entrepreneurial intentions among engineering and business students?. *Educational Studies*, *43*(3), 312-327.

Hibbert, S. A., Hogg, G., & Quinn, T. (2002). Consumer response to social entrepreneurship: The case of the Big Issue in Scotland. *International journal of nonprofit and voluntary sector marketing*, *7*(3), 288-301.

Higgins, D., Jones, P., & McGowan, P. (2018). Creating Entrepreneurial Space: Talking Through Multi-Voices, Reflections on Emerging Debates. In *Creating Entrepreneurial Space: Talking Through Multi-Voices, Reflections on Emerging Debates*. Emerald Publishing Limited.

Hockerts, K. (2015). The social entrepreneurial antecedents scale (SEAS): A validation study. *Social Enterprise Journal*, *11*(3), 260-280.

Hofstede, G. (1980). Motivation, leadership, and organization: do American theories apply abroad?. Organizational dynamics, 9(1), 42-63.

Holmes, T. (2007). The hero's journey: an inquiry-research model. *Teacher Librarian*, *34*(5), 19.

Holt, R. (2008). Using activity theory to understand entrepreneurial opportunity. *Mind, Culture, and Activity*, *15*(1), 52-70.

Horwitz, S. (2019). Ludwig Lachmann as a theorist of entrepreneurship. *Studies in Logic, Grammar and Rhetoric*, *57*(1), 19-40.

Hosch, W. L. (2009, July 15). isomorphism. Encyclopedia Britannica. https://www.britannica.com/science/isomorphism-mathematics

Hwang, V., & Horowitz, G. (2012). The rainforest: The secret to building the next Silicon Valley. Regenwald.

Hyrsky, K. (1999). Entrepreneurial metaphors and concepts: An exploratory study. *International small business journal*, *18*(1), 13-34.

Illinois Science & Technology Coalition. (2019). *2019 University Entrepreneurship Index*. https://www.istcoalition.org/wp-content/uploads/UE_Index_19_5.22.pdf

Illinois Science & Technology Coalition. (2022). *Illinois Innovation index: 2022 University Entrepreneurship Report*. https://www.istcoalition.org/wp-content/uploads/2022_University-Entrepreneurship-Report_20221206_FINAL.pdf

International Labor Organization. (2010). Policy options to support young workers during economic recovery. Brief no. 14. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_146811.pdf.

Isidore, C. (2021, October 26). Tesla is now worth more than $1 trillion. CNN. Retrieved April 7, 2022, from https://edition.cnn.com/2021/10/25/investing/tesla-stock-trillion-dollar-market-cap/index.html

Jahan, S., & Mahmud, A. S. (2015). Back to Basics: What Is Capitalism?-Free markets may not be perfect but they are probably the best way to organize an economy. Finance & Development, 52(002).

Jahan, S., Mahmud, A. S., & Papageorgiou, C. (2014). What is Keynesian economics. *International Monetary Fund*, *51*(3), 53-54.

Jean-Baptiste Say, Catechism of Political Economy (London, 1816).

Jenkins, A., & McKelvie, A. (2016). What is entrepreneurial failure? Implications for future research. *International Small Business Journal*, *34*(2), 176-188.

Jenkins, A. S., Wiklund, J., & Brundin, E. (2014). Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience. *Journal of Business Venturing, 29(1), 17-33.*

Jeon, C. (2022). How inequality breeds entrepreneurship and reproduces inequality in entrepreneurial teams (Doctoral dissertation, Arizona State University).

Johne, A., & Storey, C. (1998). New service development: a review of the literature and annotated bibliography. *European journal of Marketing*.

Johnson, P., & Duberley, J. (2000). *Understanding management research: An introduction to epistemology*. Sage.

Joshi, K., (2023, January 19). 9 types of entrepreneurs and their mantras to build a successful business. *Emeritus*. https://emeritus.org/blog/entrepreneurship-types-of-entrepreneurs/#:~:text=Imitative%20entrepreneurs%20need%20to%20nevertheless,Facebook%2C%20Pinterest%2C%20and%20Groupon.

Kalyanasundaram, G. (2018). Why Do Startups Fail? A Case Study Based Empirical Analysis in Bangalore. *Asian Journal of Innovation & Policy*, *7*(1).

Kaplan, R. S., & Norton, D. P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business Press.

Katila, S., Laine, P. M., & Parkkari, P. (2019). Sociomateriality and affect in institutional work: Constructing the identity of start-up entrepreneurs. Journal of Management Inquiry, 28(3), 381-394.

Katz, J. A. (2003). The chronology and intellectual trajectory of American entrepreneurship education: 1876–1999. Journal of business venturing, 18(2), 283-300.

Kaufmann, P. J., & Dant, R. P. (1999). Franchising and the domain of entrepreneurship research. *Journal of Business venturing*, *14*(1), 5-16.

Kenton, W. (2022, March 25). *Exploring How an Economy Works and the Various Types of Economies*. Investopedia. https://www.investopedia.com/terms/e/economy.asp [Accessed 17 July 2022].

Kimhi, A. (2010). Entrepreneurship and income inequality in southern Ethiopia. *Small Business Economics*, *34*(1), 81-91.

Kindig, B. (2020, January 3). Opinion: Silicon Valley loses some entrepreneurial spirit as venture capitalists favor later-stage deals. Retrieved January 4, 2020, from https://www.marketwatch.com/story/silicon-valley-loses-some-entrepreneurial-spirit-as-venture-capitalists-favor-later-stage-deals-2020-01-03.

Kintsch, W. (2008). How the mind computes the meaning of metaphor. *The Cambridge handbook of metaphor and thought*, 129-142.

Kirzner, I. M., (1985). *Discovery and the Capitalist Process*. University of Chicago Press.

Klimas, P., Czakon, W., Kraus, S., Kailer, N., & Maalaoui, A. (2021). Entrepreneurial failure: a synthesis and conceptual framework of its effects. *European Management Review*, *18*(1), 167-182.

Klofsten, M. (2000). Training entrepreneurship at universities: a Swedish case. Journal of European Industrial Training.

Koellinger, P., Minniti, M., & Schade, C. (2013). Gender differences in entrepreneurial propensity. *Oxford bulletin of economics and statistics*, *75*(2), 213-234.

Kohn, M., & Reddy, K. (2006). Colonialism.

Koppl, R. (1998). Lachmann on the subjectivism of active minds. *Subjectivism and Economic Analysis: Essays in Memory of Ludwig M. Lachmann, London: Routledge*, 61-79.

Kramer, J., & Magee, J. (1985). Dynamic configuration for distributed systems. *IEEE Transactions on Software Engineering*, (4), 424-436.

Krishna, A., Agrawal, A., & Choudhary, A. (2016, December). Predicting the outcome of startups: less failure, more success. In *2016 IEEE 16th International Conference on Data Mining Workshops (ICDMW)* (pp. 798-805). IEEE.

Kritikos, A. S. (2014). Entrepreneurs and their impact on jobs and economic growth. *IZA World of Labor*.

Kuckertz, A. (2019). Let's take the entrepreneurial ecosystem metaphor seriously!. *Journal of Business Venturing Insights*, *11*, e00124.

Kwong, C. C., Thompson, P., & Cheung, C. W. (2012). The effectiveness of social business plan competitions in developing social and civic awareness and participation. Academy of Management Learning & Education, 11(3), 324-348.

Lachmann, L. M. (1956). *Capital and its Structure*. Ludwig von Mises Institute.

Lachmann, L. M. (1963). Cultivated growth and the market economy. *South African Journal of Economics*, *31*(3), 165-174.

Lachmann, L. M. (2007). *The legacy of max weber*. Ludwig von Mises Institute. (Original work published 1971)

Lachmann, L. M. (1976a). On the central concept of Austrian economics: Market process. *The foundations of modern Austrian economics*, 126-32.

Lachmann, L. M. (1976b). From Mises to Shackle: an essay on Austrian economics and the kaleidic society. *Journal of economic literature*, *14*(1), 54-62.

Lachmann, L. M. (1977). Capital, expectations, and the market process. *Essays on the Theory of the Market Economy. Kansas City: Sheed Andrews and McMeel*.

Lachmann, L. M. (1990). Austrian economics: a hermeneutic approach. *Economics and hermeneutics*, 134-146.

LaFranco, R., & Peterson-Withorn, C. (2023). Forbes world's billionaires list 2023: The richest in 2022. *Forbes*. Retrieved January 25, 2024, from https://www.forbes.com/billionaires/

Landau, M. J., Oyserman, D., Keefer, L. A., & Smith, G. C. (2014). The college journey and academic engagement: how metaphor use enhances identity-based motivation. *Journal of Personality and Social Psychology*, *106*(5), 679.

Landry, L., (2019). 4 startup challenges to avoid when starting your business. *Harvard Business School Online – Business insights*. https://online.hbs.edu/blog/post/scaling-startup-challenges-to-avoid.

Lasprogata, G. A., & Cotten, M. N. (2003). Contemplating enterprise: The business and legal challenges of social entrepeneurship. *Am. Bus. LJ*, *41*, 67.

Lardner, J., & Smith, D. A. (2005). Inequality matters: The growing economic divide in America.

Lavoie, D. (1985). Rivalry and central planning: The socialist calculation debate reconsidered. *(No Title)*.

Lavoie, D. (Ed.). (2005). *Economics and hermeneutics*. Routledge.

Lawson, M., Butt, A. P., Harvey, R., Sarosi, D., Coffey, C., Piaget, K., Thekkudan, J., (2020). *Time to care*. Oxfam International. https://www.oxfam.org/en/research/time-care

Leadbeater, C. (2006). The socially entrepreneurial city. *Social entrepreneurship: new models of sustainable social change*, 233-246.

Leibenstein, H. (1988). Discovery and the capitalist process: Israel M. Kirzner,(The University of Chicago Press, Chicago, 1985) pp. xiii+ 183, $22.50. *Journal of Economic Behavior & Organization*, *9*(3), 315-318.

Levin, S. R. (1982). Aristotle's Theory of Metaphor. *Philosophy & Rhetoric*, *15*(1), 24–46. http://www.jstor.org/stable/40237305.

Lewin, P. (2012, November). The Austrian School of Economics and the Implications of Subjectivism. In *Conference on Austrian Thought at the Turn of the Twentieth Century* (pp. 1-15).

Liao, J., Murphy, P. J., & Welsch, H. (2005). Developing and validating a construct of entrepreneurial intensity. New England Journal of Entrepreneurship, 8(2), 31-38.

Light, P. C. (2009). Social Entrepreneurship Revisited. Stanford Social Innovation Review, 7(3), 21–22. https://doi.org/10.48558/Z8K2-W870

Locke, E. A., & Baum, J. R. (2014). Entrepreneurial motivation. In *The psychology of entrepreneurship* (pp. 125-144). Psychology Press.

London School of Economics. (2020, February 21). Thomas Piketty: "The current economic system is not working when it comes to solving inequality." Retrieved June 8, 2023, from https://blogs.lse.ac.uk/europpblog/2020/02/21/thomas-piketty-the-current-economic-system-is-not-working-when-it-comes-to-solving-inequality/#:~:text=Thomas%20Piketty%3A%20%E2%80%9CThe%20current%20economic,it%20comes%20to%20solving%20inequality%E2%80%9D

Low, G. (2008). Metaphor and education. *The Cambridge handbook of metaphor and thought*, 212-231.

Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, *14*(2), 139-161.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of management Review, 21(1), 135-172.

Mair, J., & Marti, I. (2004). *Social entrepreneurship: What are we talking about? A framework for future research* (No. D/546). IESE Business School.

Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of world business*, *41*(1), 36-44.

Mair, J., & Noboa, E. (2003). Social entrepreneurship: How intentions to create a social enterprise get formed.

Malach-Pines, A., Levy, H., Utasi, A., & Hill, T. L. (2005). Entrepreneurs as cultural heroes: A cross-cultural, interdisciplinary perspective. Journal of Managerial Psychology, 20(6), 541-555.

Mann, C. C. (2012). 1493, Uncovering the New World Columbus Created. Knopf Doubleday Publishing Group.

March, J. G., Olsen, J. P., & Christensen, S. (1979). Ambiguity and choice in organizations. Bergen: Universitetsforlaget.

Martignoni, D., Menon, A., & Siggelkow, N. (2016). Consequences of misspecified mental models: Contrasting effects and the role of cognitive fit. *Strategic Management Journal*, *37*(13), 2545-2568.

Martin, R. L., & Osberg, S. (2007). Social entrepreneurship: The case for definition.

Marquez, J., and Downey, A. (2015). "Service Design: An Introduction to a Holistic Assessment Methodology of Library Services." Weave: Journal of Library User Experience, 1(2). http://dx.doi.org/10.3998/weave.12535642.0001.201.

Marquez, J. J., Downey, A., & Clement, R. (2015). Walking a Mile in the User's Shoes: Customer Journey Mapping as a Method to Understanding the User Experience, Internet Reference Services Quarterly, 20:3-4, 135-150, DOI: 10.1080/10875301.2015.1107000

Mata, W., Baldwin, S., & Davison, T. (2024, February 1). *Talking 'bout the generations, could you be a millennial?* Evening Standard. https://www.standard.co.uk/news/uk/which-age-range-who-generation-z-millennial-boomer-zoomer-b1073540.html

Mayer, R. E. (1975). Different problem-solving competencies established in learning computer programming with and without meaningful models. *Journal of educational psychology*, *67*(6), 725.

Maynard, A. D., & Garbee, E. (2019). Responsible innovation in a culture of entrepreneurship: A US perspective. *In International Handbook on Responsible Innovation (pp. 488-502).* Edward Elgar Publishing Ltd. https://doi.org/10.4337/9781784718862.00043

McCloskey, D. N. (2016). *Bourgeois equality: How ideas, not capital or institutions, enriched the world*. University of Chicago Press.

McKelvey, B. (2004). Toward a complexity science of entrepreneurship. Journal of Business Venturing, 19, 313-341.

McKibben, B. (2007). *Deep economy: The wealth of communities and the durable future.* Times Books/Henry Holt and Co.

McMullen, J. S. (2011). Delineating the domain of development entrepreneurship: A market–based approach to facilitating inclusive economic growth. Entrepreneurship Theory and Practice, 35(1), 185-215.

McMullen, J. S., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of management studies*, *50*(8), 1481-1512.

Mediavilla, D., (2023). Daniel Sanabria, psychologist: 'The best predictor of professional success isn't cognitive performance, it's whether your parents have money'. EL PAÍS. Retrieved July 21, 2023 from: https://english.elpais.com/science-tech/2023-04-13/daniel-sanabria-psychologist-the-best-predictor-of-professional-success-isnt-cognitive-performance-its-whether-your-parents-have-money.html.

Metaphor. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/metaphor

Miao, Y., Fan, H., & Yuan, B. (2021). Optimization of supporting college students entrepreneurship environment. *Computer Applications in Engineering Education, 29(2)*, 445-452.

Microsoft. (1995). *Windows Interface Guidelines for Software Design*. Microsoft Press.

Mikl, J., Herold, D. M., Ćwiklicki, M., & Kummer, S. (2020). The impact of digital logistics start-ups on incumbent firms: a business model perspective. *The International Journal of Logistics Management, 32(4), 1461-1480.*

Miles, T. (2023, April 11). *Dynamic Supply Chain Alignment: A theory ready for practical application. Kinaxis Blog. https://www.kinaxis.com/en/blog/dynamic-supply-chain-alignment-a-theory-ready-for-practical-application*

Miller, D. J., & Acs, Z. J. (2017). The campus as entrepreneurial ecosystem: the University of Chicago. *Small Business Economics*, *49*(1), 75-95.

Miller, K. J., Shenhav, A., & Ludvig, E. A. (2019). Habits without values. *Psychological review*, *126*(2), 292.

Milne, M. J., Kearins, K., & Walton, S. (2006). Creating adventures in wonderland: The journey metaphor and environmental sustainability. *Organization*, *13*(6), 801-839.

Mimetic. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/mimetic?utm_campaign=sd&utm_medium=serp&utm_source=jsonld

Min, J. Y., Kim, H., Park, S. G., Hwang, S. H., & Min, K. B. (2019). Differences in suicidal behaviors between self-employed and standardly employed workers. *American journal of industrial medicine*, *62*(12), 1144–1151. https://doi.org/10.1002/ajim.23050

Mizgier, K. J., Jüttner, M. P., & Wagner, S. M. (2013). Bottleneck identification in supply chain networks. *International Journal of Production Research*, *51*(5), 1477-1490.

Mitra, J., & Edmondson, J. (Eds.). (2015). Entrepreneurship and knowledge exchange. Routledge.

Mill, J. S. [1845] 2006. *The claims of Labour: The Collected Works of John Stewart Mill, Volume 4: Essays on Economics and Society, 1824-1845.* Indianapolis: Liberty Fund.

Mishel, L., & Kandara, J. (2020, December 1). Wages for the top 1% skyrocketed 160% since 1979 while the share of wages for the bottom 90% shrunk. *Economic Policy Institute – Working Economics Blog Technica*. https://www.epi.org/blog/wages-for-the-top-1-skyrocketed-160-since-1979-while-the-share-of-wages-for-the-bottom-90-shrunk-time-to-remake-wage-pattern-with-economic-policies-that-generate-robust-wage-growth-for-vast-majority/

Montgomery, A.W., Dacin, P.A. & Dacin, M.T. Collective Social Entrepreneurship: Collaboratively Shaping Social Good. *J Bus Ethics* 111, 375–388 (2012). https://doi.org/10.1007/s10551-012-1501-5

Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation biology*, *28*(5), 1167-1177.

Morelix, A. (2015, October 29). The evolution of entrepreneurship on College Campuses. www.kauffman.org. Retrieved March 18, 2022, from https://www.kauffman.org/currents/the-evolution-of-entrepreneurship-on-college-campuses/#:~:text=More%20than%205%2C000%20entrepreneurship%20courses,members%20teach%20it%20(source).

Morgan, A., & Barden, M. (2015). A beautiful constraint: how to transform your limitations into advantages, and why it's everyone's business. John Wiley & Sons.

Morgan, G., & Smircich, L. (1980). The case for qualitative research. *Academy of management review*, *5*(4), 491-500.

Morong, C. (1992a, July). The creative-destroyers: Are entrepreneurs mythological heroes. In Western Economic Association Annual Conference, July, San Francisco.

Morong, C. (1992b). The Calling of the Entrepreneur. *The New Leaders: The Business Bulletin for Transformative Leadership*.

Morris, M.H. (2015). Entrepreneurial Intensity, vol. 3. John Wiley & Sons, Hoboken.

Morris, M. H. (2020). The liability of poorness: Why the playing field is not level for poverty entrepreneurs. *Poverty & Public Policy*, *12*(3), 304-315.

Morris, M. H., Kuratko, D. F., Audretsch, D. B., & Santos, S. (2020). Overcoming the liability of poorness: disadvantage, fragility, and the poverty entrepreneur. Small Business Economics, 1-15.

Morris, M. H., & Kuratko, D. F. (2020). What do entrepreneurs create?: Understanding four types of ventures. Edward Elgar Publishing.

Morris, M. H., & Lewis, P. S. (1991). Entrepreneurship as a significant factor in societal quality of life. Journal of Business Research, 23(1), 21-36.

Morris, M. H., Neumeyer, X., & Kuratko, D. F. (2015). A portfolio perspective on entrepreneurship and economic development. Small Business Economics, 45(4), 713-728.

Morris, M. H., Santos, S. C., & Neumeyer, X. (2020). Entrepreneurship as a solution to poverty in developed economies. Business Horizons, 63(3), 377-390.

Morris, M. H., & Sexton, D. L. (1996). The concept of entrepreneurial intensity: Implications for company performance. Journal of Business Research, 36(1), 5-13.

Morris, M. H., Shirokova, G., & Tsukanova, T. (2017). Student entrepreneurship and the university ecosystem: A multi-country empirical exploration. *European Journal of International Management*, *11*(1), 65-85.

Morse, R., Brooks, E., Vega-Rodriguez, J., Castonguay, A., & Hines, K. (2021, March 29). Methodology: 2022 best business schools rankings. www.usnews.com. Retrieved March 27, 2022, from https://www.usnews.com/education/best-graduate-schools/articles/business-schools-methodology

Mort, G. S., Weerawardena, J., & Carnegie, K. (2002). Social entrepreneurship: Towards conceptualization and measurement. In *American Marketing Association. Conference Proceedings* (Vol. 13, p. 5). American Marketing Association.

Mulgan, G. (2010). Measuring Social Value (SSIR). Retrieved January 02, 2021, from https://ssir.org/articles/entry/measuring_social_value.

Müller, B., & Olbrich, S. (2011). The artifact's theory–a grounded theory perspective on design science research.

Neck, H. M., Greene, O. G., & Brush, C. G. (2014). Practice-based entrepreneurship education using actionable theory. *Annals of Entrepreneurship Education and Pedagogy _ 2014*, 1.

Nicholls, A. (Ed.). (2008). *Social entrepreneurship: New models of sustainable social change*. OUP Oxford.

Nicholls, A. (2013). Heroes. Journal of Social Entrepreneurship, 4(2), 109-112.

Niiniluoto, I. (1999). *Critical scientific realism*. OUP Oxford.

Normative. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/normative

Obama, B. (2013, December 04). *Remarks by the President on Economic Mobility*. Office of the Press Secretary. https://obamawhitehouse.archives.gov/the-press-office/2013/12/04/remarks-president-economic-mobility

Oboidhe, P. (2023, January 25). The 5 Stages of Entrepreneurship. *Hubspot*. https://blog.hubspot.com/sales/stages-of-entrepreneurship#:~:text=Ideation%20is%20the%20first%20stage,what%20they're%20passionate%20about.

Ogola, F., & Thériault, A., (2023). Richest 1% bag nearly twice as much wealth as the rest of the world put together over the past two years. Oxfam International. Retrieved July 21, 2023, from https://www.oxfam.org/en/press-releases/richest-1-bag-nearly-twice-much-wealth-rest-world-put-together-over-past-two-years#:~:text=The%20richest%201%20percent%20grabbed,half%20of%20all%20new%20wealth

Omisakin, O. M., Nakhid, C., Littrell, R., & Verbitsky, J. (2016). Entrepreneurial Orientation among Migrants and Small and Medium Enterprises. Journal of Business Administration Research, 5(1). https://doi.org/10.5430/JBAR.V5N1P7

Organizational Communication Channel. (2017, September 20). *Research Paradigms by Burrell and Morgan* [Video]. YouTube. https://www.youtube.com/watch?v=eOP7uS-TGZ4

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers* (Vol. 1). John Wiley & Sons.

Ostrom, E. (2016). Beyond markets and states: polycentric governance of complex economic systems. In Boettke, P. J., Haeffele-Balch, S., & Storr, V. H., *Mainline economics: Six Nobel lectures in the tradition of Adam Smith* (pp.193-239). Mercatus Center at George Mason University.

Ostrom, E. (2002). Common-pool resources and institutions: Toward a revised theory. *Handbook of agricultural economics*, *2*, 1315-1339.

Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, games, and common-pool resources*. University of Michigan press.

Ostrom, V., Tiebout, C. M., & Warren, R. (1961). The organization of government in metropolitan areas: a theoretical inquiry. *American political science review*, *55*(4), 831-842.

Oxfam America. (2021, October 29). Foreign aid 101: A Quick and Easy Guide to Understanding US Foreign Aid. Oxfam. Retrieved July 13, 2022, from https://www.oxfamamerica.org/explore/research-publications/foreign-aid-101/

Panetta, K. (2020, October 19). *The Future of Business is composable - gartner keynote. Gartner Insights.* *https://www.gartner.com/smarterwithgartner/gartner-keynote-the-future-of-business-is-composable*

Papi-Thornton, D. (2016). Tackling Heropreneurship. *Stanford Social Innovation Review*. https://doi.org/10.48558/997W-YB97

Payne, A., Frow, P., & Eggert, A. (2017). The customer value proposition: evolution, development, and application in marketing. *Journal of the Academy of Marketing Science*, *45*, 467-489.

Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of world business*, *41*(1), 56-65.

Perrini, F. (Ed.). (2006). *The new social entrepreneurship: what awaits social entrepreneurial ventures?*. Edward Elgar Publishing.

Pew Research Center. (2015). *The Whys and Hows of Generations Research*. https://www.pewresearch.org/wp-content/uploads/sites/4/2015/09/09-3-2015-Generations-explainer-release.pdf

Pierce, N. (2023, August 11). International Youth Day: It's time to empower youth with skills for the future. *World Economic Forum*. https://www.weforum.org/agenda/2023/08/as-world-celebrates-international-youth-day-it-s-time-to-empower-youth-with-skills-for-the-future/

Pineda, K. (2020, August 18). Generation create? gen Z might be the most creative generation yet, poll says. *USA Today*. https://www.usatoday.com/story/news/nation/2020/08/18/generation-z-may-most-creative-yet-study-says/5589601002/

Piketty, T. (2017). Capital in the twenty-first century. In *Capital in the twenty-first century*. Harvard University Press.

Piketty, T., Saez, E., Zucman, G., Alvaredo, F., & Chance, L. (2022). World inequality report 2022. *Paris: World Inequality Lab*.

Pittaway, L. (2016). Philosophies in entrepreneurship: a focus on economic theories. In *Theories of Local Economic Development* (pp. 235-258). Routledge.

Polanyi, M. (2013). *Science, faith and society*. University of Chicago Press.

Pomerantz, M. (2003). The business of social entrepreneurship in a" down economy". *IN BUSINESS-EMMAUS PENNSYLVANIA-*, *25*(2), 25-28.

Pont, S. (2014, September 16). *'Generation create': Their Rise & What They Can Teach Us*. HuffPost UK. Retrieved March 9, 2023, from https://www.huffingtonpost.co.uk/simon-pont/millenials-generation-create_b_5594928.html

Pryor, J. H., & Reedy, E. J. (2009). Trends in business interest among US college students: An early exploration of data available from the cooperative institutional research program. Available at SSRN 1971393.

Rante, Y., & Warokka, A. (2013). The Interrelated Nexus of Indigenous Economic Growth and Small Business Development: Do Local Culture, Government Role, and Entrepreneurial Behavior Play the Role?. Journal of Innovation Management in Small & Medium Enterprises, 2013, 1.

Rassokha, I. M. (2022). Relativism as an Ontological System. *Axiomathes*, *32*(6), 1433-1449.

Ratten, V., & Jones, P. (Eds.). (2018). *Transformational entrepreneurship*. Routledge.

Reedy, A., (2021, July 13). The unintentional entrepreneur. *University of Denver*. https://daniels.du.edu/blog/unintentional-entrepreneur/

Read, S., Sarasvathy, S., Dew, N., Wiltbank, R., & Ohlsson, A.V. (2011). Effectual Entrepreneurship. New York: Routledge.

Reinert, H., & Reinert, E. S. (2006). Creative destruction in economics: Nietzsche, Sombart, schumpeter. *Friedrich Nietzsche (1844–1900) Economy and Society*, 55-85.

Reis, E. (2011). *The Lean Startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Currency.

Reynolds, P., & Miller, B. (1992). New firm gestation: Conception, birth, and implications for research. Journal of business venturing, 7(5), 405-417.

Rice, M. P., Fetters, M. L., & Greene, P. G. (2014). University-based entrepreneurship ecosystems: a global study of six educational institutions. *International Journal of Entrepreneurship and Innovation Management*, *18*(5-6), 481-501.

Ries, E. (2011). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Business.

Rittel, H. (1972). On the planning crisis: Systems analysis of the 'first and second generations'. Bedriftskonomen, 8, 390-396.

Ro, M., Brauer, M., Kuntz, K., Shukla, R., & Bensch, I. (2017). Making Cool Choices for sustainability: Testing the effectiveness of a game-based approach to promoting pro-environmental behaviors. *Journal of Environmental Psychology*, *53*, 20-30.

Roberts, D., & Woods, C. (2005). Changing the world on a shoestring: The concept of social entrepreneurship. *University of Auckland business review*, *7*(1), 45-51.

Rosas, G., & Rossignotti, G. (2005). Starting the new millennium right: Decent employment for young people. Int'l Lab. Rev., 144, 139.

Rosenbaum, M. S., Otalora, M. L., & Ramírez, G. C. (2017). How to create a realistic customer journey map. *Business horizons*, *60*(1), 143-150.

Roth, C. (2023). *You Will Own Nothing: Your War with a New Financial World Order and How to Fight Back*. Broadside Books.

Rudeloff, C., & Damms, J. (2023). Entrepreneurs as influencers: the impact of parasocial interactions on communication outcomes. Journal of Research in Marketing and Entrepreneurship, 25(2), 328-346.

Russell, R., Atchison, M., & Brooks, R. (2008). Business plan competitions in tertiary institutions: encouraging entrepreneurship education. Journal of Higher Education Policy and Management, 30(2), 123-138.

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse researcher*, *25*(4), 41-49.

Saez, E., & Zucman, G. (2016). Wealth inequality in the United States since 1913: Evidence from capitalized income tax data. *The Quarterly Journal of Economics*, *131*(2), 519-578.

Sarason, Y., Dean, T., & Dillard, J. F. (2006). Entrepreneurship as the nexus of individual and opportunity: A structuration view. *Journal of business venturing*, *21*(3), 286-305.

Sarasvathy, S.D. (2001a). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of management Review*, *26*(2), 243-263.

Sarasvathy, S. D. (2001b). What makes entrepreneurs entrepreneurial?. *Available at SSRN 909038.*

Sarasvathy, S. D., & Dew, N. (2005). New market creation through transformation. *Journal of evolutionary economics*, *15*, 533-565.

Sarkar, S., Rufín, C., & Haughton, J. (2018). Inequality and entrepreneurial thresholds. *Journal of Business Venturing*, *33*(3), 278-295.

Saxton, T., Wesley, C. L., & Saxton, M. K. (2016). Venture advocate behaviors and the emerging enterprise. *Strategic Entrepreneurship Journal*, *10*(1), 107-125.

Sayer Regan & Thayer, LLC. (2023, May 2). *Is your business divorce proof?* . Sayer, Regan & Thayer, LLC. https://www.srtflaw.com/is-your-business-divorce-proof/#:~:text=The%20divorce%20rate%20is%20higher,on%20managing%20their%20respective%20businesses.

SBA Grants. (n.d.). https://www.sba.gov/funding-programs/grants.

Scheer, A. W. (2023). The Composable Enterprise as a New Paradigm. In *The Composable Enterprise: Agile, Flexible, Innovative: A Gamechanger for*

Organisations, Digitisation and Business Software (pp. 1-22). Wiesbaden: Springer Fachmedien Wiesbaden.

Schumpeter, J. A. (1942). Capitalism, Socialism and Democracy,(UK 1943) 5th Edn (1976).

Schut, M., van Paassen, A., Leeuwis, C., & Klerkx, L. (2014). Towards dynamic research configurations: A framework for reflection on the contribution of research to policy and innovation processes. *Science and public policy*, *41*(2), 207-218.

Schwartz, B. (1982). Reinforcement-induced behavioral stereotypy: How not to teach people to discover rules. *Journal of Experimental Psychology: General*, *111*(1), 23.

Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business horizons*, *48*(3), 241-246.

Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small business economics*, *33*, 141-149.

Shantz, A. S., Kistruck, G., & Zietsma, C. (2018). The opportunity not taken: The occupational identity of entrepreneurs in contexts of poverty. Journal of Business Venturing, 33(4), 416-437.

Sherman, B. (2021, August). Youth Entrepreneurs will Define the Future. ENHEDUANNA. https://www.wilsoncenter.org/blog-post/youth-entrepreneurs-will-define-future.

Shiota, M. N., Papies, E. K., Preston, S. D., & Sauter, D. A. (2021). Positive affect and behavior change. *Current Opinion in Behavioral Sciences*, *39*, 222-228.

Shostack, G. L. (1982). How to design a service. *European journal of Marketing*, *16*(1), 49-63.

Shostack, G. L. (1984). Designing services that deliver. *Harvard business review*, *62*(1), 133-139.

Shoven, J. B., & Whalley, J. (1992). Applying general equilibrium. Cambridge university press.

Simon, H. A. (1996). *The sciences of the artificial*. MIT press.

Skaja, G., & Holcomb, R. (2023). *Entrepreneurship roadmap: key stages of developing a business*. Oklahoma Cooperative Extension Service.

Skoll Foundation. (December 31, 2023). *Financials.* *https://skoll.org/about/financials/*

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. History of Economic Thought Books, McMaster University Archive for the History of Economic Thought.

Smith, A. (2010). *The theory of moral sentiments [1759]*. Penguin.

Smith, T. M., & Smith, R. L. (2015). *Elements of ecology* (No. 574.5 S662el9). Pearson,.

Socialism. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/socialism

Spigel, B., Kitagawa, F., & Mason, C. (2020). A manifesto for researching entrepreneurial ecosystems. Local Economy, 35(5), 482-495.

Stam, E. (2014). The Dutch entrepreneurial ecosystem. *Available at SSRN 2473475*.

Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies, 46, 308-331.*

Stickdorn, M., and Schneider, J. (2011). This Is Service Design Thinking: Basics, Tools, Cases. Hoboken, NJ: Wiley.

Stillman, J. (2013, July 3). *Entrepreneur for Life? Apparently, There's No Turning Back*. Inc. https://www.inc.com/jessica-stillman/entrepreneurship-there-is-no-going-back.html

Stuart, V. (1999). Myth and the Movies: Discovering the Mythic Structure of 50 Unforgettable Films. *Michael Weise Productions, Studio City*.

Subjective. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/subjective

Sull, D. N. (2004). Disciplined entrepreneurship. *MIT Sloan Management Review*, *46*(1), 71.

Sullivan, R. (2000). Entrepreneurial learning and mentoring. *International Journal of Entrepreneurial Behavior & Research*, 6(3), 160-175.

Sutter, C., Bruton, G. D., & Chen, J. (2019). Entrepreneurship as a solution to extreme poverty: A review and future research directions. Journal of business venturing, 34(1), 197-214.

Swedberg, R. (2018). Max Weber's central text in economic sociology. In *The sociology of economic life* (pp. 62-77). Routledge.

Takahashi, D. (2023, January 5). U.S. VC investments and exits plummeted in 2022. VentureBeat. https://venturebeat.com/games/vc-investments-and-exits-plummeted-in-2022-nvca/#:~:text=The%20deal%20count%20in%202022,Capital%20Association%20(NVCA).

Tatum, M., (2023). The entrepreneurs who regret starting businesses. BBC. Retrieved July 21, 2023 from https://www.bbc.com/worklife/article/20230402-the-entrepreneurs-who-regret-starting-businesses.

Taylor, M., Marrone, M., Tayar, M., & Mueller, B. (2018). Digital storytelling and visual metaphor in lectures: a study of student engagement. *Accounting Education*, *27*(6), 552-569.

Tech Launch Arizona. (2023, September 27). *The UArizona Commercialization Process*. https://techlaunch.arizona.edu/resources/commercializationprocess

Teece, D. J. (2010). Business models, business strategy and innovation. *Long range planning*, *43*(2-3), 172-194.

Teleology. (n.d.) In Merriam-Webster's collegiate dictionary. https://www.merriam-webster.com/dictionary/teleology#word-history

Tesson, K. J. (2006). *Dynamic Networks. An interdisciplinary study of network organization in biological and human social systems*. University of Bath (United Kingdom).

The Institute for Social Entrepreneurs. (n.d.). *Five essential concepts*. Social Enterprise Terminology. Retrieved January 24, 2023, from https://socialent.org/index.php/social-enterprise-terminology/

The Princeton Review. (2023). Entrepreneurship rankings: Our methodology. Entrepreneurship Rankings: Our Methodology . https://www.princetonreview.com/college-rankings/top-entrepreneur/methodology.

Thompson, J. L. (2002). The world of the social entrepreneur. *International journal of public sector management 15*(5),412-431.

Ting, S. X., Feng, L., & Qin, W. (2017). The effect of entrepreneur mentoring and its determinants in the Chinese context. *Management Decision*, *55*(7), 1410-1425.

Tipu, S. A. A. (2020). Entrepreneurial reentry after failure: A review and future research agenda. *Journal of Strategy and Management*, *13*(2), 198-220.

Tommasini, G. (2004). The Meaning of Social Entrepreneurship for Congruent Regional Development. *ADEST Srl–Irecoop–Veneto*.

Torrance, W. E. (2013). Entrepreneurial campuses: Action, impact, and lessons learned from the Kauffman campuses initiative. Ewing Marion Kauffman Foundation Research Paper.

Torrance, W. E., Rauch, J., Aulet, W., Blum, L., Burke, B., D'Ambrosio, T., de los Santos, K., Eesley, C., Scott Green, W., Harrington, K., Jacquette, J., Kingma, B., Magelli, P., McConnell, G., Moore, D., Neeley, L., Song, M., Tan, T., Zoller, T., & Zurbuchen, T. (2013). Entrepreneurship education comes of age on campus: The challenges and rewards of bringing entrepreneurship to higher education.

Turner, F. J. (1894). *The significance of the frontier in American history*. Madison: State Historical Society of Wisconsin.

UNCDF. (2014). Financial inclusion of Youth. Retrieved June 30, 2023, from https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-financial-inclusion.pdf.

UNESCO. (2015). A growing number of children and adolescents are out of school as aid fails to meet the mark. Policy Paper 22/Fact Sheet 31 July 2015. Paris: UNESCO. Retrieved from https://uis.unesco.org/sites/default/files/documents/fs31-a-growing-number-of-children-and-adolescents-are-out-of-school-as-aid-fails-to-meet-the-mark-2015-en.pdf.

UNESCO. (2019). New methodology shows that 258 million children, adolescents, and youth are out of school. Fact Sheet 56, September 2019. Retrieved from https://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-children-adolescents-and-youth-are-out-school.pdf

"Understanding Science 101". (2022). UC Berkeley.

United Nations. Department of Economic and Social Affairs. (2023, June). *Supporting small businesses to achieve inclusive growth for all.* https://www.un.org/en/desa/supporting-small-businesses-achieve-inclusive-growth-all

United Nations. (n.d.). *Youth. United Nations. Retrieved April 24, 2023, from https://www.un.org/en/global-issues/youth#:~:text=State%20of%20the%20World's%20Youth,cent%20of%20the%20global%20population.*

United Nations. (n.d.). *#Youthstats. United Nations - Office of the Secretary-General's Envoy on Youth. https://www.un.org/youthenvoy/youth-statistics/*

United Nations. (2016). *Inequality – a defining challenge of Our time | un desa department of economic and social affairs*. United Nations. Retrieved September 14, 2022, from https://www.un.org/development/desa/en/news/intergovernmental-coordination/inequality-defining-challenge.html

United Nations. (2023). *Technology and innovation report 2023*. United Nations Conference on Trade and Development. https://unctad.org/tir2023

Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research. *Advances in Entrepreneurship, Firm Emerges and Growth*, 119-138.

Verplanken, B., & Wood, W. (2006). Interventions to break and create consumer habits. *Journal of public policy & marketing*, *25*(1), 90-103.

Vesper, K. H. (1990). New venture strategies. University of Illinois at Urbana-Champaign's Academy for entrepreneurial leadership historical research reference in entrepreneurship.

Vickers, J. (1995). Concepts of competition. *Oxford Economic Papers*, *47*(1), 1-23.

Vogler, C. (1985). A practical guide to Joseph Campbell's the hero with a thousand faces. *Hero's Journey*.

Vogler, C. (1999). The Stages of the Hero's Journey. *Myth movies Discov. Myth. Struct, 50, 300.*

Vogler, C. (2007). *The Writer's journey* (p. 114). Studio City, CA: Michael Wiese Productions.

Volkmann, C., Fichter, K., Klofsten, M., Audretsch, D. B., (2019). Sustainable entrepreneurial ecosystems: an emerging field of research, Small Business Economics, , 1-9. https://doi.org/10.1007/s11187-019-00253-7

Vrionis, J., (2017, May 1). Why entrepreneurs are today's heroes. *Medium*. https://medium.com/@jvrionis/why-entrepreneurs-are-todays-heroes-37e66de7adbb

Wagner, J. (2006). Nascent entrepreneurs. In *The life cycle of entrepreneurial ventures* (pp. 15-37). Boston, MA: Springer US.

Waters, L., McCabe, M., Kiellerup, D., & Kiellerup, S. (2002). The role of formal mentoring on business success and self-esteem in participants of a new business start-up program. *Journal of business and psychology*, *17*, 107-121.

Watson, K., & McGowan, P. (2019). Rethinking competition-based entrepreneurship education in higher education institutions: Towards an effectuation-informed coopetition model. Education+ Training.

Weber, M. (1988). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). P. Smith. (Original work published 1920).

Weerawardena, J., & Mort, G. S. (2006). Investigating social entrepreneurship: A multidimensional model. Journal of world business, 41(1), 21-35.

Wei-Skillern, J., Austin, J. E., Leonard, H., & Stevenson, H. (2007). *Entrepreneurship in the social sector* (Vol. 13). Sage.

Welter, F., Baker, T., & Wirsching, K. (2019). Three waves and counting: The rising tide of contextualization in entrepreneurship research. *Small business economics*, *52*, 319-330.

White, J. V., Saurav, S., & Gupta, V. K. (2022). Entrepreneurship Research After Chiles, Bluedorn, and Gupta (2007): Has the Field Delivered on the Promise of Good Scholarship?. *Modern Classics in Entrepreneurship Studies: Building the Future of the Field*, 35-64.

White, J. (2019). Transforming purpose-driven business education. *Humanistic Management Journal*, *4*(2), 261-264.

Whitehead, A. N. (1968). Modes of thought (Vol. 93521). Simon and Schuster.

Wiens, J., & Jackson, C. (2015). The importance of young firms for economic growth. Entrepreneurship Policy Digest.

Wikipedia. 2023. Hero's Journey. Wikimedia Foundation. Last modified July 4, 2023.

Wiklund, J. (1999). The sustainability of the entrepreneurial orientation—performance relationship. Entrepreneurship theory and practice, 24(1), 37-48.

Wiles, R., & Ryman, A. (2014, December 19). *ASU finalizes agreement to integrate Thunderbird School*. AZcentral. Retrieved March 8, 2023, from https://www.azcentral.com/story/news/local/tempe/2014/12/19/asu-to-acquire-thunderbird-school-of-management/20634469/.

Williams, C. (2017). The hero's journey: A creative act. *Journal of Genius and Eminence*, *2*(2), 70-78.

Williams, C. (2019). The hero's journey: A mudmap for change. *Journal of Humanistic Psychology*, *59*(4), 522-539.

Williams, L. D. (2020). Design, feminism, and the persona spectrum: introducing the intersectional persona matrix. *Inclusive Research By Design*.

Wilsdon, J., et al. (2015). The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management. DOI: 10.13140/RG.2.1.4929.1363

Wilson, A. (2016). Why Universities Shouldn't Teach Social Entrepreneurship. Stanford Social Innovation Review. https://doi.org/10.48558/YD8T-QR95

Wolf, C. (1987). Market and Non-Market Failures: Comparison and Assessment1. Journal of Public Policy, 7(1), 43-70.

Wood, M. (2020, February 3). *Raising Capital for Startups: 8 Statistics That Will Surprise You*. Fundera. https://www.fundera.com/resources/startup-funding-statistics#:~:text=Only%200.05%25%20of%20startups%20raise%20venture%20capital.,-Although%20about%20100&text=But%20it%20represents%20less%20than,to%20fund%20any%20entrepreneurial%20pursuits.

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, *14*(3), 361-384.

World Bank. 2012. World Development Report 2013 : Jobs. Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/11843 License: CC BY 3.0 IGO.

World Bank. (2023a). Unemployment, youth total (% of total labor force ages 15-24) (modeled ILO Estimate). Retrieved June 30, 2023, from https://data.worldbank.org/indicator/SL.UEM.1524.ZS?end=2022&start=2005&view=chart

World Bank. (2023b). Unemployment, total (% of total labor force) (modeled ILO Estimate). Retrieved June 30, 2023, from https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?end=2022&start=2005&view=chart

X, Malcolm. (1970). By Any Means Necessary: Speeches, Interviews, and a Letter. United Kingdom: Pathfinder Press.

Yanya, M., Abdul-Hakim, R., & Abdul-Razak, N. A. (2013). Does entrepreneurship bring an equal society and alleviate poverty? Evidence from Thailand. *Procedia-Social and Behavioral Sciences*, *91*, 331-340.

Young, Robert, 2001. *Postcolonialism: An Historical Introduction, Oxford: Blackwell.*

Zahra, S., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2006). Social entrepreneurship: Domain, contributions and ethical dilemmas. In *University of Minnesota Conference on Ethics and Entrepreneurship*.

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of business venturing*, *24*(5), 519-532.

Zellweger, T. M., & Zenger, T. R. (2021). Entrepreneurs as scientists: A pragmatist approach to producing value out of uncertainty. *Academy of Management Review*, (ja).

Table 1

Turner's Frontier/Entrepreneurial Ecosystem Metaphor

Theme	Frontier	Modern U.S. Universities & College's
Available assets	Land, mineral wealth, water, game, burgeoning populations, growing transportation, communication, and financial networks, growing markets	Courses, extracurricular and cocurricular options, peers, faculty, alumni, networks to other institutions, research, labs, and libraries
Liberty (freedom)	No early governments, no established social institutions or conventions, no incumbent economic power, evolving European, Native, American battles	Dispersed decision-making for administration and faculty, freedom of research and field of study, extracurricular choices, part-time/full-time/executive options, transfer system
Diverse populations	Changed over time, nationality and place of birth, wealth, method of arrival, place of, Native, European, American, Canadian	Ethnicity, place of birth, field of study, age, education levels, political ideologies, regenerating youthful populations, visiting scholars and students; full time/ part time; adjuncts/research faculty/teaching faculty

adapted from Miller, & Acs (2017)

Table 2

The Hero's Journey

Stage	Campbell's 17 "hero's journey" steps
I. Separation	1. The Call to Adventure 2. Refusal of the Call 3. Supernatural Aid 4. The Crossing of the First Threshold 5. Belly of the Whale
II. Initiation	6. The Road of Trials 7. The Meeting with the Goddess 8. Woman as the Temptress 9. Atonement with the Father 10. Apotheosis
III. Return	11. The Ultimate Boon 12. Refusal of the Return 13. The Magic Flight 14. Rescue from Without 15. The Crossing of the Return Threshold 16. Master of the Two Worlds 17. Freedom to Live

adapted from Campbell (1968); & based on Wikipedia (2023)

Table 3

The Hero's Writing Journey

Stage	Campbell's 17 "hero's journey" steps (1968)	Vogler's 12 "writer's journey" steps (1985)
I. Separation	1. The Call to Adventure 2. Refusal of the Call 3. Supernatural Aid 4. The Crossing of the First Threshold 5. Belly of the Whale	1. Ordinary World 2. Call to Adventure 3. Refusal of the Call 4. Meeting with the Mentor 5. Crossing the first Threshold
II. Initiation	6. The Road of Trials 7. The Meeting with the Goddess 8. Woman as the Temptress 9. Atonement with the father 10. Apotheosis	6. Tests, Allies, and Enemies 7. Approach to the Inmost Cave 8. The Ordeal 9. Reward
III. Return	11. The Ultimate Boon 12. Refusal of the Return 13. The Magic Flight 14. Rescue from Without 15. The Crossing of the Return Threshold 16. Master of the Two Worlds 17. Freedom to Live	10. The Road Back 11. The Resurrection 12. Return with the Elixir

adapted from Campbell (1949); Vogler (1985, & 2007), & based on Wikipedia (2023)

Table 4

The Heroic Entrepreneurial Journey

Stage	Vogler's 12 "hero's journey" steps (1985)	Entrepreneurs Hero Journey
I. Separation	1. Ordinary World	Creative destruction was needed to "[lay] waste [to] old companies in order to make room for the new" (Reinert, & Reinert, 2006, p.56)
	2. Call to Adventure	"An entrepreneur must step out of the ordinary way of producing and into his imagination about the way things could be. . ." (Morong, 1992b, p.9)
	3. Refusal of the Call	Entrepreneurial action is inversely correlated with national economic wealth (see Shane, 2009)
	4. Meeting with the Mentor	A relationship between entrepreneurial success and the presence of entrepreneurial mentoring programs (Waters, McCabe, Kiellerup, & Kiellerup, 2002; Ting, Feng, & Qin, 2017)
	5. Crossing the first Threshold	Entrepreneurs transition (see Jeon, 2022) towards direct interaction with an economic ecosystem through a new exchange of value, through a variety of means, including but not limited to "new [or enhanced] products and services" (Mitra, & Edmondson, 2015)
II. Initiation	6. Tests, Allies, and Enemies	New businesses "must face a road of trials which include getting capital, land and labor to mesh together efficiently and creatively. . . long hours of work, bureaucratic regulations. . ., irate customers, mechanical breakdowns, competitors, etc.. . ." (Morong, 1992a, p.13)
	7. Approach to the Inmost Cave	Nascent entrepreneurship refers to those who move beyond initial idea conceptualization, or idea creation, towards implementation by intentionally committing resources to an active exchange of new value (adapted from Wagner, 2006; and, Jeon, 2022).
	8. The Ordeal	It is seemingly essential entrepreneurial statistics, albeit hotly debated, to reference the [dauntingly low] success rate of entrepreneurship, brining damaging personal consequences (see Klimas, et. al., 2021)
	9. Reward	"It is the entrepreneurs who know the laws of the world and the laws of God. Thus, they sustain the world" (Gilder, 1984, p. 19; cited by Morong 1992a, p.15)
III. Return	10. The Road Back	Entrepreneurial failure "may provide the requisite entrepreneurial assets to explore new possibilities" (Tipu, 2020, p.198)
	11. The Resurrection	After heroic transformation into new beings (see Vogler, 1985, p.5), entrepreneurs can consistently repeat their success as 'portfolio' or 'serial' entrepreneurs (see Dabić, et al., 2023)
	12. Return with the Elixir	Successful entrepreneurs influence society more credibly than traditional social influencers (see Crittenden, Crittenden, & Kemp, 2023)

Table 5

Advantages & Disadvantages of Youth Employment Programs

Program Type	Advantages	Disadvantages
Labor Market Training	Works better with broader vocational and employability skills that are in demand and include work experience as well as employment services.	May produce temporary unsustainable solutions and, if not well-targeted, may benefit those who are already "better off." Training alone may not be sufficient to increase youth employment prospects.
Employment Services (i.e., Job search, career guidance, etc.)	Can help make realistic, aspirational employment and training choices; improve information transfer, as well as efficiency, effectiveness, and relevance of initiatives.	May create unrealistic expectations if not linked to labor market needs and often cover only urban areas and the formal economy.
Employment intensive public works and Community Services	Help gain labor market attachment and improve the physical and social infrastructure and the environment – especially if combined with development and sectoral strategies – and enhance employability, if combined with training.	Low capacity for labor market integration; young workers may become trapped in a carousel of public works programs; often gender-biased; displacement of private-sector companies.
Employment Subsidies	Can create employment if targeted to specific needs (i.e., to compensate for initial lower productivity and training) and to groups of disadvantaged young people.	High deadweight losses and substitution effects (if not targeted); employment may last only as long as the subsidy.
Entrepreneurship Promotion	Can have high employment potential and may meet youth aspirations; more effective if combined with financial and other services, including mentoring.	May create displacement effects and may have high failure rate, which limits capacity to create sustainable employment. They are often difficult for disadvantaged youth, owing to their lack of networks, experience, know-how, and collateral.

adapted from the International Labor Organization, Policy Brief #14, 2010;

reported in Rosas, G., & Rossignotti, G. (2005).

Table 6

Self-identified Entrepreneurial Skillsets (Student Survey Results)

Skillset	number of respondents who self-identify as having the skillset
Identifying New Opportunities	246
Developing New Products	87
Designing Services	103
Developing New Software (i.e., coding)	50
Conducting Market Research	180
Startup Accounting/Financial Modelling	83
Sales	195
Guerilla Marketing/Marketing Strategy	87
Digital Marketing	193
Startup Funding (i.e., Angel investment, etc.)	32
None of the above	26

n=496

Table 7

Definitions of Social Entrepreneurship

Author(s)	Year	Definitions
Fowler	2000	The creation of viable (socio-) economic structures, relations, institutions, organizations and practices that yield and sustain social benefits. (p.649)
[Canadian Center for Social Entrepreneurship]	2001	A variety of initiatives which fall into two broad categories. First, in the for-profit section, social entrepreneurship encompasses activities emphasizing the importance of a socially engaged private sector, and the benefits that accrue to those who "do well by doing good". Second, it refers to activities encouraging more entrepreneurial approaches in the not-for-profit sector in order to increase organizational effectiveness and foster long-term sustainability. (p.1)
Dees, et al.	2004	"is not about starting a business or becoming more commercial. It is about finding new and better ways to create social value. (p. xxx)
Hibbert, et al.	2002	Loosely defined as the use of entrepreneurial behavior for social ends rather than for profits objectives, or alternatively, that profits generated are used for the benefit of a specific disadvantaged group. (p.288)
Institute for Social Entrepreneurs	n.d.	The art of simultaneously pursuing both a financial and a social return on investment (The "double bottom line"). (p.1)
Thompson	2002	In evidence in many profit-seeking businesses – sometimes in their strategies and activities, sometimes through donations of money and time. (p.413)
Lasprogata, & Cotton	2003	Nonprofit organizations that apply entrepreneurial strategies to sustain themselves financially while having a great impact on their social mission. (p.69)
Mair, & Noboa	2003	The innovative use of resource combinations to pursue opportunities aiming at the creation of organizations and/or practices that yield and sustain social benefit. (p.5)
Pomerantz	2003	The development of innovative, mission-supporting, earned income, job creation or licensing, ventures undertaken by individual social entrepreneurs, non-profit organizations, or nonprofits in association with for profits. (p.25)
Mort, et al.	[2002]	The entrepreneurship leading to the establishment of new social enterprise, and the continued innovation in existing ones' (p.76) 'Conceptualizes social entrepreneurship as a multidimensional construct involving the expression of entrepreneurially virtuous behaviour to achieve the social mission, a coherent unit of purpose and action in the face of moral complexity, the ability to recognize social value-creating opportunities and key decision-making characteristics of innovativeness, proactiveness and risk-taking. (p.76)

Table 7

Definitions of Social Entrepreneurship

Author(s)	Year	Definitions
Mair, & Marti	2004	The innovative use of resources to explore and exploit opportunities that meet to [*sic*] a social need in a sustainable manner. (p.3)
Tommasini	2004	A professional, innovative, and sustainable approach to systematic change that resolves social market failures and grasps opportunities. Social entrepreneurship engage [*sic*] with both non and for profit organizations, and the success of their activities are [*sic*] measured first and foremost by their social impact. (p.3)
Haugh	2005	Social entrepreneurship is the process of creating social enterprise. (p.3)
Roberts, & Woods	2005	Social entrepreneurship is the construction, evaluation and pursuit of opportunities for transformative social change carried out by visionary, passionately, dedicated individuals (p.49)
Seelos, & Mair	2005	Social entrepreneurship creates new models for the provision of products and services that cater directly to basic human needs that remain unsatisfied by current economic or social institutions. (p.233-234)
Austin, et al.	2006	Innovative, social value caring activity that occurs within or across the nonprofit, business, or government sectors. (p.2)
Harding, & Cowling	2006	Any attempt at new social enterprise activity or new enterprise creation . . . or the expansion of an existing social enterprise by an individual, teams of individuals or established social enterprise, with social or community goals as its base and where the profit is invested in the activity or venture itself rather than returned to investors. (p.241)
Leadbeater	2006	One way to define social entrepreneurship would be through what motivates the actors, i.e., they want to create social value and put a higher value on their social mission than a financial one. […] Another way to define social entrepreneurship would be through outcomes: anyone who creates lasting social value through entrepreneurial activities is a social entrepreneur. (p.241)
Mair, & Marti	2006	First, we view social entrepreneurship as a process of creating value by combining resources in new ways. Second, these resource combinations are intended primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs. And third, when viewed as a process, social entrepreneurship involves the offering of services and products but can also refer to the creation of new organizations. (p.37)

Table 7

Definitions of Social Entrepreneurship

Author(s)	Year	Definitions
Nicholls	2008	Innovative and effective activities that focus strategically on resolving social market failures and creating new opportunities to add social value systematically by using a range of resources and organizational formats to maximize social impacts and bring about changes. (p.23)
Peredo, & McLean	2006	Exercised where some person or group: (1) aim(s) at creating social value either exclusively or at least in some prominent way; (2) show(s) a capacity to recognize and take advantage of opportunities to create value ("envision"); (3) employ(s) innovation, ranging from outright invention to adapting someone else's novelty, in creating and/or distributing social value; and (5) is/are unusually resourceful in being relatively undaunted by scarce assets in pursuing their social venture. (p.64)
Perrini	2006	Entailing innovation designed to explicitly improve societal wellbeing, housed within entrepreneurial organizations that initiative this level of change in society. (p.247)
Weerawardena, & Sullivan Mort	2006	Strives to achieve social value creation, and this required the display of innovativeness, proactiveness and risk management behavior. This behavior is constrained by the desire to achieve the social mission and to maintain the sustainability of existing organization[s]. In doing so they are responsive to and constrained by environmental dynamics . . . often within the context of the relative resource poverty of the organization. (p.32)
Zhara, et al.	2006	Concerns the processes related to the discovery of opportunities to create social wealth and the organizational processes developed and employed to achieve that end. (p.12)
Cochran	2007	The process of applying the principles of business and entrepreneurship to social problems. (p.451)
Haugh	2007	The simultaneous pursuit of economic, social, and environmental goals by enterprising ventures […] Social entrepreneurship is first and foremost a practical response to unmet individual and societal needs. (p.743)
Martin, & Osberg	2007	[A combination of] (1) identifying a stable but inherently unjust equilibrium that causes the exclusion, marginalization, or suffering of a segment of humanity that lacks the financial means or political clout to achieve any transformative benefit on its own; (2) identifying an opportunity in this unjust equilibrium, developing a social value proposition, and bringing to bear inspiration, creativity, direct action, courage, and fortitude, thereby challenging the stable state's hegemony; and (3) forging a new, stable equilibrium that releases trapped potential or alleviates the suffering of the targeted group, and through imitation and the creation of a stable ecosystem . . . ensuring a better future for the targeted group and even society at large. (p.35)

Table 7

Definitions of Social Entrepreneurship

Author(s)	Year	Definitions
Wei-Skillern, et al.	2007	An innovative, social value creating activity that can occur within or across the nonprofit, business, or government sector. (p.4)
Brock	2008	Innovative approaches to social change' or 'using business concepts and tools to solve social problems. (p.3)
Dees, et al.	2008	Innovative and resourceful approaches to addressing social problems. (p.1)
Zhara, et al.	2009	Social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures of managing existing organizations in an innovative manner. (p.522)

adapted from Brouard, & Larivet, 2010

Table 8

Research Implications

Premise	Unit of observation	Definitions	Type of Explanation
Opportunity as happening	Venture Idea	Why does a particular individual come up with a particular venture idea?	Process
		Why are some individuals more likely to come up with venture ideas?	Variance
Opportunity as expressed in actions	Entrepreneurial action	Why does a particular venture idea prompt a particular action?	Process
		Why are some venture ideas more likely to be acted upon?	Variance
Opportunity as instituted in market structures	Market Interaction	Why does a particular venture idea enable the formation of a particular exchange relationship?	Process
		Why are some venture ideas more likely to attract exchange partners?	Variance

adapted from Dimov (2013)

TABLE 9

Ontological Spectrum

Realism: one reality exists			Relativism: multiple realities exist	
Naïve realism	**Structural Realism**	**Critical Realism**	**Bounded Realism**	**Relativism**
Reality can be understood using *appropriate* methods	Reality is *described* by scientific theory, but its underlying nature remains uncertain	Reality is *captured* by broad critical examination	Mental constructions of reality are equal in space & time within boundaries (i.e., cultural, moral, cognitive)	Reality exists as multiple, intangible mental constructions; no reality beyond subjects

adapted from Moon & Blackman (2014)

TABLE 10

Philosophical Paradigms

Positivism			Interpretivism
epistemology	**Objectivism** Meaning exists within an object: an objective reality exists independent of the subject	**Constructionism** Meaning created from interplay between the subject & object: subject *constructs* reality of object	**Subjectivism** Meaning exists within the subject: subject imposes meaning on an object
theoretical perspective	Knowledge acquisition is deductive, 'value free', and generalizable.		Knowledge acquisition is inductive, value laden, and contextually unique

adapted from Moon & Blackman (2014); and Ryan (2018)

Table 11

Four Economic Approaches to Entrepreneurship

Objectivist Ontology				**Subjectivist Ontology**
Paradigmatic Philosophical Assumptions	Positivist paradigm, Realist ontology	Postpositivist paradigm, Realist ontology	Critical realist paradigm, Realist ontology	Constructivist paradigm, Relativist ontology
Approaches	Neoclassical economics (Walras), Equilibrium-based	Traditional Austrian economics (Kirzner), Equilibrium-based	Schumpeterian economics (Schumpeter), Equilibrium-based	Radical subjectivist Austrian economics (Lachmann, Shackle), Nonequilibrium
Core Ideas	Entrepreneurs make rational, optimal decisions mechanically recognizing the same preexisting opportunities.	Entrepreneurs notice preexisting opportunities through their subjective interpretations of past experiences.	Entrepreneurs are driven by subjective human will to irregularly exploit preexisting, known opportunities created by scientist invention.	Entrepreneurs exercise choice based on subjective expectations of an imagined future to create and recreate opportunities.
	Firms serve as "production functions" that mathematically convert inputs into outputs.	Firms are instruments to exploit opportunities, the single entrepreneur need not invest any capital resource(s).	Firms aren't needed, entrepreneurs innovate such combinations from preexisting elements.	Firms are vehicles to materialize imaginative resource recombination to produce novel goods and services.
	Markets reside in equilibrium.	Markets gravitate toward equilibrium.	Markets evolve from equilibrium through brief upheaval to continued equilibrium.	Markets drive away from equilibrium via subjective imagination, creativity, and unstable market interactions.

adapted from Chiles, et al., (2010), p.140-141

Table 11

Four Economic Approaches to Entrepreneurship

Objectivist Ontology				**Subjectivist Ontology**
Metaphors	Mechanistic (e.g., clockworks, equilibrium), Disciplined	Organic (Discovery), Disciplined	Organic (creative destruction), Racing	Contextualist (Kaleidic process)
Theories	Integrative/Analytic	Integrative/Synthetic	Integrative/Synthetic	Dispersive/Synthetic
Methodological Approaches	Quantitative/statistical/variance methods (i.e., multivariate regression analysis)	Mostly quantitative/statistical/ variance methods; some qualitative/variance methods	Mostly quantitative/statistical/ variance methods; some qualitative/variance methods	Process methods (e.g., hermeneutics)
Research Question Example(s)	What is the optimal allocation of given means to achieve predetermined ends?	How do entrepreneurs continually discover existing opportunities?	At what rate do entrepreneurial efforts succeed or fail?	How is order achieved in disequilibrium market processes?
Authors	Lucas (1978), Kihlstrom & Laffont (1979), Evans & Jovanovic (1989), Evans & Leighton (1989), Douglas & Shepherd (2000, 2002), Bianchi & Henrekson (2005), Aquilina et al. (2006)	Kaish & Gilad (1991), Busenitz (1996), Venkataraman (1997), Zaheer & Zaheer (1997), Ferrier et al. (1999), Shane (2000), Shane & Venkataraman (2000), Gaglio & Katz (2001), Demmert & Klein (2003), Gaglio (2004)	Guth & Ginsberg (1990), Meyer et al. (1990, 1993), Shane (1996), Tripsas (1997), Venkataraman (1997, 2004), Ferrier et al. (1999), Shane & Venkataraman (2000), Wiggins & Ruefli (2005), Lavie (2006), Giarrantana & Fosfuri (2007)	Chiles et al. (2004), Dew et al. (2004), Chiles & Zarankin (2006), Berglund (2007), Chiles et al. (2007), Foss & Ishikawa (2007), Kor et al. (2007), Loasby (2007), Foss et al. (2008), Chiles et al. (2010), Mathews (2010)

adapted from Chiles, et al., (2010), p.140-141

Table 12

Kirznerian, Schumpeterian, and Lachmannian Entrepreneur Overview

Dimension	Objectivist		Subjectivist
	Kirznerian	Schumpeterian	Lachmannian
Unit of agency	Individual	Individual	Individual and groups
Context	Ahistorical, asocial	Historically and socially situated	Socially embedded
Focal entrepreneurial ability	Alertness	Combinatorial action	Combinatorial action
Nature of opportunities	Once discovered, full awareness of potential for profit	Fully imagined opportunities for gain	Incompletely formed expectations of gaps in capital structures
Source of opportunities	Exogenous – product of changes in market data (i.e., tastes, technologies, available resources)	Endogenous product of creative intelligence	Endogenous – emergent product of ongoing entrepreneurial interpretation of capital structures
Opportunity discovery	Activating alertness	Applying tacit knowledge in specific institutional context(s)	Applying interpretive instruments to capital structures
Opportunity evaluation	Forming private hunches about profit potential	Conjectural process of interpersonal testing	Appraisal by extracting meaning about gaps in capital structure and interpreting feedback from past actions
Opportunity exploitation	Mechanical optimization potential	Non-mechanical, novelty-creating process	Non-mechanical, expectation-generating, orientation process involving specifying and appraising
Role of time	Instantaneous acts of profit recognition and exploitation	Dynamic interpersonal process in stages – leaders, followers, and imitators, *long lags possible*	Temporal process of interpretation, meaning extraction and communication, *long lags possible*
Conception of knowledge	Non-conjectural, spontaneously acquired	Conjectural, spontaneously acquired	Conjectural (expectations-based), deliberately acquired, materially embedded, changeable
Role of prior knowledge	Discover independent of prior knowledge, exploitation depends on knowledge of optimization	Important for leaders, crucial for followers and imitators	Important causal role – knowledge interpretive techniques in appraising known capital structures
Psychological content	Outside scope	Minimal, relies on economic sociology	Interested in mental rules, outcomes of mental processes, cognitive dimension of institutions

adapted from Endres, & Harper (2013), p.321

Table 13

Popular Definitions of Entrepreneurship

Author(s)	Year	Definitions
Knight	1921	The ability to predict the future successfully
Schumpeter	1934	"Carrying out new combinations"
Lachmann	1973	Specifying the uses of capital goods (Horwitz, 2019)
Cole	1968	The purposeful activity to initiate, maintain, and develop a profit-oriented business
Kirzner	1973	Closely linked to arbitrage and the ability to correctly anticipate where the next market imperfections
Leibenstein	1978	Argued that firms do not necessarily operate at the outer limit of their production function; therefore entrepreneurship is the ability to work smarter and harder than your competitor.
Gartner	1985	the creation of new organizations
Low, & McMillan	1988	The "creation of new enterprise" (p.141).
Amit Glosten, and Muller	1993	The process of extracting profits from new, unique, and valuable combinations of resources in an uncertain and ambiguous environment
Venkataraman	1997	Although Venkataraman doesn't proffer a clear definition, the suggestion (p.120) is made that entrepreneurship is "understanding how, in the absence of current markets for future goods and services, these goods and services come into existence."
Jeon	2022	A transition from status quo to a founder/leader of a new organization

adapted from Low, & McMillan (1988), see p.140-141; and Kaufmann, &

Dant (1999), see p.8

Table 14

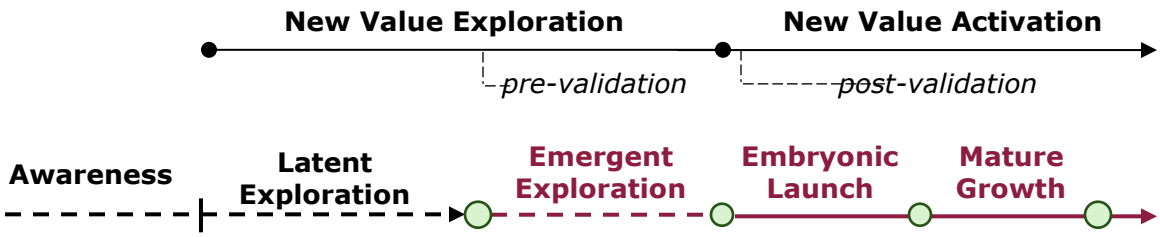
Lachmannian Interpretive Entrepreneurial Behavior

Key Dimensions	General Behavioral Response	Manifestations of social and institutional embeddedness	Manifestations of material embeddedness
Interpreting	Selecting social and mental interpretive instruments for a given capital structure	Interpreting the market: using conventions, socially legitimated instruments, socially situated, tacit, contextual understanding	Using human minds and skills, diagnostic and prognostic tools, information, and communication technologies
Extracting Meaning	Appraising with a wide variety of interpretive instruments	Orienting: forming expectations by drawing on networks mediated by socio-cultural elements	Identifying concrete market opportunities, (i.e., exploitable gaps in existing capital structures, and specifying feasible capital combinations)
Communicating Meaning	Positioning plans relative to other domain-relevant entrepreneurs	Setting bid and offer prices in markets Transmitting make-or-buy decisions by participating in markets for capital goods. Imitating capital combinations	Organizing capital combinations and executing production Endogenously creating new gaps in capital structures Forming, scrapping, and reshuffling capital goods merging, acquiring and forming alliances in production and distribution

adapted utilizing Endres, & Harper (2013), p.318

FIGURE 1

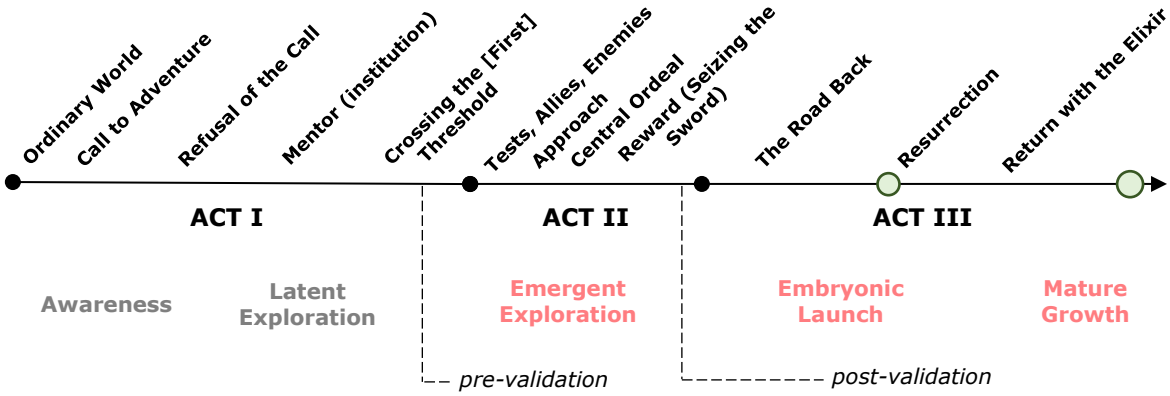
Entrepreneurial Journey



adapted from Vogler (2007, p.8), District3 (2023); & Cunningham, Lehmann, & Menter (2022)

FIGURE 2

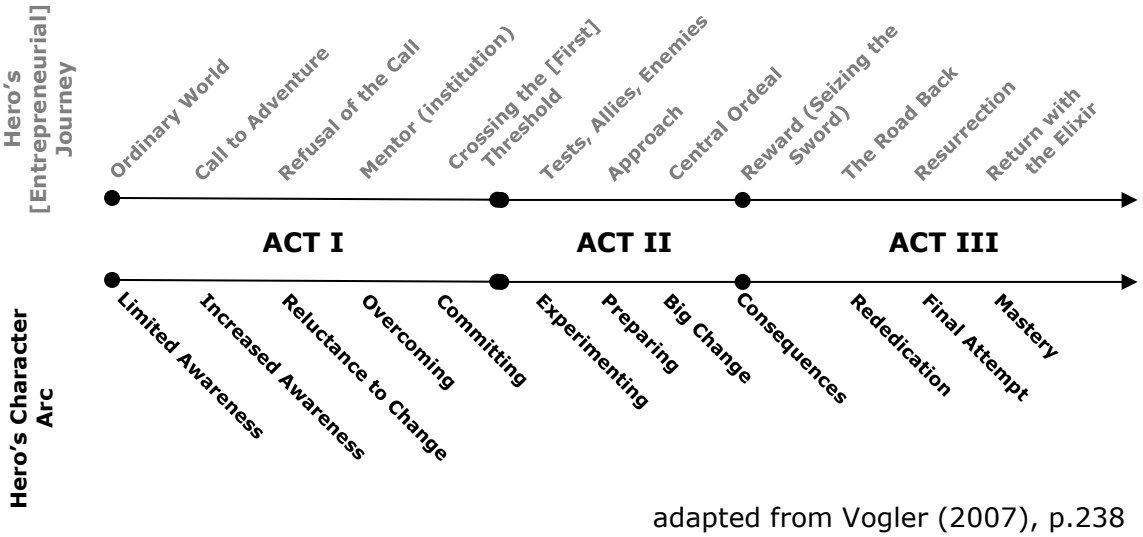
Heroic Entrepreneurial Journey



additions from Vogler (2007)

FIGURE 3

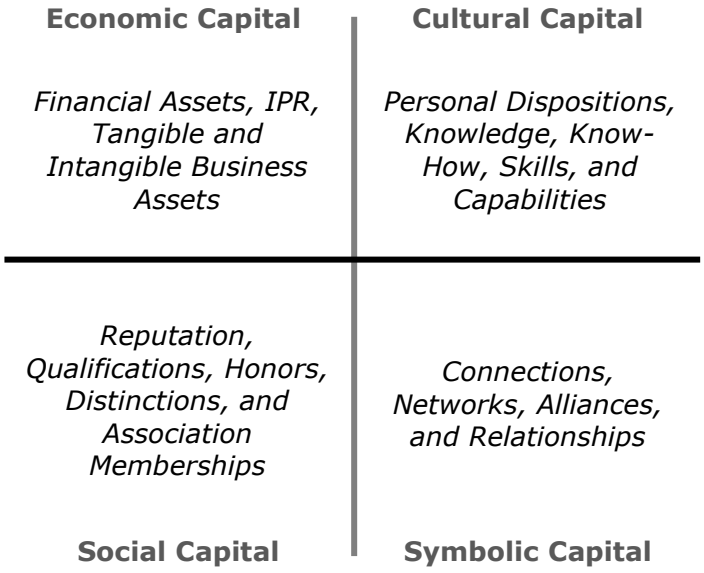
Entrepreneurial Hero's Journey v. Character Arc



adapted from Vogler (2007), p.238

FIGURE 4

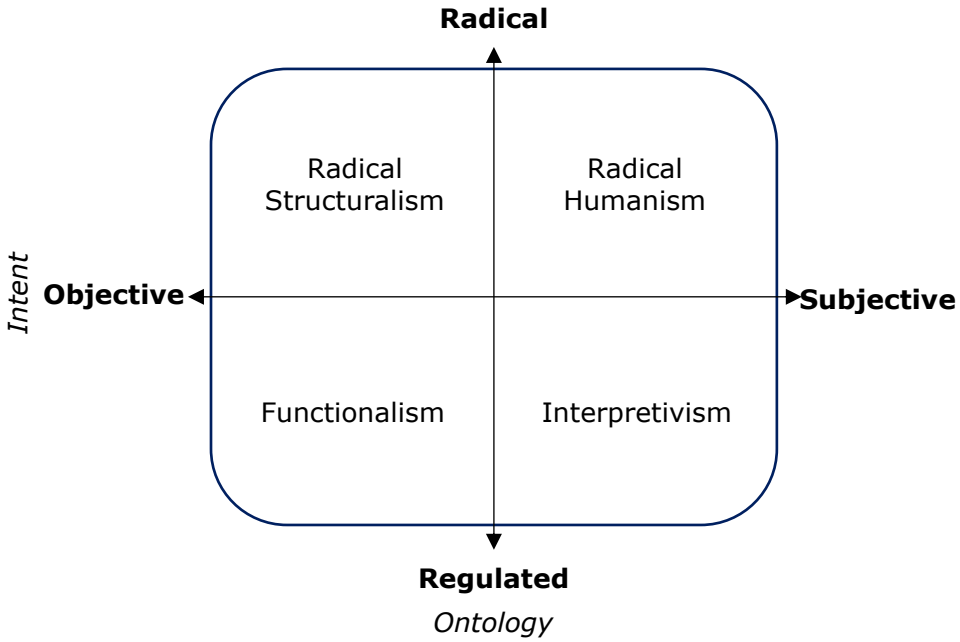
Entrepreneurial Capital Accumulation



adapted from Gordon, Harvey, Shaw, & Maclean (2016), p.429

FIGURE 5

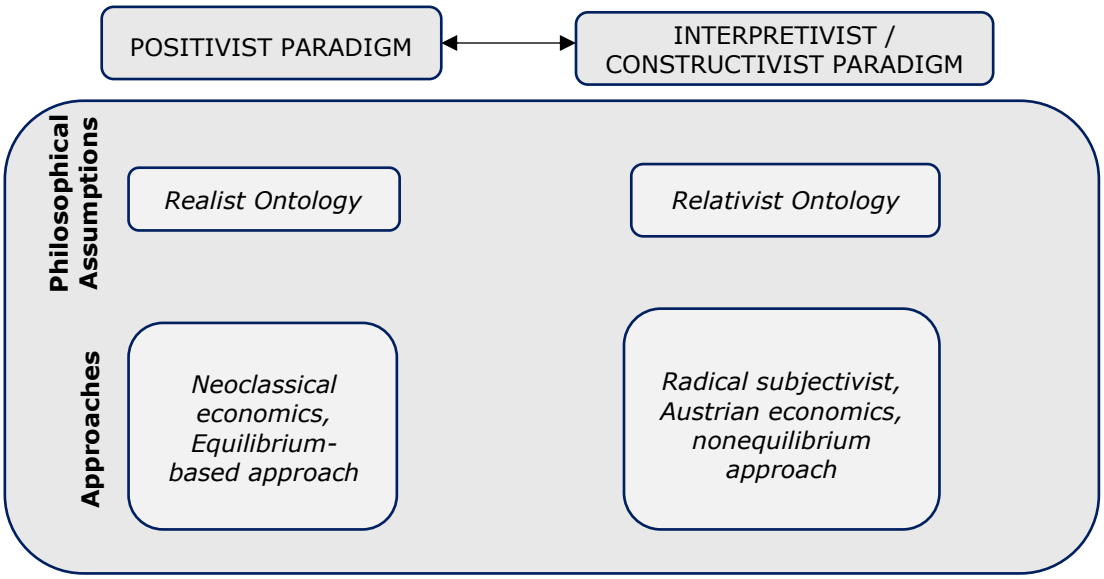
Research Paradigms



adapted from Gioia, & Pitre (1990); and Corley (2020b)

FIGURE 6

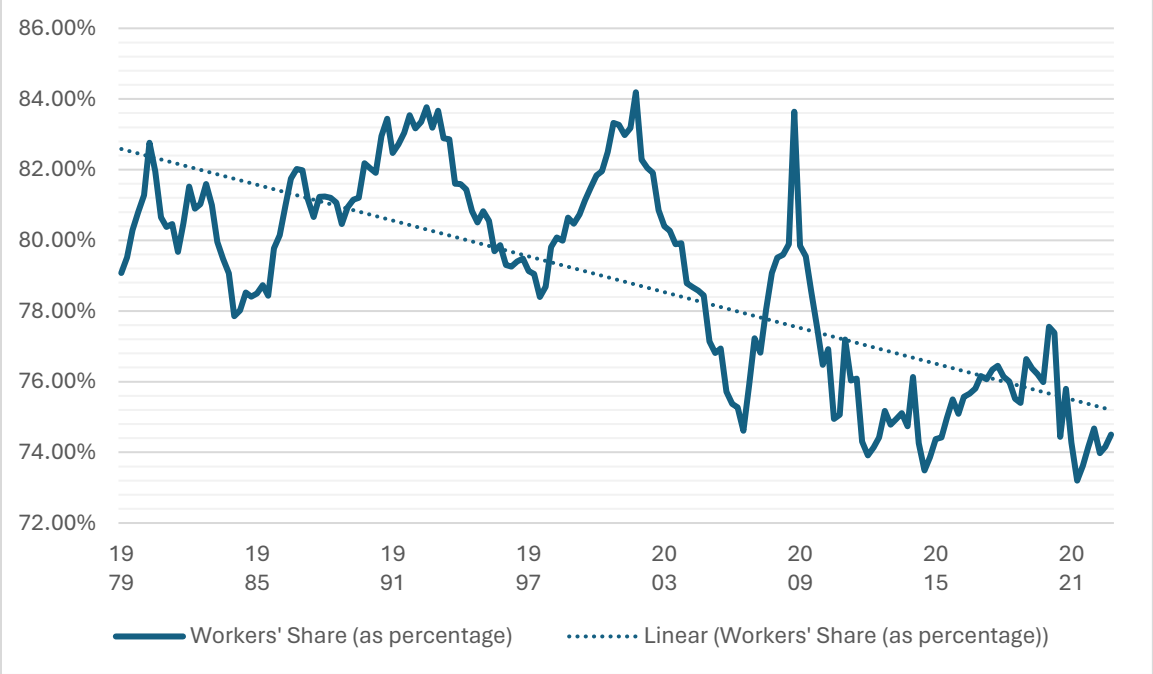
Ontological Spectrum



adapted from Chiles, Vultee, Gupta, Greening, & Tuggle (2010)

FIGURE 7

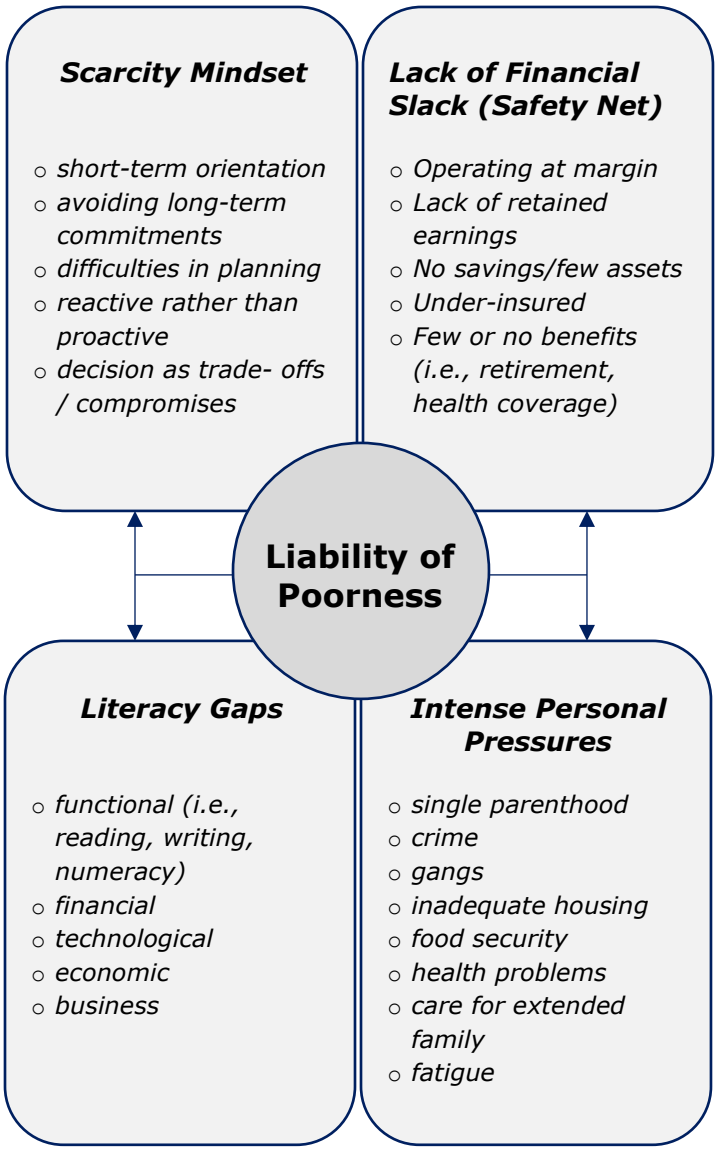
Workers' Share of Corporate Income 1979-2022



adapted from Economic Policy Institutes (2023) Nominal Wage Tracker, based on data from the Bureau of Economic Analysis

FIGURE 8

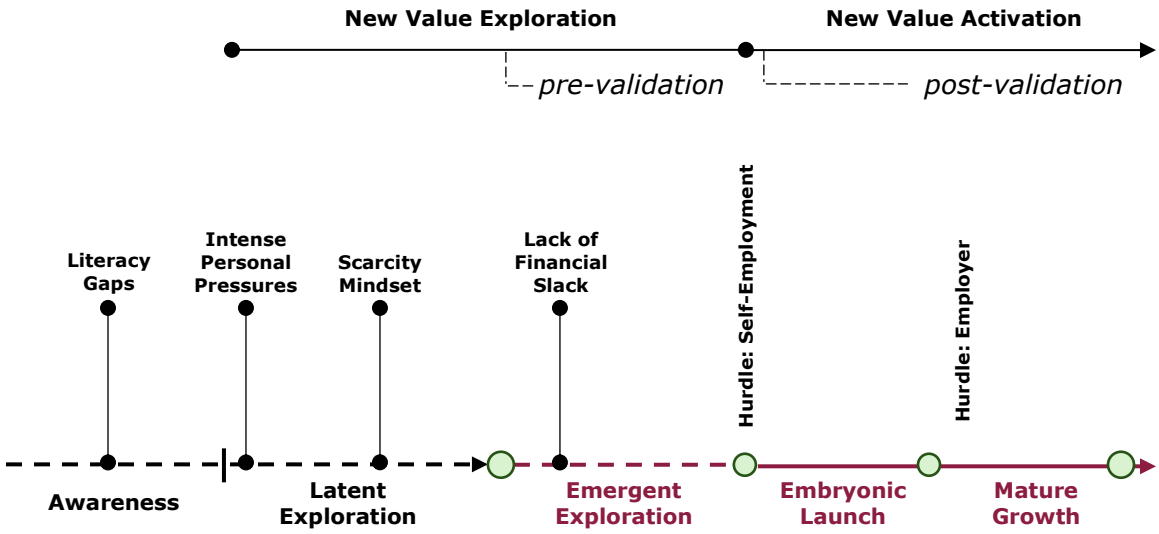
A Liability of Poorness and its Components



adapted from Morris, Kuratko, Audretsch & Santos (2020)

FIGURE 9

Entrepreneurial Constraints



adapted from Vogler (2007, p.8), District3 (2023); Cunningham, Lehmann, & Menter (2022), and Morris, Kuratko, Audretsch, & Santos (2020); Sarkar, Rufín, & Haughton (2018).

FIGURE 10

Variables for Increased Participation

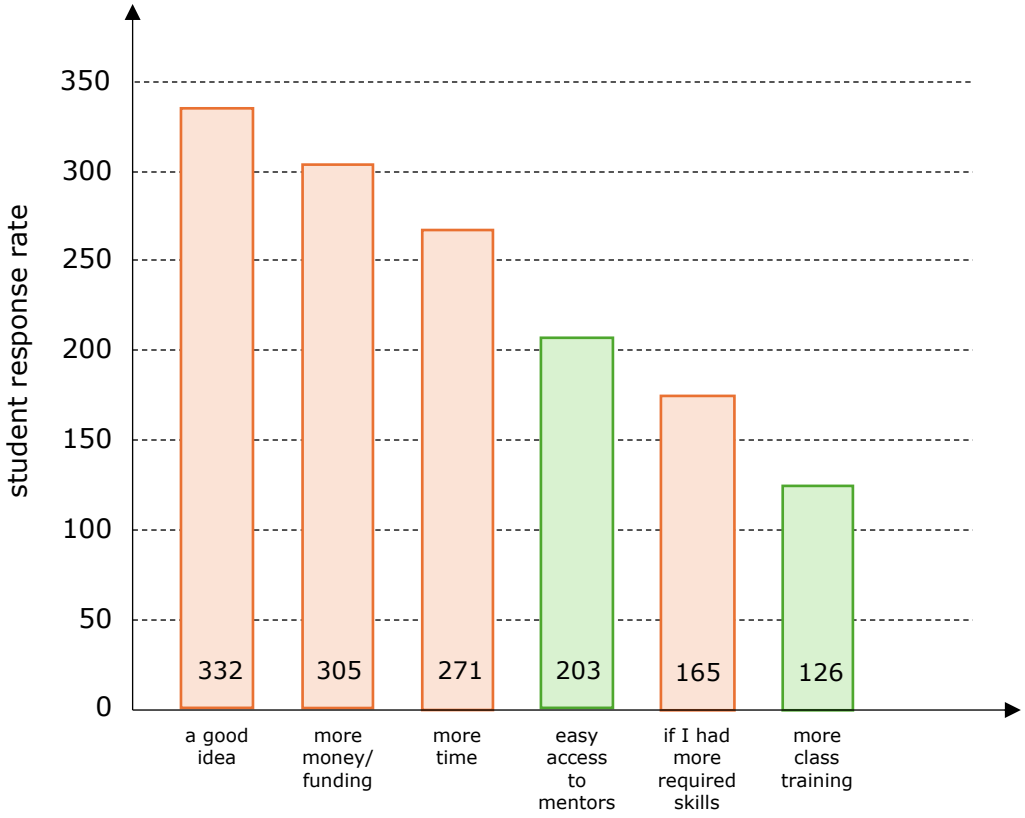
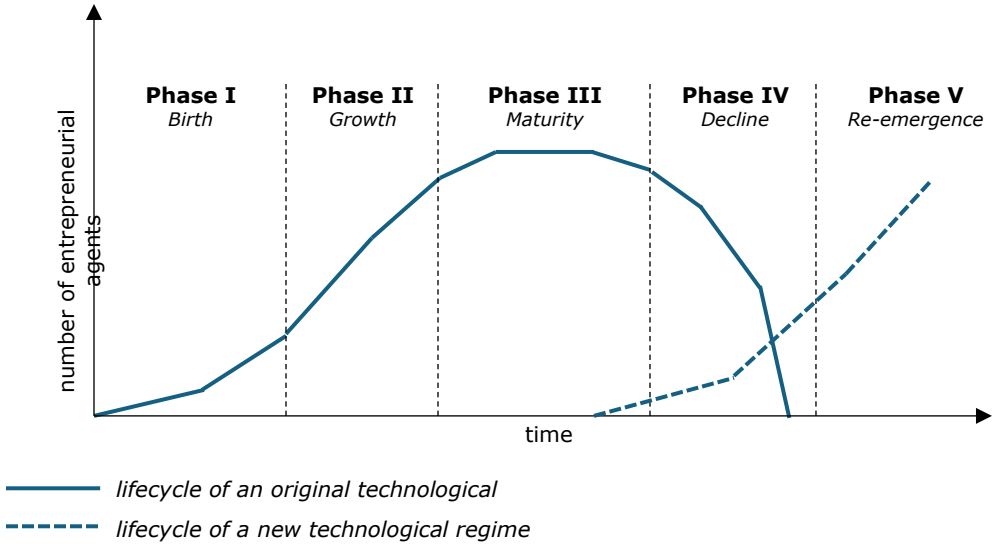


FIGURE 11

A Dynamic Lifecycle Model of an Entrepreneurial Ecosystem



adapted from Cantner, et. al., (2021)

FIGURE 12a

A Literature-based View of an Entrepreneurial Journey

STAGES OF ENTREPRENEURSHIP	EXPLORATION		EXPLOITATION	
	Latent	Emergent	Launch	Growth

adapted from Cunningham, Lehmann, & Menter (2022)

FIGURE 12b

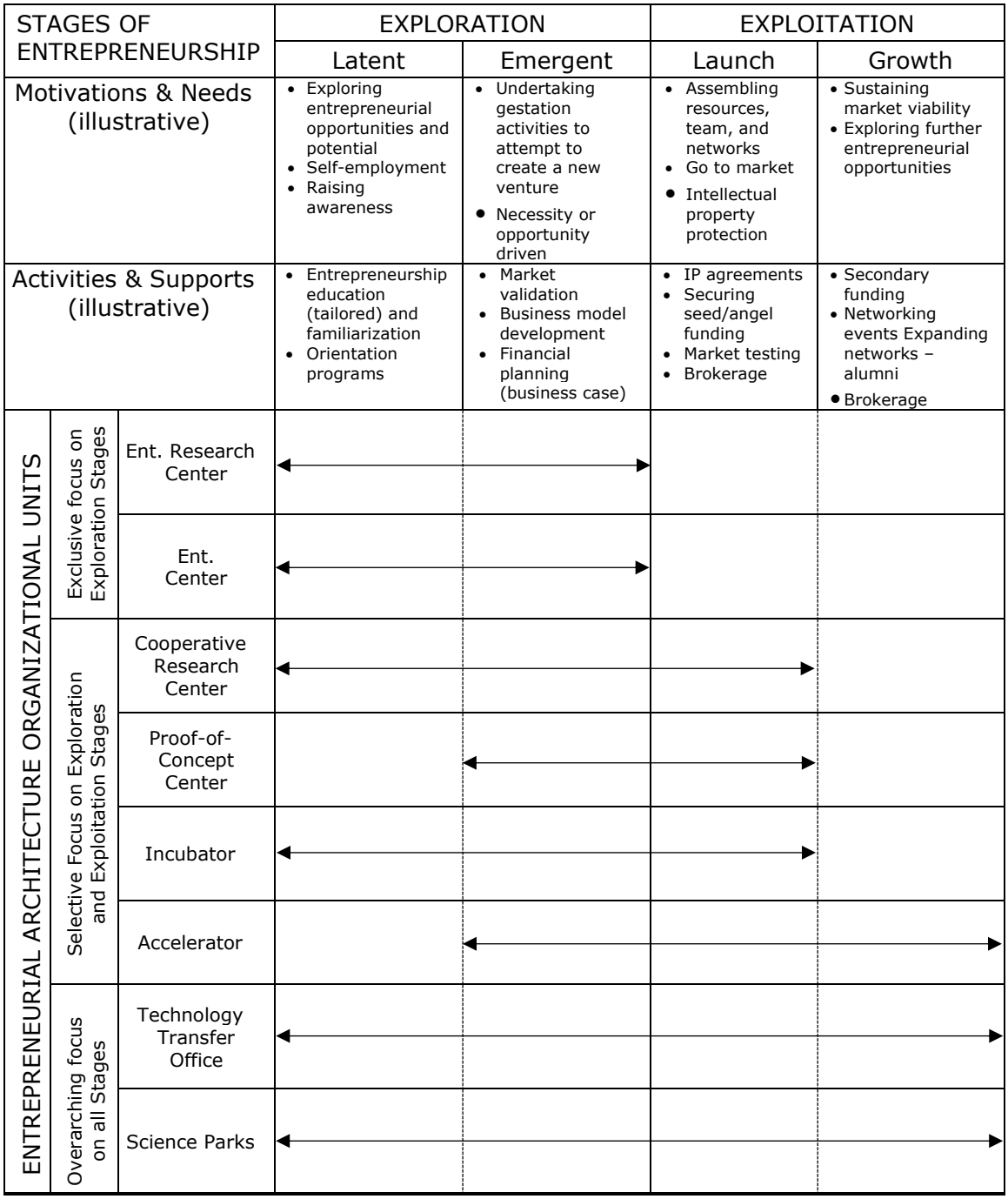
Entrepreneurial Universities Organizational Architecture

STAGES OF ENTREPRENEURSHIP	EXPLORATION		EXPLOITATION	
	Latent	Emergent	Launch	Growth
Motivations & Needs (illustrative)	• Exploring entrepreneurial opportunities and potential • Self-employment • Raising awareness	• Undertaking gestation activities to attempt to create a new venture • Necessity or opportunity driven	• Assembling resources, team, and networks • Go to market • Intellectual property protection	• Sustaining market viability • Exploring further entrepreneurial opportunities
Activities & Supports (illustrative)	• Entrepreneurship education (tailored) and familiarization • Orientation programs	• Market validation • Business model development • Financial planning (business case)	• IP agreements • Securing seed/angel funding • Market testing • Brokerage	• Secondary funding • Networking events Expanding networks – alumni • Brokerage

adapted from Cunningham, Lehmann, & Menter (2022)

FIGURE 12c

Entrepreneurial Universities Conceptual Structure



adapted from Cunningham, Lehmann, & Menter, 2022

FIGURE 13

The HEI Users Entrepreneurial Journey Map

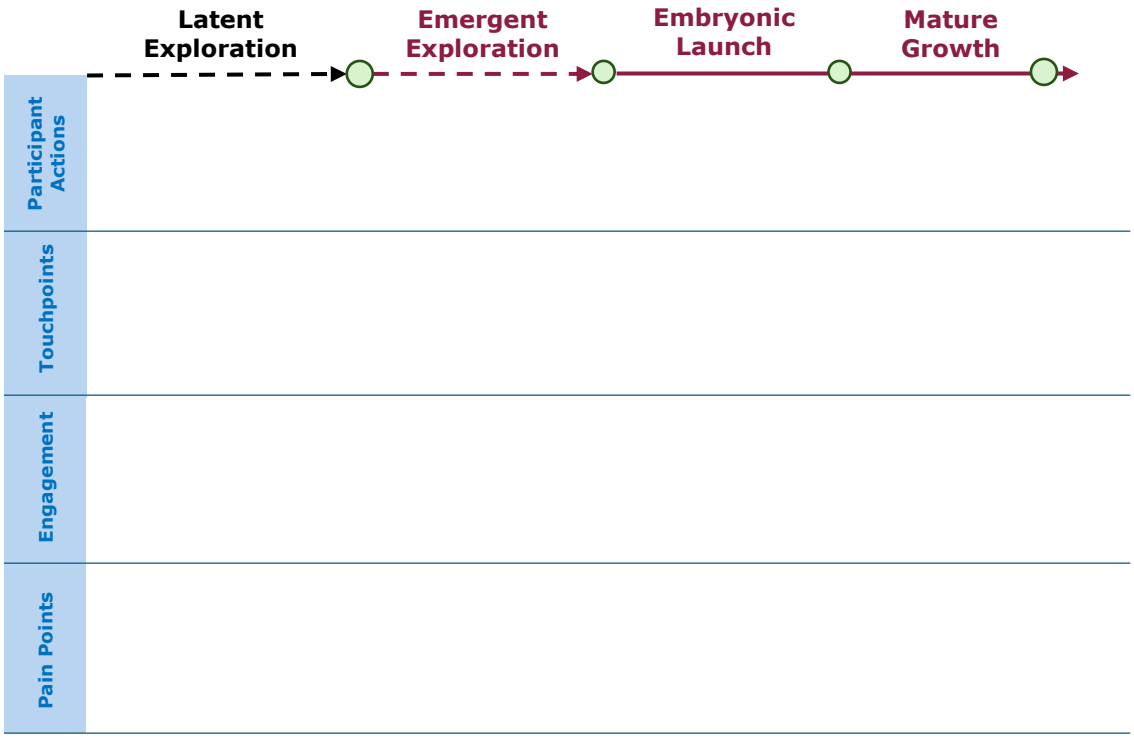
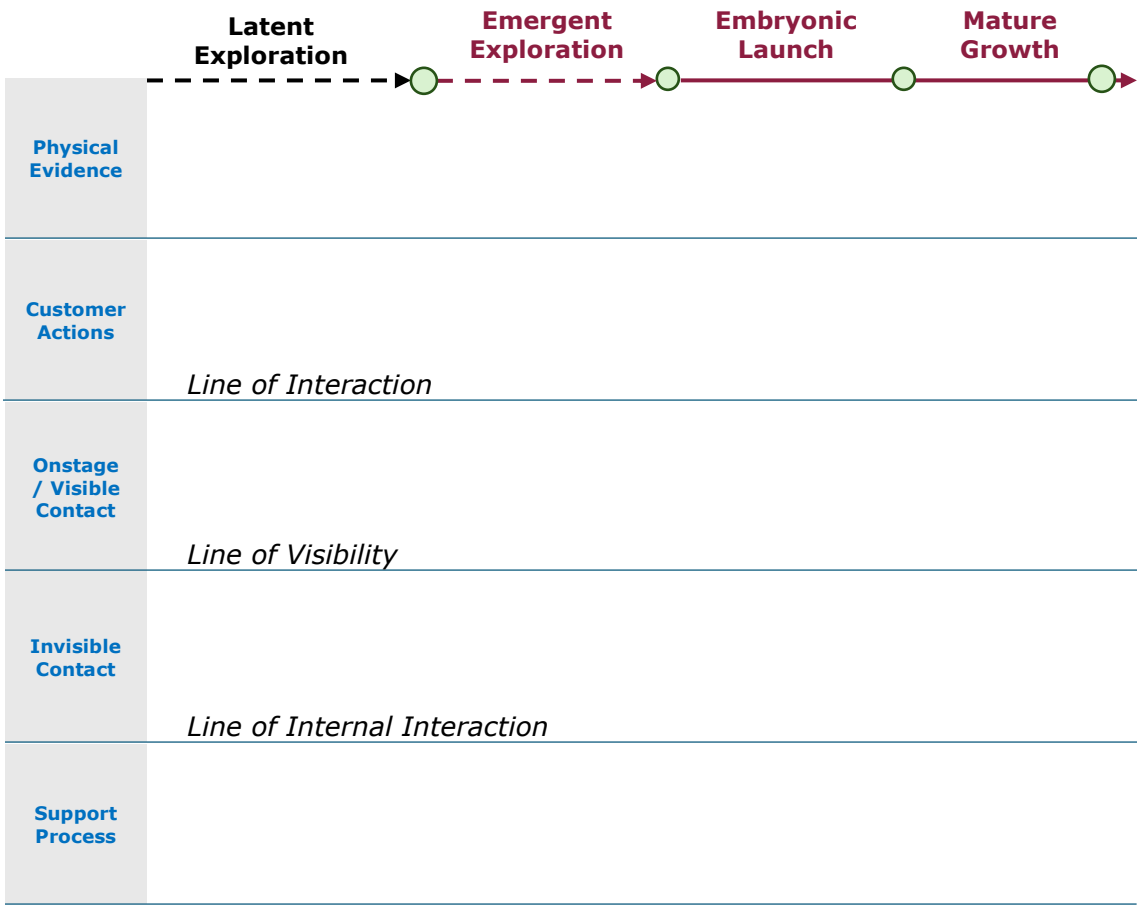


FIGURE 14

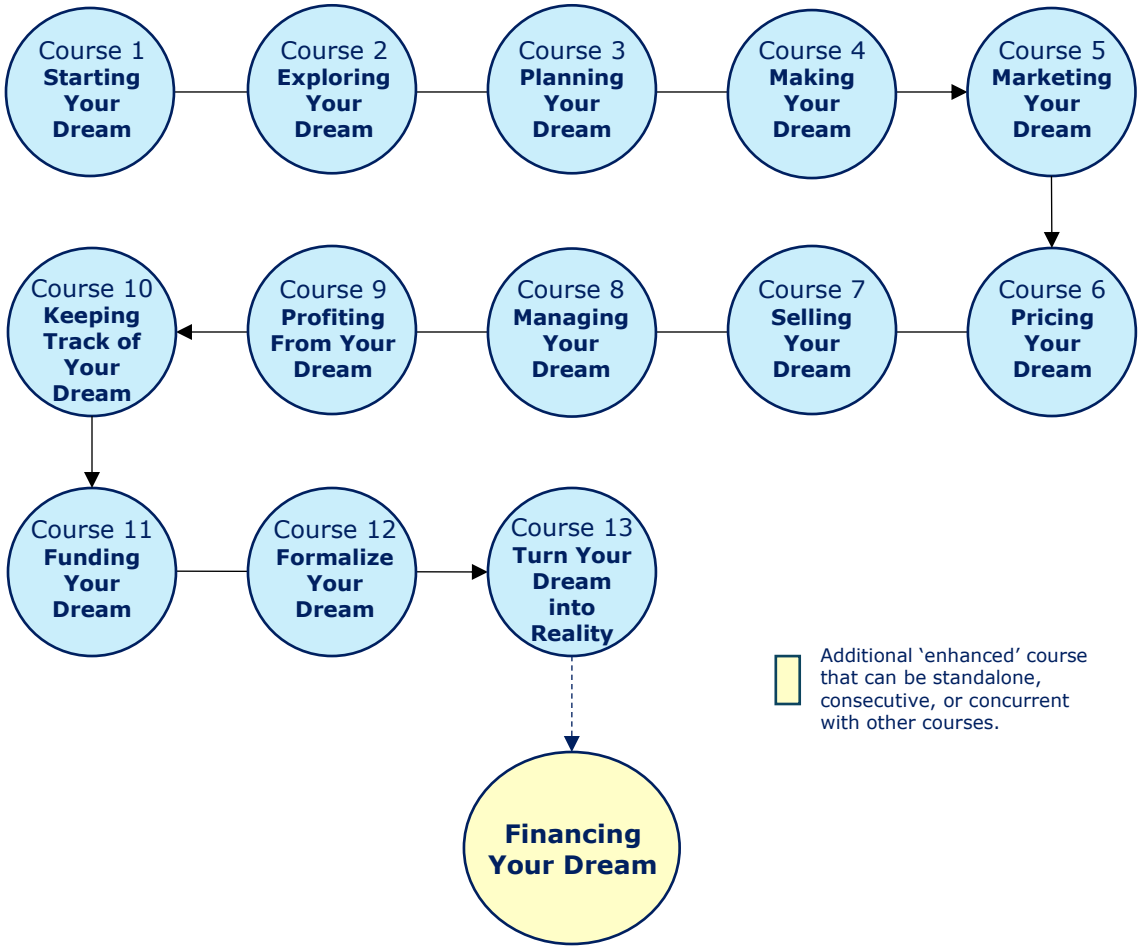
The Five Entrepreneurial Steps of a Service Blueprint



adapted from Shostack, 1984; & Bitner, Ostrom, & Morgan (2008), p.73

FIGURE 15

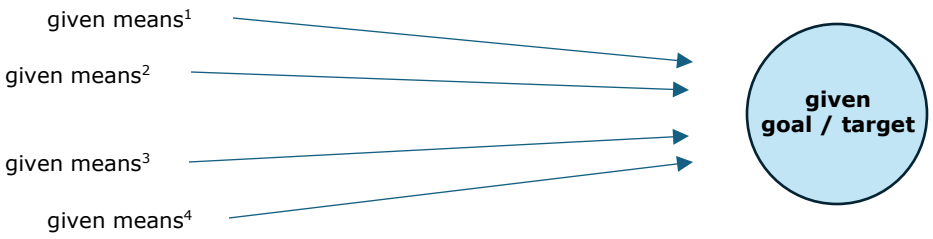
DreamBuilder Outline



adapted from DreamBuilder (2018)

FIGURE 16

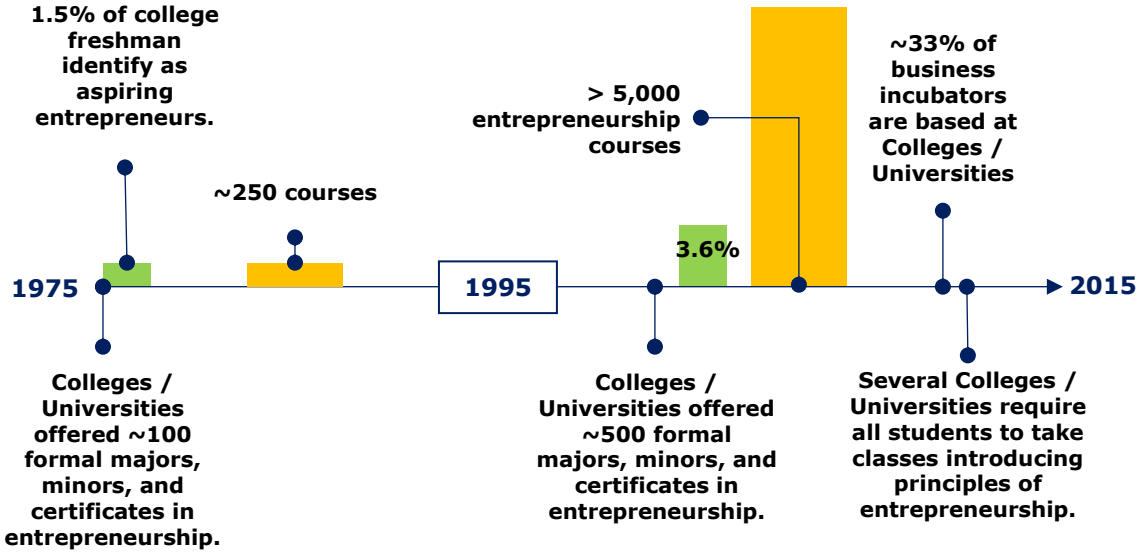
Managerial Thinking (Causal)



adapted from Sarasvathy (2001b)

FIGURE 17

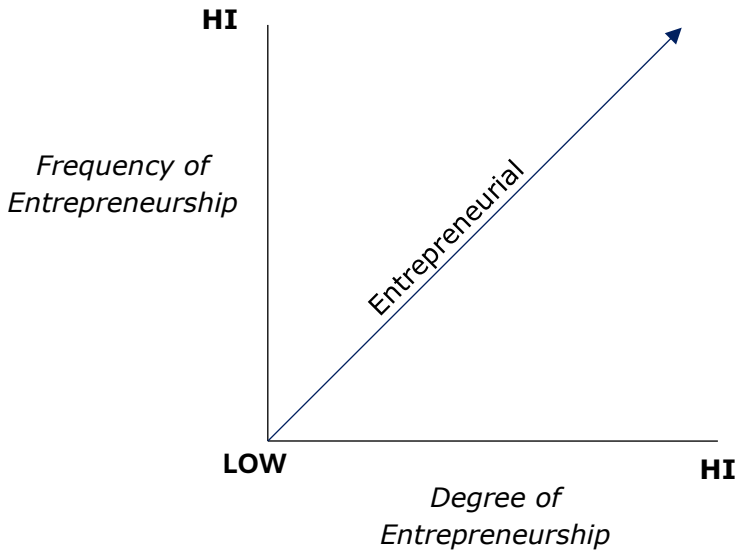
Timeline: Entrepreneurship on College Campuses



adapted from Morelix (2015)

FIGURE 18

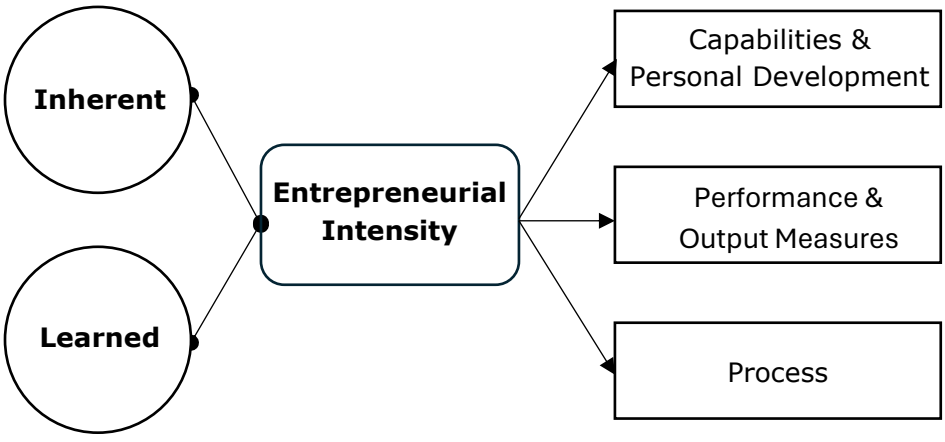
Entrepreneurial Intensity



adapted from Morris & Sexton (1996)

FIGURE 19

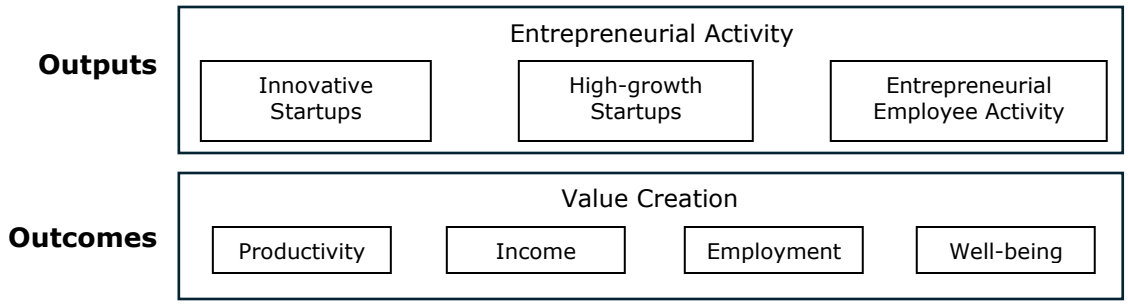
Entrepreneurial Intensity Antecedents & Outcomes



adapted from Morris & Sexton (1996); and Liao, J., Murphy, P. J., & Welsch, H. (2005)

FIGURE 20

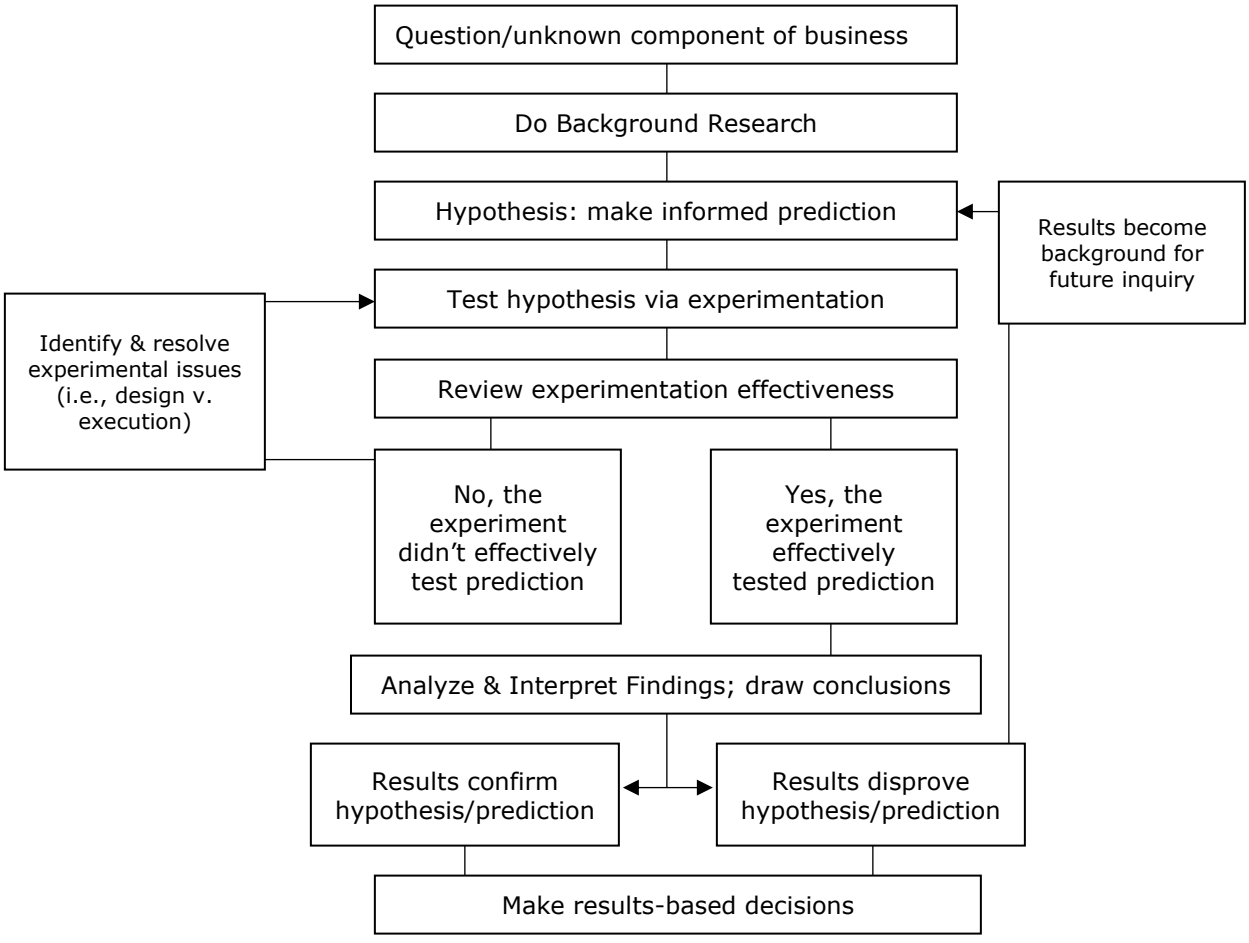
Outputs and Outcomes of Institutional Entrepreneurial Ecosystems



adapted from Stam (2014), p.6

FIGURE 21

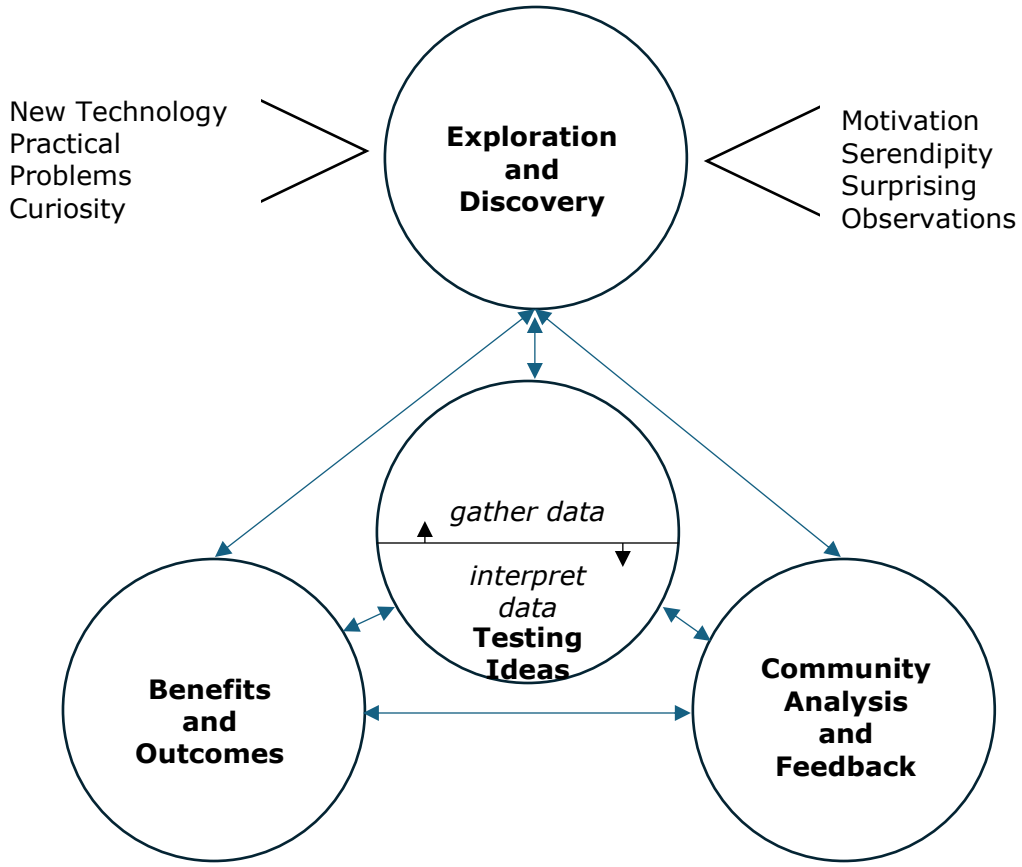
The [Prescribed] Scientific Method



adapted from Cox, Kidwell, & Lortie (2021)

FIGURE 22

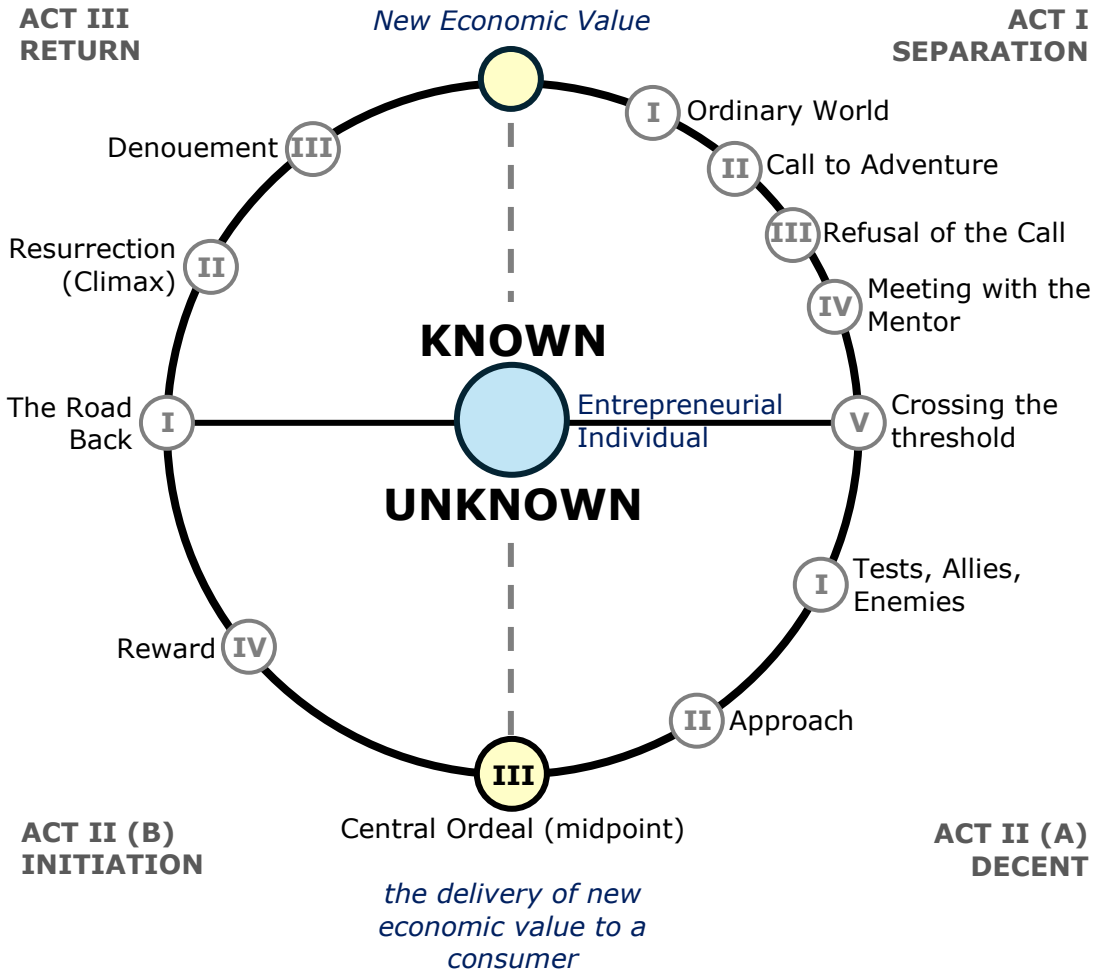
The Circular Scientific Method



adapted from "Understanding Science 101" (2022)

FIGURE 23:

The Non-linear / Circular Hero's Journey



adapted from Vogler (2007), p.9

Figure 24

Subjective Interaction

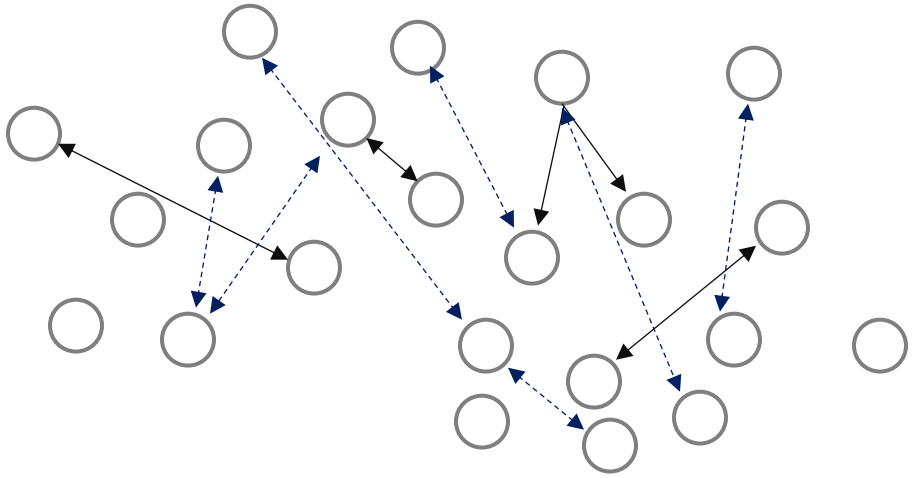
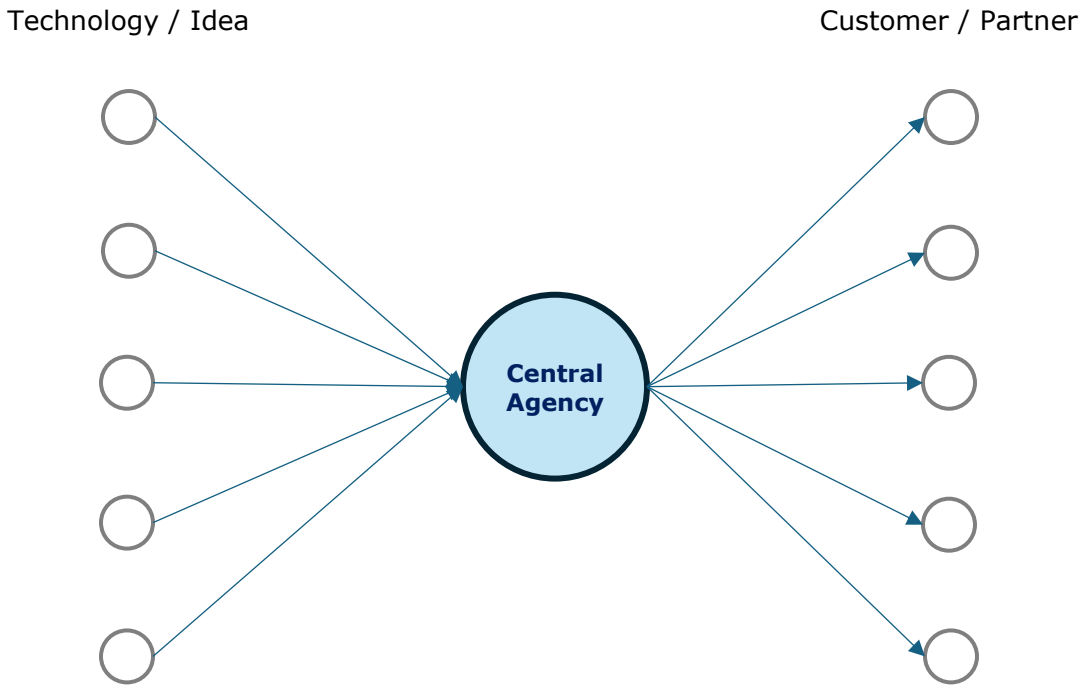


FIGURE 25

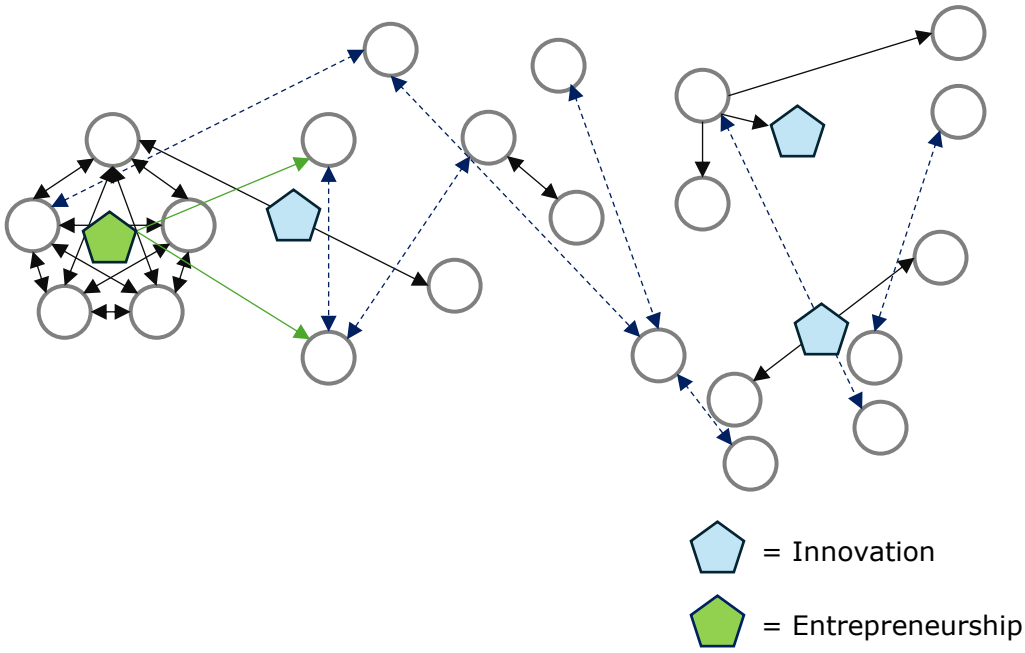
First Derivative Approach



adapted from Hwang, & Horowitz, 2012 (p.182)

Figure 26

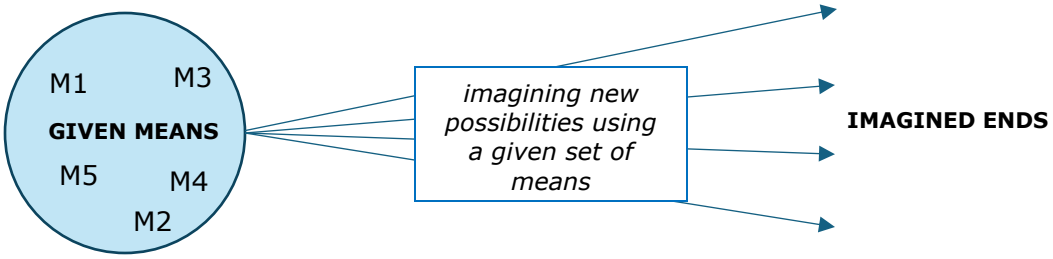
Subjective Action



see also Hwang, & Horowitz (2012), Chapter 2

FIGURE 27

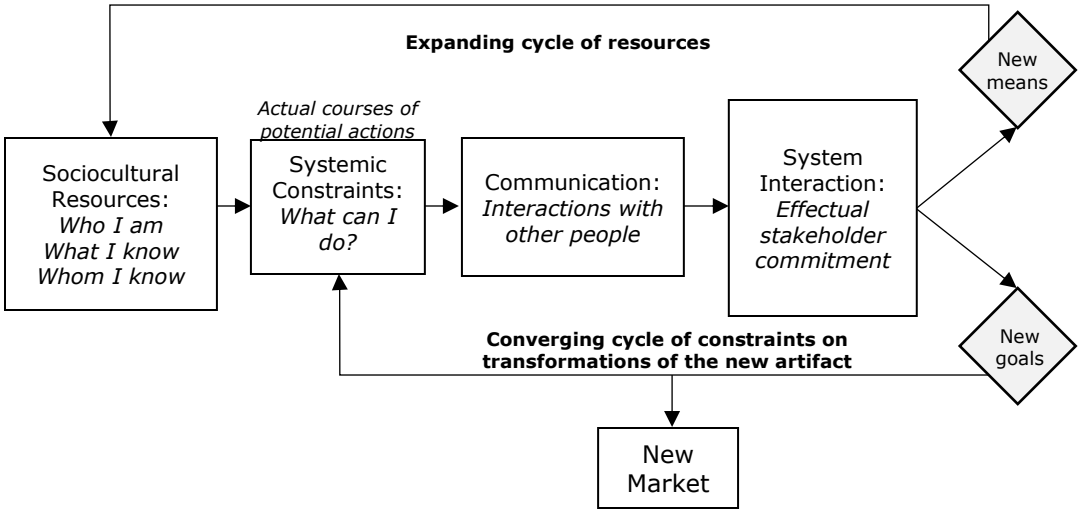
Entrepreneurial Thinking (Effectual)



adapted from Sarasvathy (2001b)

FIGURE 28

New Value Creation (Effectual): Individual Interactions Creating Markets



adapted from Sarasvathy, & Dew (2005)

FIGURE 29

The Non-linear / Circular Hero's Journey

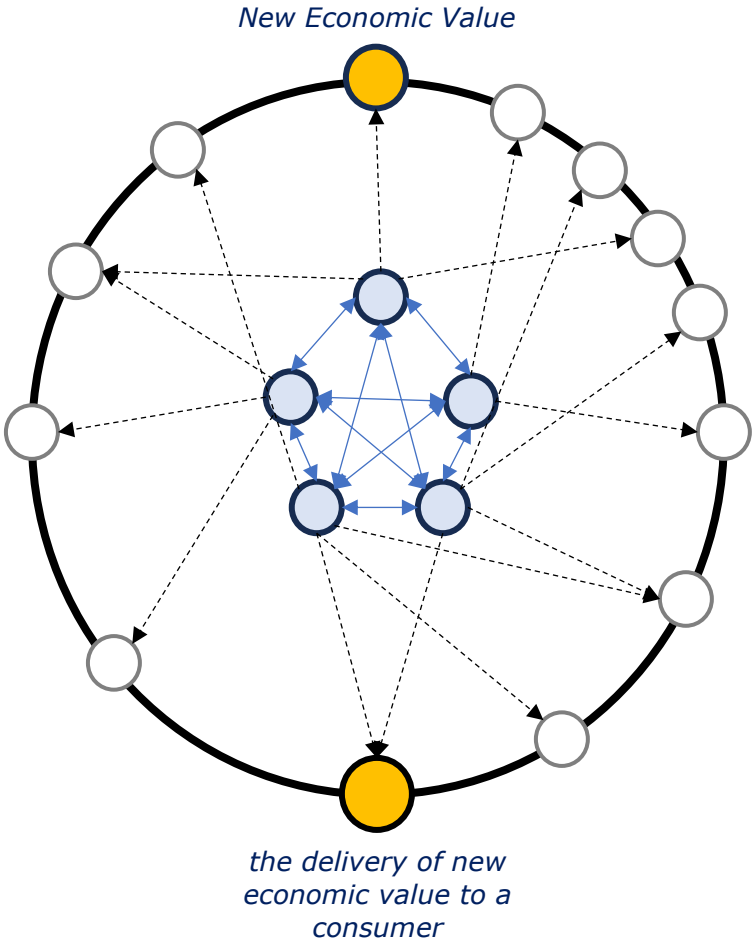
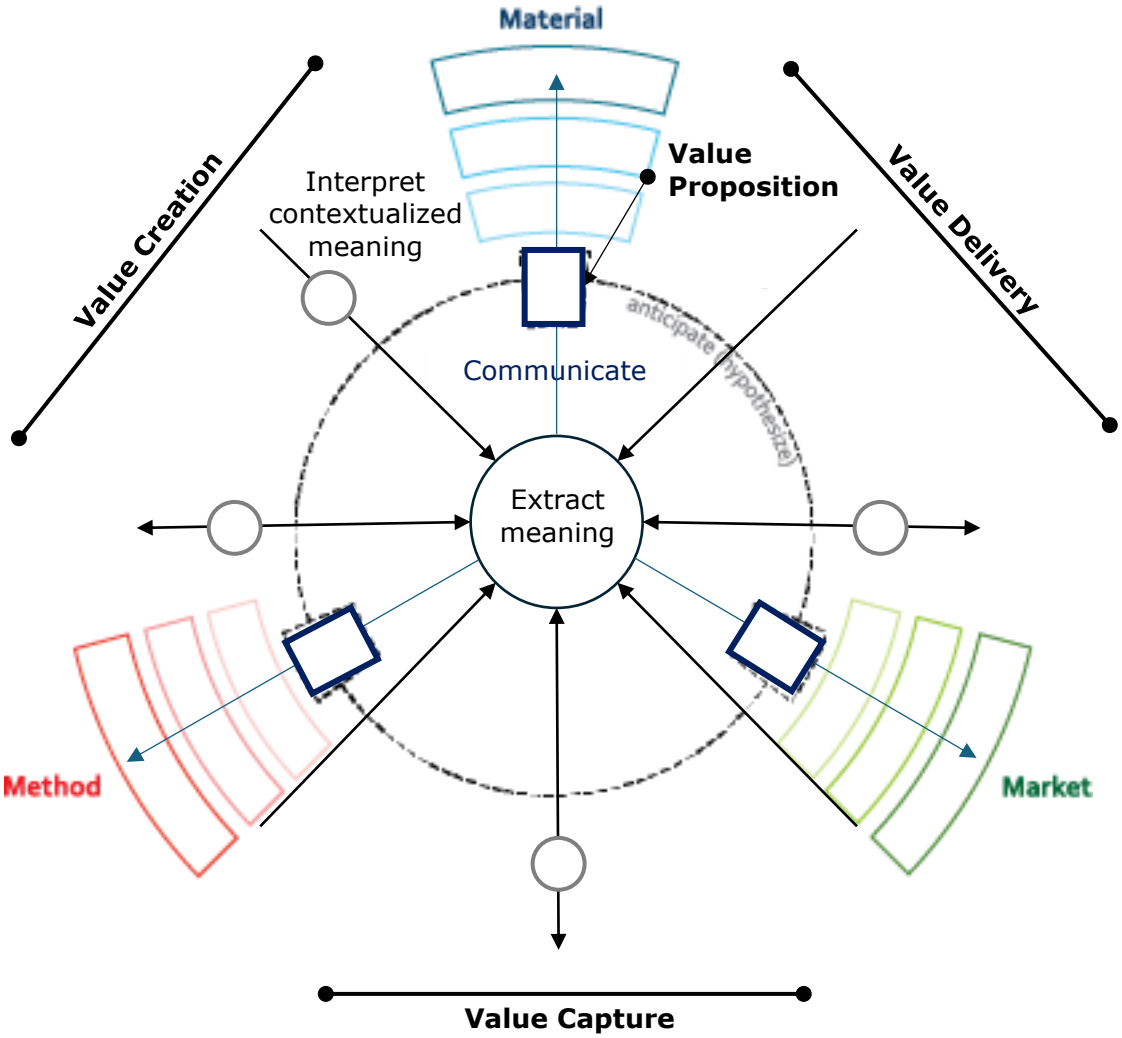


Figure 30

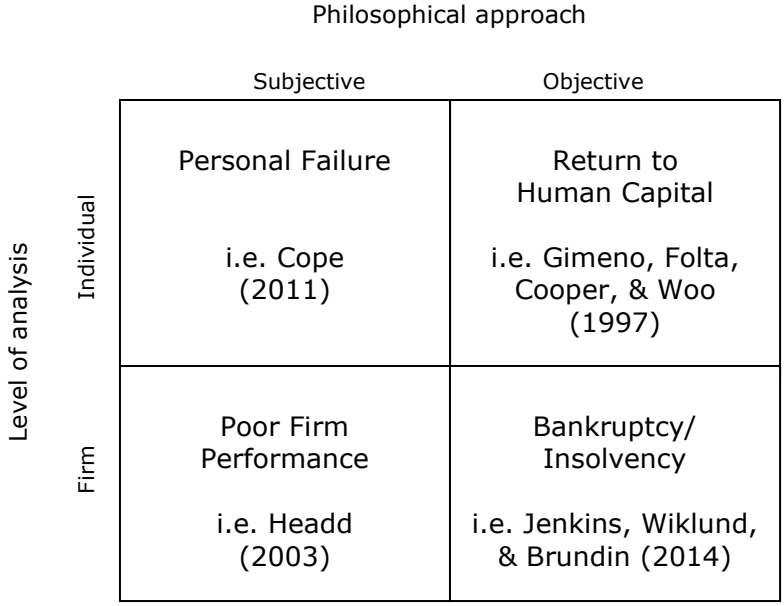
A Non-linear Sequence of Entrepreneurial Action



Path adapted from Endres, & Harper (2013), see p.321; and Skaja, & Holcomb (2023), who referenced Mikl, Herold, Cwiklicki, and Kummer (2021)

FIGURE 31

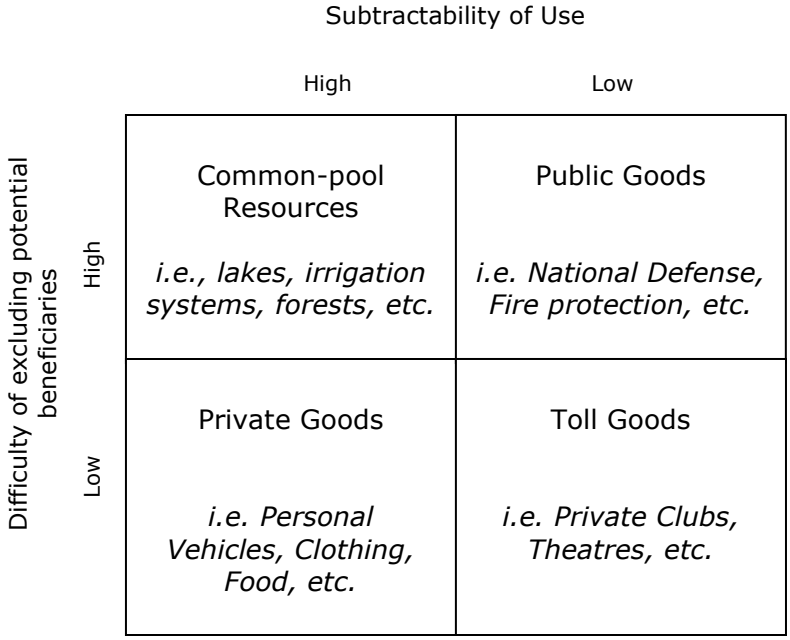
Conceptualizations of Entrepreneurial Failure – Classification Schema



adapted from Jenkins, & McKelvie (2016), p.181

FIGURE 32

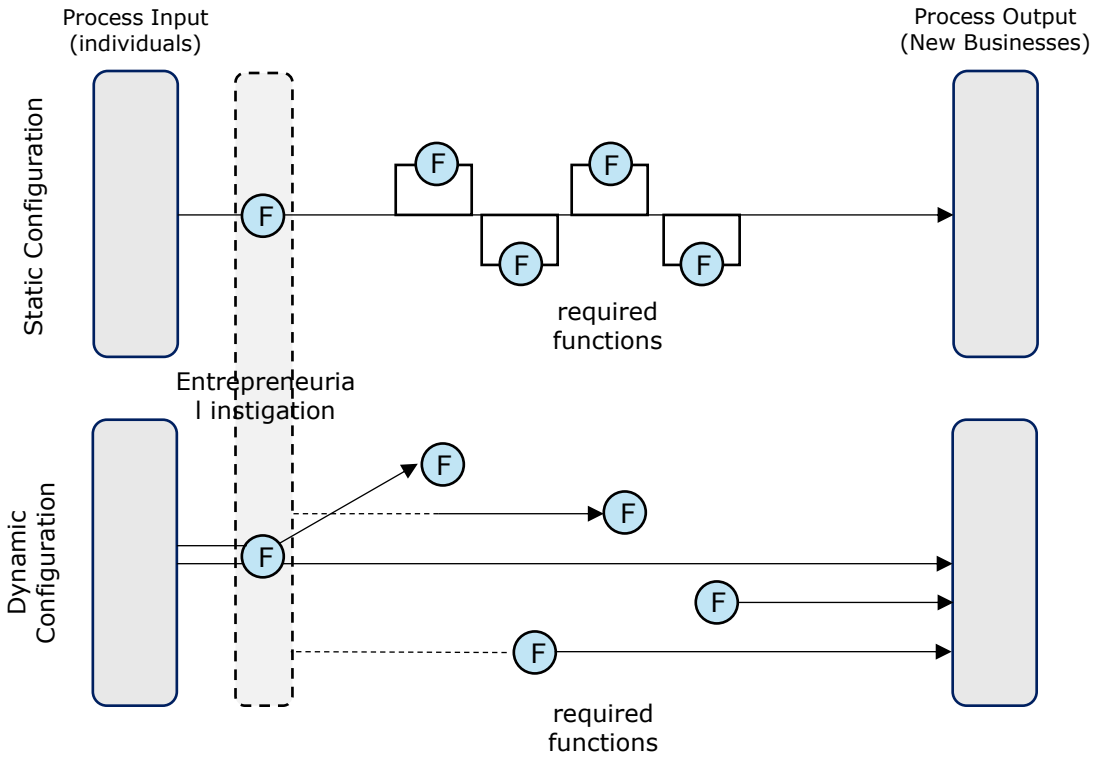
Four Types of Goods



adapted from Ostrom (2016), p. 201

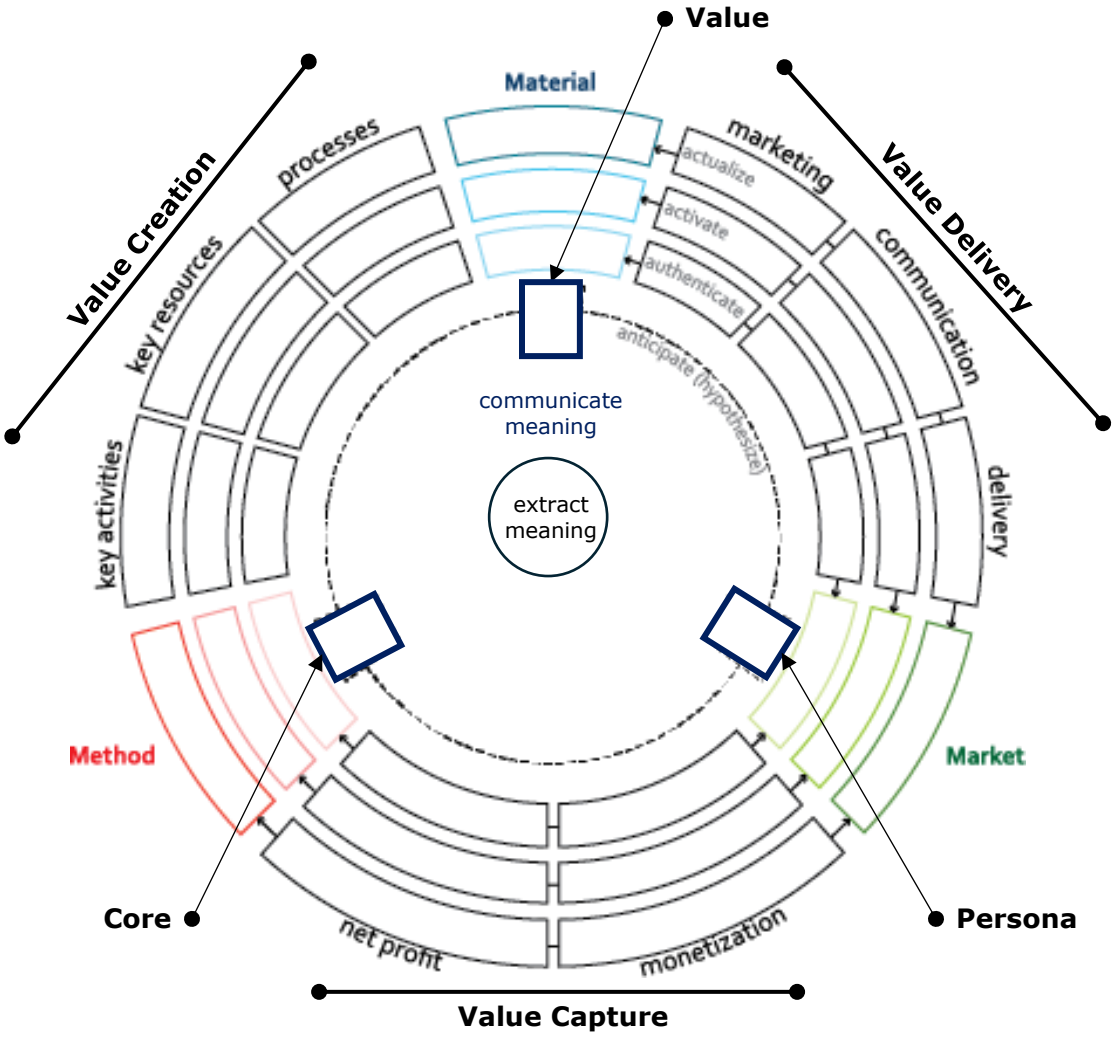
FIGURE 33:

Static v. Dynamic Configuration



adapted from Kramer, & Magee (1985), p.425; and Miles (2023)

Figure 34
A Composable Entrepreneurial Map

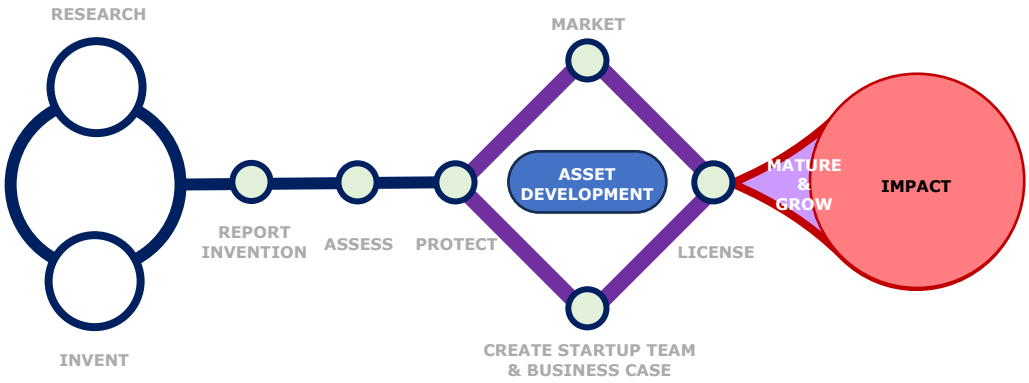


adapted from Endres, & Harper (2013)

APPENDIX A

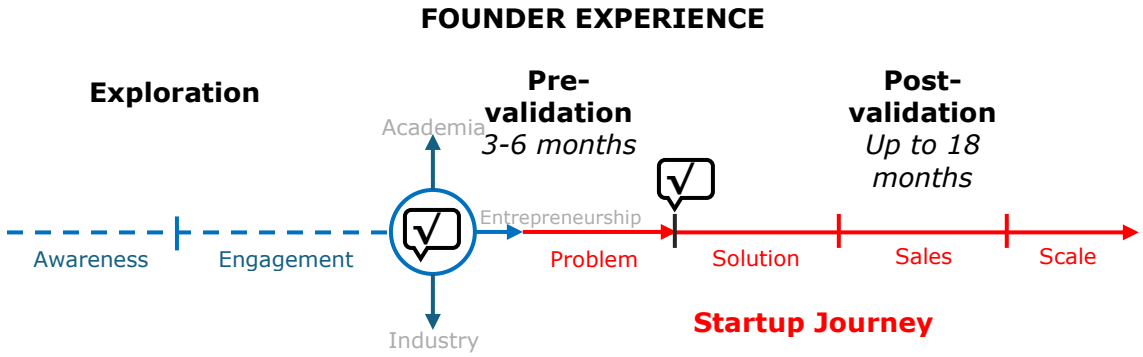
THE UNIVERSITY OF ARIZONA COMMERCIALIZATION PROCESS

The concept of entrepreneurial linearity is very common at public institutions. Admittedly, these linear processes may look different and have their own unique narratives, but they are ultimately based on the same philosophical foundations. Note below the University of Arizona's listed tech commercialization process:



adapted from Tech Launch Arizona (2023)

Note that this process overlaps almost step by step with the Concordia University map of the Founder Experience (District3, 2023) that goes so far as to suggest specific timelines:



adapted from District3 (2023)

APPENDIX B

WORKERS SHARE OF CORPORATE INCOME (1979-2022)

Utilizing data from the Bureau of Economic Analysis National Income and Product Accounts (Tables 1.14 and 6.16D), the Economic Policy Institutes (2023) Nominal Wage Tracker presented the following outline of the percentage share of corporate-sector income received by workers, monthly, between 1979-2022. With consistent fluctuations noted, there is a general decrease in the share of corporate-sector income received over time.

Date	Labor share	Date	Labor share
January 1979	79.08%	April 1979	79.52%
July 1979	80.29%	October 1979	80.81%
January 1980	82.28%	April 1980	82.76%
July 1980	81.96%	October 1980	80.65%
January 1981	80.38%	April 1981	80.46%
July 1981	79.67%	October 1981	80.48%
January 1982	81.52%	April 1982	80.90%
July 1982	81.02%	October 1982	81.59%
January 1983	81.00%	April 1983	79.95%
July 1983	79.47%	October 1983	79.07%
January 1984	77.85%	April 1984	78.02%
July 1984	78.52%	October 1984	78.41%
January 1985	78.50%	April 1985	78.73%
July 1985	78.43%	October 1985	79.77%
January 1986	80.14%	April 1986	80.99%
July 1986	81.75%	October 1986	82.02%
January 1987	81.98%	April 1987	81.16%
July 1987	80.66%	October 1987	81.23%
January 1988	81.24%	April 1988	81.20%
July 1988	81.07%	October 1988	80.46%
January 1989	80.93%	April 1989	81.15%
July 1989	81.20%	October 1989	82.18%
January 1990	82.04%	April 1990	81.91%
July 1990	82.95%	October 1990	83.44%
January 1991	82.47%	April 1991	82.72%
July 1991	83.04%	October 1991	83.54%
January 1992	83.17%	April 1992	83.35%
July 1992	83.77%	October 1992	83.19%
January 1993	83.67%	April 1993	82.89%
July 1993	82.86%	October 1993	81.60%
January 1994	81.59%	April 1994	81.44%
July 1994	80.82%	October 1994	80.51%
January 1995	80.82%	April 1995	80.55%
July 1995	79.69%	October 1995	79.86%
January 1996	79.30%	April 1996	79.26%
July 1996	79.49%	October 1996	79.48%
January 1997	79.13%	April 1997	79.05%
July 1997	78.40%	October 1997	78.69%
January 1998	79.81%	April 1998	80.08%

July 1998	79.99%	October 1998	80.64%
January 1999	80.47%	April 1999	80.73%
July 1999	81.13%	October 1999	81.49%
January 2000	81.48%	April 2000	82.96%
July 2000	82.50%	October 2000	83.32%
January 2001	83.27%	April 2001	82.98%
July 2001	83.18%	October 2001	84.19%
January 2002	82.28%	April 2002	82.05%
July 2002	81.91%	October 2002	80.85%
January 2003	80.40%	April 2003	80.27%
July 2003	79.89%	October 2003	79.92%
January 2004	78.79%	April 2004	78.68%
July 2004	78.58%	October 2004	78.44%
January 2005	77.14%	April 2005	76.81%
July 2005	76.94%	October 2005	75.72%
January 2006	75.37%	April 2006	75.27%
July 2006	74.61%	October 2006	75.91%
January 2007	77.23%	April 2007	76.82%
July 2007	78.04%	October 2007	79.08%
January 2008	79.51%	April 2008	79.59%
July 2008	79.89%	October 2008	83.64%
January 2009	79.85%	April 2009	79.55%
July 2009	78.55%	October 2009	77.55%
January 2010	76.48%	April 2010	76.92%
July 2010	74.95%	October 2010	75.06%
January 2011	77.19%	April 2011	76.03%
July 2011	76.09%	October 2011	74.30%
January 2012	73.91%	April 2012	74.14%
July 2012	74.42%	October 2012	75.17%
January 2013	74.78%	April 2013	74.94%
July 2013	75.11%	October 2013	74.74%
January 2014	76.13%	April 2014	74.26%
July 2014	73.49%	October 2014	73.86%
January 2015	74.38%	April 2015	74.42%
July 2015	74.97%	October 2015	75.50%
January 2016	75.09%	April 2016	75.57%
July 2016	75.66%	October 2016	75.81%
January 2017	76.16%	April 2017	76.07%
July 2017	76.34%	October 2017	76.45%
January 2018	76.14%	April 2018	76.01%
July 2018	75.52%	October 2018	75.40%
January 2019	76.64%	April 2019	76.38%
July 2019	76.21%	October 2019	75.99%
January 2020	77.55%	April 2020	77.38%
July 2020	74.44%	October 2020	75.80%
January 2021	74.28%	April 2021	73.20%
July 2021	73.62%	October 2021	74.16%
January 2022	74.67%	April 2022	73.98%
July 2022	74.16%	October 2022	74.50%

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APPENDIX C

PUBLIC TITLE IV SCHOOLS (US – FALL 2020)

Data, gathered from a personal communication through the U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), Spring 2021, Fall Enrollment component (provisional data). This data only includes the degree granting, public institutions (not private) who offer 4-year or more years' programming. Institutions (9) with over 50,000 students highlighted. Herein, Title IV institutions are defined as those with a written agreement with the U.S. Department of Education allowing the institution to participate in any of the Title IV federal student financial assistance programs.

Institution Name	Total enrollment	State abbreviation
Aaniiih Nakoda College	143	MT
Abraham Baldwin Agricultural College	3,990	GA
Adams State University	3,164	CO
Alabama A & M University	5,977	AL
Alabama State University	4,072	AL
Albany State University	6,509	GA
Alcorn State University	3,230	MS
Alpena Community College	1,436	MI
Angelo State University	10,775	TX
Antelope Valley College	12,057	CA
Appalachian State University	20,023	NC
Arapahoe Community College	12,001	CO
Arizona State University (Campus+ Digital)	128,788	AZ
Arkansas State University	13,106	AR
Arkansas Tech University	10,829	AR
Athens State University	2,867	AL
Atlanta Metropolitan State College	1,704	GA
Auburn University	30,737	AL
Auburn University at Montgomery	5,212	AL
Augusta University	8,920	GA
Austin Community College District	39,896	TX
Austin Peay State University	10,272	TN
Bakersfield College	24,903	CA
Ball State University	21,597	IN

Bay Mills Community College	438	MI
Bellevue College	12,286	WA
Bellingham Technical College	1,848	WA
Bemidji State University	4,577	MN
Binghamton University	18,148	NY
Bismarck State College	3,716	ND
Black Hills State University	3,608	SD
Bloomsburg University of Pennsylvania	8,427	PA
Bluefield State College	1,243	WV
Boise State University	24,069	ID
Bowie State University	6,250	MD
Bowling Green State University-Firelands	2,085	OH
Bowling Green State University-Main Campus	18,142	OH
Brazosport College	3,852	TX
Bridgewater State University	10,651	MA
Broward College	33,243	FL
California Polytechnic State University-San Luis Obispo	22,440	CA
California State Polytechnic University-Pomona	30,014	CA
California State University Maritime Academy	952	CA
California State University-Bakersfield	11,745	CA
California State University-Channel Islands	7,446	CA
California State University-Chico	16,746	CA
California State University-Dominguez Hills	18,687	CA
California State University-East Bay	16,253	CA
California State University-Fresno	25,497	CA
California State University-Fullerton	42,051	CA
California State University-Long Beach	40,069	CA
California State University-Los Angeles	26,745	CA
California State University-Monterey Bay	7,409	CA
California State University-Northridge	40,381	CA
California State University-Sacramento	32,293	CA
California State University-San Bernardino	19,689	CA
California State University-San Marcos	16,367	CA
California State University-Stanislaus	11,163	CA
California University of Pennsylvania	6,885	PA
Cameron University	3,771	OK
Carolinas College of Health Sciences	514	NC
Cascadia College	2,597	WA
Castleton University	2,211	VT
Central Connecticut State University	10,652	CT

Central Michigan University	17,311	MI
Central State University	4,021	OH
Central Washington University	11,174	WA
Central Wyoming College	1,755	WY
Centralia College	2,314	WA
Chadron State College	2,330	NE
Charter Oak State College	1,634	CT
Cheyney University of Pennsylvania	623	PA
Chicago State University	2,644	IL
Chipola College	1,943	FL
Christopher Newport University	4,868	VA
Cincinnati State Technical and Community College	6,873	OH
Citadel Military College of South Carolina	3,740	SC
Clarion University of Pennsylvania	4,465	PA
Clark College	7,665	WA
Clark State Community College	5,396	OH
Clayton State University	7,052	GA
Clemson University	26,406	SC
Cleveland State University	15,247	OH
Clover Park Technical College	3,591	WA
Coastal Carolina University	10,118	SC
College of Central Florida	6,150	FL
College of Charleston	10,384	SC
College of Coastal Georgia	3,457	GA
College of Southern Idaho	7,321	ID
College of Southern Nevada	29,965	NV
College of Staten Island CUNY	12,797	NY
Collin County Community College District	35,390	TX
Colorado Mesa University	9,110	CO
Colorado Mountain College	5,315	CO
Colorado School of Mines	6,744	CO
Colorado State University Pueblo	5,925	CO
Colorado State University-Fort Collins	32,428	CO
Colorado State University-Global Campus	12,578	CO
Columbia Basin College	6,745	WA
Columbus State University	8,372	GA
Community College of Denver	7,273	CO
Concord University	1,807	WV
Coppin State University	2,348	MD
CUNY Bernard M Baruch College	19,740	NY

CUNY Brooklyn College	17,735	NY
CUNY City College	15,227	NY
CUNY Graduate School and University Center	9,300	NY
CUNY Hunter College	24,052	NY
CUNY John Jay College of Criminal Justice	15,766	NY
CUNY Lehman College	15,091	NY
CUNY Medgar Evers College	5,237	NY
CUNY New York City College of Technology	15,513	NY
CUNY Queens College	19,700	NY
CUNY School of Law	677	NY
CUNY York College	7,784	NY
Cypress College	15,325	CA
Dakota State University	3,186	SD
Dallas College	74,781	TX
Dalton State College	4,794	GA
Daytona State College	12,728	FL
Delaware State University	4,739	DE
Delaware Technical Community College-Terry	12,955	DE
Delta State University	2,999	MS
Dickinson State University	1,441	ND
Dine College	1,369	AZ
Dixie State University	12,043	UT
East Carolina University	28,798	NC
East Central University	3,608	OK
East Georgia State College	2,415	GA
East Stroudsburg University of Pennsylvania	5,835	PA
East Tennessee State University	13,713	TN
Eastern Connecticut State University	4,644	CT
Eastern Florida State College	13,937	FL
Eastern Illinois University	8,626	IL
Eastern Kentucky University	14,465	KY
Eastern Michigan University	16,294	MI
Eastern New Mexico University-Main Campus	5,266	NM
Eastern Oregon University	2,853	OR
Eastern Virginia Medical School	1,289	VA
Eastern Washington University	12,349	WA
Edinboro University of Pennsylvania	4,319	PA
Edmonds College	6,545	WA
Elizabeth City State University	2,002	NC
Emporia State University	5,828	KS

Fairmont State University	3,848	WV
Farmingdale State College	10,018	NY
Fashion Institute of Technology	8,191	NY
Fayetteville State University	6,726	NC
Feather River Community College District	1,821	CA
Ferris State University	11,165	MI
Fitchburg State University	6,728	MA
Florida Agricultural and Mechanical University	9,184	FL
Florida Atlantic University	30,805	FL
Florida Gateway College	3,018	FL
Florida Gulf Coast University	15,358	FL
Florida International University	58,836	FL
Florida Polytechnic University	1,422	FL
Florida Southwestern State College	15,141	FL
Florida State College at Jacksonville	22,344	FL
Florida State University	43,569	FL
Foothill College	14,605	CA
Fort Hays State University	15,033	KS
Fort Lewis College	3,469	CO
Fort Valley State University	3,079	GA
Framingham State University	4,876	MA
Francis Marion University	4,148	SC
Front Range Community College	18,703	CO
Frostburg State University	4,857	MD
Galveston College	2,060	TX
George Mason University	38,541	VA
Georgia College & State University	6,873	GA
Georgia Gwinnett College	11,627	GA
Georgia Highlands College	5,680	GA
Georgia Institute of Technology-Main Campus	39,771	GA
Georgia Military College	7,501	GA
Georgia Southern University	26,949	GA
Georgia Southwestern State University	3,162	GA
Georgia State University	36,360	GA
Glenville State College	1,583	WV
Gordon State College	3,231	GA
Governors State University	4,650	IL
Grambling State University	5,438	LA
Grand Valley State University	23,350	MI
Granite State College	1,879	NH

Grays Harbor College	1,553	WA
Grayson College	4,066	TX
Great Basin College	3,772	NV
Green River College	7,493	WA
Greenville Technical College	10,536	SC
Gulf Coast State College	4,410	FL
Harris-Stowe State University	1,400	MO
Haskell Indian Nations University	731	KS
Henderson State University	3,163	AR
Henry Ford College	11,345	MI
Highline College	5,829	WA
Humboldt State University	6,612	CA
Idaho State University	11,766	ID
Ilisagvik College	232	AK
Illinois State University	20,720	IL
Indian River State College	15,236	FL
Indiana State University	10,829	IN
Indiana University of Pennsylvania-Main Campus	10,037	PA
Indiana University-Bloomington	43,064	IN
Indiana University-East	3,434	IN
Indiana University-Kokomo	3,227	IN
Indiana University-Northwest	3,801	IN
Indiana University-Purdue University-Indianapolis	29,390	IN
Indiana University-South Bend	4,942	IN
Indiana University-Southeast	4,678	IN
Institute of American Indian and Alaska Native Culture and Arts Development	693	NM
Iowa State University	31,822	IA
Jackson College	4,140	MI
Jackson State University	6,921	MS
Jacksonville State University	9,238	AL
James Madison University	21,594	VA
Kansas State University	20,854	KS
Kean University	14,064	NJ
Keene State College	3,210	NH
Kennesaw State University	41,181	GA
Kent State University at Ashtabula	2,049	OH
Kent State University at East Liverpool	1,173	OH
Kent State University at Geauga	2,477	OH
Kent State University at Kent	26,822	OH
Kent State University at Salem	1,729	OH

Kent State University at Stark	4,950	OH
Kent State University at Trumbull	2,290	OH
Kent State University at Tuscarawas	2,212	OH
Kentucky State University	2,290	KY
Kutztown University of Pennsylvania	7,890	PA
Lac Courte Oreilles Ojibwe College	278	WI
Lake Superior State University	1,909	MI
Lake Washington Institute of Technology	3,319	WA
Lake-Sumter State College	4,760	FL
Lamar University	16,637	TX
Lander University	3,513	SC
Langston University	2,038	OK
Laramie County Community College	3,838	WY
Laredo College	9,292	TX
Lewis-Clark State College	3,856	ID
Lincoln University	2,012	MO
Lincoln University	2,077	PA
Lock Haven University	3,163	PA
Lone Star College System	70,109	TX
Longwood University	4,841	VA
Lorain County Community College	10,138	OH
Louisiana State University and Agricultural & Mechanical College	34,285	LA
Louisiana State University Health Sciences Center-New Orleans	2,827	LA
Louisiana State University Health Sciences Center-Shreveport	982	LA
Louisiana State University-Alexandria	3,706	LA
Louisiana State University-Shreveport	9,955	LA
Louisiana Tech University	11,126	LA
Lower Columbia College	2,325	WA
Madison Area Technical College	13,057	WI
Maine Maritime Academy	941	ME
Mansfield University of Pennsylvania	1,784	PA
Marshall University	11,958	WV
Massachusetts College of Art and Design	1,894	MA
Massachusetts College of Liberal Arts	1,202	MA
Massachusetts Maritime Academy	1,637	MA
Mayville State University	1,168	ND
McNeese State University	7,284	LA
Medical University of South Carolina	3,083	SC
Metropolitan State University	7,552	MN

Metropolitan State University of Denver	19,086	CO
Miami Dade College	46,523	FL
Miami University-Hamilton	2,451	OH
Miami University-Middletown	1,640	OH
Miami University-Oxford	18,880	OH
Michigan State University	49,695	MI
Michigan Technological University	6,873	MI
Middle Georgia State University	8,404	GA
Middle Tennessee State University	22,080	TN
Midland College	4,737	TX
Midwestern State University	5,860	TX
Millersville University of Pennsylvania	7,456	PA
Minnesota State University Moorhead	5,547	MN
Minnesota State University-Mankato	14,761	MN
Minot State University	2,920	ND
MiraCosta College	12,645	CA
Mississippi State University	22,986	MS
Mississippi University for Women	2,704	MS
Mississippi Valley State University	2,032	MS
Missouri Southern State University	5,045	MO
Missouri State University-Springfield	23,505	MO
Missouri University of Science and Technology	7,642	MO
Missouri Western State University	4,911	MO
Modesto Junior College	16,365	CA
Montana State University	16,218	MT
Montana State University Billings	4,000	MT
Montana State University-Northern	1,024	MT
Montana Technological University	1,650	MT
Montclair State University	21,005	NJ
Morehead State University	9,304	KY
Morgan Community College	1,376	CO
Morgan State University	7,634	MD
Murray State University	9,449	KY
Navajo Technical University	1,350	NM
Nevada State College	7,289	NV
New College of Florida	675	FL
New Jersey City University	7,550	NJ
New Jersey Institute of Technology	11,652	NJ
New Mexico Highlands University	2,777	NM
New Mexico Institute of Mining and Technology	1,686	NM

New Mexico State University-Main Campus	14,227	NM
Nicholls State University	6,769	LA
Norfolk State University	5,457	VA
North Carolina A & T State University	12,753	NC
North Carolina Central University	8,078	NC
North Carolina State University at Raleigh	36,042	NC
North Central State College	2,729	OH
North Dakota State University-Main Campus	12,846	ND
North Florida College	1,181	FL
North Seattle College	5,240	WA
Northeast Ohio Medical University	985	OH
Northeastern Illinois University	7,119	IL
Northeastern State University	7,349	OK
Northern Arizona University	29,566	AZ
Northern Illinois University	16,769	IL
Northern Kentucky University	16,211	KY
Northern Michigan University	7,368	MI
Northern New Mexico College	1,234	NM
Northern State University	3,431	SD
Northern Vermont University	1,999	VT
Northwest Florida State College	5,004	FL
Northwest Indian College	555	WA
Northwest Missouri State University	7,267	MO
Northwestern Michigan College	3,278	MI
Northwestern Oklahoma State University	1,833	OK
Northwestern State University of Louisiana	11,447	LA
Nueta Hidatsa Sahnish College	179	ND
Oakland University	18,552	MI
Odessa College	7,019	TX
Oglala Lakota College	1,251	SD
Ohio State University (all Campuses)	67,410	OH
Ohio University (all Campuses)	36,248	OH
Oklahoma Panhandle State University	1,337	OK
Oklahoma State University Center for Health Sciences	1,219	OK
Oklahoma State University Institute of Technology	2,349	OK
Oklahoma State University-Main Campus	24,535	OK
Oklahoma State University-Oklahoma City	4,949	OK
Old Dominion University	24,286	VA
Olympic College	5,357	WA
Oregon Health & Science University	3,035	OR

Oregon Institute of Technology	5,323	OR
Oregon State University	32,312	OR
Oregon State University-Cascades Campus	1,374	OR
Palm Beach State College	26,666	FL
Pasco-Hernando State College	9,886	FL
Peninsula College	1,727	WA
Pennsylvania College of Technology	4,565	PA
Pensacola State College	9,226	FL
Peru State College	1,902	NE
Pierce College District	8,329	WA
Pikes Peak Community College	12,506	CO
Pittsburg State University	6,398	KS
Plymouth State University	4,491	NH
Polk State College	9,961	FL
Portland State University	23,640	OR
Potomac State College of West Virginia University	1,193	WV
Prairie View A & M University	9,248	TX
Pueblo Community College	5,551	CO
Purdue University Fort Wayne	8,093	IN
Purdue University Global	43,927	IN
Purdue University Northwest	9,363	IN
Purdue University-Main Campus	46,655	IN
Radford University	10,695	VA
Ramapo College of New Jersey	6,042	NJ
Red Rocks Community College	6,029	CO
Renton Technical College	3,214	WA
Rhode Island College	7,072	RI
Rio Hondo College	15,692	CA
Rogers State University	3,400	OK
Rowan University	19,678	NJ
Rutgers University-Camden	7,076	NJ
Rutgers University-New Brunswick	50,411	NJ
Rutgers University-Newark	13,231	NJ
Saginaw Valley State University	8,028	MI
Saint Cloud State University	11,841	MN
Saint Johns River State College	6,828	FL
Salem State University	7,242	MA
Salisbury University	8,124	MD
Salish Kootenai College	716	MT
Sam Houston State University	21,912	TX

San Diego Mesa College	20,693	CA
San Diego State University	36,334	CA
San Francisco State University	27,349	CA
San Jacinto Community College	31,110	TX
San Jose State University	36,208	CA
Santa Ana College	20,118	CA
Santa Fe College	12,607	FL
Santa Monica College	25,948	CA
Savannah State University	3,488	GA
Schoolcraft College	8,116	MI
Seattle Central College	5,763	WA
Seminole State College of Florida	16,298	FL
Shasta College	8,121	CA
Shawnee State University	3,485	OH
Shepherd University	3,159	WV
Shippensburg University of Pennsylvania	6,130	PA
Sinclair Community College	18,687	OH
Sinte Gleska University	438	SD
Sitting Bull College	229	ND
Skagit Valley College	4,227	WA
Slippery Rock University of Pennsylvania	8,860	PA
Snow College	5,800	UT
Solano Community College	9,251	CA
Sonoma State University	8,018	CA
South Carolina State University	2,339	SC
South Dakota School of Mines and Technology	2,475	SD
South Dakota State University	11,405	SD
South Florida State College	2,710	FL
South Georgia State College	2,028	GA
South Seattle College	5,324	WA
South Texas College	28,233	TX
Southeast Missouri State University	10,001	MO
Southeastern Louisiana University	14,426	LA
Southeastern Oklahoma State University	5,607	OK
Southern Arkansas University Main Campus	4,432	AR
Southern Connecticut State University	9,331	CT
Southern Illinois University-Carbondale	11,366	IL
Southern Illinois University-Edwardsville	12,860	IL
Southern Oregon University	5,140	OR
Southern University and A & M College	6,917	LA

Southern University at New Orleans	2,264	LA
Southern University Law Center	843	LA
Southern Utah University	12,582	UT
Southwest Minnesota State University	7,259	MN
Southwestern Oklahoma State University	4,898	OK
Spokane Community College	7,081	WA
Spokane Falls Community College	4,189	WA
St Petersburg College	26,430	FL
St. Mary's College of Maryland	1,508	MD
State College of Florida-Manatee-Sarasota	9,242	FL
State University of New York at New Paltz	7,489	NY
Stephen F Austin State University	12,620	TX
Stockton University	9,893	NJ
Stone Child College	311	MT
Stony Brook University	26,782	NY
Sul Ross State University	2,345	TX
SUNY at Albany	17,688	NY
SUNY at Fredonia	4,055	NY
SUNY at Purchase College	3,685	NY
SUNY Brockport	7,592	NY
SUNY Buffalo State	8,339	NY
SUNY College at Geneseo	4,911	NY
SUNY College at Old Westbury	5,007	NY
SUNY College at Oswego	7,636	NY
SUNY College at Plattsburgh	5,109	NY
SUNY College at Potsdam	3,084	NY
SUNY College of Agriculture and Technology at Cobleskill	2,079	NY
SUNY College of Environmental Science and Forestry	2,127	NY
SUNY College of Optometry	402	NY
SUNY College of Technology at Alfred	3,667	NY
SUNY College of Technology at Canton	3,135	NY
SUNY College of Technology at Delhi	3,077	NY
SUNY Cortland	6,832	NY
SUNY Downstate Health Sciences University	2,118	NY
SUNY Empire State College	10,724	NY
SUNY Maritime College	1,671	NY
SUNY Morrisville	2,486	NY
SUNY Oneonta	6,718	NY
SUNY Polytechnic Institute	3,044	NY
Tacoma Community College	5,823	WA

Tallahassee Community College	11,245	FL
Tarleton State University	14,016	TX
Temple University	37,236	PA
Tennessee State University	7,615	TN
Tennessee Technological University	10,177	TN
Texas A & M International University	8,525	TX
Texas A & M University-College Station	70,418	TX
Texas A & M University-Commerce	12,249	TX
Texas A & M University-Corpus Christi	10,820	TX
Texas A & M University-Kingsville	6,932	TX
Texas A&M University-Central Texas	2,339	TX
Texas A&M University-San Antonio	6,759	TX
Texas A&M University-Texarkana	2,171	TX
Texas Southern University	7,015	TX
Texas State University	37,812	TX
Texas Tech University	40,322	TX
Texas Tech University Health Sciences Center	5,274	TX
Texas Tech University Health Sciences Center-El Paso	775	TX
Texas Woman's University	16,433	TX
The College of New Jersey	7,783	NJ
The College of the Florida Keys	856	FL
The Evergreen State College	2,281	WA
The Pennsylvania State University	89,816	PA
The University of Alabama	37,840	AL
The University of Montana	9,808	MT
The University of Montana-Western	1,334	MT
The University of Tennessee Health Science Center	3,181	TN
The University of Tennessee-Chattanooga	11,728	TN
The University of Tennessee-Knoxville	30,559	TN
The University of Tennessee-Martin	7,117	TN
The University of Texas at Arlington	48,072	TX
The University of Texas at Austin	50,476	TX
The University of Texas at Dallas	28,669	TX
The University of Texas at El Paso	24,879	TX
The University of Texas at San Antonio	34,742	TX
The University of Texas at Tyler	9,781	TX
The University of Texas Health Science Center at Houston	5,608	TX
The University of Texas Health Science Center at San Antonio	3,478	TX
The University of Texas MD Anderson Cancer Center	358	TX

The University of Texas Medical Branch at Galveston	3,458	TX
The University of Texas Permian Basin	5,530	TX
The University of Texas Rio Grande Valley	32,441	TX
The University of Virginia's College at Wise	1,905	VA
The University of West Florida	13,061	FL
Thomas Edison State University	10,495	NJ
Towson University	21,917	MD
Troy University	16,497	AL
Truckee Meadows Community College	10,249	NV
Truman State University	4,655	MO
Tyler Junior College	11,749	TX
United States Air Force Academy	4,307	CO
United States Coast Guard Academy	1,056	CT
United States Merchant Marine Academy	1,045	NY
United States Military Academy	4,536	NY
United States Naval Academy	4,594	MD
University at Buffalo	32,347	NY
University of Akron Main Campus	16,094	OH
University of Alabama at Birmingham	22,563	AL
University of Alabama in Huntsville	9,999	AL
University of Alaska Anchorage	11,953	AK
University of Alaska Fairbanks	6,813	AK
University of Alaska Southeast	2,070	AK
University of Arizona	45,601	AZ
University of Arizona-Sierra Vista	395	AZ
University of Arkansas	27,562	AR
University of Arkansas at Little Rock	8,899	AR
University of Arkansas at Monticello	2,645	AR
University of Arkansas at Pine Bluff	2,668	AR
University of Arkansas for Medical Sciences	2,907	AR
University of Arkansas System eVersity	794	AR
University of Arkansas-Fort Smith	5,887	AR
University of Baltimore	4,169	MD
University of California-Berkeley	42,327	CA
University of California-Davis	39,074	CA
University of California-Hastings College of Law	1,026	CA
University of California-Irvine	36,303	CA
University of California-Los Angeles	44,589	CA
University of California-Merced	9,018	CA
University of California-Riverside	26,434	CA

University of California-San Diego	39,576	CA
University of California-San Francisco	3,201	CA
University of California-Santa Barbara	26,179	CA
University of California-Santa Cruz	19,161	CA
University of Central Arkansas	10,335	AR
University of Central Florida	71,881	FL
University of Central Missouri	9,959	MO
University of Central Oklahoma	14,132	OK
University of Cincinnati-Blue Ash College	7,239	OH
University of Cincinnati-Clermont College	7,504	OH
University of Cincinnati-Main Campus	40,826	OH
University of Colorado Boulder	37,437	CO
University of Colorado Colorado Springs	12,380	CO
University of Colorado Denver/Anschutz Medical Campus	24,723	CO
University of Connecticut	27,215	CT
University of Connecticut-Avery Point	564	CT
University of Connecticut-Hartford Campus	1,683	CT
University of Connecticut-Stamford	2,354	CT
University of Connecticut-Waterbury Campus	853	CT
University of Delaware	23,613	DE
University of Florida	53,372	FL
University of Florida-Online	4,407	FL
University of Georgia	39,147	GA
University of Hawaii at Hilo	3,165	HI
University of Hawaii at Manoa	18,025	HI
University of Hawaii Maui College	2,936	HI
University of Hawaii-West Oahu	3,168	HI
University of Houston	47,090	TX
University of Houston-Clear Lake	9,053	TX
University of Houston-Downtown	15,239	TX
University of Houston-Victoria	4,922	TX
University of Idaho	10,791	ID
University of Illinois Chicago	33,518	IL
University of Illinois Springfield	4,146	IL
University of Illinois Urbana-Champaign	52,679	IL
University of Iowa	30,318	IA
University of Kansas	26,744	KS
University of Kentucky	29,986	KY
University of Louisiana at Lafayette	16,450	LA
University of Louisiana at Monroe	8,888	LA

University of Louisville	22,211	KY
University of Maine	11,741	ME
University of Maine at Augusta	4,202	ME
University of Maine at Farmington	1,862	ME
University of Maine at Fort Kent	1,624	ME
University of Maine at Machias	762	ME
University of Maine at Presque Isle	1,467	ME
University of Mary Washington	4,293	VA
University of Maryland Baltimore	7,137	MD
University of Maryland Eastern Shore	2,646	MD
University of Maryland Global Campus	58,526	MD
University of Maryland-Baltimore County	13,497	MD
University of Maryland-College Park	40,709	MD
University of Massachusetts Medical School Worcester	1,292	MA
University of Massachusetts-Amherst	31,642	MA
University of Massachusetts-Boston	16,259	MA
University of Massachusetts-Dartmouth	7,869	MA
University of Massachusetts-Lowell	18,150	MA
University of Memphis	22,205	TN
University of Michigan-Ann Arbor	47,907	MI
University of Michigan-Dearborn	8,783	MI
University of Michigan-Flint	6,829	MI
University of Minnesota-Crookston	2,530	MN
University of Minnesota-Duluth	10,275	MN
University of Minnesota-Morris	1,339	MN
University of Minnesota-Rochester	632	MN
University of Minnesota-Twin Cities	52,017	MN
University of Mississippi	21,014	MS
University of Missouri-Columbia	31,089	MO
University of Missouri-Kansas City	16,147	MO
University of Missouri-St Louis	13,874	MO
University of Montevallo	2,600	AL
University of Nebraska at Kearney	6,225	NE
University of Nebraska at Omaha	15,892	NE
University of Nebraska Medical Center	3,699	NE
University of Nebraska-Lincoln	25,108	NE
University of Nevada-Las Vegas	31,142	NV
University of Nevada-Reno	20,722	NV
University of New Hampshire at Manchester	717	NH
University of New Hampshire-Franklin Pierce School of Law	442	NH

University of New Hampshire-Main Campus	14,348	NH
University of New Mexico-Main Campus	22,311	NM
University of New Orleans	8,375	LA
University of North Alabama	8,086	AL
University of North Carolina at Asheville	3,363	NC
University of North Carolina at Chapel Hill	30,092	NC
University of North Carolina at Charlotte	30,146	NC
University of North Carolina at Greensboro	19,764	NC
University of North Carolina at Pembroke	8,262	NC
University of North Carolina School of the Arts	1,070	NC
University of North Carolina Wilmington	17,915	NC
University of North Dakota	13,615	ND
University of North Florida	16,926	FL
University of North Georgia	19,793	GA
University of North Texas	40,953	TX
University of North Texas at Dallas	4,164	TX
University of North Texas Health Science Center	2,329	TX
University of Northern Colorado	11,460	CO
University of Northern Iowa	9,507	IA
University of Oklahoma-Health Sciences Center	3,116	OK
University of Oklahoma-Norman Campus	27,772	OK
University of Oregon	21,752	OR
University of Pittsburgh-Bradford	1,305	PA
University of Pittsburgh-Greensburg	1,408	PA
University of Pittsburgh-Johnstown	2,356	PA
University of Pittsburgh-Pittsburgh Campus	32,277	PA
University of Rhode Island	17,649	RI
University of Science and Arts of Oklahoma	733	OK
University of South Alabama	14,224	AL
University of South Carolina Aiken	3,944	SC
University of South Carolina Beaufort	2,006	SC
University of South Carolina-Columbia	35,470	SC
University of South Carolina-Upstate	6,038	SC
University of South Dakota	9,459	SD
University of South Florida	50,626	FL
University of Southern Indiana	10,203	IN
University of Southern Maine	8,022	ME
University of Southern Mississippi	14,606	MS
University of Texas Health Science Center at Tyler	89	TX
University of Texas Southwestern Medical Center	2,299	TX

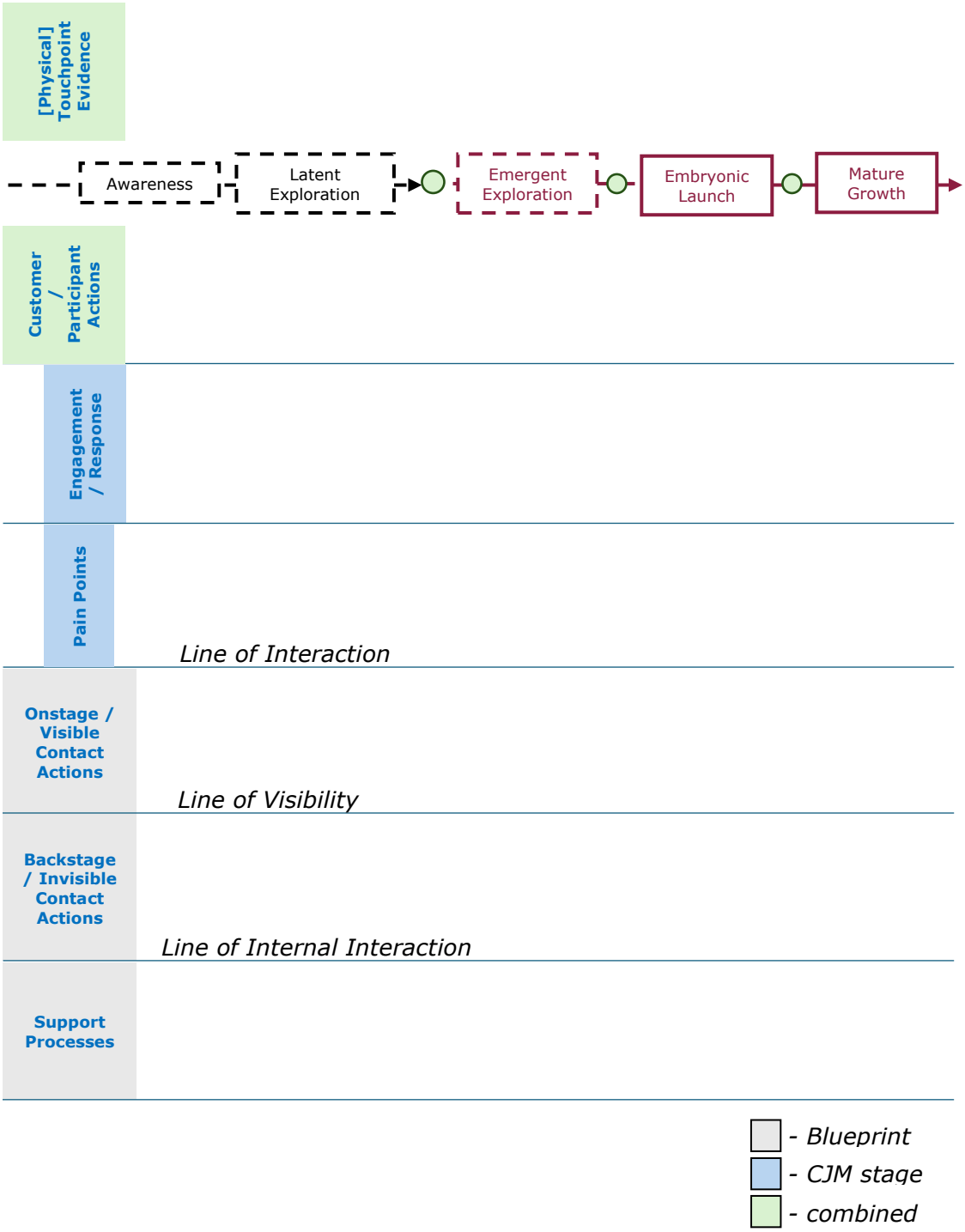
University of the District of Columbia	3,725	DC
University of the District of Columbia-David A Clarke School of Law	221	DC
University of Toledo	18,319	OH
University of Utah	33,081	UT
University of Vermont	13,292	VT
University of Virginia-Main Campus	25,628	VA
University of Washington-Bothell Campus	6,304	WA
University of Washington-Seattle Campus	48,149	WA
University of Washington-Tacoma Campus	5,364	WA
University of West Alabama	5,734	AL
University of West Georgia	13,419	GA
University of Wisconsin-Eau Claire	11,017	WI
University of Wisconsin-Green Bay	8,954	WI
University of Wisconsin-La Crosse	10,531	WI
University of Wisconsin-Madison	44,640	WI
University of Wisconsin-Milwaukee	24,565	WI
University of Wisconsin-Milwaukee Flex	590	WI
University of Wisconsin-Oshkosh	15,314	WI
University of Wisconsin-Parkside	4,452	WI
University of Wisconsin-Parkside Flex	145	WI
University of Wisconsin-Platteville	7,547	WI
University of Wisconsin-River Falls	5,855	WI
University of Wisconsin-Stevens Point	8,302	WI
University of Wisconsin-Stout	7,970	WI
University of Wisconsin-Superior	2,560	WI
University of Wisconsin-Whitewater	11,989	WI
University of Wyoming	11,829	WY
Upstate Medical University	1,528	NY
Utah State University	27,691	UT
Utah Valley University	40,936	UT
Valdosta State University	12,304	GA
Valencia College	45,949	FL
Valley City State University	1,676	ND
Vermont Technical College	1,520	VT
Vincennes University	16,048	IN
Virginia Commonwealth University	29,070	VA
Virginia Military Institute	1,698	VA
Virginia Polytechnic Institute and State University	37,024	VA
Virginia State University	4,020	VA
Walla Walla Community College	2,940	WA

Washburn University	5,880	KS
Washington State University	31,159	WA
Wayne State College	4,202	NE
Wayne State University	26,241	MI
Weatherford College	5,480	TX
Weber State University	29,596	UT
Wenatchee Valley College	3,090	WA
West Chester University of Pennsylvania	17,719	PA
West Liberty University	2,481	WV
West Los Angeles College	11,417	CA
West Texas A & M University	10,036	TX
West Virginia School of Osteopathic Medicine	800	WV
West Virginia State University	3,638	WV
West Virginia University	26,269	WV
West Virginia University at Parkersburg	2,624	WV
West Virginia University Institute of Technology	1,645	WV
Western Carolina University	12,243	NC
Western Colorado University	3,203	CO
Western Connecticut State University	5,246	CT
Western Illinois University	7,490	IL
Western Kentucky University	17,517	KY
Western Michigan University	19,887	MI
Western Nevada College	3,495	NV
Western New Mexico University	2,896	NM
Western Oregon University	4,554	OR
Western Washington University	15,197	WA
Westfield State University	5,395	MA
Whatcom Community College	2,719	WA
Wichita State University	14,999	KS
William & Mary	8,939	VA
William Paterson University of New Jersey	9,635	NJ
Winona State University	7,106	MN
Winston-Salem State University	5,169	NC
Winthrop University	5,576	SC
Worcester State University	5,724	MA
Wright State University-Lake Campus	1,749	OH
Wright State University-Main Campus	10,936	OH
Yakima Valley College	3,954	WA
Youngstown State University	11,835	OH
Zane State College	2,223	OH

APPENDIX D

CUSTOMER JOURNEY BLUEPRINT

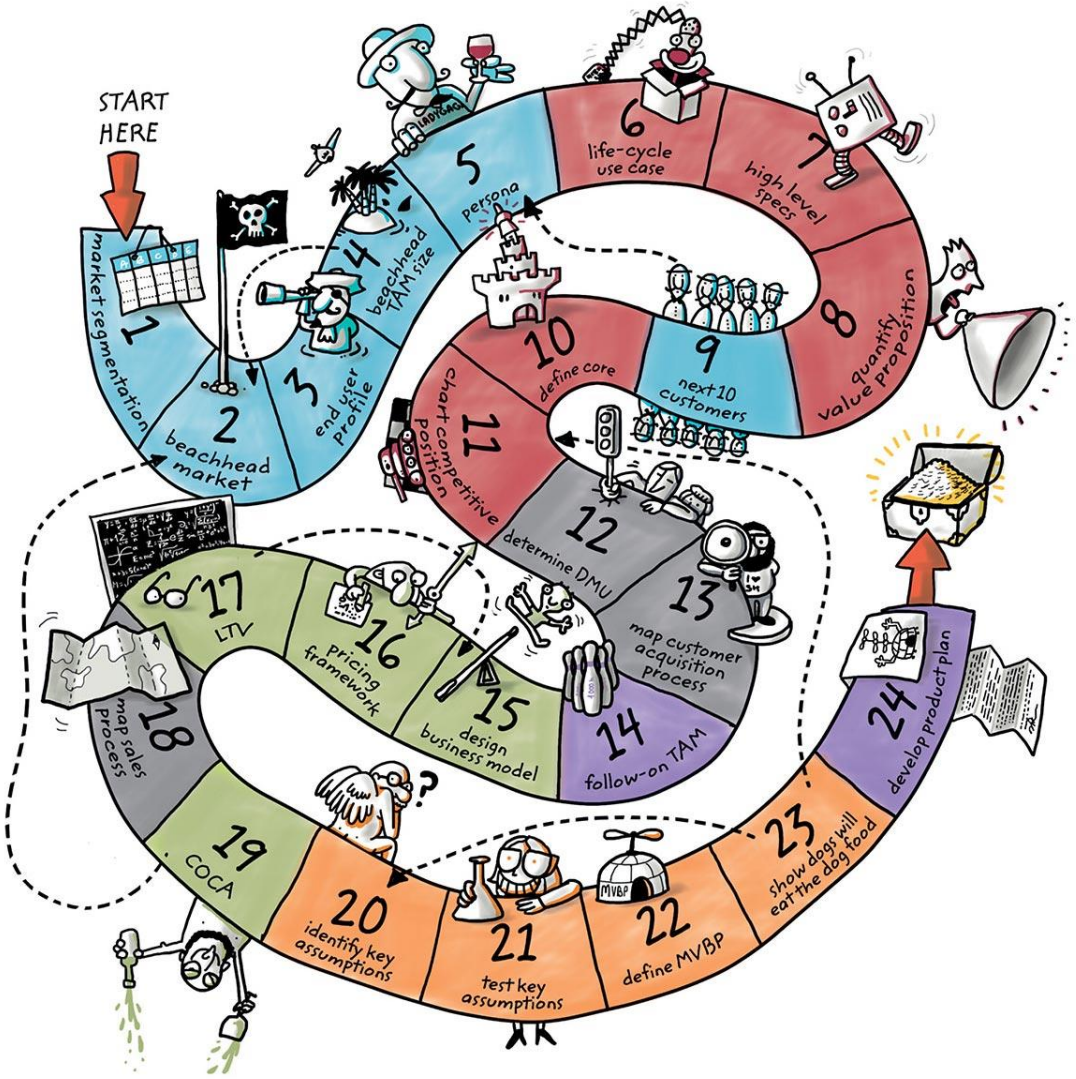
There is some clear overlap in the Customer Journey Mapping (CJM) and Service Blueprinting methodologies; utilizing both in partnership presents an opportunity to merge the two user-centric methodologies into a combined unit of programmatic analysis.



APPENDIX E

DISCIPLINED ENTREPRENEURSHIP PROCESS

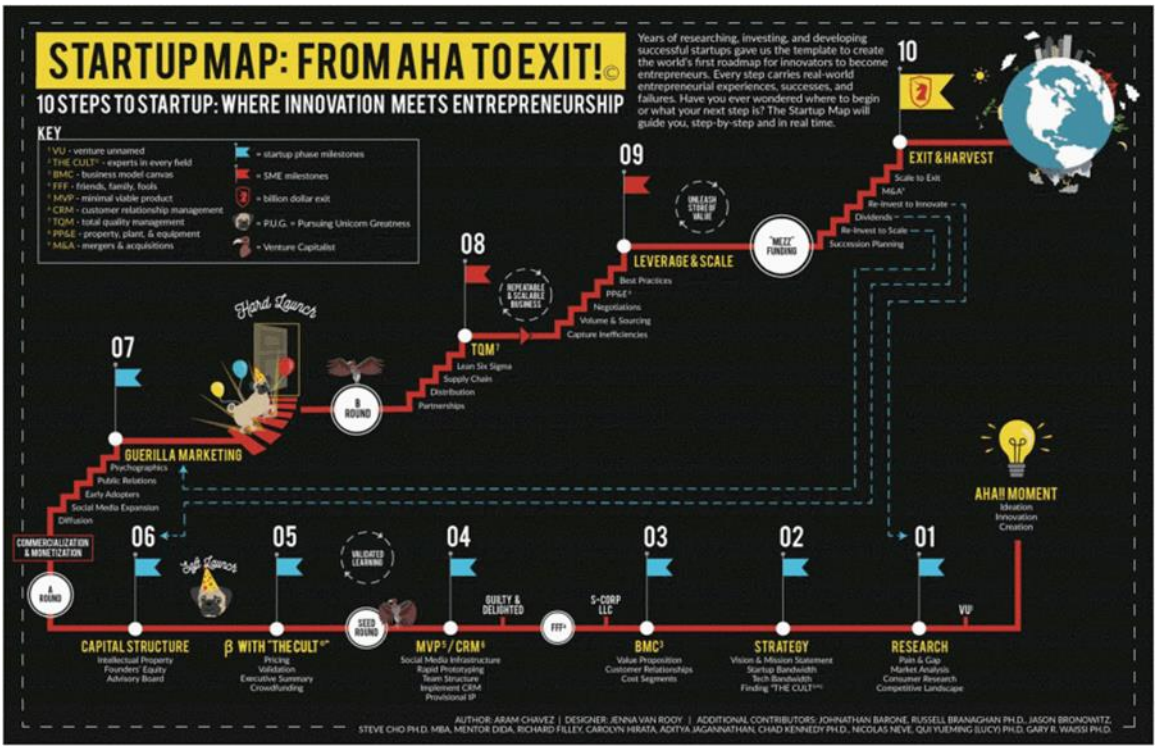
This is the most common image shared re: the Disciplined Entrepreneurship (Aulet, 2013) book, workbook, and shared on their personal website (https://www.d-eship.com/en/framework/).



APPENDIX F

STARTUP MAP

It is more difficult to find images of the AHA to Exit! Startup Map, and this is an image that was shared via a 2019 blog post from Arizona State University on the topic (https://entrepreneurship.engineering.asu.edu/2018/01/post/) and shared in article from Cho, Chomina-Chavez, & Bronowitz (2017).



APPENDIX G

EPI CONSIDERED VARIABLES

As proposed by Crews, et al., (2021), the entrepreneurial capacity index is an ecosystem-level framework that reduces entrepreneurship, as an economic tool, into the individual variables which allow for the prediction, and ranking, of ecosystems' ability to promote and support entrepreneurialism. The identified variables (which are time sensitive to the year(s) of the report), and their definitions, are as outlined below:

Young Firm Employment Share	The share of all private employment in a state held firm ages five years and less
Young Firm Knowledge Intensity	The share of all state employment at firms aged five years and less where the worker has obtained a bachelor's degree or higher
Young Firm Deals per Million	Total count of pre-seed, incubator, accelerator, seed, angel, early-stage venture capital, and late-stage venture capital deals to a state's businesses, per million people.
Young Firm Capital per Million	Total value of pre-seed, incubator, accelerator, seed, angel, early-stage venture capital, and late-stage venture capital deals to a state's businesses, per million people.
Government Grants to Businesses per Million	Total count of government grants to a state's businesses, per million people
Government Grant Capital to Businesses per Million	Total value of government grants to a state's businesses, per million people
Percentage of Households with a Computer in the Home	Share of a state's households with a computer in the home; smartphones are considered computers
Percentage of Households with a Home Broadband Connection	Share of a state's households with a broadband internet connection
Percentage of the Adult Population with a bachelor's degree or higher	Share of the population ages 25 and older with a bachelor's degree or higher education
Business Research and Development Spending per Million	Research and development spending by businesses in the state, per million people
Federal Government Research and Development Spending per Million	Research and development spending funding to state-residing institutions from the federal government, per million people
Higher Education Research and Development Spending per Million	Research and development expenditures at a states' higher education institutions, per million people
Utility Patents per Million	Count of patents to a state's investors for an actual product, not simply the visual aspects of its design (design patent)

SBIR Awards per Million	Count of Small Business Innovation Research awards given to a state's small businesses, per million people; these awards provide funding to small businesses to engage in research and development activity and attempt to commercialize related discoveries.
InBIA Member Organizations per Million	Count of a state's current member organizations of the International Business Innovation Association, which provides support and idea-sharing opportunities to entrepreneurship support organizations
Total STEM Degree Awards per Million	Total bachelor's, master's, and doctorate STEM (Science, Technology, Engineering, and Mathematics) degree awards from a state's academic institutions, per million people; the Department of Homeland Security's 2016 STEM programs definition is used to identify STEM degrees
Location Quotient for STEM Occupations	State employment location quotient for STEM (Science, Technology, Engineering, and Mathematics) occupations, the Census Bureau's definition of STEM occupations is used to identify STEM occupations; an employment location quotient is the ratio of the share of all state employees in a certain occupation/industry to the share of all national employees in the same occupations/industries
Corporate Income Tax Business Friendliness Index	Business friendliness of a state's corporate income tax structure
Individual Income Tax Business Friendliness Index	Business friendliness of a state's individual income tax structure
Sales Tax Business Friendliness Index	Business friendliness of a state's sales tax structure
Property Tax Business Friendliness Index	Business friendliness of a state's property tax structure
Unemployment Insurance Tax Business Friendliness Index	Business friendliness of a state's unemployment insurance tax structure
Large Establishment Employment Share	Share of all state employment held at establishments with 1000 or more workers
Mountain Count	Number of mountains in the state among the top 200 nationally by prominence (height from base to top)
Shoreline Miles	Length of a state's ocean and/or Great Lakes shoreline in miles

adapted from Crews, et al. (2021) p.36

APPENDIX H

IRB DOCUMENTATION

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Andrew Maynard
CGF: Future of Innovation in Society, School for the (SFIS)
480/727-8831
Andrew.Maynard@asu.edu

Dear Andrew Maynard:

On 10/19/2023 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Democratizing Entrepreneurship: A Scoping Review
Investigator:	Andrew Maynard
IRB ID:	STUDY00018861
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• [short form] Participant Consent (interview) (2).pdf, Category: Consent Form; • Interview Questions (Undisciplined) (2).pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • IRB Social Behavioral Protocol [Undisciplined].docx, Category: IRB Protocol; • Recruitment Script (Invite) (1).pdf, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 10/19/2023.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required.

Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Jared Byrne
Jared Byrne

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Andrew Maynard
CGF: Future of Innovation in Society, School for the (SFIS)
480/727-8831
Andrew.Maynard@asu.edu

Dear Andrew Maynard:

On 9/5/2023 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Entrepreneurial Participants
Investigator:	Andrew Maynard
IRB ID:	STUDY00018384
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• IRB Social Behavioral Protocol (2).docx, Category: IRB Protocol; • Venture Devils data Approval.pdf, Category: Other;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (4) Secondary research on data or specimens (no consent required) on 9/5/2023.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Jared Byrne
Jared Byrne

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Andrew Maynard
CGF: Future of Innovation in Society, School for the (SFIS)
480/727-8831
Andrew.Maynard@asu.edu

Dear Andrew Maynard:

On 3/13/2023 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Democratizing Entrepreneurial Participation (Dissertation1)
Investigator:	Andrew Maynard
IRB ID:	STUDY00017639
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• [Short] Participant Consent.pdf, Category: Consent Form; • E-mail Script (students).pdf, Category: Recruitment Materials; • Interview Questions.pdf, Category: Other; • IRB Social Behavioral Protocol (3-6-2023) (2).docx, Category: IRB Protocol; • Questions (no consent questions included), Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Recruitment Script (students).pdf, Category: Recruitment Materials; • Shelly Potts Response (as requested), Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Survey Questions (Consent Removed), Category: Other;

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The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 3/13/2023.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Jared Byrne
Jared Byrne