

Entrepreneurship as organizing

- A literature study of entrepreneurship

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Paper to be presented at the DRUID Summer conference
June 9-11, Bornholm, Denmark

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Introduction

In an evolutionary study of the configuration of an industrial district of stainless steel manufacturers (Christensen and Philipsen, 1998) a distinction between three phases of coordination has been proposed and modelled. While the overall study of evolving a structural configuration of the cluster was emphasised in the study, the study also revealed that an entrepreneurial perspective might provide strong contribution to the explanation of firm formation and clustering in periods of transition.

This study along with other studies (see DeBresson, 1989) has thus indicated that new business formation and innovations tend to cluster in time as well as in space.

Therefore this study is focussed on theoretical lines promising fruitful perspectives on how clusters of enterprises and activities are organized and reorganized as a response to environmental changes.

Entrepreneurship has been analysed from different approaches: economic, psychologic, sociologic, anthropology and managerial perspectives. In this study a rough distinction between different school of thoughts about entrepreneurship, proposed by Stevenson and Sahlman (1987), will be used. They make a distinction between those who view entrepreneurship as an economic function, those who identify entrepreneurship with an individual, and those who view entrepreneurship in behavioural terms.

The specific aims of this paper are

- to discuss selected contributions to entrepreneur theory within the traditions of entrepreneurship as an economic function, as an individual and entrepreneurship viewed in behavioural terms.
- to argue that the contributions from entrepreneurship as an economic function tend to treat entrepreneurship as a “black box”
- to argue that contributions from entrepreneurship as an individual seem to come to contradictory conclusions
- to argue that contributions to entrepreneurship within the behavioural tradition, eg. “entrepreneurship as organizing”, seem to be better to explain relationships between structural and institutional change and entrepreneurial behaviour in small business clusters.
- to present a few selected theories which contribute to an understanding of entrepreneurship at the cluster level.

Theories about entrepreneurship

Wilken (1979) compares¹ those who study entrepreneurship to “the characters in the Winnie-the-Pooh stories who have all heard about the awesome creature known as the “heffalump” but who have failed to capture one” (Wilken, 1979:xi).

This characteristic of entrepreneurship as a concept which is difficult to describe and explain in a way which is generally agreed upon among researchers is still a basic challenge to the

¹ With the word of Peter Kilby (ed.) (1971). *Entrepreneurship and Economic Development*. New York: Free Press.

research in entrepreneurship. Hebert and Link (1988) have made an extensive survey of contributions to economic theories of entrepreneurship in the last 200 years. They identified 12 different approaches in theoretical contributions to the concept and role of entrepreneurs (ibid.: 152). So there seems to be no simple answer to the questions about what entrepreneurship is (Churchill & Myzyka, 1994). Nevertheless, Drucker (1985) argues that what can be learned from the Japanese firm behaviour during the 1980s and beginning of the 1990s is that innovation and entrepreneurship are disciplines with their own - fairly simple - rules.

I do not find that contemporary research in entrepreneurship mirrors that it is a field of “fairly simple rules”. The obstacles to integrate the concept of entrepreneurship in formal economic analyses seem to be associated with how to treat the essential personal aspects of entrepreneurship (Penrose 1972:33). Nevertheless, an attempt to clarify the concept of entrepreneurship will be made in the spirit of Drucker, which means not to treat entrepreneurship as a more complex subject than other phenomena in social science.

Theories on entrepreneurship as an economic function

In this section theories on entrepreneurship as an economic function are mainly characterised by looking at the role of the entrepreneur in the economy at an aggregate level, rather than at the level of firm and cluster. Nevertheless, the ideas presented in these contributions have a major influence on the theories with a focus on the cluster and firm level. Thus, they will be presented.

Richard Cantillon (1755) is the first person who recognized the crucial role of the entrepreneur in economic theory. “The farmer is an entrepreneur who promises to pay the landowner, for his farm or land, a fixed sum of money without assurance for the profit he will derive from this enterprise” (Cantillon 1775:47).

The entrepreneur is motivated to engage in entrepreneurial activities by gaining a potential profit. The entrepreneur buys a product at a known price and sell to an uncertain price and thus risks to lose money because of uncertainty with the sales price. Uncertainty is an inherent element in the market. Though Cantillon described the landowners as the “fashion leaders” who, through their wealth and social status, established the pattern of consumption, the entrepreneur was the central economic actor. Cantillon stressed the *function* of the entrepreneur and not the personality. He also stressed the economic function of the entrepreneur over the person’s social status (Hébert and Link, 1988:19-26).

The concept “entrepreneur” was also used by the French economist Jean Baptiste Say around 1800. His definition of an entrepreneur is: “The entrepreneur shifts economic resources out of an area of lower and into an area of higher productivity and greater yield” (Drucker, 1995:19). Drucker adds that Say does not tell us who this “entrepreneur” is”. The question about whom the entrepreneur is might be explained by the approach used by Say. Say analysed the “central function of the entrepreneur independently of any particular social framework”² (Hébert and

² The comment by Hébert and Link refer to Jean Baptiste Say’s book (1845). A treatise on political economy. 4th ed., translated by C.R.Prinsep. Philadelphia: Grigg & Elliot.

Link, 1988:36). Say broadened the understanding of the entrepreneurship by including “the concept of bringing together the factors of production” (Stevenson and Sahlman, 1987:14). Say did not, unlike Cantillon, emphasize uncertainty in his definition.

Uncertainty and risk are the basic building blocks in Frank Knight’s (1921) definition of entrepreneurship. Knight discusses what will happen if uncertainty is introduced to the economy. “With uncertainty present, doing things, the actual execution of activity, becomes in a real sense a secondary part of life; the primary problem or function is deciding what to do and how to do it” (ibid.: 268). ... Knight describes the most important characteristics of the social organisation by introducing uncertainty. “In the first place, goods are produced for a market on the basis of an entirely impersonal prediction of wants, not for the satisfaction of the wants of the producers themselves. The producer takes the responsibility of forecasting the consumer’s wants. In the second place, the work of forecasting and at the same time a large part of the technological direction and control of production are still further concentrated upon a very narrow class of the producers, and we meet with a new economic functionary, the entrepreneur” (ibid.: 268).

In Knight’s definition of an entrepreneur uncertainty is a basic element and starting point. On this point Schumpeter disagrees with Knight. He criticized Knight for not distinguishing between an entrepreneur and a resource owner. Knight postulates that to receive a profit is for bearing the risk of losing. Schumpeter argues that it assumes the possession of resources. So the resource owner role (eg. the capitalist) is separated from the entrepreneur (Schumpeter 1934:75). For Schumpeter the risk was therefore not a vital element in the understanding of the entrepreneur. Unless, of course, the entrepreneur also is a resource owner.

Schumpeter adds the concept of innovation to the theory of entrepreneurship. He makes a distinction between two separate systems of economic activities: a static and a changing. The static describes the static circular capitalist system and thus the typical situation for the capitalist. The entrepreneur is an important agent in the changing system. For Schumpeter (1934) the entrepreneur is bearer of the “mechanism for change” (ibid., 61, note 1). Changes can both occur from inside and outside the economy. Changes, development or entrepreneurship is defined “by the carrying out of new combinations” (Schumpeter, 1934:66). “The carrying out of new combinations we call “enterprise”; the individuals whose function it is to carry them out we call “entrepreneurs”” (Schumpeter, 1934:74).

Schumpeter (1934:66) listed five different kinds of innovations or ways to act as an entrepreneur:

1. The introduction of a new good or quality of a good.
2. The introduction of a new method of production.
3. The opening of a new market.
4. The utilization of some new sources of supply for raw materials or intermediate goods.
5. The carrying out of some new organizational form of the industry.

For Schumpeter (1934) the ability to identify new opportunities in the market is a central entrepreneurial activity which creates disequilibrium in the economy.

Kirzner (1973; 1982; 1985) disagrees with neoclassic economics about the existence of equilibrium, because he does not believe in the assumption of complete information. To Kirzner the entrepreneur contributes to a movement towards economic equilibrium by

pursuing opportunities, though an equilibrium situation never will be reached. Essential for Kirzner's view on entrepreneurship is the imperfect distribution of information.

The economy is described as a process characterized by discovery and learning. The entrepreneur takes advantage of the imperfect distribution of information and try to profit from the superior information and knowledge he poses. A central concept added by Kirzner to entrepreneurship is alertness (Kirzner, 1973:35). "Now I choose ... to label that element of alertness to possible newly worthwhile goals and to possible newly available resources ... the entrepreneurial element in human decision-making. It is this entrepreneurial element that is responsible for our understanding of human action as active, creative, and human rather than as passive, automatic, and mechanical." (Kirzner, 1973:35). In the mind of Kirzner a pure entrepreneur has nothing but his alertness. Nevertheless, the main focus by Kirzner is on the entrepreneur and his role in the economy rather than on the human behaviour (Ripsas, 1998:108).

Casson. Entrepreneurship theory founded on a rational human behaviour postulate

The number of authors who have made an attempt to present an economic theory about entrepreneurship after Schumpeter and Knight are very sparse (Baumol, 1968:64) though the interest has been increasing significantly since the beginning of the 1980s (Kirchhoff, 1991). A significant contribution is made by Casson (1982) who wishes to develop an economic theory of the entrepreneur within or close to the established economic theory. Casson (1982) wants to make a synthesis of significant selected contributions to entrepreneur theory, by most notably Knight, Schumpeter, and Kirzner³. Therefore Casson's contribution will be presented and discussed in some detail.

Casson (1982) has developed a theory of the entrepreneur from an economic perspective. He argues that economic theory is the only one of the social sciences which do not have an established theory of the entrepreneur. Nevertheless, Casson argues, entrepreneurs have an important function in the economy. He criticises the neoclassical and orthodox economic theory for being static and being unable to make a satisfactory account of the economic *function* of the entrepreneur because "all the functions that need to be performed are already performed by someone else" (ibid.: 13). He also rejects the position of the Austrian school of economics, because the extreme subjectivism makes a predictive theory of the entrepreneur impossible (ibid.: 11).

Thus, Casson makes two theoretical reconstructions. The first concerns an intuitive objection to the neoclassical economics and its "translation of the invisible hand into an assumption of perfectly competitive market equilibrium". "It depersonalizes the market process" (ibid.: 13). Casson finds it important to "resolve the tension that exists between the invisible hand of Adam Smith and the all-too-visible hand of the entrepreneur" (ibid.: 13-14). The first revision is to recognize that individuals not only differ concerning taste but also in their access to information. The second revision is to recognize transaction costs in the organizing of the market (ibid.: 15).

³ In chapter 19 Casson (1982) suggests to interpret his contribution as an synthesis and extension of the theories of Leibenstein, Hayek and Kirzner, Knight, Schumpeter, Andrews, and Penrose. He argues that though there exist a number of differences then "on the whole the similarities are more significant than their differences" (Casson 1982:364).

Casson defines an entrepreneur as “someone who specializes in making judgmental decisions about the coordination of scarce resources (ibid.: 23). As support to this definition Casson has five arguments that: i) Entrepreneurship appears as a personal quality which enables certain individuals to make decisions with far reaching consequences (ibid.: 11); ii) “The entrepreneur has better - or at least more relevant - information than other people” (ibid.: 157); iii) “It is assumed, ... , that entrepreneurs are motivated by self-interest”. ... “To simplify the theory it is assumed that entrepreneurs operate their business purely with a view to maximizing the profit they obtain from a given amount of effort”. ...” Although this assumption is clearly counter-factual, the resulting theory goes a long way towards explaining entrepreneurial behaviour” (ibid.: 25); iv) The entrepreneur believes that he is right, while everyone else is wrong. Thus the essence of entrepreneurship is being different - being different because one has a different perception of the situation (ibid.: 14); v) “The entrepreneur often has to create an institution to make markets between himself and other transactors” (ibid: 17).

Discussion of Casson’s contribution

The value of Casson’s (1982) contribution is associated with the aim of incorporating entrepreneurship within a formalized economic model. This may be interpreted as an attempt to overcome the problem with treatment of entrepreneurship in economic theory pointed out by Penrose (1972:30-31). Casson also contributes by clarifying eg. the behavioural and information assumptions on which an economic approach to entrepreneurship may be build and not least a detailed presentation of an economic approach to entrepreneurship.

Nevertheless the discussion will mainly focus on elements of Casson’s contribution to entrepreneur theory which face problems in relation to the aim of this paper. On several points Casson’s contribution to entrepreneur theory is confronted with problems which concerns 1) the rational actor model; 2) the narrow focus on the economic element in decision making; 3) bounded rationality influence on decision making; and 4) the distinction of entrepreneurs versus non-entrepreneurs resting on mental characteristics.

The first problem concerns the rational actor model which is at the heart of Casson’s entrepreneur theory.

“While the perspective of the theory is radically different, the technique of the analysis is not. The reason is, quite simply, that the theory, like the neoclassical and Austrian theories, is based upon a rationality postulate. So long as this postulate is maintained, and the information available to the individual is properly specified, the theory rules out inconsistent behaviour and therefore acquires predictive power. Thus while individuals may, for example, follow decision rules to economize on information, their choice of a decision rule is always a rationale one. It is the rationality postulate that explains why marginal analysis and its associated techniques hold the key to future developments in the theory of the entrepreneur” (Casson, 1982:394-395).

The line of argument by Casson (ibid.: 330-346) builds on a link between potential entrepreneurial profit and wage level. His argument is as follows: The number of entrepreneurs depend on the number of profit opportunities; profit opportunities are reached through judgmental economic decisions of the entrepreneurial opportunities which will be compared with the current wage level. This means that one will expect a higher number of

entrepreneurs in the case of high perceived entrepreneurial profit opportunities and in cases where the individual potential entrepreneur expects entrepreneurial profit to exceed the current wage level.

Casson's argument thus rests on information relevant to make a judgmental decision of an economic rational kind and that the decision is made by individuals. This theoretical view can be claimed for not taking other kinds of human motives into account when making decisions - what Granovetter (1973, 1985, 1992) calls an undersocialised approach.

The decision to become an entrepreneur is not only influenced by isolated economic calculations about potential entrepreneurial profit and current wage level, but is also influenced by non-economic considerations and the social context the person is part of. The social embeddedness matter (Granovetter, 1985, 1995). The decisions are not made by atomistic individuals, but also influenced by the social relations. It is difficult to explain why innovation and business creation seem to cluster in time and space without explaining it with influence by social relationships.

The other problem is related to the assumption that humans have cognitive limits or bounded rationality which affect the ability to make rational decisions. Aldrich and Zimmer (1986:6) argue that "empirical research on cognition, perception and decision making by social psychologists has found that people do not behave the way atomistic models predict they should." They summarize that people trying to make decision have problems with: 1) judging the representativeness of received information; 2) making proper causal attributions; 3) limiting themselves only to information easily available; 4) mistaking co-variation for causal connections; 5) being overconfident; and 6) wildly overestimating their ability to make multistage inferences. Aldrich and Zimmer (1986:6) argue that empirical studies show that people do not match the standards set up by atomistic rational decision models.

Ripsas (1998:110) argues that Casson (1982) does not give an answer to why certain individuals become an entrepreneur. This may be the case. Nevertheless, Casson discusses this as an element of the investigation of what characterise a successful decision making.

Casson argues that the entrepreneur needs to possess a number of qualities in relation to the decision-making to be able to make successful decisions. The qualities mentioned are self-knowledge, imagination, analytical ability, search skills, foresight, computational as well as communication skills. These qualities match the three main steps and sub-steps in the decision-making activities: formulation of the decision problem generating the data, and execution of the decision. Some may be learned others, like imagination cannot be learned. Casson argues that these qualities are unequal distributed in a population. The concept of imagination is not defined and explained further by Casson. If imagination cannot be learned then it must be a mental characteristic which distinguishes an entrepreneur from non-entrepreneurs. The argumentation builds on personal traits of the psychology type. This approach to explain entrepreneurship will be discussed below, but it can already here be stated that this "supply-side" explanation of why people chose to become entrepreneurs also face problems. Imagination thus have some similarities with Kirzner's "alertness".

As a conclusion to Casson's contribution it may be argued that the economic motive is not sufficient to explain entrepreneurship, though it is an important factor. The phenomenon

“entrepreneurship” cannot be reduced to the economic aspects if a sufficient understanding and explanation is the aim.

A theory of entrepreneurship which rests on a rational economic agent view, which only take the economic aspects of the decision making into account, and which is not able to incorporate cognitive limitations does not seem to be able to offer a sufficient explanation of historical developments or as a theoretical foundation for public entrepreneur policies though it includes an important understanding of the economic elements. A revision of the model which take into account bounded rationality and satisfying behaviour is not able to overcome the problems with social embeddedness and its influence on decision making (Aldrich and Zimmer, 1986; Granovetter, 1995).

Entrepreneurship as an individual

While some analysts have focused on the economic function of entrepreneurship, others have turned their attention to research on the traits or personal characteristics of entrepreneurs in an attempt to understand and explain entrepreneurship. The trait approaches build on the presumption that the entrepreneur has a particular personality compared with non-entrepreneurs. The researchers within this approach have therefore sought to identify the personality characteristics which are unique for entrepreneurs and the key characteristics of successful entrepreneurs. The trait approach is also labelled a “supply side explanation” of entrepreneurship. The trait approach includes a psychological as well as a sociological or anthropological variant. The two last-mentioned will not be discussed here (see Granovetter, 1985) for a presentation and critique of what he labels a deterministic over-socialized explanations of entrepreneurship).

The research in psychological entrepreneur traits can be traced back to Schumpeter. Among more recent works is the seminal work by McClelland (1961) who made an attempt to explain entrepreneurship, and thus economic development, by the need for achievement. Other studies have subsequently found other psychological key characteristics of (successful) entrepreneurs, eg. internal locus of control, low aversion to risk taking, aggressiveness, ambition, overoptimism, desire for autonomy, marginality, personal values, and need for power (Brockhaus, 1982; Gartner, 1989; Aldrich and Zimmer, 1986; Carson et al. 1995; Delmar 1996).

Different problems have been identified with this approach. Gartner (1989) has in a critical survey found that the concepts and definitions of personal traits used in different studies in this tradition differ substantially as well as the characteristics correlated with entrepreneurship. Furthermore, the characteristics correlated with entrepreneurship found in the studies are conflicting (Stevenson et al., 1985) and many both successful and unsuccessful entrepreneurs have characteristics which are not on the list - this indicates that the character traits are not universal (Stevenson and Sahlman, 1987:17). This means an identification of psychological characteristics of entrepreneurs versus non-entrepreneurs which have a strong general explanatory power, has not been identified so far. This point is one of the three problems which plague the personality-based approaches. Aldrich and Zimmer (1986) add that the psychology tradition of studying leadership has faced a similar problem after three decades of study: they are not able to identify common or general characteristics. Aldrich and Zimmer conclude that it seems reasonable to argue that no style of leadership is successful at

all time. Leadership seems to be a contingent phenomenon and the same is the case for entrepreneurship. The last point is that personality approach substantially under-predict the existence of entrepreneurship in the United States and thus is also less fruitful as a foundation for an entrepreneur policy.

“Considerable effort has gone into understanding the psychological and sociological sources of entrepreneurship - as Kent refers to it, “supply-side entrepreneurship.” These studies have noted some common characteristics among entrepreneurs with respect to need for achievement, perceived locus of control, and risk-taking propensity. In addition many have commented on the common - but not universal - trend of childhood deprivation and early adolescent experiences as typifying the entrepreneur. These studies - when taken as a whole - are inconclusive and often in conflict” (Stevenson et al., 1985:4).

I agree with the statement by Stevenson et al. (1985) on the personal trait explanations of entrepreneurship: “With respect to the “supply-side” school of entrepreneurship, many questions can be raised. At the heart of the matter is whether the psychological and social traits are either necessary or sufficient for the development of entrepreneurship.” (Stevenson et al., 1985:5).

This also means that the explanation by Casson (1982) of the “imagination” of the entrepreneur as a psychological characteristic, is difficult to find empirically support for in the referred studies as a significant personal trait correlated with entrepreneurship.

A contribution to a new approach within the personal trait research tradition is made by Delmar (1996). He argues that previous studies “either focused on the stable characteristics of the entrepreneur or the impact of the environment on the venture performance” (ibid p. 4). His contribution is an integrated economic-psychological model of entrepreneurial behaviour. He develops a model which tries to understand the impact of entrepreneurial behaviour and the environmental context on entrepreneurial performance (business growth and financial). The entrepreneurial behaviour is determined by both individual differences (stable determinants like intellectual ability and motivation) and task characteristics.

Though Delmar (1996) makes a serious attempt to take both the environmental context and an understanding of personal characteristics in understanding entrepreneurship the basic problems concerning the personal trait approach still exist. It will therefore be argued that the explanations based on an approach with an interpersonal or an organisational approach are more fruitful in an attempt to understand entrepreneurship.

A behavioural approach to entrepreneurship

Reading the literature on entrepreneurship shows that certain contemporary contributions to entrepreneurship theory are often cited and used as a theoretical frame within the entrepreneurship treated as a behavioural phenomenon. Two significant contributions within this tradition will be presented and discussed here. They are the works of Stevenson and his colleges and the work of Gartner and other researchers in the same tradition.

The starting point of Stevenson and Sahlman (1987:17) is to define entrepreneurship as “the relentless pursuit of opportunity without regard to resources currently controlled. Moreover

we believe there is an underlying process in entrepreneurship that starts with the identification of opportunity and ends with harvesting the fruits of one's labours" (Stevenson and Sahlman, 1987:17-18).

Though Stevenson and Sahlman (1987) describe entrepreneurship as an economic function they find that within the management approach, in which they place their contribution, it is not fruitful to distinguish between those functions which are entrepreneurial and which are not entrepreneurial. They do not view entrepreneurship as a certain point in time at which the distinction between entrepreneurs and non-entrepreneurs can be made - they reject an understanding of entrepreneurship as an all-or-none trait. Entrepreneurship is a sequence of behaviours which may change over time. Stevenson and Sahlman have identified six critical dimension which can be used to distinguish between entrepreneurship and more administratively oriented management. The six critical dimensions of business practice are: strategic orientation, the commitment to opportunity, the resource commitment process, the concept of control over resources, the concept of management, and compensation policy.

Stevenson and Sahlman (1987) perceive the behaviour as a continuum with two extremes. "At one extreme is the *promoter* type of manager who feels confident of his or her ability to seize opportunity regardless of the resources under current control. At the opposite extreme is the *trustee* type of manager who fosters efficient management by emphasizing the effective utilization of existing resources." (Stevenson and Sahlman, 1987:18).

The "promoter" (entrepreneur) is on the strategic dimension defined as "driven by perception of opportunity" contrary to the trustee (administer) who is "driven by resources currently controlled". This dimension, emphasizing the innovative element, match the definitions of the entrepreneur as an innovator, but the trustee can also be opportunity oriented/innovative as long as it is within the limits of the controlled resources. The point is that the strategic dimension is not sufficient to define an entrepreneur. The other five dimensions also contribute to the mosaic of the entrepreneur. The distinction between promoter and trustee on the six dimensions are shown in figure 1.

For each dimension factors which pull both individuals and firms toward the trustee or promoter end of the continuum are described. These factors are not included in Figure 1.

With the Stevenson and Sahlman approach the distinction between entrepreneur and intrapreneur is irrelevant. In the introduction a need to analyse both radical and more normal entrepreneurial activities in relation to the stainless steel study was formulated. The Stevenson and Sahlman (1987) and Stevenson et al. (1994) offer explanations of the normal entrepreneurial activity types.

figure 1. Six key business dimensions to distinguish between promoter and trustee

Promoter	Key business dimensions	Trustee
Driven by perception of opportunity	<i>Strategic orientation</i>	Driven by resources currently controlled
Revolutionary with short duration	<i>Commitment to opportunity</i>	Evolutionary of long duration

Multistaged with minimal exposure at each stage	<i>Commitment of resources</i>	Single-staged with complete commitment upon decision
Episodic use or rent of required resources	<i>Control of resources</i>	Ownership or employment of required resources
Flat with multiple informal networks	<i>Management structures</i>	Formalized hierarchy
Value-based Team based Unlimited	<i>Compensation/reward policy</i>	Resource-based Driven by short-term data Promotion Limited amount

Source: Reduced version of Stevenson, Roberts, and Grousbeck (1995, figure 1-7, pp.14-15).

Stevenson and Sahlman (1987:33) also discuss what characterises an individual entrepreneur. “The individual entrepreneur is a person who perceives opportunity, finds the pursuit of opportunity desirable in the context of his or her life situation and believes that success is possible. These three elements are those that distinguish the individual entrepreneur from the vast majority of the populace.”

For an organisation to become entrepreneurial it is necessary that the individual’s view of personal opportunity is tied to the company’s need. A number of organisational requirements concerning encouraging and controlling entrepreneurship, dealing with failures, ensure creation and maintenance of teams, encouraging individuals to both develop functional and general skills, and how to design organisation structure to adapt to opportunities (Stevenson and Sahlman, 1987:47-48). The combined analytical and normative aim of the Stevenson and Sahlman approach becomes clear here.

The second contribution comes from Gartner (1985, 1989) and Gartner, Bird, and Starr (1992).

Gartner is founding his approach on two ideas. The first is inspired by Schumpeter: “everyone is an entrepreneur only when he actually “carries out new combinations,” and loses that character as soon as he has built up his business, when he settles down to running it as other people run their business” (Schumpeter, 1934:78).

This is used by Gartner to make a clear distinction between an entrepreneur and a normal (small) firm manager. The second idea is that entrepreneurship is a behavioural concept which means that “these behaviours cease once organisation creation is over” (Gartner, 1989:62).

Entrepreneurship is thus a behaviour which is tied to the creation of new organisations, organisation formation or how organisations come into existence. In Gartner et al. (1992) an attempt to differentiate entrepreneurial behaviour from organisational behaviour is made. Two questions are borrowed from organisational theory: “What do persons in organisations do?” and “why do they do what they do?” (Gartner et al., 1992:13). The idea is to borrow some of the concepts from organisational theory and use them to develop an understanding of entrepreneurship:

“The organizational behaviour topics we explore, behaviour and motivation, are also important topics in other disciplines, Organisational behaviour researchers make a topic

“organisational” by placing a person’s behaviours and motivations within an organisational context. In this vein, it is our goal to look at organisational phenomena and make them “entrepreneurial” by placing them within the context of emergence”(Gartner et al., 1992:14).

Gartner et al. (1992) are mainly inspired by the work of Weick (1979).

The purpose with using the concept “entrepreneurship as organizing” instead of entrepreneurship as combining factors is not only semantic. It points to the idea proposed in this paper that a further development of entrepreneur theory and research has to build on a more multidisciplinary approach which encompasses eg. economics, sociology, psychology organisation theory, marketing, innovation economics and finance.

Discussion of the behavioural approach to entrepreneurship

What is fruitful in the research attempts: the “entrepreneurship as organizing” (Gartner) and “entrepreneurship as the pursuit of opportunity without regard to resources currently controlled” (Stevenson and Sahlman).

In looking for an understanding of entrepreneurship the Stevenson & Sahlman and Gartner contributions offer an explanation which is not based on the criticised personal traits or a narrow economic rational behavioural assumption. The contributions to entrepreneurship by Gartner and Stevenson & Sahlman will be viewed as complementary rather than rivals. Though the approaches take a different point of departure, as described above, they both focus on entrepreneurship as organizing production factors.

One can ask whether entrepreneurship always creates a new organisation. Casson (1982) talk about institutions (and not organisations) and argues that this is often, but not always the case. Rumelt (1987) argues along the same lines. This is clearly the case by Gartner. It is also the case by Stevenson et al. (1994) and Stevenson and Sahlman (1987) because it is not possible to pursue an opportunity without changing the existing organisation and create new relationships to required resources external and internal to the firm. But Gartner emphasizes the process of the emergent organisation while Stevenson et al. present a framework with the distinction between entrepreneurship and the administer type of management.

Another discussion concern the relationship between the theory of the firm and entrepreneurship. The contribution by Penrose (1972) have not been discussed in detail here. Penrose’s view is similar to that of Stevenson and Sahlman (1987) concerning the focus on entrepreneurship within a firm, focus on opportunities, the management, the management of both entrepreneurial and ongoing business operations, the focus on firm resources, and focus on less significant entrepreneurial activities (Penrose, 1972:31-32 and 36). But dissimilarities also exist. Stevenson and Sahlman do not use Penrose’s distinction between resource and the services they yield. They stress, in their definition of entrepreneurship, that it is “the pursuit of opportunities without regard to resources currently controlled”.

Both Stevenson et al. and Gartner make use of a multidisciplinary approach with borrowing concepts, theories and ideas from other disciplines. Nevertheless one can argue that the entrepreneurial research can gain from further borrowing from both theory and research methods. Within the behavioural approach contributions have been made to firm behaviour (Covin and Slevin, 1991), marketing (Hills, Raymond, and LaForge, 1992; Gardner, 1994),

management (Kjeldsen, 1991), strategic management (Sandberg, 1992), sociology (Reynolds, 1991), finance (Brophy and Shulman, 1992) and anthropology (Stewart, 1991).

An example of the use of marketing theory and methods in entrepreneur research will be used to illustrate the point. Gardner (1994) discusses the interface between entrepreneurship and marketing. He argues that “entrepreneurial behaviour is a potential candidate to significantly influence marketing thought and practice because it deals directly with a key concept in marketing: bringing innovation successfully to market”. But though the concept and practice of innovation do exist in marketing, it focus on innovative activities in mature markets rather than with innovation in new or emerging markets.

The entrepreneurship-marketing interface can be discussed from two perspectives. The interest in entrepreneurial issues in marketing and the interest in marketing issues in entrepreneurship. The research in marketing on entrepreneurial issues are rather sparse (Gartner 1994) though the identification of changing consumer or organisational needs and innovation of corresponding products are at the core of the concepts of marketing research is based upon: the marketing concept, the concept of product life-cycle, the segmentation, targeting and positioning concept, and the marketing strategy concept. Nevertheless, the main focus in the marketing research seem to be on the mature product markets rather than emerging markets (Gartner 1994).

If the perspective is turned around then there is no doubt that entrepreneur theory could gain by using marketing concepts, eg. those mentioned about, and marketing research techniques to collect, analyze and interpret relevant data about the needs of the consumers and organizations, their buying behaviour etc. In this sense marketing theory and research methods may enrich the entrepreneurial research eg. to a better understanding of the concept “opportunity”. Within innovation/marketing theory some attempt have been made to understand emerging opportunities (von Hippel 1988, Philipsen, 1995).

Entrepreneurship in clusters

This section will briefly sketch two approaches to entrepreneurship at the cluster level as argued in the introduction.

Different approaches may be considered in relation to the study of entrepreneurship in clusters. One possibility would be to make use of Porter’s (1990) diamond framework - see eg. the study by Dalum (1995) of the development of the Danish telephone communication cluster in North Jutland. But this approach is not suited to explain the entrepreneurial activities, but rather emphasizes international competitiveness.

Aldrich and Zimmer (1986) propose to analyze entrepreneurship at the cluster level from a population perspective. The population analysis include the investigation of four evolutionary processes: variation, selection, retention and diffusion and the struggle for existence (Aldrich and Zimmer 1986:9). The population analysis is a rather abstract, but it have been used to analyse entrepreneurship in clusters, eg. In Johannisson et al. (1994). Johannisson et al. (1994)

have been inspired by Weick (1979) and are thus inspired by a behavioural approach to entrepreneurship. Johannisson et al. (1994) argue that it is important to develop a contextual approach to entrepreneurship, and the context is defined as a provider of: “...ends and means for the enactment, selection and retention sub-processes. It may operate as a springboard (supporting ecological change/enactment) a gear-box (supporting selection), and as a shock absorber or defense wall (supporting retention) between the entrepreneur and the environments beyond the context” (Johannisson 1988:88; Here quoted from Johannisson et al. 1994:430).”

The context is important for the entrepreneur’s need for stability and change. The function of the context may be further divided into sub-functions as illustrated in table 1.

Table 1. Generic Functions of the Entrepreneurial Context - Illustrations.

<i>Function of the context</i>	<i>The industrial district</i>	<i>the corporation</i>
SUPPORT		
* Incubator		X
* Shock absorber	X	
VENTURING		
*Spring board		X
* Experience bank	X	
RENEWAL		
* Selector		
* Amplifier	X	X

Source: Johannisson et al. (1994:431, Table 1). An illustration of a science park is left out.

Johannisson et al. (1994) use the concept “industrial district” with reference to Pyke et al. (1990). This will here be viewed as the same as cluster. The marks in table 1 is illustrative because one may argue that the corporation can e.g. also be an shock absorber and the cluster can also be an incubator. The context may play a different role for the individual firm which is part of the cluster and for the cluster as a whole. Thus the role and function of the context will be an empirical matter, but the sub-functions in table 1 give some guidelines to look for explanations for the role of the cluster as a context for the firm.

The systemic view on innovation used by Metcalfe (1994) may be used to understand entrepreneurship at the cluster level in a similar way. The systemic view on innovation works by being a cognitive framework for the individuals and institutions involved in technological development. Within this cognitive technological framework actors identify opportunities and are confronted with constraints. Nonaka and Takeuchi (1995) discuss the importance of shared visions for the persons, departments and firms involved in product development in a similar way.

If technology is viewed as a set of design concepts which can be integrated, then the number of possible design concepts will be huge. The logic behind the systemic view on innovation is that the possible number of combinations are considerable delimited by the specific opportunities and constraints of the specific technology. This is supposed to reduce the rate of errors in the innovation process.

The study of DeBresson (1989) “Breeding Innovation Clusters: A Source of Dynamic Development” may also be categorized within the cluster analyses. The innovation will be treated as entrepreneurship in this paper. DeBresson’s (1989) main argument is that innovations come in swarms rather than as isolated events. And the clustering of innovations are facilitated by a certain factors. This is also what we have found is the case in the stainless steel district (Christensen 1998). The study of DeBresson encompasses the invention and innovation of the snowmobile system in Canada and cover the years 1925 to 1970 and thus a longer historical period similar to the stainless steel study.

DeBresson’s (1989) study is inspired theoretically by Schumpeter and Perroux. From Perroux he borrows the concept of economic and technical space and DeBresson identifies 9 factors (technical and economic) which influence the innovation in clusters: 1) Paradigmatic discontinuities; 2) technical systems of complements; 3) cumulative learning processes; 4) economies and diseconomies of scope; 5) vertical and technical externalities; 6) innovation inducement mechanisms; 7) appropriability; 8) innovative transaction costs; 9) innovative profit.

It will be argued that these factors can be used to explain the clustering of innovative or entrepreneurial activities. The explanation offered by DeBresson may be supplemented by more general approach to the study of entrepreneurship at the cluster level.

Conclusion

The aim of this paper is to discuss the fruitfulness of different approaches and research traditions within entrepreneurship at the firm and cluster level. The main focus has been on the firm level. A survey of the theories about entrepreneurship which view entrepreneurship as an economic function, as identified with an individual and viewed as a behavioural phenomenon.

Different problems associated with the entrepreneurship as a economic function and viewed as an individual made it less fruitful to use the explanations offered by these approaches. Instead it was argued that the behavioural approach was more promising. The explanation on the firm level can be supplemented with explanations on the cluster level. A study similar to the stainless steel district was found to offer some explanation concerning the clustering of entrepreneurial activities in time and economic space. A broader concept based on an population ecological approach could be supplemented with explanation of four evolutionary processes.

In my view an understanding of entrepreneurship research within clusters do not take place within economics, but within an multi-disciplinary approach to entrepreneurship.

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