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Contingency as an entrepreneurial resource: How private obsession fulfills public need

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ABSTRACT

Borrowing from Rorty (1989:37), this article portrays the entrepreneurial process as a mechanism through which "private obsession" fulfills "public need." It begins with an argument that a deeper understanding of contingency can enhance management scholarship in general and entrepreneurship in particular. It continues with an examination of contingency and entrepreneurial opportunity and then uses six narratives to show how both personal and historical contingencies become resources in the entrepreneurial process. A depiction of possible alternative responses (counterfactuals) for each narrative illustrates how entrepreneurs tend to take a resourceful, rather than an adaptive or a heroic stance toward contingency. A discussion of American Pragmatism provides theoretical support for contingency's role in the entrepreneurial process. The paper concludes with a literature review and a look at how this view of entrepreneurial contingency illuminates the temporal context in management scholarship, among other implications for both research and practice.

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1. Executive summary

By "uncertain" knowledge ... I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty ... The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention ... About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know! (John Maynard Keynes, 1937: 213–214)

Management scholarship has largely been an exercise of studying the "knowable," or those phenomena which are "retrospective and rely on historical data." Indeed, the empirical settings chosen for study are necessarily "influenced by the availability of data, and available data are seldom a representative or random sample of all empirical settings to which the theory is supposed to apply." (Denrell and Kovács, 2008: 109). Furthermore, because we have so much available data on widely-diffused practices or very large populations or organizations, we have studied them at the risk of falling prey to the "fallacy of presentism," meaning the "mistaken idea that the proper way to do history is to prune away the dead branches of the past, and to preserve the green buds and twigs which have grown into the dark forest of our contemporary world." (Fischer, 1970:135, in Denrell and Kovács, 2008:109). We look at the green buds and twigs of our existing organizations, turn them over, examine them for every detail, and in the process we clearly learn valuable lessons about a wide range of phenomena that illuminate and improve the practice of management. However, we less often ask the question, why did these organizations come into existence in the first place? Why this particular organization and not some other?

This paper is dedicated to Richard Rorty, who died on June 8, 2007. Orchid lover, heretic, irreverent intellectual, he will be sorely missed. E-mail address: sharmeling@howard.edu.

The evolutionary biologist Steven Jay Gould, describing the Burgess Shale, the oldest fauna of preserved soft-bodied animals discovered in 1909 by the paleontologist Charles Walcott, wrote that this discovery revealed, not Walcott's vision, namely the "fulfillment of a divine purpose guaranteed to yield human consciousness after a long period of gradual and stately progress," but rather a "new view" that exposed the "controlling power of contingency in setting the pattern of life's history and current composition." (Gould, 1989: 288–289). What if, in addition to looking at the "green buds and twigs" that make up our current, contemporary forest, we were to rewind and, as Gould did with the Burgess Shale, look at the sheer happenstance that has led us to this place? Why might one seemingly novel idea has been left to wither into a dead branch while some others blossomed and grew? Were we to dig more deeply, we would surely come to utter many times the phrase "but for", as in "but for this person or that event which led to x, y or z, Company A or Phenomenon B would never have come into being."

In this paper, I look closely at those "but fors"—contingencies—and show the profound influence they have on the entrepreneurial process that leads certain artifacts to come into being while others wither. This process, I argue, is responsible for the origins of the large firms now populating "the dark forest of our contemporary world." What a different world it would be "but for" the contingencies that have made it what it currently is.

The article begins with an argument that contingency has been largely overlooked, to the detriment of management scholarship. It continues with an examination of contingency and entrepreneurial opportunity and then uses six narratives to show how both personal and historical contingencies become resources in the entrepreneurial process. A depiction of possible alternative responses (counterfactuals) in each narrative illustrates how entrepreneurs tend to take a resourceful, rather than an adaptive or a heroic stance toward contingency. A discussion of American Pragmatism provides theoretical support for contingency's role in the entrepreneurial process. The paper concludes with a literature review and a look at how entrepreneurial contingency helps us to better understand the role of time in the context of management scholarship, among other implications for both research and practice.

2. Contingency and opportunity

To sum up, poetic, artistic, philosophical, scientific or political progress results from the accidental coincidence of a private obsession with a public need. (Rorty, 1989:37)

The last several years have seen a lively debate over the ontological status of entrepreneurial opportunity. Do opportunities exist objectively, independent of those who would pursue them, lying about like a dollar bill in a pile of leaves waiting to be discovered? Or are opportunities constructed, fully dependent on the entrepreneur to breathe life into an idea nurtured by his or her background, skills and predilections?

A contingency-driven view of this debate concludes that each side tends to choose a particular aspect of contingency—either personal or historical—and to overlook the other. The reality is that contingency operates on a number of levels simultaneously, providing for a kaleidoscopic view of opportunity generation and exploitation where closing one window may easily open several others if only for a fleeting moment.

The objectivist approach to opportunity supports the pragmatist notion that our metaphors for living are constructed upon the dead metaphors of prior generations. To translate this specifically to entrepreneurship, opportunity objectivists recognize that as entrepreneurs move to create and exploit future markets for goods and services, these new markets eventually become saturated and no longer suitable for entry *as originally conceived*. Therefore, the would-be entrepreneur treads upon and consciously or unconsciously transforms the accumulating artifacts² of these established markets to find and shape the next opportunity, one that perhaps could not exist but for the once-novel product or service now taken for granted. The objectivist entrepreneur, then, is building upon *historical* contingency to create a good, service, market, or movement that in an earlier time not only wasn't contemplated, but wasn't even possible.³

The constructivist view focuses on the importance of the individual in visualizing and creating opportunities. This line of thought emphasizes the unique circumstances that have shaped an individual and placed him or her in a special position to advance a new perspective, even if she is not precisely sure of what that perspective entails or even means. Human beings can and do remake themselves, says Rorty (1989), taking cues from popular culture, art, politics or some other influence in their environment to constantly transform themselves from their existing accumulation of lived experience into the new, fresh self, living out new metaphors and ways of being. In entrepreneurship terms, we can take from this that the unique mix of experience, talent and networks are the reason a *particular* person is able to create a viable market where another did not and in fact *could* not. He or she is acting on *personal* contingency, the chance brew of experiences, skills, knowledge, relationships and obsessions that place the entrepreneur in a position to influence and create, a position unattainable by others since they don't possess the "right" combination of factors to birth the particular new idea. This new idea can, under the right conditions, be expressed not only as a new product, a new service or a new organization, but also as an entirely new market (Sarasyathy, 2008).

¹ Rorty refers extensively to the notion of the Strong Poet, first conceived by the literary critic Harold Bloom. The idea is that strong poets, like the entrepreneurs we describe in this paper, recognize that their predecessors have somehow failed to serve, or continue to serve, their public(s), thereby leaving room for the strong poets' literary innovations.

² Artifacts of markets include firms, and existing goods and services.

³ Two entrepreneurship scholars have recently, and passionately, argued for the merit of historical perspectives on entrepreneurship after a two-decade long immersion in behavioral analyses. "Our. . . agenda is to re-stimulate the exchange between historical and social scientific studies of entrepreneurship that Schumpeter envisioned. . . Today, empirical historical research on entrepreneurship and social scientific theorizing about it are separate by an even deeper gulf than they were a half century ago. This is a loss to both sides." (Wadhwani and Jones, 2007: Abstract). We agree.

Table 1 Objectivist vs. constructivist approaches to opportunity.

The objectivist approach	The constructivist approach
New markets spring from already established markets	New markets spring from unique individual perspectives
Opportunities are <i>given</i> : "out there"	Opportunities are <i>created</i> : "in here"
Emphasizes historical contingency	Emphasizes personal contingency
Entrepreneur recognizes a public need	Entrepreneur pursues a private obsession

Table 1 compares the objectivist and constructivist approaches to entrepreneurial opportunity.

However, by focusing on only one aspect of contingency, each of these approaches misses the "nexus" of individual and opportunity persuasively suggested by Shane and Venkataraman (2000). I propose that contingency is an essential element of entrepreneurship because it explains not only the residue of historical accidents that constitute today's playing field but also the makeup of the players who seek to impose their will upon it. The interplay of the two is central to the process through which the *private* obsessions of a would-be entrepreneur blossom and find acceptance as they fill some *public* need.

The objectivist view of opportunity accommodates the notion of historical contingency but downplays personal contingency. As has been noted elsewhere (Shane, 2000; Ardichvili et al., 2003; Sarasvathy et al., 2005), such a view overlooks the experience and makeup of the entrepreneur in visualizing, interpreting and ultimately developing opportunities. It implicitly assumes that while perhaps only a certain individual or set of individuals have the requisite key to unlock a particular opportunity, the opportunity in question is *given*, not malleable. This approach, which is expressed with deterministic metaphors inherent in the language used (such as "discovering" and "recognizing" opportunities) fails to address how the entrepreneur willfully shapes the landscape through his/her actions. From this perspective, finding and exploiting an opportunity is akin to unlocking a destiny.

In the extreme case, Aldrich (1990, 1994, 1999) depicts firm creation and extinction almost entirely as a function of the "ecological" landscape in which the entrepreneur finds him or herself. The individual entrepreneur, facing Darwinian forces of variation, selection and retention struggles to compete for scarce resources. Taken to its logical conclusion, the entrepreneur here is acting on a stage not of his own making, in a play with little or no improvisation possible, reading lines from a given script. Casson (1982) also presents a sort of strong-form economic objectivism in his depiction of the entrepreneurial process. Here, entrepreneurship is the result of a unique body of information that the anonymous entrepreneur exploits through a 'market-making' firm which connects customers and suppliers who could not otherwise come in contact. As Schumpeter memorably wrote, this is "Hamlet without the Danish prince." (1942:86)

On the other side, the constructivist view has its own limitations. It largely downplays the element of public need⁴ (a product of historical contingency) required to make the entrepreneur's project viable. Instead, by focusing on the influence of a creative or visionary entrepreneur, this approach can make it difficult to distinguish between a quixotic product, firm or movement that fails to find wider acceptance and one that can ultimately be deemed successful by dint of the founder's superior and inspired vision. Behaviorial studies examining how the entrepreneur acts (such as Stevenson and Jarillo, 1990), and more recently, a wealth of cognitive research (such as Shane and Venkataraman, 2000; Shane and Eckhardt, 2003) is largely devoid of the historical, "public" perspective on entrepreneurship. Instead, entrepreneurship is about individual behavior, will and reaction. This, if you will, is the Danish prince without the rest of the characters, embedded in no particular historical context, master of his destiny nonetheless.

A trend toward understanding the important role of contingency in the context of the individual-opportunity nexus is beginning to take shape. For example, Sarasvathy (2008, 2001) introduced a process of entrepreneurial effectuation where contingency is *integral* to the creation not only of new ventures, but also of new market opportunities. Here the entrepreneur always starts with his own raw materials—"who he is, what he knows and whom he knows"—in other words, the contents of his mind and heart, the names on his Rolodex, the creative connections and ideas that he comes upon day by day. In this model, the entrepreneur capitalizes on contingency *throughout* the development process. Dew et al. (2004), make a parallel case for personal contingency. In their view, some people will become entrepreneurs and attempt to create something new out of all those unique raw materials and some will not. But any opportunity that arises, any little corner of a "new world" that the entrepreneur might create at a given moment, is different from the one that someone else might create because those starting places—their personal contingencies—are so different.

As Dew, et al., explain: We cannot talk about opportunities without talking about specific individuals. It is hard to imagine how certain firms could have come to be aside from the particularity of certain individuals: Wedgewood without Josiah Wedgewood, Ford without Henry Ford, General Electric without Thomas Edison, Wal-Mart without Sam Walton. The reason for this is that recognition of an opportunity usually (but not exclusively) depends on the prior knowledge and particular expectations of the individual (Venkataraman, 1997). (2004:668)

However, grasping personal contingency alone precludes a richer perspective on the entrepreneurial process that comes from understanding how historical contingency shapes and changes the world in which the entrepreneur acts. A private obsession

⁴ We deliberately chose to stick with Rorty's term "public need" instead of employing the more common economic term, "demand." We did this because in the broader realm of entrepreneurship in which we carry out our analysis, demand might be "too active" a concept. For example, in the case of social entrepreneurs seeking to alleviate poverty or help educate a certain segment of the population, need may be there without the existence of active "demand."

alone is not enough to create a new market, firm, or product. Instead, a public need must also be fulfilled for a viable act of entrepreneurship to take place. The concept of historical contingency recognizes that entrepreneurs are not heroes, transcendent of time and place, but rather human beings situated in a world created by both the random and intentional acts of those who came before them. This is at once their canvas and their playing field, upon which they attempt to remake their environment and compete against others trying to do the same.

In summary, the entrepreneuring objectivist would go out seeking pre-existing opportunities while the constructivist would look inside herself for the idea of the moment. We have many provocative answers to the questions, "What is the nature of the decision-maker?" or, "What is the nature of opportunity recognition?" In this paper, I hope to answer a different question, namely, "What is the nature of contingency and how is it exploited in the creation of new products, new organizations, new markets?" Next, I illustrate how entrepreneurs use contingency as a resource, and how both personal *and* historical contingency interact to provide a more complete perspective of the entrepreneurial process *through which "private obsession" fulfills "public need.*"

3. Contingency as resource

Only poets, Nietzsche suspected, can truly appreciate contingency. The rest of us are doomed to remain philosophers, to insist that there is really only one true lading list, one true description of the human condition, one universal context of our lives. We are doomed to spend our conscious lives trying to escape from contingency rather than... acknowledging and appropriating contingency. (Rorty, 1989: 28)

At the outset, I will define both "entrepreneurship" and "contingency." I begin with Shane and Venkataraman's (2000) definition of entrepreneurship as the *process by which future goods and services come into being*. This definition of the field nicely captures both the initiation of a venture aimed at exploiting an entrepreneurial opportunity and the assembly of resources required to bring a project to fruition. As will become clear, contingency has an important role to play in both of these processes.

I define contingency simply as *possibility without necessity*, recognizing that this depiction differs from "classic" contingency theories in management that typically provide accounts of contingency as a type of context-dependency. For example, in a comprehensive review of contingency theories in strategic management, Ginsberg and Venkatraman (1985: 421) state:

The popularity of contingency theory in recent organization theory-based research can be attributed partly to a fundamental assumption that there is no one best way to organize, and that any way of organizing is not equally effective under all conditions (Galbraith, 1973). Extending this assumption to the strategy context, a major reason for its acceptance is that the field of business policy exemplified by the initial strategy paradigm (Schendel and Hofer, 1979) is rooted in the concept of matching organizational resources with the corresponding environmental context (Andrews, 1980; Chandler, 1962). Further, there is a belief that no universal set of strategic choices exists that is optimal for all businesses, irrespective of their resource positions and environmental context.

Historical contingency is another way of conceptualizing the same idea, but in a temporal context (Harmeling et al., 2009). My conceptualization aligns with these ideas. However, I believe that viewing contingency through a Pragmatist lens reveals additional insights which are displayed in Table 2.

Specifically, traditional theories in entrepreneurship tend to portray the decision-maker facing contingency as either strongly *rational*—depicting opportunities as *discovered*, or strongly *situational*—depicting opportunities as *constructed*. Likewise, the portrayal of the entrepreneur's response to contingency differs depending upon that initial stance. The rational actors' response to contingency is typically narrated as a *heroic* one—they pursue their fixed ends no matter what—*in spite of* contingency. The situational actors' response is primarily an *adaptive* one—they seek to be flexible and change their goals and actions in response to contingent changes in their environments (Harmeling and Sarasvathy, 2009).

I argue that this picture is incomplete without a third type of response to contingency. In this view, contingency is not a foe to be vanquished nor an obstacle to be overcome nor an inconvenience to which the entrepreneur must adapt. Rather, contingency becomes a *resource* in the hands of the decision-maker, or as Shackle (1979:18) described it, a "choice" which is both a "proximate" and an "ultimate" cause, a cause itself uncaused, an *ex nihilo* origination." Viewed (and appropriated) in this way, contingency allows the decision-maker to be an active agent of change in the world, by bringing his private interests, tinkerings, dreams and obsessions into the realm of public judgment. However, this way of looking at contingency rests on a "non-teleological view of intellectual history. . .," a view that "does for the theory of culture what the Mendelian, mechanistic account of natural selection did for evolutionary theory. Mendel let us see mind as something which just happened rather than something that was the point of the whole process. Davidson let us think of the history of language and thus of culture, as Darwin taught us to think of

Table 2Traditional depiction of decision-maker, opportunities and contingency.

Depiction of decision-maker	Depiction of opportunities	Response to contingency
Rational	Discovered	Heroic
Situational	Constructed	Adaptive

the history of a coral reef. Old metaphors are constantly dying off into literalness, and then serving as a platform and foil for new metaphors. This analogy lets us think of 'our language'. . . as something that took shape as a result of a great number of sheer contingencies." (Rorty, 1989:16)

Thus, through the entrepreneurial process, old metaphors are shifted off into the realm of "literalness" where they are woven into the fabric of first, present and eventually, past culture. The fabric is then constantly re-woven with new metaphors that form new cultural languages. I argue that the basic foundation of this process is *contingency as resource*.

4. Narratives on entrepreneurial contingency

To illustrate this phenomenon, I present six very different narratives, two describing the movements created by political entrepreneurs, two programs started by entrepreneurial educators and two "traditional" entrepreneurs.

4.1. Political entrepreneurs

Lech Walesa

Lech Walesa, age 63, was the father of the Solidarity labor union in the shipyards of industrial Poland in 1981. After graduating from vocational school at the age of 18, Walesa worked as a car mechanic at a machine center from 1961 to 1965. He served in the army for two years, rose to the rank of corporal, and in 1967 was employed in the Gdansk shipyards as an electrician. During the clash in December 1970 between the workers and the government, he was one of the leaders of the shipyard workers and was briefly detained. In 1976, however, as a result of his activities as a shop steward, he was fired and had to earn his living by taking temporary jobs. In 1978 with other activists he began to organize free non-communist trade unions. He was kept under surveillance by the state security service and frequently detained. In August 1980 he led the Gdansk shipyard strike which gave rise to a wave of strikes over much of the country with Walesa seen as the leader. The primary demands were for workers' rights. The authorities were forced to capitulate and to negotiate with Walesa the Gdansk Agreement of August 31, 1980, which gave the workers the right to strike and to organize their own independent union which came to be known as Solidarity. Walesa won the Nobel Peace prize in 1983. (Craig, 1987; Goodwyn, 1991)

Rosa Parks

On December 1, 1955, forty-three year old Rosa Parks boarded a Montgomery, Alabama city bus after finishing work as a tailor's assistant at the Montgomery Fair department store. As all black patrons were required to do, she paid her fare at the front of the bus and then re-boarded in the rear. She sat in a vacant seat in the back next to a man and across the aisle from two women. After a few stops, the seats in the front of the bus became full and a white man who had boarded stood in the aisle. The bus driver asked Parks, the man next to her, and the two women to let the white man have their seats. As the others moved, Parks remained in her seat. The bus driver again asked her to move, but she refused. The driver called the police, and she was arrested. The arrest of Parks sparked the bus boycott in Montgomery. After Parks' arrest, community leaders spread the word that a one-day bus boycott was scheduled for December 5. On that cold and cloudy morning, onlookers watched as the buses drove by with few black passengers onboard. The boycott had been a success. The boycott continued and lasted for 381 days. On December 20, 1956, buses were desegregated. (McElrath, 2006)

4.2. Entrepreneurial educators

Steve Mariotti

One afternoon in September of 1981 in broad daylight on the Lower East Side of Manhattan, a group of six teenagers surrounded Steve Mariotti and made him give up the \$10 bill he was carrying. They slapped him, knocked him down and threatened to throw him into the East River. "It was deeply humiliating," Mariotti recalled, "I became frightened at the sight of young males who looked like they came from bad neighborhoods. I gave up jogging entirely and had constant flashbacks of that awful day's events." Mariotti's paranoia lasted for months and the flashbacks to the mugging continued until one day he got an idea-maybe he could try to get a teaching position in a very tough inner city high school as a way to overcome his fear. If he confronted the very people he had become so afraid of, he reasoned, maybe he could move on. "I only wanted to teach for about four or five days total," he said. "I was actually contemptuous of high school teaching. Mom was a high school teacher and I felt, "boy I can do better than that." In my mind, my ego—how I viewed myself—was being a businessperson, running Ford Motor Company or a big investment bank so thinking about being a high school teacher was such a step down for me." Mariotti thought that his therapeutic stint teaching high school would be very short lived and that as soon as he was done, he could "resume his passion, the art of making dollars" (Harmeling, 2006; Mariotti, 2000: Foreward, Mariotti 1996). Instead, Mariotti started teaching students about business, about making money, and some of the most difficult students became engaged in learning for the first time in their lives. Mariotti, age 54, went on to start the National Foundation for Teaching Entrepreneurship ("NFTE") in 1987. By 2005, the NFTE curriculum was being taught in hundreds of schools across the United States and around the world to over 20,000 students annually. More than 100,000 students had graduated from NFTE. The organization held business plan competitions in every city in which it operated and thousands of students had gone on to compete and place in those competitions, with nearly 50% of the winners continuing their businesses after completing the program. (Mariotti, 1996, 2004)

Slavica Singer

Dr. Slavica Singer, age 63, was, like everyone else in Osijek, Croatia, a victim of the devastating Balkan Wars of the early 1990's which had left this region with a very high unemployment rate and a generation of young people who had lost confidence and hope. While hiding from the Serbian army's daily shellings in the University of Osijek's underground bunker, Singer, a beloved economics professor, read and learned as much as she could about entrepreneurship theory and practice, reasoning that only entrepreneurship could get her and her countrymen out of the devastating situation in which they found themselves. After the war, she went on to create the Graduate Program for Entrepreneurship at the University of Osijek and the first class of 20 students entered in May 2000. By 2005, 120 students had completed the program and the following comment was typical of their reaction: "The program was extremely interesting for me, because I was able to apply in my own company the things we listened to and practiced through the lectures and student teamwork...During the program, I felt that I have been changing as a person a lot, and that some ideas were born inside me, about which I hadn't thought before at all...We have also gained the conviction that each one of us can plan and start our own business and be an entrepreneur, that being an entrepreneur isn't something big and unattainable..." (Oberman, 2004:1)

4.3. "Traditional" entrepreneurs

Ioe O'Donnell

Joe O'Donnell, age 60, founded *Boston Concessions Group Inc.* in 1977. By 2005, the serial entrepreneur had built his privately-held food service company into one of the largest in the industry. With over 10,000 employees in 140 operating units across the United States and hundreds of millions of dollars in annual revenues, BCG had made O'Donnell a wealthy man; he was rumored to have a net worth of over \$1 billion. But tremendous wealth and professional success could not shield O'Donnell from the most devastating of all possible losses, of his son Joey to cystic fibrosis at age 12 in 1986. After living through his son's daily battle with this terrible disease, spending many nights not knowing whether he would live or die, near the end, O'Donnell swore to himself that he would "never have anything to do with this disease again." But shortly after Joey's death, O'Donnell created the Joey Fund, a foundation dedicated to Cystic Fibrosis causes. By 2005, the Joey Fund had raised over \$15 million in efforts to fight the devastating disease. (O'Donnell, 2001, 2004, BCG Inc. 2005).

Pierre Omidyar

Pierre Omidyar, age 38, launched *eBay* on Labor Day in 1995. By 2005, the company was the world leader in person-toperson trading over the Internet with annual revenues of well over \$3 billion and an annual audience of over 45 million users. The eBay Foundation, which was created with \$40 million worth of eBay shares in 1999, funded projects in cities where the company had a major employment base, and in the areas of childhood education and mentoring, adult job retraining and community revitalization. The Foundation also helped to connect local suppliers and producers of goods in developing countries to eBay buyers in the developed world. (Cohen, 2002, Krishnamurthy, 2004). Omidyar said, "Sometimes, ideas have ideas of their own. That's certainly true in terms of system design. Almost every industry analyst and business reporter I talk to observes that eBay's strength is that its system is self-sustaining—able to adapt to user needs, without any heavy intervention from a central authority of some sort. So people often say to me—'when you built the system, you must have known that making it self-sustainable was the only way eBay could grow to serve 40 million users a day.' Well... nope. I made the system self-sustaining for one reason: Back when I launched eBay on Labor Day 1995, eBay wasn't my business—it was my hobby. I had to build a system that was self-sustaining... ...Because I had a real job to go to every morning. I was working as a software engineer from 10 to 7, and I wanted to have a life on the weekends. So I built a system that could keep working—catching complaints and capturing feedback—even when Pam and I were out mountain-biking, and the only one home was our cat."

Although these narratives run the gamut from political movement to non-profit educational foundation to billion-dollar company, each helps to illustrate my vision of the entrepreneurial process at the intersection of private obsession and public need. In each case, private thought and individual action converged with a public need for—and eventual acceptance of—a new cultural metaphor.

Lech Walesa was fired from his job because he had dared to defy the government when he worked as an electrician in the shipyards of Gdansk. It was out of personal desperation that he began to organize independent trade unions, and because his own individual struggle coincided with the struggle of so many other workers. Solidarity was born.

Rosa Parks, faced with one moment in time heavy with the old metaphor of the segregated south, and perhaps having reached her own personal "tipping point," entrepreneured a new metaphor, a culture where blacks didn't have to give their seats up for whites, where it wasn't a crime for a tired woman to be denied a proper rest solely because of her skin color.

The National Foundation for Teaching Entrepreneurship (NFTE) was born of that contingent moment when Steve Mariotti was mugged and then chose to use that contingency to get to the bottom of a much larger social problem, namely the desperation and hopelessness of inner city youth. That one awful incident spawned Mariotti's career teaching entrepreneurship to these troubled youth, and the old metaphors—that these kids were "borderline retarded" and "unteachable"—gave way to new ones—that they can learn and can be engaged if they are interested in the subject matter and if they see how it relates to their own personal experience.

Joe O'Donnell's personal pain at losing his only son to a devastating life-long disease transformed him into a crusader on behalf of other families suffering the same prolonged agony and overwhelming loss.

And finally, Pierre Omidyar's desire to create a self-sustaining on-line marketplace—an endeavor that he describes as a "hobby"—was born of a personal desire to have time for recreational activities. It just so happened to coincide for the public's interest in buying and selling directly over the internet. Table 3 shows the entrepreneurs, the particular personal and historical contingencies they encountered and the entrepreneurial artifacts that each eventually created.

The narratives above serve three different purposes. First, they clearly illustrate the interplay between personal and historical contingency and the use of contingency as a resource that is at the heart of the entrepreneurial process. In each of the cases above, rather than seeing contingency as an obstacle to be avoided (the adaptive approach) or a challenge to be overcome (the heroic approach), the individuals I profile employed contingency as a resource for entrepreneurial action. Instead of abandoning contingency, or overcoming it in a purely individual, "private" sense, each of the entrepreneurs I outline took it and created something with it—a son's death from cystic fibrosis eventually became an organization dedicated to fighting the terrible disease. A woman's indignity at being treated as less than a whole human being became a movement for equal rights. A professor's suffering in the war-time bunker of her university became a program for entrepreneurship. And so on. . .

It is important to note here that this definition of contingency includes a sufficient, yet *unnecessary* spark for entrepreneurial action. (Harmeling and Sarasvathy, 2009). Each of the entrepreneurs profiled here used both personal and historical contingency as inputs—resources—for the creation of their respective ventures. But a fine-grained analysis of what is really at play shows that it is not the mere occurrence, nor the unique characteristics of a contingency itself that are of special interest, but rather the individual entrepreneurs' *responses* to the contingencies they encountered.

In order to understand this point, it is useful to think about the counterfactual in each particular instance, to look not only at what actually happened but also to what else could *logically* have happened (Simon, 1998). In other words, how might these entrepreneurs have responded differently to the contingencies they faced? What if we were to rewind—as Steven J. Gould did with the story of the Burgess Shale—and try to better understand how the particular response to contingency led to the blossoming of the particular artifacts profiled here? If we were to in effect attempt to play the film over again, what might the possible *alternative* responses have looked like? Above, I introduced two other possible types of responses to contingency, the adaptive and the heroic; Table 4 illustrates what these alternative responses might have looked like in each of these cases.

While I am discussing here the way in which contingency is used as a resource in the initial stage of creation, it is important to note that the eventual development of the artifact is itself an evolutionary process where new stakeholders, new resources and new contingencies continuously appear and recede on the way to the ultimate venture that is created. While this is a process with no real "end", it should be noted that as any given project or product, service or market, continues to develop over time, even as more people come on board, more resources are available to the entrepreneur, and new ideas arise, there will tend to be an increased level of goal convergence as stakeholders who provide time, money and other resources to the venture will help to shape and refine its continuing development (Sarasvathy, 2001).

That was surely the case in each of the examples above—as the educators brought on new professors, acquired course materials, secured classroom facilities, etc, the eventual structure and content of their programs began to take shape. Or as Parks or Walesa were joined in their protest by larger groups of fellow activists, encountered further resistance, re-grouped and re-shaped their responses, the eventual outcomes and achievements of their efforts began to be made clear.

Indeed, the second role of the narratives is to clarify the interaction between the individual and the collective in the entrepreneurial process. None of the above endeavors could have been realized by the individual alone, without a larger "market" created by public need and dictated by historical contingencies. And it is through this constant interaction between the entrepreneur and the fruits of his or her labor with all of the involved stakeholders that the ventures themselves continue to take shape (Chell, 2007, Venkataraman, 2002; Sarasvathy, 2001; Freeman, 1984).

Finally, and perhaps most importantly, these narratives illustrate how entrepreneurial action extends from the exclusive realm of existing commercial markets into the broader realm of human enterprise in general. Entrepreneurial markets become markets not only in the economic sense, but also in the sense of fostering "human hope" (Sarasvathy, 2008) as progress is borne of often painful human contingencies. In fact it is this most entrepreneurial of phenomena, which we have witnessed so often in human history, that this paper seeks in some measure to describe.

Later, I review the relevant entrepreneurship literature and show how this view of contingency sheds light on the nature of opportunity and how it adds a new dimension to the study of time and management. But first, I show how the philosophical tradition of American Pragmatism provides a theoretical underpinning for contingency's role in the entrepreneurial process.

Table	3
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Entrepreneur	"Private obsession": initial personal contingency	"Public need": historical contingency	Accepted metaphor: entrepreneurial artifact
Rosa Parks Lech Walesa	Asked to move to the back of the bus Fired because of union activities	African American equality/civil rights Workers' rights	The Civil Rights Movement Solidarity
Steve Mariotti	Mugging	Way to get through to "uneducable" inner city youth	National Foundation for Teaching Entrepreneurship
Slavica Singer	The Balkan Wars	Lost generation: hopelessness, unemployment	The Graduate Program for Entrepreneurship, University of Osijek
Joe O'Donnell Pierre Omidyar	Death of son Joey from Cystic Fibrosis Desire to create "self-sustaining on-line marketplace" "Hobby"	Research on CF, support for CF families Consumers' desire to buy and sell on internet	The Joey Fund EBay

Table 4

Entrepreneur	"Private obsession": initial personal contingency	Actual response: resourceful	Alternative response: adaptive	Alternative response: heroic
Rosa Parks	Asked to move to the back of the bus	Quietly refuses, gets arrested	Gets up and gives the white man her seat	Refuses and agitates, gets others to join her in uprising then and there
Lech Walesa	Fired because of union activities	Begins to informally organize trade unions while working temporary jobs	Gives up political activity, looks for a steady job	Takes direct, confrontational/legal action against government at unjust firing
Steve Mariotti	Mugging by inner city youth	Becomes a teacher to face the problem	Moves away from New York, stops jogging	Overcomes fear with extensive counseling, goes back to jogging
Slavica Singer	The Balkan Wars hit Eastern Croatia	Reads about entrepreneurship, starts a university program	Looks for employment elsewhere in the world, leaves Osijek	Works to change political situation in the country, uses influence to try to end the war
Joe O'Donnell	Death of son Joey from Cystic Fibrosis	Starts the Joey Fund to raise money for CF	Goes into seclusion after son's death, avoids CF causes	Direct confrontation with personal grief: counseling, work with CF causes
Pierre Omidyar	Desire to create self-sustaining platform: "Hobby"	Starts EBay at home while still employed at other job; makes time for personal activities, venture takes off "on its own"	Constant tinkering to adapt to implementation glitches; increasing focus	Quits job, starts for-profit company with large up-front investment, seeks to develop sophisticated platform

5. Insights from pragmatism

Charles Sanders Peirce, the late 19th century philosopher who is generally recognized as the father of pragmatism, was devoted to what he believed was the central tenet of this uniquely American philosophy, namely "that the whole function of thought is to produce habits of action." In 1905, referring to himself and his fellow pragmatists, most notably William James and John Dewey, he even went so far as to state, "our idea of anything is our idea of its sensible effects" (Sahakian, 1968: 256).

Pragmatism's early philosophical roots have led to our modern notions of the term such that today, this widely-used word generally conjures ideas such as concern with practical matters, a matter-of-fact approach to problems, practicality and concerns with making decisions and taking action that are useful in practice, not just in theory. However, these quotidian definitions fail to evoke the rich insights of this long philosophical tradition. Many of these insights inform entrepreneurial creation in meaningful and important ways. Here, I outline two of these ideas and show how each places contingency at the center of the entrepreneurial process in a way that has not been done to date.

5.1. Truth is made, not found

One of pragmatism's main breaks with the philosophic traditions of Europe happened over what Dewey called the "perverted" notion that "the correspondence of things and meanings is prior to discourse and social intercourse" (Hickman and Alexander (eds) 1998:52). The pragmatists asserted that normative philosophy's "belief in ideal essences, individually complete, and yet connected in a system of necessary subordinations and dependencies" ignored the vital power that communication through language allows the human race. Language, they believed, is central to the creative process, as it allows us to subject any occurrence to re-consideration, revision, and re-adaptation. Describing the crucial role of linguistic innovation, Rorty wrote that it can be "summed up in the vague, misleading, but pregnant and inspiring thought that *truth is made rather than found*" (1989:53).

The modern pragmatist Nelson Goodman took the idea of "truth making" a step further, asserting that human beings don't discover worlds; they *create* them. "Worldmaking as we know it always starts from worlds already on hand; the making is a re-making" (1978:6). In this view, which embellishes historical contingency, we make new worlds out of the versions that already exist:

If worlds are as much made as found, so also knowing is as much remaking as reporting. All the processes of worldmaking... enter into knowing. Perceiving motion, we have seen, often consists in producing it. Discovering laws involves drafting them. Recognizing patterns is very much a matter of inventing and imposing them. Comprehension and creation go on together. (1978: 22)

The important point here is that we are not merely subject to the worlds, or the truths in which we find ourselves; we also influence and shape them through an interactive process between our inner thoughts and our communication with others. Dewey captured the individual's unique role in a magical observation on "inner experience": "the modern discovery of inner experience, of a realm of purely personal events that are always at the individual's command, and that are his exclusively as well as inexpensively for refuge, consolation, and thrill is also a great and liberating discovery. It implies a new worth and sense of dignity in human individuality, a sense that an individual is not a mere property of nature, set in place according to a scheme independent of him, as an article is put in its place in a cabinet, but that he adds something, that he makes a contribution." Mind itself, Dewey believed, emerged through conversation and interaction with others, through social give and take, which leads to a process whereby "various organic attitudes become an assemblage of persons engaged in converse, conferring with one another, exchanging distinctive experiences, listening to one another..." (Hickman and Alexander, 1998:53)

However, language is not merely a means of communicating those individual inner feelings and experiences: it changes the very nature of feelings and experiences for all of us moving forward. As Dewey put it, exchange is not an event that can be isolated, but

rather "it marks the emergence of production and consumption into a new medium and context wherein they acquire new properties." (Ibid)

Of course, the notion of "re-making" is nothing new to entrepreneurship scholars. Schumpeter, intellectual father of the field, pointed out decades ago that the entrepreneur's role in society, much like the artist's, is to "creatively destroy" by combining previously unconnected elements to create new products, services, channels of distribution and technologies (1942). However, while Schumpeter explained what happens as a *result* of the process, and even saw the need to examine both the individual and collective aspects of entrepreneurship, he did not explain *how* this process is actually carried out—how does one individual or a group of individuals bring to the broader marketplace of ideas their own (initially private) obsessions? I assert that truthmaking and worldmaking as described by the pragmatists, where the private individual with his own inner thoughts and experiences interacts with the public he inhabits, forms the basis of entrepreneurial creation. This insight leads to another important tenet of pragmatism, the idea that *contingency matters*.

5.2. Contingency matters

One of the major questions of philosophy throughout the ages revolves around what Rorty called the "attempt to fuse the public and the private... a striving for perfection with a sense of community." (1989:iii). Historicists have answered this question by asserting that socialization —and not some "immutable idea of human nature"—is the foundation of what it is to be human. In other words, as Dewey and other pragmatists claimed, there is nothing "beneath" socialization or prior to history which defines human existence. Rorty explains that this point of view should lead us to revise the questions we want philosophy to answer. "The broad question 'What is it to be a human being?' should be replaced with far more specific questions like 'What is it to inhabit a rich twentieth-century democratic society? and 'How can an inhabitant of such a society be more than the enactor of a role in a previously written script?' (1989:iii, our italics)

What he is saying here, simply, is that, not only social and cultural context, but also the contingent *temporal* context matters. What works at one point in history will not work at another. What will be accepted at one moment will be ignored at another. This in turn places contingency, both personal and historical, at the center of the entrepreneurial process. To illustrate how this plays out in practice, we use the philosopher Nelson Goodman's description of how art gradually comes to be accepted in society. He explained that the artist brings out "likenesses and differences" and forces "unaccustomed associations, and in some measure remakes our world. And if the point of the picture is not only successfully made but is also well-taken, if the re-alignments it directly and indirectly effects are interesting and important, the picture—like a crucial [scientific] experiment—makes a genuine contribution. To a complaint that his portrait of Gertrude Stein did not look like her, Picasso is said to have answered, 'no matter, it will.'" (Goodman, 1976:33) Likewise, entrepreneuring means taking a piece of the landscape and then collaborating with willing "accomplices" (Sarasvathy, 2001) to remake some portion of the world. It doesn't look like the same world we knew before, but "no matter, it will." If not, if the venture fails, then the entrepreneur's re-alignments were not "interesting" or "important" enough. However, if the venture succeeds, then those re-alignments, small or large⁵ take hold, at least for a time, until the next re-alignment occurs.

This is how contingent creation occurs and where pragmatism has offered us a plausible "next step" in the analysis. The entrepreneur's initial idea, a contingent, historically situated "private obsession," if it is eventually brought to market, either fulfills a public need—or fails to do so. Whether it does or does not fulfill that need is contingent only on whether the entrepreneur "produces a metaphor which we can find a use for." The entrepreneur's innovation, like Picasso's Gertrude Stein, if successful, has "idiosyncrasies which just happen to catch on with other people—happen because of the contingencies of some historical situation, some particular need which a given community happens to have at a given time" (Rorty, 1989:37). It is this historical embeddedness, this emphatic lack of universality, this rejection of *telos* that the entrepreneurial process implies. To understand entrepreneurial creation in this way, inspirational narrative is a tool more valuable than universal theory because in this view, protagonists always face historical contingencies they never could have predicted. It is the protagonists' *responses*, their use of these contingencies as a resource in the entrepreneurial process that produce new metaphors which we use for some period thereafter until they are replaced with the fresh metaphors of the next moment in time.

6. Literature review

Over the past decade, since the publication of Shane and Venkataraman's seminal work on the definition of entrepreneurship and its boundaries as a field of study (2000), the debate about the ontology of entrepreneurial opportunities seems to have gathered considerable steam in the entrepreneurship community (See for example Sarason et al., 2006; Mole and Mole, 2008). Shane and Venkataraman noted a common shortcoming in much of the entrepreneurship literature, namely that it had been defined up to that point largely in terms of the individual entrepreneur and his or her actions. However, there was clearly a "problem with this approach" as the authors explained:

... entrepreneurship involves the nexus of two phenomena: the presence of lucrative opportunities and the presence of enterprising individuals (Venkataraman, 1997). By defining the field in terms of the individual alone, entrepreneurship researchers have generated incomplete definitions that do not withstand the scrutiny of other scholars (Gartner, 1988).

⁵ Venkataraman (2002) makes the distinction between the weak equilibrating force and the strong equilibrating force. The weak force refers to relatively minor corrections in market inefficiencies, while the strong force calls for "fundamental qualitative change of the kind Schumpeter envisioned (2002: 53).

The definition of an entrepreneur as a person who establishes a new organization is an example of this problem. Because this definition does not include consideration of the variation in the quality of opportunities that different people identify, it leads researchers to neglect to measure opportunities. Consequently, empirical support (or lack of support) for attributes that differentiate entrepreneurs from other members of society is often questionable, because these attributes confound the influence of opportunities and individuals. In contrast to previous research, we define 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 (Venkataraman, 1997). Consequently, the field involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them. (2000: 219)

That work served as a challenge for entrepreneurship scholars in their struggle to accurately portray opportunity and its role in the entrepreneurial process. However, as I mentioned at the outset, the ontological debate between entrepreneurial opportunity as "out there"—meaning pre-existent, vs. "in here"—existing only in the perceptions and a priori beliefs of the entrepreneur—persists.

On the "in here" side, entrepreneurial opportunity, whether "enacted" (Gartner et al., 2001), or "constructed" (Chabaud and Ngijol, 2004), emerges as a result of the individual's unique makeup—his or her imagination, vision or creativity. On the "out there" side are those who represent entrepreneurial opportunity as a freestanding entity, able to be studied and measured separate from the entrepreneur himself (Casson, 1982; Shane, 2005). There is an implied teleology to the process—the aim is for individuals X, Y or Z to find a given opportunity and bring it to market. In this view, largely based on Austrian economic theory, "Opportunities have their own, objective existence independent from actors. In other terms, the market opportunity exists prior to its identification." (Chabaud and Ngijol, 2004:4–5)" Chabaud and Ngijol criticize this view on two grounds. First, they say, in a critique similar to that of Shane and Venkataraman (2000), that it focuses on the entrepreneurial *individual* and largely ignores the entrepreneurial *process*. Second, it presents a static view of opportunity identification, namely alertness to a given opportunity at one moment in time (a la Kirzner, 1979) while it largely neglects the "project" aspects and the on-going evolution of opportunity. Indeed, a further implication of this approach is that entrepreneurial ideas in their original state end up being implemented in some way similar or even identical to the original plan; if they don't, then something went wrong. Contingency seen through this divided lens of the "in here"/"out there" dichotomy is either an obstacle to be overcome in the march toward a pre-defined destination (Davidsson and Honig, 2003), or a change in the environment requiring an adaptive response (Shane, 2005).

More recently, the topic of how and under what conditions the entrepreneur interacts with *his or her particular historical context* has been intermittently and variously explored in the entrepreneurship literature.

Kalantaridis (2004) describes this epoch in entrepreneurship research as being defined by a "social constructionist approach" and the entrepreneurial process is depicted as a way for individuals to "create their reality and make sense of it." These efforts attempt to "combine agency and context: the individual exists as a distinct entity, energized by a specific set of motives, capable of envisaging or imagining the future, and exercising judgment. However, the entrepreneur is contextually embedded. Thus the process is one of interaction (between agency and context) from which outcomes emerge." (2004: 66).

For example, Baron (2007) suggests that entrepreneurs "connect the dots" between seemingly unrelated events or trends, and that both personal and environmental factors are at play in the process:

Robert Bresson (1975), a well-known French film director, once described the creative process in these words: 'Make visible what, without you, might never have been seen.' Those words seem applicable to entrepreneurship and to new venture creation which does, indeed, bring into existence something that might, without an entrepreneur, have existed. A competing view is that specific entrepreneurs are relatively unimportant; good ideas will be recognized and put to use by someone, so individuals themselves matter very little. While this may be accurate up to a point, it does not explain situations in which extremely valuable ideas exist in a given culture, sometimes for many years, but are not implemented. For instance, the Inca civilization, although highly advanced in many respects, never used the wheel for transportation. The idea of doing so definitely existed in the culture because children played with toys in the form of wheeled carts. Yet no one ever put this idea to use in the way in which it was applied in many other cultures. Could this situation have changed if an appropriate entrepreneur were present? Since the wheel was not culturally prohibited, it seems quite possible. (2007: 168)

Shah and Tripsas (2007) describe "accidental entrepreneurs" like Josephine Cochrane whose company eventually became KitchenAid, and Jerry Yang and David Filo whose hobby of keeping track of their personal interests on the internet led them to create Yahoo. These individuals practiced "user entrepreneurship" meaning they "experienced a need in their day-to-day lives, created a solution to that need, had a passionate desire to share their solution with others, and eventually commercialized the solution." Otherwise described, these entrepreneurs acted to bring their solution—a "private obsession" born of personal contingency—to market, thereby fulfilling a historically contingent "public need."

Dew (2009:3–4) depicts entrepreneurial "serendipity" as "search leading to unintended discovery" and also "some combination of search (directed effort), contingency (favorable accidents) and prior knowledge (sagacity)" that lies between the two concepts of systematic exploration and spontaneous recognition, where "individuals are involved in some kind of search effort when they accidentally discover something that they were not looking for." While contingency plays a central role in this model of entrepreneurial serendipity, a more fine-grained analysis of contingency, and more importantly, an understanding of entrepreneurs' attitudes toward contingency and their use of contingency as a *resource*, clearly adds a new element to this subset of the entrepreneurship literature.

7. Contingency and time

A deeper understanding of contingency also helps us to grasp the critical nature of *time* in shaping both the players and the field. Indeed, in 2001, the *Academy of Management Review* dedicated an entire special issue to highlighting the potential contribution of time and temporal dynamics to theory and method in management research. For example, hypotheses are often tested with explicit or implicit suggestions that X causes Y with little thought given to how long it takes for X to cause Y, how long Y lasts, and what happens in between (Mitchell and James, 2001). Some, such as management researchers influenced by population ecologists (Hannan and Freeman, 1984; Aldrich, 1990, 1999a,b), do in fact incorporate time explicitly into their models, but overlook the interesting interactions that happen within those periods of time and in fact give them their relevance.

Time is relatively easy to measure and is a phenomenon with which we are all familiar. However, the mutual causality over time that characterizes the interrelationship between actor and environment has not emerged clearly from most management studies of time. Perhaps this is because common metaphors reinforce the perception of stasis. For example, in strategy we often speak of a "playing field" when analyzing competition between companies. This metaphor implies that the environment does not change, that it is an immutable space, removed from time, serving only as a surface and set of boundaries for the activities of the teams of humans in which we are interested. Or consider the metaphor of "cultural distance" prominent in the international business literature, communicating a relationship of different cultures frozen in permanence which may be bridged, but will not evolve or grow closer together (Shenkar et al., 2008).

The pragmatist view of contingency supports the notion that what was possible yesterday may not be possible today, and vice versa; that individuals with exceptional endowments or in exceptional circumstances can change the rules of the game; that unlike Newtonian physics, actors change their behaviors in response to prevailing circumstances; that time and contingency push some windows of opportunity open while slamming others shut, like shapes in a turning kaleidoscope. The consequences for research can be disheartening. If the only thing that changed between t_1 and t_2 was the treatment applied to our test group, we have the makings of a good experiment. But if a host of unmeasured variables changed too, we have statistical chaos. It can be daunting and humbling to acknowledge that as agents seek to change their worlds, they are at the same time indebted to that world for the bundles of resources that they have (or are), that what once looked like a stable finding laboriously teased from careful analysis of the data may be the fleeting relic of a world which no longer exists. However, this paper does not advocate a collapse into extreme skepticism. On the contrary, we need richer, more inclusive theories of entrepreneurship and management that make room for individuals pursuing their private obsessions who, with some luck, see those obsessions intersect with emerging public needs.

8. Implications and conclusion

If choice is effective, its effects can be only most uncertainly, vaguely and elusively foreknown, and beyond some near horizon... cannot be foreknown at all. This is the paradox of choice: if effective, we cannot know what it will effect. (Shackle, 1979: 19)

Having outlined how exploring contingency can help us to understand heretofore unexamined or overlooked phenomena, and having shown how neither the objectivist nor constructivist views of entrepreneurship fully capture the importance of contingency in their respective attempts to explain or describe value creation, I now provide a brief sketch of how this depiction of contingency, supported by Pragmatist philosophy may inform both research and practice moving forward.

One important implication involves recasting the generalizations drawn from entrepreneurship research. If we take the idea of contingency seriously, it follows that attempts to draw generalizable conclusions from the results of hypothesis testing and case study analysis may prove frustrating (Stevenson and Harmeling, 1989). The nature of contingency necessarily implies that the debris of history that constitutes an industry and its markets can be very different than that of another industry in another place or at another time (See Cooke, 2002 and Malerba, 2004). While there is still clearly a role for those who seek to find common threads across industries and markets, another fruitful path may lie in generating specialized domains of study organized around particular industries or markets, suitably defined.

It also follows that the passage of time can alter the applicability of previously known truths as the accumulation of history renders their foundational assumptions obsolete. This idea in itself is nothing new, of course. A number of scholars have pointed out how management practices respond, even if slowly, to well-publicized research findings that show promise in solving stubborn real-world problems (Ferraro et al., 2005; Ghoshal, 2005). For example, option valuation prior to the introduction of the Black-Scholes option pricing model displayed higher variance than in the period after its introduction; it is now unusual to find options that deviate significantly from the model's prescription (Rubinstein, 1985, cited in Ferraro et al., 2005).

However, a more comprehensive view of contingency recognizes that not only does the entrepreneurial playing field change as practice evolves to solve important problems (*historical* contingency), but that tomorrow's problem solvers are being educated with today's truths (*personal* contingency). That is, the research that informs their education and experience becomes part of their makeup as they go forth to fulfill their private ambitions in a future world of unmet public needs (*personal* contingency). Therefore, understanding both the historical and the personal aspects of contingency is critical to understanding the process of value creation and how new markets emerge.

Another impact of viewing entrepreneurship as the product of both historical and personal contingency is that the economic motivation for entrepreneurship is appropriately de-emphasized. The entrepreneur's project, sparked and fueled by her composite of experiences, beliefs and contacts, may easily represent an attempt to remake herself or her world for reasons far more complex than pure economic gain. In an expanded definition of entrepreneurship to include the creation of non-profits and the origins of political movements, this is almost assuredly the case. However, even from a perspective where economics is de-emphasized, the

profit motive is not unimportant for entrepreneurship. Instead, it recognizes profit, however small, as a necessity for continued viability of the firm and as a feedback mechanism for describing how well the entrepreneur has filled (or created) a public need. Profit therefore shifts from being the *purpose* of the project to a byproduct of its success.

Finally, this pragmatist, contingency-driven notion of entrepreneurship comes closer to explaining why entrepreneurs persist even in the face of long odds and uneven financial success. As noted in the literature, purely economic explanations of entrepreneurship come up short when faced with the large number of business owners who incur great opportunity costs in keeping their firm's doors open (Gimeno et al., 1997). This perspective may in turn add to the literature in behavioral economics, social psychology, economic sociology or other fields which seek to explain individual behavior through lenses other than rationality or to describe markets and institutions as enduring artifacts of human adaptation to local circumstances.

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