A CONCEPTUAL HISTORY OF ENTREPRENEURIAL THOUGHT[1]

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ABSTRACT

We introduce a conceptual history of knowledge expansion in the entrepreneurship field based on a logical mechanism of conjecture and refutation. Our undertaking interprets and explains the emergence, rise, re-emergence, and decline of key problem situations and theories through prehistoric, economic, and multidisciplinary movements in entrepreneurial thought.

INTRODUCTION

Right now, at the beginning of the 21st century, the management field is taking on a new vision of entrepreneurship research and pedagogy in the Academy and in business schools around the world. Over the last five years, for example, the Academy of Management's Entrepreneurship Division has "dramatically outpaced the growth of every other division" by 77% (Shaver, 2004). No less than 1,600 universities around the world offer 2,200 entrepreneurship courses. There are at least 277 endowed faculty positions and 44 refereed scholarly entrepreneurship journals (Katz, 2003). The purpose of our paper is to interpret and explain entrepreneurship's dynamic evolution into a scholarly field. To accomplish this purpose, we use an application of history to unify its extant and wide-ranging principle concepts.

The Idea of Conceptual History

From the fall of Rome (circa 476 AD) to the eighteenth century, there was virtually no increase in per capita income in the West. However, with the advent of entrepreneurship, per capita income grew exponentially in the West by 20% in the 1700s, 200% in the 1800s, and 740% in the 1900s (Drayton, 2004). In this historical context, entrepreneurial thought has evolved by way of profound, unpredictable conceptual developments (e.g., international commerce, demand curves, competition as a discovery mechanism, the opportunity construct); each one offering a reconceptualization of *what it means* for something to be "entrepreneurial."

Our treatment of this historical context abides by two complementary tenets: conceptual knowledge (across history) *is not* relative or paradigm-specific and historical knowledge (across concepts) *is* relative and paradigm-specific. In other words, we define any instance of conceptual knowledge as a free invention that has not yet been rejected. We distinguish

conceptual from historical knowledge, which is defined more temporally and spatially; relative to a paradigm, and based on induction from past observation (Agassi, 1963). The two-part assumption allows our undertaking to accomplish a dual-purpose: (1) for the primary objective of interpretive and explanatory historical analysis of concepts amidst multiplicities of subjective views and problem situations, we employ a logic-based principle of conjecture and refutation (Popper, 1963) in favor of sociological-based descriptions of communities of individuals (Kuhn, 1962). On the other hand, (2) for the secondary objective of framing and organizing (i.e., describing) the conceptual history of entrepreneurial thought, our bias is reversed.

Nature of the Analysis

Knowledge expansion in the form of theories adjusts continually vis-à-vis other theories, empirical tests, or observations that function as attempted or successful refutations. The interplay underlies turbulences and unpredictable evolutionary trajectories in a scholarly field. Research in epistemology (e.g. Popper, 1976) has utilized formal logic to explain such breakouts from prior knowledge limits (e.g., Miller, 1974). This work shows the imposition of theory on reality via trial and error to contain a mechanism of conjecture and refutation. We use this mechanism to analyze the historical development of the entrepreneurship field. Formula 1 (Popper, 1972: 119) depicts the mechanism as a schema:

$$P_1 \rightarrow TT \rightarrow EE \rightarrow P_2 \qquad (1)$$

This schema shows a problem (P_1) giving rise to tentative theory (*TT*), which goes through error elimination processes (*EE*) wherein critical revisions give rise to new problems (P_2) and eventual new *TT*. The process goes on *ad infinitum* and can begin at any stage, beginning frequently at P_1 with an inefficiency forming a need for *TT* in relation to it. *TT* can take on the character of enduring theory leading to conceptual movements, evolving by weathering interplay with *EE* (i.e., refutation attempts). Figure 1 shows the domain to be covered in our paper, originating with prehistoric interpretation and terminating with contemporary conjectures and refutations. Key conceptual elements are situated chronologically and subsumed by categories reflecting general orientations or paradigms (prehistoric, economic, multidisciplinary bases). We have divided our paper into major sections corresponding to those categories.

Figure 1 about here

INTERPRETATION OF PREHISTORIC BASES

Entrepreneurial activity existed in ancient and medieval societies. Its success has always depended on overcoming various risks and external constraints (Hebert & Link, 1988: 15). From an anthropological perspective, the earliest forms of entrepreneurial activity involved trading food or inimitable resources for survival purposes across tribes and clans. Eventually, by 50 BC in ancient Rome, avenues for entrepreneurial activity such as tax farming derived similarly within social controls, regulations, and institutions. In turn, the early Middle Ages (500-1000 AD) saw new kinds of entrepreneurship (Baumol, 1991). Owned property or social status were

not a guarantee of success as value generation was pursued frequently through warfare. Innovation manifested itself as implements of war (e.g., stirrups, round castle turrets). Later (1000-1500 AD), church pacification in the West reduced warfare, and architecture and engineering became common as entrepreneurship. Monks and puritans established water-driven grain mills and other enterprises, leading to Weber's (1930) notion of a "Protestant work ethic." Such entrepreneurial activity was long established in the Middle and Far East when the west began to use specialized knowledge to discover opportunities. Prehistoric entrepreneurship held a conjecture that experiential or skill-based knowledge was instrumental for remedying inefficiencies and offering solutions, products, and services. It became a way to make a living. However, only a fraction of the populace, usually those belonging to religious orders or craft guilds, had an option to engage in entrepreneurial activity.

EXPLANATION OF ECONOMIC BASES

Classical

Conjectures. Classical theory proper extolled the virtues of free trade, specialization, and competition (Smith, 1776). Competition across industries (e.g., cotton versus corn) added new dynamics of discontinuity to economic activity, leaving entrepreneurs able to discover increasingly obscure niches and opportunities. The movement emphasized the *directing* role of an entrepreneur in a competitive marketplace (e.g., Say, 1803). Going beyond the entrepreneur as a mere *coordinator*, it defined the risks of obtaining materials, training a workforce, or finding a market. The movement offered principles for dividing and characterizing labor, establishing a framework for valuation and distribution. With a proliferation of foreign trade in the early 1800s, measuring currency differentials became commonplace, allowing entrepreneurs to recognize arbitrage opportunities. As entrepreneurs tended to "move on" (e.g., selling/passing on a business), the notion of diminishing return (e.g., from the cultivation of fertile land) introduced the idea of opportunities expiring with the passage of time.

Refutations. Inability to explain diminishing return led to a later conjecture of *marginal* utility. The upheaval generated by industrial-age entrepreneurs (e.g., short-term variable prices, relative production costs) led to a refutation of strict equilibrium reasoning. Inability to trace scarcity and inimitability (a result of specialization) became acute as local methods of production grew sophisticated and entrepreneurial activity evolved to include the *utterly* novel. The link between market demand and utility was out of bounds, precluding explanation of the decreasing output units / constant input units function. Such refutations set the stage for another movement in the history of entrepreneurial thought.

Neoclassical

Conjectures. Diminishing marginal utility emerged in the 1870s as a way to conceptualize commercial activity, allowing more subjective views (e.g., Menger, 1871) of such activity as relations among *people*, not objects. Social factors became more important, implying the importance of individual awareness: entrepreneurs could accept a price, not accept it, or be forced into accepting it if they want to remain in business. Entrepreneurship was seen as a *transformation* of resources into unforeseen products as combined ideas (e.g., Bohm-Bawerk, Wiser, Marx, Weber, Walras) led to a new conceptualization (i.e., Schumpeter, 1934) explaining

entrepreneurship as *less* capital accumulation and *more* novel combining of existing resources. The "creative destruction" of entrepreneurs destroyed system-level harmony, which was restored by imitators. The movement assumed economic phenomena involved *exchange*, implying optimal exchange ratios and making an expanded place for systematizing entrepreneurship.

Refutations. The movement assumed efficiency maximization to be the main purpose of entrepreneurship and other economic activity; by knowing means-ends relations and assuming omniscience, optimal courses of action were evident. This assumption was later refuted (e.g., Menger, 1934) because perfect knowledge in social systems *creates* imperfect knowledge: rational conduct in competitive contexts spreads uncertainty. Further, imperfect knowledge in an equilibrium-based framework necessitates varying levels of information, which violates the omniscience assumption. Thus, strategic, future-oriented conceptions of entrepreneurship were logically forbidden by neoclassical assumptions of perfect competition and equilibrium.

Austrian Market Process

Conjectures. Following the neoclassical, this movement was based largely on a principle that entrepreneurial action contains error. A primary aim was to explain how knowledge necessary for making correct decisions or discovering opportunities *converges* even though it is distributed idiosyncratically in a market system. Given such a convergence, the movement held, an opportunity stands to be recognized. Thus, alertness was cast as fundamental to entrepreneurship and opportunity was based largely on other entrepreneurs (inadvertently) undertaking sub-optimal activity. Relatedly, all market actors' decisions were assumed to interact and generate change in prices, outputs, production methods, and resource allocations. Based on Say (1803) and Schumpeter (1936: 74-75), ownership was *distinct* from entrepreneurship, the latter requiring no tangible resources; not being a production factor, and requiring only knowledge (Kirzner, 1973: 44-45).

Refutations. The movement did not explain competition realistically (e.g., with a view toward monopoly). It did not describe hostile takeovers or deception / fraud. By not including such elements it did not describe reality effectively. It did not articulate the varying affordances of private versus state-owned firms competing in governmental regulatory contexts. Finally, an over-reliance on pure market forces squelched the notion of entrepreneurship in non-market oriented social situations, which took hold in later movements.

EXPLANATION OF MULTIDISCIPLINARY BASES

Conjectures

Building on prior movements but not primarily economics-based, the multidisciplinary movement strongly reflects a Lewinian (1935) conceptual framework, describing entrepreneurial action via an interaction between person and environment. The influence is obvious in many entrepreneurship conceptualizations and research designs. Thus, aside from *sociological* and *marketing* factors, this movement allows for *psychological* characteristics to be quantifiable and scalable and also impact entrepreneurial activity. Yet, the movement holds it specious to focus solely on person-centric or environmental factors, which complement one another, pointing to the relevance of an *integration* of individual and environmental rather than their interaction.

Refutations

The dynamic nature of entrepreneurial activity creates a refutation for this movement because a Lewinian framework does not handle discontinuous change: static environment or person-centric models assume the same factors tend to lead to the same results (Venkataraman, 1997). The assumption is specious to the degree entrepreneurial discoveries are patently unique. As well, convergences of knowledge transcend individual and environment; frustrating widely-used parametric statistical methods, which require reliability, and straining a Lewinian model, which casts individual and environment as orthogonal.

Contemporary Conjectures and Refutations

Conceptual framing. Entrepreneurial discovery exists at all levels of a social system. An opportunity is a nexus in which individual and environment participate and its traceability across levels of analysis encourages research from many perspectives. However, whereas such a mix of research promotes understanding *within* perspectives, it creates inconsistencies *across* perspectives and calls for a new entrepreneurship research paradigm.

Statistical methods. Empirical observation is theory-laden (Cook & Campbell, 1979: 23-25). Normal distributions and meaningful aggregation are not possible if variance is idiosyncratic and unreliable. Thus, dynamism in entrepreneurship data creates measurement ramifications and parametric statistics can be misapplied (Murphy & Shrader, 2004; Robinson & Hofer, 1997).

The opportunity construct. Internal and external factors affect entrepreneurial discovery, ascribing objectivity to opportunities as constructs to be explained along with discoverers and environments. The call for opportunity-based research will be unanswered so long as a Lewinian framework sets the boundary conditions for empirical entrepreneurship research (Murphy, 2004).

Networks. Approaches based on networks promise to mitigate levels-of-analysis issues as they imply a scale for gauging relations via "embeddedness" or "structural equivalence." Such notions approximate continuous and quantifiable estimates instead of the rougher scaling implied by "levels-of-analysis" that is germane to interactional frameworks.

Knowledge. Scholarship increasingly finds knowledge to facilitate entrepreneurial discovery. Learning (i.e., acquiring knowledge) is immutable in entrepreneurship theory and practice (Drucker, 1985: 263). Indicators of knowledge include convergences of episodic factors (e.g., relationships, guidance, experience). Entrepreneurship researchers can operationalize episodic knowledge to forecast discovery (e.g., Murphy, 2005; Shane, 2000).

Conceptual division and emergence. As the entrepreneurship field develops in a multidisciplinary paradigm, it parses into specific areas of academia, finance, and practice (Welsch & Maltarich, 2004). Meanwhile, a wide-ranging paradigm based on knowledge and the opportunity construct is beginning to hold greater sway as contemporary conjectures and refutations continue to emerge.

ENDNOTES

1. An unabridged version of this paper is forthcoming in *Journal of Management History.*

REFERENCES AVAILABLE FROM THE AUTHORS

FIGURE 1
An Illustrated Conceptual History of Entrepreneurial Thought