

How entrepreneurs learn? A practical interpretation

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Abstract

Entrepreneurial learning processes have begun to take an important place in the economics literature. In this work, we discuss the Kirznerian theory of entrepreneurship and the place of learning in this theory. We criticize Israel Kirzner for lack of a learning mechanism in entrepreneurial discovery procedures. Two important recent contributions to Kirznerian theory by Yong Back Choi and David Harper do not satisfactorily provide a learning mechanism that drives the market process. Having discussed these contributions with an interpretive approach, we introduce a practical learning mechanism for entrepreneurial activity.

1. Introduction

Nowadays there is an increasing interest in the issue of entrepreneurial learning. Both Austrians and non-Austrians alike put forward relatively complete theories of learning procedures behind entrepreneurial activity. It was Israel Kirzner who triggered the debate over an entrepreneurial market process. Later entrepreneurial activity became the central force for the market process analysis. In the meantime, Kirzner's theory has faced many criticisms. One of the important aspects of his theory that has drawn much attention is the place of learning in the process of entrepreneurial discovery.

On entrepreneurial learning, two recent works particularly draw attention. Both works argue that mainstream economics does not have adequate tools to deal with entrepreneurial learning in the face of real time and radical uncertainty. One of these works explicitly follows the Popperian theory of growth of knowledge. David Harper (1996, 1998), in his recent attempt to fill

a gap in the theory of entrepreneurship, argues that Kirzner does not offer an explanation on 'how entrepreneurs learn'. The other notable work comes from Young Back Choi (1993, 1997). Choi also raises the issue of the lack of an entrepreneurial learning process in the theoretical work in this area. Both theories answer many questions that are relevant to the entrepreneurial processes, not adequately dealt with by Kirzner's theory. Yet, their works raise some questions as well. To what extent can we bring these theories together with the practical orientation of Kirzner's theory and its Hayekian underpinnings? Is it not more suitable to assume that entrepreneurial learning is more a practical process than a rational one? Would not a practical process be more suitable to the spirit of spontaneous order and market process analysis? In other words, in this paper, I deal with the question of how we can establish a connection between the everyday world of the entrepreneur and his theory or paradigm to choose and act on opportunities. These questions will be discussed in the following sections.

The paper's structure is as follows. To begin with, I will discuss briefly the absence of a learning process in Kirzner's theory. Second, I will turn to Harper's and Choi's work. Emphasizing the inability of rational processes in explaining entrepreneurial processes, I will argue that these theories remain incomplete because they do not pay much attention to the practical background of entrepreneurial activity. Finally, I will present a practical process of entrepreneurial learning and touch upon possible implications of this approach in connection with entrepreneurial discovery.

2. Entrepreneurial learning and Kirzner

While the Austrian literature has made important contributions in explaining the role and importance of entrepreneurship in market processes, it remains limited only to one kind of learning. The dynamic process of entrepreneurial decision-making is incomplete without the learning process behind it. Israel Kirzner, the Austrian economist who offers the most elaborate theory of entrepreneurship in economic literature, assumes an 'intuitive' mechanism in his theory of 'alertness'. This is mostly understood as a 'switching on/off' mechanism. He does not dwell on the nature of this process and leaves its discussion to others. Kirzner assumes that entrepreneurs already know how to look for and exploit opportunities. However, our understanding of the entrepreneurial process remains incomplete without any explanation of this 'intuitive' character of entrepreneurial discovery.

In Kirzner's theory, entrepreneurial discoveries are a result of the perceptiveness of the entrepreneur. An entrepreneur sees price discrepancies

with a natural alertness. Since opportunities exist objectively out there, in the world, the entrepreneur just perceives them. Kirzner says that the essence of individual entrepreneurship is alertness in which the decision is embedded (1979: 181). Yet he does not question the nature, domain and context of 'embeddedness'. No extensive discussion of the meaning of 'embedded' is found in his writings. Indeed, he accepts that we do not know much about the nature and contextual structure of entrepreneurial vision (1979: 169). Assuming that alertness is an intuitive phenomenon, he leaves the investigation of the nature of alertness to other scientists, particularly psychologists, although he thinks that it would be interesting to do work in this area (1985, 25). In his theory, entrepreneurs open their eyes and see opportunities. This opening does not necessarily depend on the background or economic orientation of the entrepreneur. Since alertness is a gift from nature and no entrepreneur has the knowledge of whether he has the ability of entrepreneurial alertness, it is, quite possibly, impossible to relate it to any kind of 'personal' trait, in the sense that being a person has something to do with that.

Moreover, Kirzner's entrepreneurs do not hold prejudices or opinions about entities in their world. Seeing an opportunity is an instantaneous, all-or-nothing, event. An entrepreneur, at the moment of seeing an opportunity, acts entrepreneurially. After acting and exploiting this opportunity, in one way or another, he becomes an ordinary market participant. However, in everyday life there is no sharp line between the moment of seeing an opportunity and other moments. The entrepreneur can see an opportunity because he is already in a world in which an opportunity has a meaning as opportunity. As being in the world, he is not independent of the past and future. The entrepreneur can see an opportunity because he has a past that allows him to see it. He has an understanding of the future that makes the 'now' of seeing opportunity meaningful. He acts on an opportunity because of his projection toward the future. An important implication of this historical orientation is that there are different ways and styles of 'being alert' and exploiting an opportunity. Despite the fact that Kirzner does accept the role of history on entrepreneurial alertness (e.g., Kirzner, 1989), it does not play an important role in terms of shaping the nature and the form of alertness. Alertness remains one-dimensional. In this non-historical orientation, learning does not necessarily play a role.

Kirzner's theory does not offer an explanation about the learning processes of entrepreneurs. How do entrepreneurs acquire a superior perception of economic opportunities? How does this skill develop? These

questions do not find a satisfactory place in Kirzner's analysis (Spinosa *et al.*, 1997). In his system, 'alertness' is a gift from nature. It is not skillful coping. An entrepreneur sees an opportunity by opening his eyes and no more, so it is costless. Indeed, Kirzner's entrepreneur sees an opportunity and the right way of exploiting it in an instant. As it stands, it does not have much to do with skillful and concerned coping. No action is needed to be an entrepreneur; it is more like a mental instinct.

An important problem in Kirzner's story is that the nature of the relationship between background knowledge and perception of the opportunity remains in the dark (Smith, 1986: 22). How does background knowledge lead to a perception of an opportunity? What determines or shapes the nature of this relationship? These questions find no answer. The relationship between the background knowledge and the entrepreneurial perception shapes the nature of 'alertness' and 'opportunities'. It is not a straightforward and colorless transformation.

In sum, what enables an entrepreneur to see and act on an opportunity is one of the difficulties of this otherwise quite successful theory of entrepreneurship. Some economists have tried to remedy this 'difficulty' in Kirzner's theory. In the next section, I will touch upon two of them. While one of them (Harper) directly aims at Kirzner's theory, the other one (Choi) offers a more general criticism against the lack of learning in economic theory and the theory of entrepreneurship.

3. How do entrepreneurs learn?

What is learning? How should we understand it? As the accumulation of data, or as the advancement of our understanding of the way the world works. Between these two extremes we find a large gray area that include them in varying proportions.

In this section I will discuss two theories of learning: one Popperian, the other pragmatic. I argue that they do not fully fit into the Hayekian core of entrepreneurial discovery. The reason is to be found in the rationalistic tendencies in these theories.

3.1. *Popperian learning and experimenting*

On the issue of learning and entrepreneurship, one of the most elaborate works comes from David Harper (1996). Following Loasby's (1983, 1986) work, Harper correctly claims that we need a theory of entrepreneurial learning in order to explain market processes. In explaining the dynamics of market processes, we need to explain how any change occurs within the

structure of the market: what directs the nature of this change and what role entrepreneurial discovery plays in this process. So, as he argues, a theory of economic change is 'necessarily a theory of learning' (Harper, 1996: 4).

In his work, Harper investigates the role of learning in entrepreneurial processes. His aim is to provide a framework to explain how entrepreneurs learn. He points out an important bottleneck of Kirzner's theory of entrepreneurship, namely no explanation on the learning mechanisms is offered. He argues that "this perspective needs to be bolstered by emphasizing the rational and critical aspects of entrepreneurship which are prerequisite to acquiring new knowledge" (1996: 6). Indeed, he goes one step further and claims that the essence of entrepreneurship is rational problem-solving.

Following the Popperian theory of knowledge¹ he argues that all learning is based on conjectures and refutations. Beginning with the assumption that learning is a logical process, he puts forward an 'experimental problem-solving' process. Learning, in this context, is a problem-solving process that involves particular means of generating trials and particular methods of eliminating errors (Harper, 1996: 281). The stage of conjecture is subjective and entrepreneurs create new opportunities in their imaginations at this stage of entrepreneurial discovery. After imagining and constructing a hypothesis, entrepreneurs attempt to test their conjectures. At this objective and experimental step, they test their ideas with a falsificationist methodology. That is, they test whether their conjectures are refuted. In this falsificationist perspective, a theory is assumed right until it is refuted.

Harper defines entrepreneurship as the creative and critical segment of the continuum of human action or as the apex of the hierarchy of human cognitive processes (1996: 82). As a real time problem-solving activity through exercise of imagination and critical faculties, entrepreneurial learning explains disequilibrium processes: how people revise their knowledge, and how they disseminate it. In the structurally uncertain and complex problem situations that are conjectured to prevail, the entrepreneur identifies and constructs the problem. He can change it any time he wants. This gives us a picture in which the entrepreneur seems to have power to dominate events. Entrepreneurial choice includes forming and reforming problems and means-end structures. Entrepreneurial decisions are reached by a process of deliberation involving trial and error, based on experience and feedback (Harper, 1996: 87).

¹ For critical discussions of Popper's work in connection with economics, see, for instance, Caldwell (1991), Hands (1992).

Harper offers a strong case for a rational learning mechanism. His discussions on the rational and reflective aspects of the entrepreneurial processes give a good account of the logical choice of theories by entrepreneurs. Harper's work argues that rational processes are central to all kinds of learning. Practical learning has a subsidiary role at best. He seems to claim that practical knowledge follows the theoretical framework. The following quotation reflects Harper's views nicely:

Practical knowledge is potentially false and may quickly become out of date. As well as being tacit, it is also nontheoretical (comprising as it does information about particular facts). And it pertains only to specific transient and local conditions (i.e., it comprises empirical knowledge of the particular circumstances of time and place). . . In addition, all practical knowledge (including empirical knowledge of profit opportunities) is essentially theoretical and hence conjectural. Entrepreneurs have to select which 'bits of information' are relevant to the discovery of profit opportunities. The selection of these 'facts' implies a point of view on the part of the entrepreneur, and that point of view is itself a theory. (1998, p. 20)

For him, all knowledge is potentially theoretical in its essence. So theory is where one starts, not the place one reaches with the *activity* of theorizing. He understands theory in a narrow sense. For him, an entrepreneur's theories are not always already there in a way that shapes his actions. Entrepreneurs *need* to construct theories consciously in order to explain, predict and control economic events (Harper, 1998: 136).

Harper's acceptance of piecemeal social engineering as the method of entrepreneurial learning (Harper, 1996: 167) also reflects his views on the role of practical knowledge in the market processes. Assuming that we can articulate all knowledge, this theory implicitly denies the evolutionary structure of reason (Hayek, 1988).

A fundamental problem with the Popperian theory of discovery is that it restricts the imagination and creativity to the conjecture stage. The stage of refutation is a totally objective and scientific process (Lavoie, 1985b: 259). While 'active, spontaneous, prelogical cognitive processes' are used in the conjecture of discoveries and innovations, the entrepreneur is free of any personal and interpretive dimensions in the refutation stage (Harper, 1996: 88). The refutation stage thus plays the crucial role in entrepreneurial learning. The implicit assumption behind this approach is that there are 'strict' rules for discovering things (Polanyi, 1972: 48). Seemingly this inference does not fit the evolutionary and spontaneous nature of the market processes. Particularly, it does not offer a satisfactory explanation of entrepreneurial discoveries. Harper claims that the learning methodology remains constant over time. It also does not change with respect to contextual characteristics of situations

(1996: 33). This denies the role of practical understanding and tacit knowledge in the discovery procedure. A quotation from Polanyi shows the direction of the argument:

Personal knowledge in science is not made but discovered, and as such it claims to establish contact with reality beyond the clues on which it relies. It commits us, passionately and far beyond our comprehension, to a vision of reality. Of this responsibility we cannot divest ourselves by setting up objective criteria of verifiability - or falsifiability, or testability or what you will. For we live in it as in the garment of our own skin (1958: 64).

As Polanyi nicely puts it, we cannot put aside our indwelling in the world whenever we want. It is always with us. Moreover, our understanding of the world is not constant over time. It also changes, or more correctly, evolves, as time passes.

In Harper's theory, we do not find a role for interpretation at the refutation stage. Even at the stage of conjecture, interpretation has only a derivative meaning. The entrepreneur 'uses' interpretation when there is a difficulty in understanding the situation. On the contrary, in our view, interpretation is not something we have recourse to when needed. It permeates all aspects of our life.

The phenomenological critique of Harper's work can be put forward at a different level. He argues that entrepreneurs use logical deduction in their decision-making (1996: 129), following the Popperian methodology. For him, 'deduction is central to patterns of reasoning in all sciences and in practical decision-making'. However, the practical approach to entrepreneurship can be said to be close to inductive logic (Holland *et al.*, 1986). Similarly, the Austrian-Schutzian tradition also seems to be congenial to this type of argument (Langlois, 1998).

An important implication in this connection is related to the action-choice separation. For rational theories, choice precedes every action. More correctly, economic action is the result of choice. In this vein, in Harper's theory sophisticated falsificationist entrepreneurs rely on logical reasoning and rational evaluation in making decisions (1996: 318).

One of the basic propositions of Harper is 'methodological individualism'. For him, all explanations of the market process should begin and end with individuals (1996: 23). Moreover, these explanations should be in the form of explicit conjectures (p. 25). This formulation excludes the role of 'unconscious' prejudices and beliefs as opinions. While Harper appreciates the role of cultural context, his strictly Popperian methodology does not comprise the practical and cultural dimensions of entrepreneurial discoveries.

As Hayek discusses extensively in his later work, our social skills and shared practices shape much of what we do in our economic activities.

As my discussion implies, the difficulties with the rational and logical learning mechanisms originate from a fundamental misunderstanding of the nature of knowledge: the neglect of practical knowledge. As Hayek argues in many places, our practical knowledge shapes the way and method of our articulate constructions of reality. Since our reason cannot understand what creates it, any attempt to try to transform our practical understanding to a formal framework remains unsuccessful (e.g., Hayek, 1967).

At a fundamental level, Harper does not answer the question of what enables an entrepreneur to come to see opportunities as opportunities. For him, the Popperian theory of entrepreneurship ‘does not concern itself with the mental processes by which entrepreneurial discoveries of profit opportunities are made’ (1996: 32). So, the basic question of this thesis is bypassed with the assumption that ‘how entrepreneurs learn their learning methodologies’ is not the subject matter of the growth of knowledge approach. For Harper, this is the subject of psychological economics.

As a whole, Harper brings up important questions about entrepreneurial discovery procedures. He provides important insights into the nature of entrepreneurial learning. In its details, there is much to learn from Harper. While there are important contributions in his work, the general framework in which he introduces these insights seems problematic in terms of a practical approach. The neglect of practical knowledge and skillful coping originates from this general framework, while his extensive discussions remedy this problem to some extent.

3.2. Choi on paradigms and learning

Another recent attempt to introduce ‘learning’ into economic processes in general, and entrepreneurial processes in particular, comes from Young Back Choi (1993, 1997). Choi argues that neoclassical theory lacks an understanding of decision-making processes because of its inability to explain phenomena such as entrepreneurship (1997: 214). Economists neglect the fundamental problem of decision-making, that is, how to describe or formulate the problem at issue. They focus on a secondary one, the calculation of a given framework. Thus, the understanding of the situation is not addressed, where ‘the pure logic of choice’ becomes the way to solve problems.

Learning, for Choi (1993: 47), is ‘the process by which we acquire understanding of, or the ability to deal with, a situation that we could not

make sense of, or deal with, before'. As he rightly states, our practical knowledge shapes and limits the process of learning.

Decision-making has a two-partite structure: an understanding of the situation and the choice following this understanding (1997: 216). The former can be interpreted as 'having a vision', or 'making up one's mind about the reality of the situation'. This is the fundamental part of the decision-making process, and requires skillful coping, rather than deliberation. Indeed, Choi seems to view decision-making as some kind of expertise. In our everyday dealings, this aspect rarely comes to the forefront. An important reason for this downplaying is the close ties between routine behavior and skillful coping. The latter part of decision-making is simply the pure logic of choice. Since we make decisions in the face of uncertainty, a theory of decision-making should offer a *path* from a certain to an uncertain situation, an explanation of the learning process. This is what Choi attempts to do.

The process of 'learning', for Choi, refers to the individual's attempt to overcome the uncertainty that restricts his action. Every decision-making has some process of learning as the background of an action. Experimentation is the method of choosing among alternative courses of action. This trial-and-error process generates new knowledge about situations a decision-maker faces. The term Choi chooses for learning is 'paradigm-seeking'. 'Paradigm' means an understanding of some experience-based rule structure. A paradigm provides a base for separating relevant from irrelevant depending on our purposes (Choi, 1993: 42). It also guides individuals in their everyday activities by providing viewpoints. In this view, our paradigms shape what we learn and how we learn them. Yet, these paradigms are not constants in our ever-changing world. They spontaneously evolve based on our everyday coping. This view, he argues, is basically similar to what Hayek and Polanyi argue on the role of inarticulate and tacit rules in human action. The criteria to choose among an infinite number of possible routes to go is action based on experience (Choi, 1997: 219). Another way to choose is to imitate the successful ones. Through paradigm seeking, individuals try to make their life smoother and more manageable. The process of mutual paradigm-seeking is a spontaneous process (Choi, 1997: 221). With this description of learning as practical activity, Choi makes a case against Harper to some extent. The formal structure of experimentation in Harper is replaced with a more comprehensive and 'soft' way of learning.

The social equivalent of paradigm is convention. Conforming to conventions create a stable regime. Entrepreneurship is brought into the analysis at this point since entrepreneurs are deviants from conventions. 'They

break from the pack'. Entrepreneurial discoveries create imitation of the innovation. In this process, it becomes part of the convention. As new discoveries become part of conventions, social learning occurs.

Although Choi uses a different vocabulary to describe learning, I find his work in its spirit parallel to my argument. He offers a practical process of learning with an emphasis on the role of skill and experience in the decision-making process. As he says, 'learning is the other side of the decision-making coin' (Choi, 1997: 218).

From an interpretive perspective, however, Choi still does not answer a fundamental question about entrepreneurial learning. He brings up the processual nature of learning through a trial-error method. Individuals choose between alternative paradigms by evaluating their past experience. Choi does not offer an explanation about this process. There is no satisfactory explanation for how an entrepreneur decides on the set of plausible alternatives. Indeed, this is not what Choi tries to answer; his attention is focused on what makes an entrepreneur choose within the set of already decided suitable alternatives.

How one acquires the skill of seeking and choosing a possible 'paradigm' is central to the issue of learning. Choi uses the example of a chess player, emphasizing the player's experience. This is indeed a good way to start. Expert chess players have a huge amount of expertise which provide them with an intuitive background. In Choi's work we do not find an adequate discussion of how this skill develops. Thus, some questions remain unanswered. Why is the set of possible alternative limited? What determines the domain of this set? From an interpretive perspective, Choi's analysis limits the domain of the world or dwelling. While he tries to overcome the positivist tendency of neoclassical economics, his conceptions of paradigm and convention require further analysis. Without relating them to a more fundamental aspect of our daily encounters, it seems difficult to explain many aspects of action. In some places, Choi turns to some psychological theories, and argues that even they do not have any explanation on these issues. I believe that Choi's analysis brings us a long way toward a satisfying theory of entrepreneurial learning, yet a piece is still missing, namely, he cannot explain the worldly orientation of human action with his tools. That is why, we find no satisfactory explanation of 'paradigm choice' in his theory (Pressman, 1997).

4. A practical approach to entrepreneurial learning

In this section, I briefly discuss an interpretive approach to

entrepreneurial activity and touch upon some implications of this new approach. My emphasis will be on the nature of practical knowledge in economic activities.

The issue of learning centers on the way the mind works. In one of the recent works on the mind and learning, Denzau and North (1994) describe 'learning' as follows:

Learning entails developing a structure by which to make sense out of the varied signals received by the senses. The initial architecture of the structure is genetic but its subsequent development is a result of the experiences of the individual. This architecture can be thought of as generating an event space which gets used to interpret the data provided by the world The event space structure consists of categories - classifications that gradually evolve from earliest childhood on in order to organize our perceptions and keep track of our memory of analytic results and experiences. Building on these categories we form mental models to explain and interpret the environment, typically in ways relevant to some goal(s). . . Thus, the event space may be continually redefined with experience, including contact with others' ideas. (Denzau and North, 1994: 13).

Denzau and North argue that in the case of radical uncertainty rational models do not provide guidance. Mental models are used in these cases. This can be understood as some kind of inductivist method in a wide sense. Mental models, as they describe them, are based on our practical understanding. Our previous experiences and understanding of the world shape our mental models.

Now, let us take a closer look at the nature of practical knowledge. It refers to the knowledge of how to do things, based on experience and skills acquirement (Smith, 1988). A relevant notion is the concept of 'understanding' (*verstehen*, in German), in its phenomenological sense, which also refers to practical knowledge. It means to be at home with something. In other words, to understand something is to master it, to know practically how to use it (Dreyfus, 1991: 185). As unexpressed mastery, it does not allude to any kind of articulate knowledge. In this sense, it is with us all the time. We understand, for example, how to get along with people, to care for things, to kill time and so forth. This everyday understanding remains implicit most of the time.

From an interpretive perspective, this everyday understanding is primary to any kind of action and articulate knowledge (Heidegger, 1962: 385). When we enter a room, we already have some understanding of what a room is for and what we *can* do in the room. Our understanding of the room shapes the possibilities of what we can do in the room. The room makes sense to us as part of a more general picture. It is meaningful in that context. So the 'whole'

or the world shapes the meaning of entities that we deal with in our everyday life. Our pre-understanding of how to enter a room, among other things, makes it possible for us to accomplish our goals as we proceed to realize them in the room. In this process, we do not think explicitly about the way we enter the room. That remains in the background. We simply enter the room. The background of our achievements in the room is situated in this tacit understanding of what a room is for. As Polanyi says, ‘to understand a watch is to understand what it is for and how it works’ (1969: 153). We understand a watch when we know how to use it. Learning only its material characteristics does not suffice to use a watch.

In the vocabulary of Polanyi, when we understand (or learn-how-to-use) or master something, we begin to dwell in it (1969: 148). In other words we interiorize those things. They extend our bodily existence and the world. For example, when a blind man first faces a cane, he attempts to understand it. He learns how-to-use it, tries to master it. After learning how to use a cane, he no longer pays attention to it. It becomes an extension of his bodily existence. He directs his attention to things the cane touches. He begins to find his way with the help of the cane. Thus, the cane becomes transparent for him. Yet, this does not make that cane nonexistent. It is still there and has an important bearing in terms of the blind man’s explicit understanding of entities that he experiences in his world through his understanding of the cane. Polanyi puts it in the following way:

The way we use a hammer or a blind man uses his stick, shows in fact that in both cases we shift outwards the points at which we make contact with the things that we observe as objects outside ourselves. While we rely on a tool or probe, these are not handled as external objects. . . . They remain necessarily on our side of it, forming part of ourselves, the operating persons. We pour ourselves out into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them (1958: 59).

The phenomenological emphasis on practical knowledge implies the indispensability of ‘learning by doing’, as we most clearly see in the examples of apprenticeship. This is in opposition to the Popperian understanding of learning as a logical and objective process (e.g., Boland, 1982; Harper, 1996). According to this theory, learning is a response to change in the economy and advances through logical experiments. It assumes that individuals use deductive logic in specifying the domain of refutability of their problem-situation. The contextual dimension of human action is not essential to experimenting and problem-solving. Learning, thus, becomes more a conscious act than a practical coping in the everyday world.

In the case of skills and practical coping, learning is not a ‘conscious’

process. Let us look at how learning works with an example. As in the example of the chess-master, the way a blind man learns how to use a cane is a practical activity. The blind man learns how to use the cane through a practical trial-and-error method. Accumulating experiences throughout his daily encounters, he develops the skill. Since his goal is to use the cane practically, he does not try to get an objective picture of the cane. He uses the cane without the help of rules of practical activity, yet in a productive way. A huge amount of knowledge is discovered in the process of learning to use a cane. As Polanyi (1958) would argue, the rules he learns are unspecifiable. He learns without the help of mathematical formulas. There is nevertheless an intelligent effort in learning how to use a cane. Mere repetition never brings about skillful coping. It only brings repeated data yet to be made sense of.

An important form of learning that the market process creates is the mobilization of tacit knowledge. In the market process, individuals seek profits by exploiting opportunities that are dispersed. An entrepreneur takes notice of what others miss. His tacit understanding of a particular situation shapes the way he creates a problem domain. As he exploits the opportunity and makes it part of general knowledge afterwards, we see an advancement in knowledge. Indeed, we may even say that some knowledge is created out of the entrepreneur's imagination. At the level of society as our civilization advances, the totality of knowledge that we have about the working of the system decreases. We happen to be relatively ignorant about the whole system (Hayek, 1960: 22). Yet, this is exactly the point that specialization and division of labor work in favor of economic development. With the spread of specialization and division of labor, our ignorance about the working of the whole system also increases. The amount of tacit and local knowledge involved in doing a particular task increases as well as the relative value of our knowledge. As knowledge becomes more and more dispersed, the tacit domain becomes bigger.

Realizing an intention through action is not a straightforward translation but an interpretation. Different styles create different unintended consequences. The lack of the 'style' dimension reduces the quality of alertness to only a linear space. However, we see a multi-dimensional entrepreneurial activity both in different styles and in different unintended consequences in our everyday economic dealings. In other words, with their unique experiences and knowledge, each entrepreneur has a different perception of reality. Thus entrepreneurs have different understandings of profit opportunities. For this reason, different entrepreneurs 'create' different opportunities out of the same situational pattern (Loasby, 1983).

Another way of putting the same argument would be to discuss the role of action in Kirzner's theory. It tends to interpret the entrepreneur more as a thinker than as a doer (Vaughn, 1992). This is because the defining characteristic of entrepreneurship is 'alertness', which is understood as a mental category. When we try to define entrepreneurship only as a mental category, we seem to forget the role of 'bodily existence'. As Kirzner's example on the grasping ten-dollar bills waiting to be taken (Kirzner, 1973: 47) shows, the action part is not decisive on defining what is entrepreneurial. With alertness, one becomes an entrepreneur. Executing alertness can be done in any form and by anyone, not necessarily by the person who is alert to the opportunity. This is most clearly seen in the relationship between a capitalist and an entrepreneur. The application of an innovation in production depends on the tension between the capitalist and the entrepreneur who notices an opportunity. If we confine entrepreneurial activity to 'alertness' only, then we face an interesting yet disturbing question: Who deserves the name 'entrepreneur'? The individual who has the 'alertness' and vision or the capitalist who *notices* the alertness of the entrepreneur and sees an opportunity in that connection.

In order to fully grasp the nature of entrepreneurial discovery, we should keep in mind the role of bodily existence in this process. It is the entrepreneur's bodily existence in the world that makes any kind of creative activity of entrepreneurship possible in the first place. Moreover, it is again his bodily existence that makes it possible for him to realize his creation. The exploitation of an opportunity is thus meaningful in the world of the entrepreneur. We cannot think of any aspect of entrepreneurial discovery without any attention to his worldliness. All his past experience and future orientation make sense only in this framework.

Lavoie's (1991) work on entrepreneurial discovery pays attention to a different aspect of human action: it is all about interpretations. For him, entrepreneurship 'necessarily takes place within culture, it is utterly shaped by culture, and it fundamentally consists in interpreting and influencing culture' (1991: 36). Being involved in this world, the entrepreneur can see opportunities just because they are already meaningful to him. A de-contextualized approach to entrepreneurship thus cannot get to the heart of entrepreneurial discovery: different interpretations create different opportunities.

5. On the applications and extensions of the theory

In our view, an entrepreneur can discover a particular profit opportunity only because the place of its various involvements within the structure of the world in general is already disclosed (becomes primarily familiar) to him. When an entrepreneur sees a profit opportunity, he already has an understanding of 'profit' and 'opportunity'. In Vaughn's words:

Entrepreneurship can only be exercised if the entrepreneur already knows a great deal about the circumstances surrounding the opportunity he believes he has identified. That is, an entrepreneur can exploit profit opportunities only insofar as he knows how to buy in one market and sell in another with all rich detail that those activities encompass. (1999: 142).

It is part of his world (as the domain of living); otherwise, he would never see a profit opportunity. He learns, and knows, how to exploit it practically, though he may not have an explicit explanation for it. An entrepreneur can see a profit opportunity only if he has understood how to deal with it primarily and differently from others. Only then may he calculate the benefits and costs of exploiting it. Thus, the calculation aspect comes after the primary familiarity.

Entrepreneurial acts occur in areas where entrepreneurs are already *in*. Based on the *skill* of 'being at the right time, at the right place' (Gilad *et al.*, 1988: 489), their concerns draw the boundaries of what can be done. Entrepreneurs mostly choose their areas within the limits of their earlier work experiences. Their experiences and skills in their worlds shape the way they attempt to introduce change. An entrepreneur does not act in a vacuum. It is more likely that entrepreneurs work within the limits of their experiences and this limits their understanding of opportunities. An entrepreneur is not a person who only notices price discrepancies (in the case of arbitrage). Rather, he is the person who notices 'opportunities' within his world. His possibilities and projection toward a future set the limits for his action.

Hayek's discussions on the importance of the knowledge of particular time and places offer us a good explanation on the worldly character of entrepreneurial activity. Since only the man on the spot can have the required skills and knowledge to exploit the particular opportunity, any particular opportunity gets its meaning from the world of the entrepreneur. The skill he gets out of his experiences and his expectations about future are unique to him. The only way to employ these kinds of knowledge is to use them in entrepreneurial decision-making. So action and choice are not two distinct

notions. They are meaningful as parts of a whole picture. Hayek puts this in the following way:

Much of the particular information which any individual possesses can be used only to the extent to which he himself can use it in his own decisions. Nobody can communicate to another all that he knows, because much of the information he can make use of he himself will elicit only in the process of making plans for action. Such information will be evoked as he works upon the particular task he has undertaken in the conditions in which he finds himself, such as the relative scarcity of various materials to which he has access (1988: 77).

A practical approach, for example, offers an explanation on the differences in entrepreneurial successes. While many entrepreneurs can see and act on an opportunity, not all of them become successful. When we see entrepreneurial discovery as some kind of skill, we can account for differences in learning and understanding. Since entrepreneurial process is not only a mental but also a bodily activity, each and every entrepreneur has different dispositions towards the things around them. Two different entrepreneurs can see the same opportunity, but this may not be enough for them to exploit the opportunity in the same way. Loasby touches on this point by saying that 'if every individual has his own pattern of experience, mediated by his own interpretative framework, then each may have a slightly different perception; thus relatively few will recognise any particular change in the environment' (1983: 118). We can only add that even those few who recognize the change will not give the same reaction. Having different backgrounds, they will take different courses of action. The world of the individual shapes what matters in a situation.

A skill-oriented theory of human action is discussed in Lane *et al.*, (1996). They draw on sources that follow traces of phenomenological and hermeneutical approaches to human action. What they argue is that human action is skillful and practical coping before it is rational decision-making. They make the following point:

There is no outside view of economic action from which certain problems can be defined as 'choice situations', independently of the experience of the economic actors who are supposed to solve those problems. What these actors see as problems to be solved and what tools they can conceive as relevant to solving them are emergent outcomes of their past immersion in domain specific situations. (1996: 55).

It is also worth mentioning that some case studies in the business literature offer supporting evidence on the practical orientation. A foremost example is Joshua Ronen's interviews with real entrepreneurs (Ronen; 1983, Gilad *et al.*; 1988). These interviews show that the discovery of opportunities and entrepreneurial alertness are the result of practical orientation and 'being

on the lookout' all the time. The inarticulate 'know-how' of doing business shapes the nature of entrepreneurs' understanding of opportunities. Since they get skills through their experiences, they see opportunities intuitively. Moreover, a considerable amount of management and organizational theory literature turns to tacit-knowledge to explain innovation and creativity (Cole, 1998). Phenomenologically informed case studies of entrepreneurial activity (e.g., Anderson *et al.*, 1989) also provide empirical evidence for the crucial role of 'skillful and concerned coping' in entrepreneurial decision-making processes.

6. Summary

In this paper, I have tried to bring up the issue of skillful and concerned coping and its implications for the theory of entrepreneurship. It is now widely accepted that Kirzner's theory does not provide any explanations for the learning processes of entrepreneurial discovery. Recent works in this area try to fill the gap, yet the lack of a practical orientation does not allow them to deal with fundamental tenets of Hayekian understanding of the market process. At this point, a number of questions come to mind. For example, how do we reconcile these different theses? What will be the role of rationality and reason in a spontaneous order theory of entrepreneurship? It was my argument that we should look at the practical approach to *human action* in order to find a learning process congruent with the spirit of market process analysis. The aim of this paper has been to put a finger on this issue quite briefly.

The nature of knowledge that is crucial for the entrepreneurial process, as Hayek pointed out long ago, does not give way to understanding it as some kind of articulated information. The everyday orientation of the entrepreneur provides the background for any entrepreneurial discovery. An entrepreneur acquires the skill to exploit opportunities in his everyday encounters and this kind of knowledge cannot be formalized. This is why entrepreneurial activity creates surprises and continuous success, which should not be an indispensable part of formal explanation.

References

- ANDERSON, R. J., HUGHES, J. A. and SHARROCK, W. W. (1989), *Working for Profit: the social organization of calculation in an entrepreneurial firm*, Aldershot: Avebury.
- BOLAND, L. (1982), *Foundations of Economic Method*, London: George Allen & Unwin.
- CALDWELL, B. (1991), "Clarifying Popper", *Journal of Economic Literature*, 29(1), 1-33.
- CHOI, Y. B. (1993), *Paradigms and Conventions: Uncertainty, Decision Making, and Entrepreneurship*, Ann Arbor: University of Michigan Press.
- (1997), "Decision-Making as Learning Process", in N. Aslanbeigui and Y. B. Choi (eds.), *Borderlands of Economics*, London: Routledge, 214-31.
- COLE, R. E. (ed.) (1998), Special Issue on Knowledge and the Firm, *California Management Review*, 40(3).
- DENZAU, A. T. and NORTH, D. C. (1994), "Shared Mental Models: Ideologies and Institutions", *Kyklos*, 47(1), 1-13.
- DREYFUS, H. L. (1991), *Being-in-the-World*, Cambridge, Mass.: The MIT Press.
- GILAD, B., KAISH, S. and RONEN, J. (1988), "The Entrepreneurial Way With Information", in S. Maital (ed.), *Applied Behavioral Economics*, 2, New York: New York University Press, 481-503.
- HANDS, D. W. (1992), "Falsification, Situational Analysis and Scientific Research Programs: The Popperian Tradition in Economic Methodology", in N. De Marchi (ed.), *Post-Popperian Methodology of Economics*, Boston: Kluwer, 19-53.
- HARPER, D. A. (1996), *Entrepreneurship and the Market Process*, London and New York: Routledge.
- (1998), "How Entrepreneurs Learn: A Popperian Approach and its Implications", mimeo., presented at George Mason University.
- HAYEK, F. A. (1960), *The Constitution of Liberty*, Chicago: University of Chicago Press.
- (1967), "Rules, Perception, and Intelligibility", in his *Studies in Philosophy, Politics and Economics*, Chicago: The University of Chicago Press, 43-65.
- (1988), *Fatal Conceit: The Errors of Socialism*, W. W. Bartley III (ed.), Chicago: The University of Chicago Press.
- HEIDEGGER, M. (1962), *Being and Time*, J. Macquarrie and E. Robinson (trs.) New York: Harper&Row.
- HOLLAND, J. H., HOLYOAK, K. J., NISBETT, R. E. and THAGARD, P. R. (1986), *Induction: Processes of Inference, Learning and Discovery*, Cambridge: The MIT Press.
- KIRZNER, I. (1973), *Competition and Entrepreneurship*, Chicago: University of Chicago Press.
- (1979), *Perception, Opportunity, and Profits*, Chicago and London: University of Chicago Press.
- (1985), *Discovery and the Capitalist Process*, Chicago and London: University of Chicago Press.
- (1989), *Discovery, Capitalism, and Distributive Justice*, Oxford and New

York: Basic Blackwell.

- (1997a), “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach”, *Journal of Economic Literature*, 35, 60-85.
- (1997b), *How Markets Work: Disequilibrium, Entrepreneurship and Discovery*, London: The Institute of Economic Affairs.
- LANE, D. MALERBA, F., MAXFIELD, R. and ORSENIGO, L. (1996), “Choice and Action”, *Journal of Evolutionary Economics*, 6, 43-76.
- LANGLOIS, R. N. (1998), “Rule-following, expertise, and rationality: a new behavioral economics?”, in K. Dennis (ed.), *Rationality in Economics: Alternative Perspectives*, Dordrecht: Kluwer Academic Publishers, 55-78.
- LAVOIE, D. (1985b), *National Economic Planning: What is Left?*, Cambridge, Mass: Ballinger.
- (1991), “The discovery and interpretation of profit opportunities: culture and the Kirznerian entrepreneurship”, in B. Berger (ed.), *The Culture of Entrepreneurship*, San Francisco: Institute of Contemporary Studies, 33-51.
- LOASBY, B. J. (1983), “Knowledge, Learning, Enterprise”, in J. Wiseman (ed.), *Beyond Positive Economics?*, New York: St. Martin Press, 104-21.
- (1986), “Organization, competition, and the growth of knowledge”, in R. N. Langlois, (ed.), *Economics as a Process*, Cambridge: Cambridge University Press, 41-57.
- POLANYI, M. (1958), *Personal Knowledge*, Chicago: University of Chicago Press.
- (1969), *Knowing and Being*, M. Greene (ed.), Chicago: University of Chicago Press.
- (1972), “Genius in Science”, *Science*, 38(1), 43-50.
- PRESSMAN, S. (1997), “Paradigms, conventions, and the entrepreneur: a review article”, *American Journal of Economics and Sociology*, 56(1), 51-8.
- RONEN, J. (1983), “Some Insights into the Entrepreneurial Process”, in J. Ronen, (ed.), *Entrepreneurship*, Toronto: Lexington Books, 137-69.
- SMITH, B. (1986), “Austrian Economics and Austrian Philosophy”, in W. Grassl and B. Smith (eds.), *Austrian Economics*, New York: New York University Press, 1-35.
- (1988), “Knowing How vs. Knowing That”, in J. C. Nyiri and B. Smith (eds.), *Practical Knowledge*, New York: Croom Helm, 1-16.
- SPINOSA, C., FLORES, F. and DREYFUS H. (1997), *Disclosing New Worlds*, Cambridge, Mass: The MIT Press.
- VAUGHN, K. I. (1992), “Entrepreneurship, Experimentation and Time”, unpublished paper.
- (1999), “Hayek’s Implicit Economics: Rules and the Problem of Order”, *Review of Austrian Economics*, 11, 129-44.

Özet

Girişimciler nasıl öğretir? Pratiğe dayanan bir açıklama

Giriřimsel öğrenme süreçleri iktisat literatüründe önemli bir yer tutar hale gelmiştir. Bu makalede girişimsel öğrenme süreçlerini piyasa süreci teorisi çerçevesinde açıklayan Israel Kirzner'in çalışmaları tartışılmaktadır. Kirzner'e getirilen eleştiriler yorumcu bir analizle incelenerek bu teorinin eksik tarafları gündeme getirilmiştir. Kirzner'in teorisindeki eksikliklerin giderilmesine yönelik iki çaba Harper ve Choi'den gelmektedir. Harper ve Choi'nin katkıları da yorumcu bir yöntemle tartışılmış ve pratik bir girişimsel öğrenme teorisi kısaca sunulmuştur. Giriřimsel faaliyetin pratik arkaplanının öğrenmenin açıklanabilmesindeki belirleyici rolünün vurgulanması bu çalışmanın temel amacıdır.