

## Entrepreneurial Paradoxes: implications of radical subjectivism.<sup>1</sup>

### Introduction

Entrepreneurship is a concept suffused with paradox. It is at once familiar and mysterious, crucial yet elusive, absolutely necessary for the market process. Its essence lies in innovation, the new, the previously unknown, the unpredictable. Every day, in many different ways, millions of entrepreneurial actions are taken. The entrepreneur is the driving force of economic growth; but the ideal types of our academic musings often bear scant resemblance to the real-life acting human beings who actually populate the category.

This essay spells out in more detail the paradoxical nature of entrepreneurship in the form of a series of paradoxical propositions. Paradoxes can be revealing in exposing essential characteristics in a novel way. We begin first with a discussion of the conceptions of entrepreneurship.

### Conceptions of Entrepreneurship

The origin of the concept “entrepreneur” has been traced to Richard Cantillon (Cantillon, 1755 [2001]), who saw him as having a distinct function apart from wage-earners and other productive resources. In Cantillon’s writing, entrepreneurs made production decisions in conditions of uncertainty, thus taking on risk for which, if successful, a return was earned. In the modern period, Joseph Schumpeter is perhaps the most well known exponent of the entrepreneur as the disequilibrater *par excellence*, the originator of the gales of “creative destruction” that propel the economy forward (Schumpeter, 1942 [2010]; 1911 [1982]). More recently, in contrast to Schumpeter, Israel Kirzner has presented a concept of the entrepreneur as an equilibrater, an all-purpose arbitrageur (Kirzner, 1973, 1979, 1985, 1992, 2009). Kirzner imagines the entrepreneur as an *alert discoverer of opportunities* for profit. Such opportunities represent a “hole” in the market, an indicator of disequilibrium in which resources are not priced to reflect those opportunities. By exposing an opportunity, the entrepreneur may set in motion a series of actions that move the economy toward the equilibrium price configuration in which all resources are priced to reflect the value of that opportunity and all actions aiming to appropriate that value are mutually coordinated.

Kirzner was concerned exclusively with the systemic implications of entrepreneurship. It is the entrepreneur who provides the answer to the question: how do equilibrium prices ever get established in a dynamic world? Without the entrepreneur, the market economy could not function and anything that impedes the entrepreneurial function, will encumber the smooth functioning of the market (Kirzner, 1979). So Kirzner’s research is directed toward providing an understanding of the market process in general and economic policies appropriate to the fostering of entrepreneurship.

The management literature is interested in Kirzner’s work for different reasons, however. It is his concept of “opportunity discovery” that has recently become the central focus of research into the

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<sup>1</sup> I thank Roger Koppl for extremely helpful discussions.

nature and workings of entrepreneurship in real world markets, most notably by Scott Shane and his collaborators (Shane 2000, 2004, Shane & Venkataraman 2000, Eckhardt & Shane, 2003). Drawing from Kirzner's basic idea, Shane inquires into the nature of entrepreneurial opportunities and the people who discover and exploit them.<sup>2</sup> And a large literature has grown up around these themes.<sup>3</sup>

More recently, scholars have turned to a parallel and, to some extent rival, strand of Austrian economics, that has been developed primarily by Ludwig Lachmann and his followers, owing much to the work of (the non-Austrian) George Shackle (Lachmann, 1976, 1986; Lavoie, 1994; Lewin, 1997, 1999; O'Driscoll & Rizzo, 1996; Shackle, 1969, 1972, 1979; Vaughn, 1998); and also reaching further back to the original contributions of Ludwig von Mises (1996 [1949]) and Frank Knight (Knight, 1921). In some ways this new research harks back to the Schumpeterian approach, which emphasized disequilibrium, but it goes deeper. Lachmann's work characterizes the *radical subjectivist* branch of the modern Austrian literature, which emphasizes the importance of the passage of real time and uncertainty for human action and especially for the entrepreneur (for recent applications see Chiles, Bluedorn, & Gupta, 2007; Chiles, et. al. 2010; Foss, et. al., 2008; Matthews, 2010; Mahoney & Michael, 2005). Likewise Mises's approach to the entrepreneur emphasizes the role the entrepreneur plays in appraising the value of resources in a world in which the future is unknown. And Knight famously drew attention to the role of uncertainty (where the set of possible outcomes was unknown and unknowable) as distinct from risk (where the set of possible outcomes was known and probabilities could be attached to them). Knight proposed that the entrepreneur supplies *judgement* in order to make decisions in an uncertain world, and judgement has recently been emphasized as a crucial aspect of entrepreneurship in a number of recent contributions (for example, Foss & Klein, 2008, 2010). This (radical) subjectivist approach informs my examination of the paradoxical nature of entrepreneurship below.

## Paradoxes

Some of the issues discussed in the literature mentioned above are<sup>4</sup>: What is an opportunity? (Murphey, 2010: 6; McMullen, Plummer, & Acs, 2007; Casson & Wadeson, 2007). Are opportunities discovered or created? (Alvarez & Barney, 2007; Foss & Klein, 2010; Holcombe, 2003; Buenstorf, 2007). Are opportunities subjective or objective? (Foss & Klein, 2008; Klein 2008; Companys & McMullen, 2007; Plummer, Haynie, & Godesiabo, 2007; McMullen & Shepperd, 2006). Who are the entrepreneurs? (Shane, 2008). What is the nature of their ability to discover or create opportunities? (Sheppard & DeTienne, 2005; Shane, 2000). What is the connection between opportunity discovery (creation) and business strategy? (Foss & Foss, 2008; Foss & Klein, 2005). What is the nature of entrepreneurship research and what are its limitations? (Minniti & Levesque, 2008). Can one teach entrepreneurship and how? (Klein & Bullock, 2006).

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<sup>2</sup>Shane's entrepreneur is, however, not Kirzner's entrepreneur. The latter is a disembodied function whose general characteristics lie beyond the realm of empirical research. Kirzner's contribution to the management literature, though substantial if one notes the large number of studies – empirical and theoretical – leveraging the concept of "opportunity," was unintended (Kirzner, 2009).

<sup>3</sup> Foss & Klein 2010; Klein, 2008; Foss, Klein, Kor, & Mahoney, 2008; Foss & Klein, 2008; Foss, Foss, & Klein, 2007; Alvarez & Barney, 2007; McMullen, Plummer, & Acs, 2007; Davidsson, 2004 to list just a few.

<sup>4</sup> For a recent review see Koppl & Minniti, 2010.

In what follows I try to contribute toward a resolution of these questions by examining a set of paradoxes connected with entrepreneurship.

*Paradox #1: Entrepreneurial opportunities are complicated by uncertainty but would not exist without uncertainty.*

Uncertainty is a fact of life, but so is predictability. In order to act we need some things to be predictable. Some things are thought to be *perfectly predictable* (the sun will rise tomorrow) while others are *imperfectly predictable* (there is a sixty percent chance that it will rain) and some are *contingently predictable* (if it rains people will use umbrellas). But there are some events that are simply outside the set of predictable events – they are “radically uncertain” (as distinct from simply risky) (Langlois, 1992; Knight, 1921) - like the nature and timing of the arrival of a new technology or product or work of art. Entrepreneurship is mostly about this last set of events, grand and small. Entrepreneurs precipitate them and they react to them. This bears closer examination.

Uncertainty is a result of the *interaction* of individuals in real time – time as we experience it, as distinct from theoretical time as we describe it or analyze it, where interactions are, for the most part, banished (O’Driscoll and Rizzo 1996; Langlois, 1992). The past is the only guide to the future, and in some respects it is more reliable than in others. Clearly there must be a discernable momentum in human affairs (Shackle, 1972), a stability of underlying conditions, or else action would be impossible. Action is by definition future-oriented, provoked by the conviction of effectiveness in bringing about some preconceived situation. Recognizing this, theorists and researchers have responded in different ways.

In the mainstream (neo-classical) economics literature the response has been effectively to define away the problem of uncertainty. Uncertainty is very inconvenient for the development of neoclassical economic models (as opposed to risk, which is measurable and can be modeled). These models, for example of production within a firm, depend on the actors possessing shared knowledge of the characteristics of resources – what they are capable of doing and to what degree (a production function), that is to say what products can be produced and how; and what products can be sold, at what prices and at which dates, etc. All this knowledge, about technical and economic matters, is solid and is shared by the decision-makers. In such a context, action (if it can be called that) is simply the predictable solution to a constrained maximization problem – that of maximizing net revenue (profit) subject to the known technical and economics constraints.

The payoff for adopting these assumptions has been the development of an impressive and extensive theoretical framework connecting all aspects of microeconomic behavior. It is a rigorous and coherent working out of the implications of the “pure logic of choice” (Buchanan 1964). As such, it provides many valuable insights into the nature of economizing, the consequences of many types of economic policy like the imposition of minimum wages and taxes and tariffs.

But, by its very nature, this “pure logic of choice” is limited to situations that are fundamentally static in nature. It cannot deal with fundamental (endogenous) change, and, therefore, it has no room for, or role for, the entrepreneur (Baumol, 1968). Endogenous change implies the arrival of something unexpected. It is the result of action and interaction in real time. In order to know everything relevant about the future, and thus avoid surprises, one has to know what others will do in various circumstances. But in order to predict the actions of others, one would have to know what they will know, since all action depends on prior knowledge. And future knowledge cannot be had before its time – by definition (O’Driscoll and Rizzo 1996, Popper, 1945). Thus, social situations involving change also involve inherent unpredictability. This is most graphically seen in the *diversity of expectations* that exists at any point in time (Lachmann, 1978: 24). Different entrepreneurs have different expectations involving the uses and values of the same sets of resources. Diverse expectations imply that, at most, only one person’s expectations can be right, and all the others must be in error. This is part of the experimental nature of the market process.

On the one hand, this is encouraging. It suggests that the market process is dynamic and selective, allowing only viable entrepreneurial visions to be actualized. The existence of error makes room for the entrepreneur, the person who notices and exposes these errors as opportunities (Kirzner 1973). As a result of the entrepreneur, resources tend to flow to where they are most highly valued.

On the other hand, it is not clear how the entrepreneur can act at all. How is one to know which “opportunities” are real, in the sense that they will appear profitable in retrospect? How is the entrepreneur to predict how other people will act in the circumstances he envisages.

It seems that every economist of note has, in one way or another, perceived some difficulty associated with accounting for the passage of time and has wrestled with it (Currie & Steedman, 1990). On the one hand there is the undeniable fact of human action in an ordered society. On the other hand there are the undeniable facts of novelty and disequilibrium and the inability to foresee all consequences. All action being future oriented rests on connecting present causes to future effects, which seems to imply successful prediction. How is one to reconcile these apparently irreconcilable perspectives?

One possible resolution may lie along the following path (Lewin 1999). We need to make use of the distinction between events that are predictable (either perfectly, probabilistically or contingently, see above) and events that are not. In other words, predictability in one sphere of knowledge coexists with unpredictability in others.

To see this consider the question of knowledge. One may categorize knowledge into three types. *Type 1 knowledge – knowledge of the natural world*, knowledge of *natural laws* (apples always fall to the ground when dropped); *Type 2 knowledge – knowledge of the social world*, knowledge of social “laws” (people tend to stop at red lights, people open their umbrellas when it rains, we all mark time the same way to facilitate coordination); *Type 3 knowledge – knowledge of unique historical events or unique events yet to come*.

Action based on the third category of knowledge cannot be predicted in the same way as action based on the first two categories. Entrepreneurial action is based on Type 3 knowledge. It is essentially unpredictable, but it is possible because it occurs *within* the world of knowledge Types 1 and 2. All action presupposes a stable world, where nature and human reactions can be predicted within certain

well-understood limits. So, while the entrepreneur may not be able to accurately predict whether and in exactly which way she will succeed in implementing her particular entrepreneurial vision (which, in any case, may not be perfectly specified ahead of time), she knows what the “rules of the game are.” She knows the social laws and conventions that will reward certain actions and punish others and the nature of the rewards and punishments. Should she fail to earn a profit she will not be executed, though she may have to sell some assets, and find another line of work. This she can contingently predict. It is only because these social laws, these institutions, are stable over the time period of her projected actions that she is able to act at all, and this enables us to say some very important things about entrepreneurship.

Though it may be disequilibrating (in the sense of destabilizing the plans of others and forcing a revision of resource valuations) and though it obviously occurs within disequilibrium (in the sense that plans may be mutually incompatible to start with), entrepreneurial action must occur within a world of social equilibrium, in which the expectations of most people, *regarding most things*, are indeed compatible and correct because of the existence of social institutions.<sup>5</sup> The designation “institution” connotes an image of permanence, of reliability. Institutions exist as fixed points in time within which individuals can make their choices in the knowledge (knowledge type 2) that they, the institutions, at least, will remain unchanged.

It must be noted, however, that this permanence must be relative, for we have the fact of institutional change. Standards come and go. Categories change. Rules appropriate to one society often disappear as the society changes. Even language evolves. How does this affect the ability of entrepreneurs to act? The answer must be in the rapidity of change. A society in which everything changed too rapidly would be one devoid of any perceptible order. History is possible only because the historian is able to know something about the enduring orientations inside people’s minds. The historical context is defined by the meaning of the institutions of the society under examination. But as the context changes, institutions may be seen at one point in time as fixed points, while at another they may be seen as aspects of change. It depends on the purpose of the analysis and the time-span involved. What is fixed and what evolves is itself a matter of context. There seems to be a continuing interaction between the foreground and the background, and which is moving depends very much on which you have in focus, much like a three-dimensional holographic picture. Commercial law is necessary for the conduct of economic life and indeed facilitates the emergence of unpredictable novelty in economic life. But economic (and technological) changes of certain types put a strain on aspects of the law that prompt it to change. For example, the emergence of electronic communications has suggested the acceptance of facsimile signatures and has raised difficult legal questions relating to copyright and privacy on the Internet.<sup>6</sup>

If the world were like the world of neoclassical economics there would be no entrepreneur because in that world everything is known. And if the world had no stable laws of nature and of social action there would be no entrepreneur either, because very little would be known and any kind of prediction would be impossibly unreliable. Opportunities for profit exist because there is a place for action that

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<sup>5</sup> “[Social] institutions enable each of us to rely on the actions of thousands of anonymous others about whose individual purposes and plans we can know nothing. They are the nodal points of society, coordinating the actions of millions whom they relieve of the need to acquire and digest detailed knowledge about others and form detailed expectations about their further action.” (Lachmann 1971:50, italics added).

<sup>6</sup> The relative permanence of the institutional environment causes the degree of uncertainty to vary. If institutions are very unstable, individual planners will choose short planning horizons. Stable institutions facilitate long term planning and entrepreneurial ventures (see Koppl & Butos, 2001).

introduces novelty within a stable social framework, in the firm, in the market and in society at large. Uncertainty makes entrepreneurship possible even as it makes it difficult to analyze.

About which more below.

*Paradox2: An entrepreneurial opportunity for everyone is an opportunity for no one in particular.*

It follows from the discussion above that knowledge about opportunities must be idiosyncratic. If too many people know about a (potential) opportunity, it may not be exploited. There is a strategic problem when everyone perceives an opportunity whose value depends on not too many people trying to exploit it. G. S. Richardson (1960) has insightfully explained this:

It may seem paradoxical to regard ignorance, in its role as a restraint on investment, as actually furthering, in certain circumstances, a successful [exploitation of opportunities for profit]. And yet it is clear that an entrepreneur may undertake a certain project chiefly on the grounds that only he, and possibly a very few other producers, are aware of the impending increase in demand. Ignorance, by checking the response of some, may be a necessary condition for any response by others; an unequal distribution of knowledge of final demand, therefore, may actually promote successful adjustment. A general profit opportunity, which is both known to everyone, and equally capable of being exploited by everyone is, in an important sense, a profit opportunity for no one in particular; it will create the incentive to invest only provided some people are less able to discern it, or to respond to it, than others. (Richardson, 1960: 57-58).<sup>7</sup>

Richardson refers to these conditions of ignorance and inertia as “helpful imperfections,”<sup>8</sup> but, in truth, they are not imperfections, but merely conditions of the real world, a world in time in which entrepreneurial expectations and abilities (which depend on the type and value of resources entrepreneurs have available) are heterogeneous in nature. Entrepreneurial producers may indeed possess, and need to possess, a kind of “temporary monopoly of information about a general profit opportunity. ... Profits may be earned ,... both by foresight and by innovation.” (Richardson, 1960: 57). No producer enters a market that is a “clean slate” – there is history. An opportunity obvious to one person may be invisible to another because he sees the world through different lenses framed by different experiences and presumptions. This is a necessary part of the market process as an implicit experimental process that pits one perceived opportunity against another.

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<sup>7</sup> Also: “[O]ppportunity finds its meaning in the context of human action and human action occurs within the flux of time, making it inherently uncertain (Mises, 1966 [1949]). Thus it seems that one cannot have opportunity without uncertainty but because the human condition is characterized by the passage of time, there will always be uncertainty and therefore, some form of opportunity. ... individuals appear to experience uncertainty differently as a function of knowledge, motivation, ability, geography, etc. enabling some but not others to act.” (McMullen, Plummer and Acs, 2007: 279).

<sup>8</sup> Alvarez and Barney refer to “competitive imperfections” (2007: 13).

One important implication of this is that current and historical perceptions of appropriate anti monopoly policy (anti-trust) may be in error if the objective of the policy is to foster and encourage competition. Anti-trust regulators and litigators know no more, and arguably know less, about the viability of perceived opportunities than business practitioners do. Profits earned from the successful exploitation of opportunities will most likely result in (at least temporarily) high market shares for those who succeed. And a substantial amount of time may be involved. Application of principles gleaned from full-knowledge micro-economic models may be seriously misleading for the dynamic world of entrepreneurial action (Teece & Coleman, 1998; Liebowitz & Margolis, 1999).

*Paradox #3: Entrepreneurial opportunities are subjective and objective; discovered and created.*

Much recent discussion concerns the ontological or epistemological nature of opportunities (Alvarez & Barney, 2007; Foss & Klein 2010; Klein 2008). Do opportunities exist (objectively) waiting to be discovered, like the peak of a high mountain, or are they created by the entrepreneur's subjective perception of them – not “existing” until the moment of perception, *ergo* a moment of creation? The actions put in motion to exploit the opportunity in this sense “create” it (Alvarez and Barney, 2007).

The key aspect of opportunities is that they are opportunities *for profit*. As such they are subjective until they are actualized by certain *necessary actions* (Koppl, 2002). Opportunities require actions to become “real.” They are undoubtedly based, to some degree, on the existence of objective conditions – the mountain is there as everyone can see; but the opportunity itself depends on certain conditions not yet existing – it may be possible to advertise the existence of this challenging peak and charge people for the knowledge and gear necessary to climb it or for access to it. Once the necessary actions are taken and successfully lead to the earning of profit, the opportunity will acquire an objective nature - in the sense of being universally recognized (McMullen, Plummer and Acs, 2007). In retrospect we may say that the entrepreneur “discovered” certain conditions that led him to believe he could “create” an opportunity for profit. The element of creativity is in the perception of something hitherto unperceived.

There is another sense in which opportunities are created. To be successful opportunities depend on the successfully combining resources (capital goods). Opportunities are “happened upon” in the sense that the pattern of the precise combination of resource elements comes to one suddenly – though, no doubt, causally preceded. This can be rationalized, though one can never be quite sure of the causal chain. There is an apparently unaccountable creative element.

Kirzner's theory of entrepreneurship is based on the notion that the entrepreneur “discovers” opportunities. This view has been repeatedly challenged over many years on the basis that it assumes that opportunities are objective in nature and bound to be successful, seeming to belie the fact that some (many, most?) perceived opportunities may turn out to not to be opportunities at all. Alternatively, one may see Kirzner as *defining* opportunities as successful opportunities – implying that entrepreneurial action is by definition successful (High 1982; Lewin, 2002; for a recent review see Koppl & Minniti, 2010).

Kirzner has endeavored valiantly to respond and to account for these objections. He has not denied that uncertainty implies that entrepreneurial action may be unsuccessful and that it may be seen as creative. He has spoken of the discovery of *higher level* “opportunities to create opportunities.” (Kirzner 2009). At the base of this debate lies Kirzner’s conviction that the entrepreneur is an equilibrator – who *discovers* a “hole” in the market and thereby sets in motion actions that will remove it; thus entrepreneurial action is coordinating rather than dis Coordinating, and he has resisted any attempt to move him away from this.

Whatever may be gained by semantic disputation and rationalization, however, it remains key to the nature of entrepreneurship that action is required for the realization of opportunities, that such actions respond to and yet also likely generate further disequilibrating forces (of which more below), that actions in pursuit of profitably opportunities often fail, and that successful entrepreneurial actions rely on hitherto unperceived opportunities. Within this understanding it is possible to speak of the entrepreneur as discovering and creating opportunities that are both subjective and objective depending on what you mean (Kirzner most subtle defense occurs perhaps in Kirzner 1982).

*Paradox #4: Entrepreneurial action is both equilibrating and disequilibrating, successful and unsuccessful.*<sup>9</sup>

Once we understand that action is possible in disequilibrium (a situation of mutual inconsistency of plans), we should not be surprised to discover that entrepreneurial action itself can be, and most often is, disequilibrating.

It may be true, following Kirzner, that successful entrepreneurs help to coordinate (equilibrate) markets. This was Adam Smith basic insight that it was not from benevolence that the butcher brought us meat, but from his attention to profit. Successful entrepreneurship entails the delivery of goods or services to consumers who value them more than the combined total (historical) value of the resources that were needed to produce them. The successful entrepreneur, in effect, saw that these resources were undervalued when one considered the opportunity to use them to produce a new, valuable good or service for the market. The entrepreneur is the bridge between the market for resources (a resource-based view) and the market for the outputs (a Porter view). And the entrepreneur is the “driving force” that causes the market to clear at a price that satisfies the plans of all consumers and producers (Kirzner, 2000).

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<sup>9</sup> Davidsson advocates for dropping the term “opportunity” altogether:

The term “opportunity” refers to something not yet realized. The increased use of this term in entrepreneurship research therefore signals the sound development that the field is really turning towards a focus on emergence, rather than starting from existing firms and established business founders. However, there is a huge linguistic problem with adopting “opportunity” as a central concept in entrepreneurship research. By almost any definition, an opportunity is something known to be favorable. ... the use of the term “opportunity” for an unproven venture idea is fundamentally opposed to acknowledging uncertainty as an inescapable aspect of the environment .... (Davidsson 2004: 506-521).

But having said this, one must also recognize that the successful entrepreneur inevitably disrupts the plans of his unsuccessful rivals. And these disrupted plans may set in motion further dis-coordinating adjustments. Suppliers counting on the successful implementation of a plan of their client, that subsequently fails, will find their plans disrupted, all the down the supply chain. Successful plans will draw in resources and unsuccessful ones will repel them. There is an incessant churning as resource owners struggle to find their most valuable uses. This may happen automatically, but it is not instantaneous, and it is not easy.

Paradox #5: Entrepreneurs act on plans that are never completely successful.

We speak of successful and unsuccessful plans, but, in truth, success and failure of plans is a matter of degree. This is another consequence of the passage of time. Time as imagined is never the same as time as experienced. Plans can incorporate only a tiny fraction of the detail of events to come (just as memory retains at most only a tiny fraction of the details of events past). Without exception, the event as experienced will differ from the event as imagined, the latter being only the barest “outline” of the former. Consequently, even a successful entrepreneurial vision will differ in essential ways, some welcome some not, from what was imagined. One dimension of success is profit-earned. But another is the experience as measured by the entrepreneur against the plan. Needless to say this is a subjective metric. One should not be surprised to find the entrepreneur striving after more than profit in a dogged effort to continually “do it better.”<sup>10</sup>

Paradox #6: Entrepreneurial action can be understood but not predicted.

Enough has been said to establish that the results of individual entrepreneurial actions (or indeed the actions themselves) cannot be predicted with any degree of definiteness. Not even the individual entrepreneur can do this. This is the ultimate nail in the coffin for the vision of a comprehensively centrally-planned economy. Such an economy could only function, if at all, by suppressing all entrepreneurial activity, hence all innovation and development. The unpredictable, uncertain nature of the market is what allows entrepreneurs to function.

Less comprehensive, more piecemeal top-down economic policy, specifically entrepreneurship policy, is similarly encumbered. The entrepreneurial market process is necessarily decentralized.

The entrepreneurial market process consists of the daily decision making of many independently acting entrepreneurs, each striving to establish, maintain, or develop an enterprise. Each entrepreneur responds principally to the business environment consisting of rival, input suppliers, and output demanders. The overall result of the process is generated by the distributed decisions of many entrepreneurs (and others). The overall result is the unintended consequence of all those decisions, unintended because the actors have not gotten together ahead of time to coordinate their actions. The aggregate level and type of entrepreneurial

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<sup>10</sup> Some work that addresses this in different ways are Harper (1996) and Sarasvathy (2009)

activity emerges as the unintended consequence of the actions taken by all independent entrepreneurs in the attempt to seize profit opportunities.

The process is decentralized and therefore unplanned, even though each individual entrepreneur plans. (Koppl, 2008: 919-920)

Economic policies aimed at developing specific types of entrepreneurial activities, in the hope of fulfilling particular national economic agendas, must contend with this. Centralization is inimical to entrepreneurship – crucial knowledge cannot be centralized (Hayek 1945), does not even exist prior to the market process that generates it, and entrepreneurship depends upon the existence of profit opportunities idiosyncratically perceived by individual entrepreneurs. Policies that attempt to control entrepreneurial outcomes are bound to fail.

In retrospect, of course, sense can be made out of both successful and unsuccessful entrepreneurial ventures, but attributing states of mind to the actors. Actions that are retrospectively comprehensible are not necessarily predictable. And much can be learned from this type of history; for example in terms of the kinds of social institutions most likely to allow for the development of creative entrepreneurial activity (Lewin, 2002).

Paradox #7: Entrepreneurship can be learnt but not taught

The same logic that applies to the impossibility of centrally planning entrepreneurial activity applies also the teaching of entrepreneurship.

Some business professors dream of finding a grand algorithm that will allow them to guide entrepreneurial decisions and to judge in advance which decisions are good and which bad. [This has been revealed to be] a form of magical thinking. We need entrepreneurs to make their decisions for themselves precisely because it is impossible for us to make those decisions for them. (Koppl 2008: 925).

To be sure, individuals who have learned certain crucial concepts (like those typically taught in business schools) may be in a better position to exploit perceived opportunities. But this is neither a necessary nor a sufficient condition for successful entrepreneurial practice (Klein and Bullock, 2006). It is surely plausible that an understanding of the workings of a business and its contextual environment could help a creative mind see opportunities that might otherwise elude her. But this relationship is variable and elusive. Enduring generalizations about entrepreneurship seem to be available only at levels of abstraction too high to be of use in the discovery, creation and exploitation of individual opportunities. Indeed Ludwig von Mises tells us that entrepreneur's "defies any rules and systematization. It can be neither taught nor learned." (Mises, 1949: 585; Klein and Bullock, 2006: 435).

With regard to this last statement, however, there is probably a sense in which aspects of entrepreneurship might be learnt. Much of the knowledge utilized by an entrepreneur in the course of indentifying and exploiting an opportunity is tacit. Tacit knowledge is gained, if at all, by experience and

observation. Immersion in the flow of actions is often the best breeding ground for entrepreneurship. This is surely the logic behind the use of case-studies as teaching devices, though whether, and to what extent, they are able to simulate real world situations so that the experience is “real” for the student is another matter. And this is also perhaps what is behind the observation that, much more often than not, successful entrepreneurs have experienced prior failures.

Paradox #8: The elements of the category “entrepreneur” are all unique individuals whose characteristics (almost) defy generalization.

There is much discussion over what and who an entrepreneur is and definitions abound. From the above discussion we would have to say that entrepreneurial aspects inhere in almost all human actions. Action occurs in time and individuals are continually responding to unexpected situations in “creative” ways. More usefully though, entrepreneurship refers to those human actions that have a large component of the new and innovative. Successful entrepreneurship produces something that is new and valuable. This is as much as is common to all components of the category “entrepreneur.” The unique, individualistic aspects loom large.

Thus while we may be able to readily consign certain actions and individuals to the category entrepreneur, it is often difficult (impossible?) to describe what common characteristic they all possess. Clearly the successful earning of profit is the key, but this is identification by result rather than by characteristic. Can we say more than entrepreneurship is that which enables some to successfully create value by innovation?

## **Implications for researching entrepreneurship.**

If the above discussion on the essential nature of entrepreneurship is correct, then effort expended on trying to discover recipes for successful entrepreneurship are unlikely to succeed. All entrepreneurial activity occurs in specific historical and institutional contexts. And it is from changes in these contexts that opportunities arise. The next big thing is unlikely to be the same as the last one. The structure of markets, of firms, of families, and of populations change rapidly enough to render historical lessons for successful action ungeneralizable at the detail level.

Nevertheless, empirical research would seem to have value in advancing our understanding of who has been successful and who not. This empirical research should aim to uncover the facts on the ground, now and in the past.<sup>11</sup> What follows from this type of research is not a tight formula for action at the policy and business practice level, but, rather, a body of suggestive information that may enhance the

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<sup>11</sup>An admirable example of this type of research is the recent book by Scott Shane on *The Illusions of Entrepreneurship* (Shane, 2008). In a study like this one must, of necessity, identify real world entrepreneurs. Shane focuses on new enterprises and self-ownership. This may be a subset of the entrepreneurship we are talking about, but it is surely a large subset, and his results are very illuminating in understanding the scope and location of entrepreneurial activity in the current American economy.

understanding of policy-makers desirous of promoting entrepreneurship and help would-be entrepreneurs gain an accurate picture of the world as it really is.

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