



Increasing Returns and the Domain of Entrepreneurship Research

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The domain definition of entrepreneurship research is “in play” as the Academy of Management Entrepreneurship Division prepares to submit a revision to its 1995 Domain Statement; and as “inclusive” vs. “distinctive” adjectives characterize the debate. In this essay, I argue that the inclusiveness/distinctiveness question itself poses a false dilemma detrimental to the development of entrepreneurship research as a field of excellence, when seen as a domain of increasing vs. decreasing returns. To encourage balanced discussion, I analyze the current and proposed domain statements according to their implicit worldview, content, basis for boundary setting, and implications for resolving domain-boundary conflicts.

Introduction

To what extent should the domain of entrepreneurship research be distinctive or inclusive? Some argue that broad inclusiveness may signal a takeover of entrepreneurship research by a neighboring field (e.g., Baker & Pollock, 2007; Meyer, 2009). Others argue for a domain distinctiveness that is sufficient to bound entrepreneurship as a field of scholarship (e.g., Shane & Venkataraman, 2000; Venkataraman, 1997), which may thereby diminish threats of encroachment. Still others argue for some kind of combination: e.g., the distinctive *and* inclusive domain of entrepreneurial cognition research (Mitchell et al., 2004, emphasis added). I argue in this paper that the inclusiveness/distinctiveness question itself poses a false dilemma that is detrimental to the development of entrepreneurship research as field of excellence, when seen through the lens of a different worldview: as a domain of increasing vs. decreasing returns.

Increasing-returns domains are thought to accentuate changes in momentum, where that which is ahead tends to get further ahead (Arthur, 1996, p. 100). Decreasing-returns domains accentuate the impact scarcity, where “economic” actors try to divide up a fixed, scarce pie. An analysis of the nature of the entrepreneurship research domain (increasing vs. decreasing returns) is relevant at this point in time, because the Domain Statement of the Entrepreneurship Division of the Academy of Management is under review; and members of this research community will be asked to consider domain-statement language that—to some—may appear to move too far away from “distinctiveness” toward

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“inclusiveness,” continuing a debate that has the potential to reduce momentum, if viewed through an increasing-returns lens.

At the core of domain debates are the declarations or assertions that delineate the boundaries of a scholarly domain, which are adopted by scholars concerned with research in that domain, e.g., the domain statement of the Entrepreneurship Division of the Academy of Management. As an involved member of the Entrepreneurship Division in various capacities over the years, I have engaged in this discussion as a participant observer; and in doing so, I have found myself thinking that the Division should update its domain statement (c. 1995) to reflect current realities in a way that might encourage the research excellence that has been the focus of the Division in recent years (cf. Mitchell & Dino, 2011). In this article, I therefore wish to introduce into the domain-statement discussion a concept that I consider to be important to the dialogue: The idea that the concept of increasing vs. diminishing returns can be applied to effectively bound the domain of scholarship for the field of entrepreneurship research.

Background

For most of recorded history, the process of bounding domains of scholarship—both constraining and expanding them—has been thought to be one of the core civilizing processes (Durant, 1935). A “domain of scholarship,” as it contributes to the refinement of knowledge-development processes, can be defined to be: the language, knowledge, technology, and art particular to the conducting and dissemination of specialized research (1935, p. 3, as adapted). The inherent dilemma posed in the distinctiveness/inclusiveness debate (at least in the case of entrepreneurship research) is motivated I believe by fear of the consequences of perceived error in either direction: where scholars worry that the freedom of unbounded exploration and inclusion can lead to chaos and loss of identity, and simultaneously, that the constraints of too-rigid, distinctiveness-based consensus-building among select groups of scholars can lead to domain insularity.

In the paragraphs that follow, I argue that this kind of thinking is based upon a false dilemma (e.g., Fearnside & Holther, 1959) that results from mistakes in logic and in framing that thereby create silo-based strife, which destructively inhabits the intellectual space where collaborative dialogue could reside, and that this strife limits the potential for knowledge creation and dissemination (the ongoing development of the entrepreneurship craft in all its varieties by succeeding generations). In a false dilemma “. . . the speaker represents the situation as offering only undesirable alternative when the facts do not warrant it” (Fearnside & Holther, p. 32).

We therefore have the opportunity to examine the possibilities for a change in logic and framing—from domain-boundary reasoning based on “diminishing-returns” logic (which suggests undesirable alternatives [such as under-distinctiveness or over-inclusiveness] inconsistent with the fact that in intellectual “production,” there is no fixed scarce factor), to domain-boundary reasoning based on “increasing-returns” logic (which, based on the fact that knowledge creation has virtually infinite potential, opens the possibility for desirable alternatives [such as a more-refined classification approaches]). This analysis would recast the domain-bounding approach of our knowledge community, as self-reinforcing/increasing-returns creating (and hence pie-size expanding), rather than as self-limiting/diminishing-returns producing (and hence pie-size restricting).

Accordingly, to avoid both of the aforementioned domain-boundary-based errors (i.e., either over-restriction or chaotic expansion), that is, to thereby move the entrepreneurship research field toward the coherence needed, for example, for paradigm

development, while still aiding, abetting, and perhaps even accelerating exploration, it might be argued that the logic of increasing returns ought to be employed to provide a fresh framework for understanding, interpreting, and bounding the new world of entrepreneurship research in which we now find ourselves as a scholarly community. Furthermore, it might be argued that current assumptions rooted in the (somewhat) default logic of diminishing returns according to some supposed fixed scarce factor, need not necessarily remain the *de facto* interpretation of issues surrounding domain boundary setting. By focusing on the more fundamental worldview question, which reframes the domain discussion in terms of an increasing-returns logic, distractions stemming from any false-dilemma-based interpretations that pit inclusiveness against distinctiveness may be avoided. Then, the research-community decision that is actually necessary can be taken: to redirect our attention to the establishment of realistic and useful boundaries that capture the benefits of increasing-returns logic.

Setting

One useful exercise might therefore be to compare, in somewhat general terms, the current domain statement of the Entrepreneurship Division with a *draft* domain statement that was recently adopted by the Executive Committee of the Division (Mid-winter Meeting, February 2010) and is in the process of working its way through the Academy of Management approval process (presently, itself, under review by the Academy's Board of Governors). In this comparison, I hope to be able to illustrate the idea that the current domain statement tends more toward, and is therefore an example of, diminishing-returns logic; and that the draft domain statement as proposed tends more toward the logic of increasing returns—although not completely so as the reader will likely observe. To set the stage for this analysis, the two domain statements in question are provided below as follows:

Current Domain Statement

Since 1995, the Domain Statement of the Entrepreneurship Division of the Academy of Management has read:

Specific domain: the creation and management of new businesses, small businesses and family businesses, and the characteristics and special problems of entrepreneurs. Major topics include: new venture ideas and strategies; ecological influences on venture creation and demise; the acquisition and management of venture capital and venture teams; self-employment; the owner-manager; management succession; corporate venturing and the relationship between entrepreneurship and economic development. (Revised 4/95)

Draft Domain Statement

The revised domain statement proposed¹ by the Executive Committee (awaiting the initiation of the AOM approval process) is:

1. The exact wording of this domain statement may change as the review process proceeds.

Specific domain: (a) the actors, actions, resources, environmental influences and outcomes associated with the emergence of opportunities and/or economic activities in multiple organizational contexts, and (b) the characteristics, actions and challenges of owner-managers and their businesses. (Proposed 2/10)

The important distinction to note between the two statements is the change from a domain statement that is anchored by specific phenomena: organization types and research topics, to one that is focused more on the more general/seminal, organizing processes and explanatory constructs. One might hope that an analysis based upon a fresh worldview interpretation of entrepreneurship research (that is, using an increasing-returns logic), would explain how increasing-returns logic can be helpful as the adoption of a new domain statement is considered—to avoid needless acrimony based upon flawed assumptions or misdirected attention. There is some evidence to support this hope.

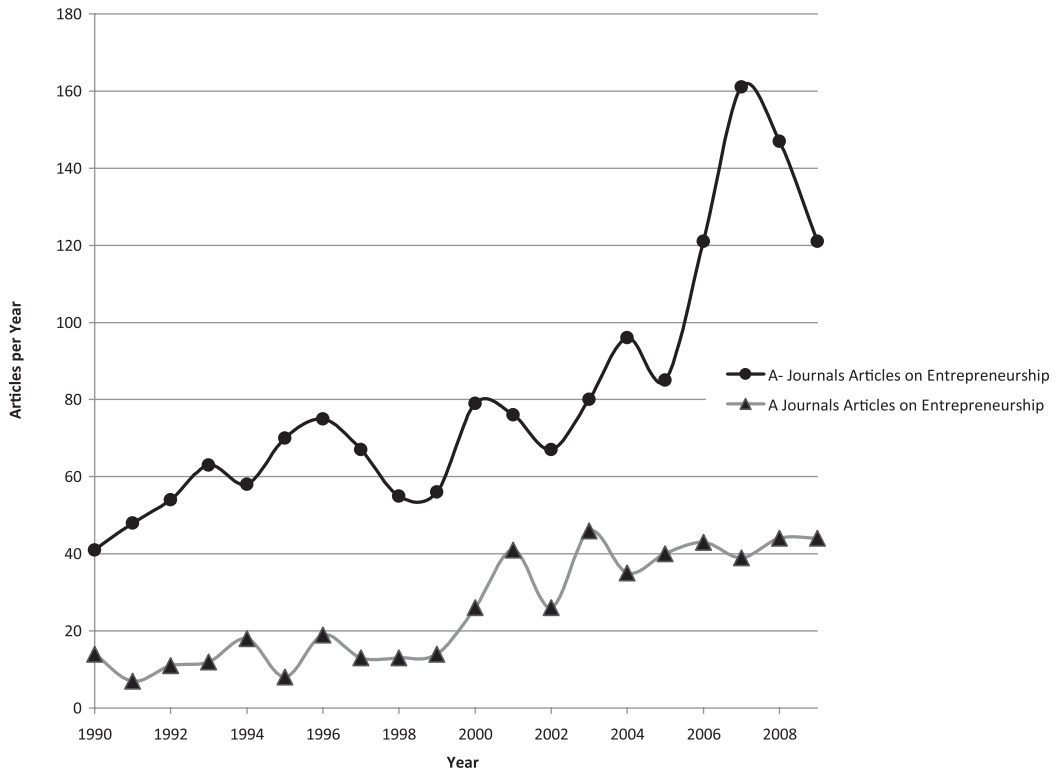
Increasing Returns

The difference between diminishing-returns and increasing-returns assumptions is based on the notion of feedback: The “negative” feedback from diminishing-returns logic suggests that due to fixed scarce factors, the value of an incremental new unit is lower than that of its predecessor; while the “positive” feedback from increasing-returns logic suggests that due to self-reinforcement, each incremental new unit may be more highly valued (Arthur, 1994). Consider for purposes of comparison, production that occurs in agriculture and mining (which is more subject to fixed scarce factors) as contrasted with knowledge-based production (that is less subject to fixed scarce factors). In the former case, the difficulties of moving toward increasingly larger scale production that depends upon diminishing returns from scarce fertile land, or high-quality ore deposits, tend to become greater as scale increases. However, in the case of increasing-returns-type phenomena (e.g., pharmaceuticals, software, telecommunications, knowledge work), such difficulties are less constraining because future production depends primarily upon a start-up investment that—due to path-dependent building of momentum—creates increasing-returns-type conditions. As scale then increases, and because the cost of producing each marginal new unit is relatively small, substantially fewer problems are encountered in the growth process—and return increases thereby become self-reinforcing.

An analysis of the scale of entrepreneurship research over the past two decades (1990–2009), identifies two very basic quantitative properties, which suggest that an increasing returns worldview of the entrepreneurship research domain is now much more relevant to the domain-specification discussion. These are (1) the number of articles using the term “entrepreneurship” published per year in a representative set of both “A” and “A-” journals, and (2) the number of faculty members who have become members of the Entrepreneurship Division of the Academy of Management. Of course, simply counting up articles or numbers of scholars does not fully explain the increasing-returns phenomenon in entrepreneurship research, but it provides a starting place and some relevant indicators. Thus, assuming differences in scholarly interests, and the capability of the peer review process to inhibit direct duplication (as distinct from replication), these basic counts do illustrate how the increasing breadth of thinking and scholarship brought to entrepreneurship research by these many more articles written by many more scholars, demonstrates the increasing-returns phenomenon at work: a growing “positive” feedback momentum due to self-reinforcement.

Figure 1

Number of Entrepreneurship Articles per Year



As shown in Figure 1, during the past two decades, the number of entrepreneurship-related articles per year in both the “A” and “A-” journals shown has grown largely at an increasing rate.

Also, Academy of Management records indicate that the number of scholars working in the field has increased from fewer than 700 members of the Entrepreneurship Division in 1990, to over 2,600 in 2010; which is a nontrivial rate of growth considering the continued increase implied in the institutional base needed to support this growth (Table 1).

The logic of increasing returns suggests that the addition of each incremental unit provides or attracts reinforcement, and the foregoing evidence in the field of entrepreneurship suggests that this type of momentum building is a current reality. This means that for purposes of the analysis in this paper, there is some justification to support the idea that the entrepreneurship research domain can credibly be considered now to operate as an increasing-returns-driven phenomenon.

This observation leads to the following question: What can using an increasing-returns worldview vs. the prevailing diminishing-returns worldview do for the building of consensus surrounding the entrepreneurship research domain statement? In the following two sections, two potential benefits are suggested: First, a method in support of the idea that increasing-returns thinking enables paradigm development by providing a rationale for domain boundary setting that leads away from an unproductive (and likely also

Table 1

Entrepreneurship Division Membership
1990–2010

Year	# of members	Yearly growth %	Cumulative growth %
1990	688		
1991	725	5.4%	
1992	699	-3.6%	1.6%
1993	746	6.7%	8.4%
1994	804	7.8%	16.9%
1995	786	-2.2%	14.2%
1996	795	1.1%	15.6%
1997	873	9.8%	26.9%
1998	917	5.0%	33.3%
1999	1,025	11.8%	49.0%
2000	1,068	4.2%	55.2%
2001	1,176	10.1%	70.9%
2002	1,222	3.9%	77.6%
2003	1,426	16.7%	107.3%
2004	1,640	15.0%	138.4%
2005	1,833	11.8%	166.4%
2006	2,033	10.9%	195.5%
2007	2,204	8.4%	220.3%
2008	2,425	10.0%	252.5%
2009	2,559	5.5%	271.9%
2010	2,622	2.5%	281.1%

Source: Academy of Management Archives.

erroneous) “scarcity” mentality; and second, that increasing-returns thinking supports domain boundary setting by specifically addressing, in a new way, the core problem of classification (i.e., to delineate which phenomena are “within,” and which are considered to be “without” a given boundary of study). This analysis is important to the expansion of the boundary of the entrepreneurship research domain without threat to its integrity, but it also may be important to the enhancement of the societal and economic impact of that research.

Toward a Paradigm-Building Rationale

Ritzer (1975) suggests that the prerequisite for paradigm development is consensus—agreement within a scholarly community on domain boundaries, for example: “the exemplars, theories, methods, and instruments that exist within [a science]” (p. 157). Therefore, in my view, one of the key next steps toward the advent of an entrepreneurship research paradigm will be in enabling agreement on domain boundaries. I further suggest that a core task to spur paradigm development, then, is to explore the means for delineating an effective domain boundary based on increasing-returns logic.

The current domain boundaries of entrepreneurship research have continued to develop over at least the past two decades (please see Table 2). As illustrated in Table 2,

Table 2

Domain-Related Examples in Recent Literature

Year	Journal	Author(s)	Excerpt
1990	<i>Strategic Management Journal</i>	(Schendel)	... a broader view of entrepreneurship would include not only the popular view of entrepreneurship defined above, but one that also recognizes the notion of re-birth of ongoing organizations . . . (p. 2).
1990	<i>Strategic Management Journal</i>	(Stevenson & Jarillo)	... The main traits generally believed to be associated with entrepreneurship . . . however, were deemed to be also desirable traits for large corporations, by theorists and practitioners alike. Thus the field of corporate entrepreneurship was born . . . (p. 17).
1990	<i>Strategic Management Journal</i>	(Guth & Ginsberg)	... The topic of corporate entrepreneurship encompasses two types of phenomena and the processes surrounding them: (1) the birth of new businesses within existing organizations . . . (2) the transformation of organizations through renewal of the key ideas on which they are built . . . (p. 5).
1999	<i>Journal of Business Venturing</i>	(Kaufmann & Dant)	... domains of entrepreneurship and management research have been traditionally demarcated rather sharply: research in entrepreneurship is focused on the formation of new firms, whereas research in management is directed on the functioning of existing firms. . . . definitions of entrepreneurship have been expanded to include noncommercial endeavors. For instance, Amit, Glosten, & Muller (1993) note that entrepreneurs are often "categorized into those who are profit-seeking, either working individually or in a corporate setting, and those who are not profit seeking, working in charitable, government and other not-for-profit organizations." Second, new definitions have been offered for entrepreneurs that do not include the creation of a new and innovative enterprise . . . (p. 6).
2000	<i>Academy of Management Journal</i>	(McDougall & Oviatt)	... I have previously defined international entrepreneurship as "new and innovative activities that have the goal of value creation and growth in business organizations across national borders" (McDougall & Oviatt, 1997, p. 293). Building on prior efforts and what I have learned from the submissions to this forum, I believe the meaning of the term "international entrepreneurship" can now be further specified: International entrepreneurship is a combination of innovative, proactive, and risk-seeking behavior that crosses national borders and is intended to create value in organizations. The study of international entrepreneurship includes research on such behavior and research comparing domestic entrepreneurial behavior in multiple countries . . . (p. 903).
2000	<i>Academy of Management Review</i>	(Shane & Venkataraman)	... the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited . . . (p. 218)
2000	<i>The Blackwell Handbook of Entrepreneurship</i>	(Hitt & Ireland)	... the increasing convergence between strategy and entrepreneurship scholars, highlighting five areas: innovation, networks, learning, top management teams and governance, and change . . . (p. 49).
2002	<i>Administrative Science Quarterly</i>	(Anderson)	... One is the notion that entrepreneurship should be studied as a local process, bounded by the resources and shared cognitions of bounded geographic regions. Another is that the shared mental models of entrepreneurs who share some local identity is an important level of analysis—struggles over meaning, identity, and reputation are as important as struggles over financial or physical assets. A third is that entrepreneurs are deeply affected by the collective strategies that institutional actors pursue. The editors suggest that the core problem of entrepreneurship is how interactions and collective actions create markets paces, not how individual entrepreneurs identify opportunities and organize to exploit them . . . (p. 734).

Table 2

Continued

Year	Journal	Author(s)	Excerpt
2003	<i>Administrative Science Quarterly</i>	(Greve)	... The main problem of entrepreneurship research is defining the boundary of the field, especially explaining the difference between strategic management and entrepreneurship research, given the apparent overlap of themes... Strategic Entrepreneurship is a rallying point and an invitation that can be used as a source of ideas for future research on strategy and entrepreneurship... (p. 348).
2004	<i>Entrepreneurship Theory and Practice</i>	(Mitchell et al.)	... distinctiveness and inclusivity appear to have a substantial zone of compatibility when viewed through the lens of entrepreneurial cognition research... entrepreneurial cognition research is a particular sort of combination: at least a mosaic, but unlikely to be a melting pot or a hybrid... (p. 516).
2005	<i>Academy of Management Journal</i>	(Ireland, Reutzel, & Webb)	... A survey of published research shows that the entrepreneurship construct is variously argued to concern opportunity identification and exploitation (Shane & Venkataraman, 2000), corporate renewal (Guth & Ginsberg, 1990), and the creation of firms (Alvarez, 2003; Vesper, 1982), among other things. Many of these arguments are in some form or fashion grounded in the classic work of scholars such as Knight (1921), Schumpeter (1934), and Kirzner (1973). Following a survey of the literature and with the objective of offering scholars an integrated and hopefully valid definition of the entrepreneurship construct, Sharma and Chrisman argued that entrepreneurship "encompasses acts of organizational creation, renewal, or innovation that occur within or outside an existing organization..." (p. 17).
2008	<i>Entrepreneurship Theory and Practice</i>	(Bruton, Ahlstrom, & Obloj)	... However, entrepreneurship research can still be critiqued as almost exclusively focused on North American and European research sites. The exploration of domains outside of these two developed economic regions remains extremely limited. In particular, little is known of entrepreneurship in emerging economies: economies that are increasingly moving to market orientation and seeking to rapidly advance economically... (p. 1).
2009	<i>Entrepreneurship Theory and Practice</i>	(Ireland, Covin, & Kuratko)	... The components of our CE strategy model include (1) the antecedents of CE strategy (2) the elements of CE strategy (3) the outcomes of CE strategy... (p. 19).
2009	<i>Journal of Small Business Management</i>	(Mullen, Budeva, & Doney)	... a strong methodological foundation built on state-of-the-art research technologies is necessary to support further paradigmatic growth and maturation... (p. 288).
2009	<i>Journal of Business Venturing</i>	(Phan, Wright, Ucbasaran, & Tan)	... I suggest some future research, with particular emphasis on the corporate governance mechanisms that foster CE and the requisite managerial roles and skills in instigating and supporting entrepreneurial activities at different levels of the organization... (p. 197).
2009	<i>Academy of Management Review</i>	(Rindova, Barry, & Ketchen)	... I define "entrepreneurship" as efforts to bring about new economic, social, institutional, and cultural environments through the actions of an individual or group of individuals. Thus, I view entrepreneurship as an emancipatory process with broad change potential. This view foregrounds three aspects of entrepreneurship that merit closer attention in future research—seeking autonomy, authoring, and making declarations... (p. 477).
2009	<i>Entrepreneurship Theory and Practice</i>	(Schindehutte & Morris)	... become boundary-crossing with various continua that allow for movement from one theoretical standpoint to another... (p. 271).

domain-related language in the literature has included statements that are increasingly broad (encompassing, for example, corporate and international entrepreneurship), but also those that are increasingly narrow (focusing, for example, on a distinctive domain, such as on opportunities). A quick scan of the excerpts represented in Table 2 reveals a trend somewhat away from broad, toward narrow—suggesting that a diminishing returns logic may be gaining ground. Two decades ago, domain descriptions were more or less characterized using terminology such as “broader view” (Schendel, 1990, p. 2), and “encompassing” (Stevenson & Jarillo, 1990, p. 17). Beginning a decade later, we began to see an increase in domain-related terminology such as “distinctive” (Shane & Venkataraman, 2000, p. 218), “difference between” (Greve, 2003, p. 348), “exclusively focused” (Bruton, Ahlstrom, & Obloj, 2008, p. 1). This, I believe, may represent a growing tendency toward defensive boundary setting that, understandably, would be a natural outgrowth of, or response to, perceived threats grounded in diminishing returns-based thinking. It seems logical to suggest that diminishing-returns thinking leads to boundary conflict because of a “rationing” mentality that arises when there appears to be scarcity (e.g., rationed space in the journals²).

An issue of importance to overcome, then, has been to find a way to enable boundary-setting consensus while addressing the presently dominant idea of a diminishing-returns-based trade-off (i.e., between the inclusion within the domain of an increasing set of entrepreneurship-related topics and thereby “losing our soul” vs. refining a limited set of entrepreneurship research topics and gaining a “defensible perimeter”). In this paper, we therefore cannot avoid beginning the analysis with the question of exclusion/inclusion because, under diminishing-returns logic, the retention of a focus on this question can be consensus damaging instead of consensus enhancing. Some logic for the replacement of a diminishing-returns focus by an increasing-returns focus is needed because the continuation of an inclusion/exclusion debate that derives from diminishing-returns logic is more likely to be conflict creating vs. consensus building. Thus, development of consensus on the boundaries of entrepreneurship research cannot be focused productively, when such development is centered upon an inclusion/exclusion debate arising from protectionism and fear of encroachment that surface when domain articulation discussions assume fixed scarce factors—such as, for example, limited intellectual space—as facts. Rather, where the domain boundaries for entrepreneurship research are defined using approaches that appeal to an “increasing returns” logic, then a key step along the domain-articulation pathway is to find a way to accomplish the effective ordering of phenomena within a virtually infinite classification space.

A New Look at the Core Problem of Classification

As earlier noted, Ritzer (1975) has suggested that exemplars, theories, methods, and instruments define a paradigm because they help to articulate solutions to the classification problem: to help one scientific community to differentiate itself from others. Briefly described (from the classification literature) the classification problem (which is as applicable among scientific communities as it is among phenomena) is as follows:

2. While low acceptance rates by top journals may indicate that there is scarcity in the number of top-quality journal articles produced, this cannot be used as evidence that “space” in the journals is objectively scarce—where the assumptions (and history) of scholarship suggest that more top-tier work will result in more top-tier journal space being made available. Hence, the “perception” of scarcity cannot be treated as scarcity itself.

The crucial problem of knowledge classification is the choice of *Invariant*. In the phenomenal level, all the myriads of classes stare at us. Each of the myriads of the “Immediate-Neighborhood-Relations” (i.e., similar classes) plead for its being kept invariant in preference to all the others. Each pleads with more or less equally valid reasons . . . thinking about the mapping of the n-dimensional space of the Universe of knowledge on the one dimensional space implied by Classified Sequence should not be started at the baffling phenomenal level crowded with myriads of Immediate-Neighborhood-Relations, each claiming the status of *Invariant*. The more I recede from the Phenomenal Level towards the Seminal level, the less the number of claimants to the status of *Invariant* will be; the more amenable to grading the nature of the claimants will be; and the less complicated the problem will become. (Ranganathan, 1965, pp. 34–35)

Somewhat counterintuitively, increasing-returns thinking suggests that instead of depending upon an ever-more-distinctive focus (listing and debating among endless phenomena such as organization types and research topics—as would continue to be the case for the entrepreneurship research domain statement as presently written), we should emphasize a more general focus (i.e., shift our focus toward the seminal/latent level (cf. Merton, 1968), and away from the phenomenal or overt level—as does some of the language in the proposed domain statement). This change in focus would permit the field of entrepreneurship research to both separate itself from other fields of scientific inquiry while yet encouraging without threat of “takeover,” the examination of a broader range of phenomena by scholars working in neighboring fields. Table 3 presents a comparison of excerpts from the current and proposed domain statements, analyzed according to implicit worldview, factors considered, basis for boundary setting, and implications for domain-boundary conflicts.

Increasing-returns thinking suggests that positive feedback results in momentum building: the larger the “tent,” the lower the cost of each incremental new unit within it. Also, increasing the breadth allows entrepreneurship scholars to more effectively explore the boundary (providing knowledge to help define it) and discover where and how its sister fields overlap in focus while retaining a distinct view. Thus, increasing-returns thinking suggests that the choice of the size of the tent should not be overly restrictive (small tent), but rather should be amply accommodating (big tent). Why should this be the case?

According to classification theory, in a “big tent” condition, the boundary is nevertheless protected by the inherent relationship between its immediate-neighbor relations and the nonvarying criterion selected to serve as *Invariant*. That is, just as in a case where classification according to color would eliminate ordering by size (since size is not a color, and therefore has no inherently color-based relationship), so would classification according to some other *Invariant* in the case of entrepreneurship research, protect (eliminate/bound) the domain from confusion with phenomena that do not possess an inherent relationship with the seminal criterion selected to serve as *Invariant*.

The question of domain boundaries could then be redirected from diminishing-returns-based distinctions that deny the positive feedback present within the research system, toward increasing-returns ones that embrace it. In this case, for example, inherent positive feedback might come from recognizing and encouraging domain-clear topics by scholars in neighboring fields. Ranganathan’s (1965) logic suggests that the trouble with domain clarity is not with the unwinnable battle over which phenomenon should be the “invariant” basis for classification; but with the need for visionary selection of “invariant” at a higher (seminal) level of abstraction. This is logical because the choice of a seminal-level “invariant” is more likely to both explain and justify the continued in-migration of

Table 3

Domain Statement Comparison

Existing domain statement excerpts

<i>Implicit worldview</i>	<i>Factors considered</i>	<i>Basis for boundary setting</i>	<i>Implications for domain conflict</i>
Decreasing returns • Fixed scarce factors	Phenomenal level e.g., bases for description: organization types: • New businesses • Small businesses • Family businesses	Immediate-neighbor relations Topics (unordered): • New venture ideas • New venture strategies • Ecological influences on venture creation and demise • The acquisition and management of venture capital • The acquisition and management of venture teams • Self-employment • The owner-manager • Management succession • Corporate venturing • The relationship between entrepreneurship and economic development	High likelihood Closed systems (Scott, 1987), e.g., • Zero-sum thinking • Protectionism • Defensiveness • Obstacle-creating

Draft domain statement excerpts

<i>Implicit worldview</i>	<i>Factors considered</i>	<i>Basis for boundary setting</i>	<i>Implications for domain conflict</i>
Increasing returns • No fixed scarce factors	Seminal level e.g., Bases for inference: generalizable reference points: • Actors • Actions • Resources • Environmental influences	A few conceptual “Invariants” Constructs (e.g., ordered wrt. Invariance): • Emergence • Opportunity • Economic activity	Low likelihood Open systems (Scott, 1987), e.g., • Infinite-space thinking • Free-trade of ideas • Openness • Obstacle-clearing

scholars from a wide variety of disciplines, each with something to say about “entrepreneurship” as seen through a home-discipline lens.

Hence, exemplars from the study of highly specific phenomena as suggested by the current domain statement, e.g., “new venture ideas and strategies; ecological influences on venture creation and demise; the acquisition and management of venture capital and venture teams; self-employment; the owner-manager; management succession; corporate venturing and the relationship between entrepreneurship and economic development,” are less likely to enable paradigmatic consensus than are those that concern more seminal topics such as, for example, “emergence” (e.g., Ireland, 2005), or “opportunity” (e.g.,

Venkataraman, 1997, and others)—big-tent constructs that can be amenable to evaluating a broad range of phenomena, while simplifying the classification problem.

For illustration purposes, this notion of emergence can be utilized as an example of a construct that can be employed to order a wide variety of phenomena when it is applied, for classification purposes, as an *Invariant* (by which all immediate neighbor phenomena can be ordered). A brief analysis of this assertion can illustrate the point. Ireland (2005) suggested that the notion of emergence: of firms, industries, institutions, products, services, transactions, etc. is an idea that seems to capture a common element in a wide variety of phenomena around which future research could coalesce. With this suggestion, a seminal-level construct is proposed whereby a consensus to develop a wide variety of phenomena under the umbrella of “emergence” could develop. We have seen such a consensus develop around the concept of opportunity. By choosing “emergence,” “opportunity,” or “economic activity” (as proposed in the draft domain statement) to be big-tent constructs that serve as the basis for the classification of phenomena—that is, as *Invariant* (in the parlance of classification theory)—then we employ an approach that is much more serviceable to domain specification and articulation than would be reliance upon any one of the admixture of descriptive or topical phenomena presently listed in the current domain statement (please see comparison analysis in Table 3).

And flowing from this sample analysis, it becomes easier to observe that reasoning, theories, methods, and instruments which enable generalizations concerning a unique, but seminal, “invariant” would be applicable—regardless of discipline of origin—to the entrepreneurship research domain by virtue of their comportment with an effective base for classification. Hence, to paraphrase Gartner (1989): “who is an entrepreneur IS the wrong question” and so are questions that focus on distinctiveness, inclusiveness, take-overs, etc. without requisite reference to theory. Instead, an increasing-returns worldview, supported by classification theory, would suggest that our current highly specific phenomenologically constrained domain statement would continue to, as do, for example, arbitrary limitations on trade (in the national-boundaries sense), unduly encumber (in the discipline-domain sense), the “snowball” benefits from a “comparative advantage” magnifier as new ideas become available through theoretical, methodological, and instrument-choice openness.

Implications and Conclusion

As noted previously, increasing-returns phenomena occur at least in part due to path-dependent events that invoke a positive-feedback momentum loop. In the case of entrepreneurship research, we ought to note as a research community that a major catalyst that occurred along the path of development of the field came from Porter and McKibbin’s (1988) call for an improvement in higher education’s response to the projected growth in “entrepreneurism.” It is commonly accepted that this report was likely an exogenous event that led to what Malcolm Gladwell (2000) would call a “tipping point,” a path-dependent event through which entrepreneurship research grew to become more of an increasing—rather than a decreasing—returns phenomenon. In terms of the increasing-returns argument, this means that entrepreneurship research got to this success point in its history at least partially based upon a key high-impact exogenous interruption in the flow of entrepreneurship-scholarship-focused resources.

Now this being said, we ought also to note the limitations that accompany increasing-returns phenomena. Where conditions of increasing returns exist—such as the growth and development of entrepreneurship research—there are also risks inherent to decision

making according to this logic. In particular, under conditions of increasing returns, there also exists a potential over the long run for more than one outcome to occur, and for small errors to be magnified (see, e.g., Arthur, 1994, p. xiv). Thus, one might also draw from the analysis the observation that error in domain-statement specification, at this point in the growth of the field of entrepreneurship research, could have substantial influence upon its future. To avoid outcomes that are not positive for our field due to the potential for small errors to be magnified, the analysis suggests that we ought to direct our attention now to the important endogenous decisions that presently face us as members of the entrepreneurship research community, such that we do not effect avoidable error.

Specifically, we ought to explicitly recognize that our domain-specification discussions may be more important than we realize as we engage in the path-dependent process of continuing to harvest the benefits of the increasing-returns-based success that our field presently enjoys. We can interrupt this process by making domain articulation decisions based upon the decreasing-returns worldview that threatens to stunt our growth by, for example, pitting against each other fields that are inherently complementary.

This is therefore the time for astute classification choices to offer an opportunity for consensus building around the seminal processes and constructs that can form the dimensions of the field's future; and can help to guide the growth of entrepreneurship research as an "increasing-returns" phenomenon (i.e., no fixed scarce factor). A conversation in the field—among those who have founded, those who have labored long, those who have recently joined, and those who are yet to join—that leads toward clarification of the domain of entrepreneurship research based on increasing-returns logic can capitalize upon the present momentum in the explosive growth of the entrepreneurship field, and can enable and perhaps accelerate paradigm development for entrepreneurship research.

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