

Entrepreneurship

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1. An elusive phenomenon

Entrepreneurship is an issue that has dominated public attention quite a bit over the past two decades. Its glamour is due to a number of reasons. First, the crisis of the large corporation which appeared to be governed by managers-bureaucrats (Nohria, Dyer and Dalzell 2001) and the contemporary discovery of the entrepreneurially-based small business (Birch 1979). Decisive in shaping the view of entrepreneurship in the public imagination is the fact that, typically, great entrepreneurs have characterized the huge restructuring process of the Nineties (think of Jack Welch at General Electric) (O'Boyle 1998). But most especially important is the fact that real entrepreneurs have been able to ride the great wave of innovation in those industries-- such as electronics and information-communication technologies-- which in turn have brought the world into the era of globalization (Cusumano and Selby 1995; Chandler 2001).

Entrepreneurship seems so central to the wealth and competitiveness of a nation that in all advanced countries there is a tendency to attempt to codify it-- both for instructional as well as for industrial policies. In the United States alone we find hundreds of colleges and business schools offering academic programs or centers dedicated to entrepreneurship (Swedberg 2000: 8). Notwithstanding its acknowledged centrality in the economic process, entrepreneurship is an elusive phenomenon, a concept very difficult to define clearly, a

concept so protean that it is virtually impossible to categorize it in a mathematically formalized discourse.

Entrepreneurship appears in different sizes: it can be found in large corporations as well as in small retail shops. It can present itself under various forms. You may discover that it's a motivating force behind a scientist who assigns economic meaning to his or her lab activity. It was also to be found in the old-time peddler who was particularly able as a salesperson just as today we can find it in the highly-educated manager who oversees a large corporation utilizing techniques learned in business school. And, of course, it's what pushes the impetuous, instinctive type who is able to anticipate demand and to build an economic empire. Entrepreneurship can be a long, day-by-day accumulation or it might just present itself in a dramatic leap ahead.

In the end, there is a sort of confusion in the language and the generally-diffused concepts utilized when we talk about entrepreneurship. This same uncertainty and confusion can be found in the academic community. So much so that a well-respected economist such as William Baumol can write "The entrepreneur is at once one of the most intriguing and one of the most elusive in the cast of characters that constitutes the subject of economic analysis" (Baumol 1993: 2). And another economist as well as historian, Mark Casson, can affirm that entrepreneurship "means different things to different historians" (Casson 2002).

Certainly a good litmus test which can clarify if we're really dealing with entrepreneurship is the capacity to create something new. Then again, innovation is not able to explain everything. Not all the people we tend to identify as entrepreneurs are actually exceptional innovators.

In dealing with the issue of entrepreneurship, there tend to be more hard questions—rather than definitive answers. Among the former, particularly relevant seem to be: “what are entrepreneurs doing since simple innovation is not enough?”; “who are they?” (an individual who risks his or her own money? or can the description be applied to a salaried manager or even to a team or collective entity?); “what is the relationship with the organizations they create?” and “is there truly entrepreneurship inside this type of organization?”; “are entrepreneurs indispensable to economic growth?”; “is it possible to separate entrepreneurship from its own historical, economical, social environment?”; and, in the end, “is entrepreneurship independent of time and space?”.

The pages which follow cannot pretend to respond to all of these questions; rather, they are listed as elements which should be kept in the forefront of our minds when examining the concept of entrepreneurship. We’ll start off with an examination of how entrepreneurship or entrepreneurs—here the expressions are used interchangeably—have been considered by economists, who represent a crucial point of reference for business historians. Out of this overview, a “heroic vision” should emerge rather than an “ejection” or view of entrepreneurs as ordinary people. Then we’ll tackle the fundamental issue of the relationship between entrepreneurship and organizations as well as how this topic has been dealt with in one of the remarkably syntheses of business history penned by Alfred Chandler. We’ll discover that this intellectual construction has been challenged by the “spirit of the times” of the last 25 years, part of which makes up an “alternative approach”. All of this will lead us to consider another fundamental issue: the relationship between entrepreneurs and their environment. This will be followed by a quick review of some of the regional orientations (namely the US, Europe, and Japan) of historiography before some concluding remarks are offered.

2. Hero, Invisible Entity, Ordinary Man

When using the term “hero” in a discussion on entrepreneurship, the work of Joseph Schumpeter immediately comes to mind. But Schumpeter was part of an environment typical of the German speaking part of the world at the turn of the 20th century, a climate which utilized the role of culture to explain what entrepreneurial action was about (Berta 2004: 47-55). Just think of giants such as Max Weber, who describes the entrepreneur as the beholder of an “instrumental rationality” which makes him capable of linking systematically some goals (the pursuit of economic gain) with the most proper means – a pervasive attitude to calculation (Weber 1922 and 1930; Martinelli 1994: 478-479); Werner Sombart, who in *Das Moderne Capitalism* stresses the elitarian component of the entrepreneur, with its vital energy and creativity that brings to life economic factors which otherwise might be considered deadweight – factors such as labor and capital beyond the denomination of property rights or the formal position in a company (Sombart 1909); Friedrich Nietzsche whose influence reached its maximum just in the first decade of the 20th century when Schumpeter was completing his formation in Vienna. Nietzsche underlined the difference between those who are far ahead of the conventional wisdom of their times and those who don’t do anything else but adapt to it, thus stressing the role of individuals who follow a path that does not appear rational; they are moved by a certain willpower (Santarelli and Pesciarelli 1990: 689-692) . This attitude is very similar to that of the Schumpeterian entrepreneur whose behavior is very distant from an abstract and utilitarian rationality. He is moved by an unbound energy, an interior force that can’t be controlled. For these individuals, wealth is not the goal; instead, they aspire to social

ascent and are encouraged by the joy of creating, the pleasure of victory over their competitors, and the awareness of their role as heads of economic empires.

In any case no one more than Schumpeter placed the entrepreneur at the center of the stage of the economic system, considering the entrepreneur as the engine of growth. In the intellectual construction of the Austrian economist, the entrepreneur was so central that when the role was taken over by a routinized organization, the entire capitalistic, bourgeois system degenerates into a bureaucratized socialism. Fundamental is innovation – meaning new products, new methods of production, new markets, new sources for raw materials or semi-manufactured goods, or the establishment of a new organization such as the creation of a monopoly or the breaking up of an old one. Innovation, which is the justification of the entrepreneur's profits, does not adapt itself to the current demand but imposes its output on the market. Innovation signifies change, disequilibrium, "creative destruction"; it does not coincide with invention but is the materialization of the former on an economic level. In this vision, the entrepreneur is a sort of "translator" who strives to take advantage of the long technological waves singled out by Kondratieff: from 1786 until 1842 the wave characterized by swarms of innovation in the textile and metallurgy sectors; from 1843 through 1897, the innovations which clustered in railways and activities linked to this field; from 1897 until the outbreak of the Second World War, when electricity, chemicals, and automobiles experience their debut and growing expansion. Technological innovation, considered as an independent variable for entrepreneurs, was crucial for the Schumpeterian hero who was, above all, a man of production. Not necessarily a risk taker (nor an owner), for this kind of entrepreneur the discriminating factor was once again innovation. What counts is the function played by a single capitalist, by a salaried manager, by a team, or even by a political entity. In an era of harsh challenges to the

bourgeois capitalistic system, Schumpeterian entrepreneurship (seen as an endogenous strength to this economic and social order) is a very effective apologia of it (Schumpeter 1934, 1939 and 1941).

Another concept of economic process can be found on the other end of the spectrum; here, entrepreneurship is *de facto* deemed as irrelevant. Such an assertion is not of little importance since we are talking of the so-called mainstream of economic theory (Blaug 1986). It is Joseph Schumpeter in his *History of Economic Analysis* who observes that if we read Smith's *Wealth of Nations* or Ricardo's *Principles*, we get the impression that the economic process goes ahead on its own. In the work of Adam Smith, the most important function of the businessman is to supply capital while David Ricardo stresses even more the automatism of economic movements (Schumpeter 1954). Of course, the founding fathers of economic science looked at the skills in business as important factors for the success or the failure of single initiatives but they were hardly influential when the economic process was considered as a whole. Also, Karl Marx, notwithstanding the eulogy of industrial bourgeoisie contained in his *Manifesto*, ever faithful to the logic of classics, denied any relevance to a subjective factor such as the entrepreneur. Once again, central to the whole mechanism is the social relationship that binds capitalists and workers (Marx and Engels [1848] 1968; Marx [1867] 1906). Entrepreneurship is even more neglected by the successful neoclassical paradigm based on the concept of market equilibrium. Here, the firm is the locus where productive factors are turned into goods depending on mechanisms well-known and foreseeable; uncertainty is found in exogenous variables like the price of the good that will be sold or of the productive factors to be used. In this framework, the entrepreneur only needs to choose the most efficient production function and to check that the "ingredients" are consistently assembled.

“Economic theory and the entrepreneur have never made easy traveling companions” (Metcalf 2004: 33). This is the initial statement of an essay dedicated to this topic by J. S. Metcalfe, a statement that appears to be true even when mainstream theory wants to explain the phenomenon of growth. In this case entrepreneurship is regarded as a “residual”, something that cannot be measured with the usual tools of the economist when searching for an increase of productivity. In this way, Edward Denison – while trying to single out the sources of growth of the United States in the period 1900-1960 to account for the increase of productivity – mentions factors such as technical progress, human capital, resources reallocation, institutional change, while rejecting entrepreneurship since he considers it automatically included in the various inputs (Denison 1962).

There is a middle way between Schumpeter and the neoclassic. Not all mainstream economists have completely disregarded the entrepreneur but even when attributing him or her a relevant role, they don't mention heroic virtues, don't consider only the peaks, choosing instead to stress abilities relatively diffused. Let's start from Richard Cantillon, an Irish banker who was active in France in the first decades of the 18th century. In his *Essai sur la nature du commerce in general*, we first encounter the term entrepreneur, an arbitrageur who buys goods at a known price to sell them at a price still to be determined. He recognizes the entrepreneur as the real engine of the economy even if his definition is so loose as to make it possible to include even thieves and beggars (Cantillon [1755] 1964). For sure, Cantillon's idea of an entrepreneur is that of an individual able to face uncertainty, an argument picked up again two centuries later by the American economist, Frank Knight. Influenced by German tradition as well as by American institutionalism, Knight sees the distinctive feature of an entrepreneur in the capacity to tackle

uncertainties, unique events that require a thorough assumption of responsibility and this is the entrepreneur's task which fully justifies the profits he makes (Knight [1921] 1965).

The ability to face aleatory plights is for sure one of the attributes normally entrusted to the entrepreneurial functions as much as it is in current opinion an expression of leadership, the ability to organize and coordinate the production and distribution factors.

This is what stands out when discussing entrepreneurship in the *Traité d'économie politique* written at the beginning of the 19th century by Jean-Battiste Say, a Protestant of Nantes who was both a professor of economics as well as a textile manufacturer. Say saw the decisive trait of entrepreneurship as the power to unify different elements such as workers and financial resources under the vision of a goal of product creation (Say [1803] 1971).

Also Alfred Marshall, one of the fathers of the neoclassic school with his *Principles of Economics* (1890) locates entrepreneurship inside the area of business management even though distinguishing an entrepreneurial role dedicated to fundamental decisions from a managerial one characterized by a delegated power. In Marshall's framework, the entrepreneur is not an exceptional personality; rather, he is portrayed in his daily activity, well embedded in the company, aiming to keep the system going just when the charismatic founders have ceased their activity (Marshall [1890] 1930). Much closer to our days, some economists have underlined the psychological dimension of entrepreneurial actions. Israel Kirzner, who belongs to the so-called "Austrian School", following the suggestions of Ludwig Von Mises and Frederic Von Hayek on the relationship between economics and knowledge, sees alertness as the entrepreneur's essence. Alertness is described as the ability to recognize the opportunities that arise from a misallocation of resources on the market. For this purpose, it is necessary to possess creativity, imagination, the ability to anticipate events and individuate the right sources of

knowledge about market data (Kirzner 1973 and 1979). Again, on the current that stresses the relationship between economics and psychology we find Mark Casson who defines the most relevant talent of an entrepreneur as his ability to assume judgmental decisions regarding the coordination of scarce resources (Casson 1991). The entrepreneur (whom Casson sees as an individual and not as a team) as one who summarizes the roles of the capitalist, the owner, and the manager is different from the others in his ability to perceive situations where it is possible to reap profits.

In the end, for all the authors considered above, the entrepreneur—even though “different” for his gifts of courage, leadership, promptness in grabbing opportunities, well-developed judgment—is essentially “one of us”, an ordinary person.

3. Entrepreneurship and Organizations

Several times already we have run into the involvement of an entrepreneur in an organization and this is a rather common occurrence since in the vast majority of cases, in order to make sure that his ideas materialize and in order to sustain them, the entrepreneur is forced to create an enterprise with an organization, a set of physical and human resources tied up (at least in the latter) by hierarchical relationships. The connecting tissue of the enterprise is found in management’s intermediate layer—between workers and the entrepreneur whose impulses are transmitted to the entire organization and who controls their realization. Most especially so for the sectors most relevant for a nation’s economic competitiveness, organizations grow at an astonishing rate often beyond the leader’s control. This forms the entrepreneurial paradox: the organizations with their bureaucratic rules and their routines end up suffocating the impetus of the

entrepreneur (Lynskey 2000: 27). This was the famous argument of Joseph Schumpeter in his work Capitalism, Socialism, Democracy (1941), an argument through which—as we have already seen—the Austrian economist anticipated the inevitable decline of the bourgeois-capitalistic system that from such a vital force had received its justification.

It was in the United States, the land of managerial capitalism, that the rise of large organizations had the strongest impact on studies in the first half of the 20th century. Consider Taylor's Principles for Scientific Management (1911), Berle and Means' The Modern Corporation and Private Property (1931), Burnham's The Managerial Revolution (1941), and Whyte's The Organization Man (1956). Each of these very significant works stresses the centrality of the organization versus a fading entrepreneurship with a strong opposition between the two. Organization means routine while entrepreneurship is associated with creativity; one stands for conformism while the other suggests deviance; one promotes stability while the other is for change. The crisis of the large corporation in the Seventies brings about a rethinking of this dichotomy in the direction of a different appraisal of the organization considered no longer as a machine without soul. William Lazonick revisited the competition between different capitalisms and found in the success of the triumphant Japanese company of the Eighties, an ability of the ruling class to involve in the innovating process all components of company life starting from the workshop level (Lazonick 1991). But it is in middle management that most of his attention is focused. The key words here are “intrapreneurship” and “corporate venturing” (Pinchot 1985; Lynskey 2000: 26). In her study of innovative organizations, Rosabeth Moss Kanter portrays the company's environment when able to mobilize the entrepreneurial resources of middle management as forming a framework

that “contains vague assignments, overlapping territories, uncertain authority and a mandate to work through teams rather than to act unilaterally” (Moss Kanter 1983).

An entrepreneurial vision of the role of middle management has recently been proposed in a stimulating paper by Louis Galambos, Christopher McKenna and Jeffrey Sturchio (Galambos, McKenna and Sturchio 2002). Their thesis—which goes back to an idea expressed by Peter Drucker more than half a century earlier in his **The Practice of Management** (1954) --- is that much of the behavior of middle management can only be defined as innovative as it implies original and successful responses to new conditions on a day-to-day basis. In this respect, the proper unit of analysis is not corporate strategy but business unit strategy. The authors therefore take into consideration three basic company functions: research and development, marketing, and manufacturing. After the pioneer phase (which in Germany and the US more or less ran from the 1880s to the 1920s) — a phase blessed by a high increase in market share and profits for the companies involved — R&D enters into an era of heavy institutionalization with too many hierarchical tiers that effectively brings about a sort of harmful form of insularity within the corporation. But the pressure of global competition in the past 30 years has compelled research managers in the US as well as in Europe and Japan to once again create close contact between production and marketing in their organizations so as to effectively develop new products and services. This means that often the core of innovation is not confined to the top level of the corporation. Galambos and his co-authors observe that marketing has unfortunately been disregarded by business history, probably for the bias that good products and services are able to sell themselves. The basic idea seems to be that innovations in marketing are completely determined by top decisions. But, in referring to the work of Richard Tedlow (1990), the three authors underline the fact that increasing saturation as well as

segmentation of markets has provided ample space in the process of innovation to middle managers. They offer three examples:

- an incremental innovation in the auto industry like the cup holder (Schumpeter would have had a smile for this one!) developed by the manager of instrument panel engineering at Chrysler
- attempts by Pepsi Cola back in the Seventies to defeat its major competitors by launching something like the “Pepsi Challenge” in 1974 where the main characters were the regional managers
- the incremental innovations introduced at McDonald’s by middle managers who did not feel themselves obliged to keep in mind the indications received from the company’s core center, Hamburger University.

As to the famous Japanese system of manufacturing, so far the flexibility of skilled shop floor workers has been stressed as regards the results achieved in Just-in-Time and Total-Quality-Control, a flexibility fostered by top management’s decisions. But equal attention should have also been given to middle management in promoting innovation and easing the rapid change taking advantage of the porous boundaries between middle managers, production engineers, and shop floor workers. *De facto*, in Japanese companies middle management has been the pivot of organizational learning. Finally, middle management has been tremendously important in the last two decades of the 20th century with the Great Revival of the American economy. Massacred by the processes of restructuring and reengineering, middle management and its innovative attitude fully re-emerged in the flat organizations which—thanks to new ICT technologies—greatly characterized American corporations.

That innovation comes from within the corporation and not through a top-down process is an opinion shared by a wide array of management scholars who believe that it is not important as to how strategies are formulated as much as concern should focus on how they materialize in reality (i.e., in a little orderly sequence to which many actors—particularly front-line managers—participate) (Mintzberg, Allstrand and Lampel 1998: 176-180). But it is not easy to reconstruct its true path given our tendency to rationalize ex-post our behaviors. A well-known example of this attitude is the “Honda case” examining the success of the Japanese firm in the export of motorcycles in the US market (Mintzberg, Allstrand and Lampel 1998: 201-208). In the “official” version, it was due to a well established capacity of planning and exploiting scale economies. In reality, though, it seems to be the result of acting out of desperation — the US-based managers decided to personally ride Honda’s small motorcycles around the Los Angeles area. Innovation therefore can arise from a progressive and sometimes serendipitous process of learning. But learning cannot be the only ingredient of innovation. There are plights in which patient learning is not adequate; for example, in times of a deep crisis, an overemphasis on learning risks ending up damaging what is working well and can bring about undesired consequences. In the end, learning for an organization is vitally important but must be framed in a system dominated by capacity of direction and decision. In this roundabout way, we find ourselves back in front of the issue of entrepreneurial leadership.

4. Organization as critical entrepreneurial act

The need for a decision-making synthesis at the top of large organizations is fully shared by Alfred D. Chandler, Jr., undoubtedly the most important living business historian

given his capacity to merge stories with generalizations so as to stimulate dialogue with other social scientists such as economists, sociologists, and legal scholars (McCraw 1988; Galambos 2003: 15-16). It is possible to affirm that the focus of Chandler's work is the analysis of entrepreneurial decisions. In his first important work, Strategy and Structure (1962), Chandler carefully distinguishes the functions of an entrepreneur from those of a manager. While the former has the responsibility of allocating resources at the highest levels in the company, the latter acts within the resource framework created by the former (Chandler 1962: 11).

But essential tasks of the entrepreneur, real critical act of its actions, is the creation of a wide managerial hierarchy. This network is essential to the good functioning of the large corporation on its turn indispensable tool of growth and economic competitiveness in the age of the Second Industrial Revolution. This term means a set of technological innovations that get momentum in the international economy between the last quarter of the 19th century and the beginning of WWI, innovations that permit the exploitation of economies of scale and scope. But to translate technological potentials into economic realities it is necessary by the entrepreneur a 3-pronged investment in plants (at the minimum efficient dimension), in a distribution structure that makes possible a fluid link between the factory and the market and—indispensable condition—in the ample enrollment and promotion of management that is the heart of what Chandler defines “organizational capabilities” (Chandler 1990). This is a difficult passage just for the management nature. In fact one of its essential prerogatives together with the acquisition via a long theoretical and practical apprenticeship of a precise technical know-how, is the exercise of an operative autonomy inside a significant segment of the company's activity. So we deal with a phenomenon of diffusion of power, not easy to realize by a ruling class.

Nonetheless, in the Chandlerian scheme this seems to be the one best way. Without management, large enterprise does not exist but, without the latter, decisive sectors for the competitiveness of a national economic system do not exist. Therefore there is an explicit connection between the entrepreneurial act that gives birth to vast organizations in the branches in which it is possible to exploit economies of scale and scope and the wealth of a nation. This operation implies such an element of socialization of the enterprise that the figure of the owner-entrepreneur disappears. At the top of large corporations in an entrepreneurial position are salaried managers. It was this the situation at the center in the celebrated work of Berle and Means **The Modern Corporation and Private Property- the divorce between ownership and control** and that the two authors see as a serious danger for a correct functioning of American capitalism.

Chandler on the other hand, observing the same phenomena, believes it indispensable and auspicious for a modern economy, i.e., for consumers who can therefore enjoy good products at convenient prices, for workers who can benefit from growing employment and higher salaries, for the shareholders who can take advantage of capital gains and dividends, for the entire national economy which can be well protected militarily and can sit on top of an increasing share of the international trade. At the same time, Chandler appears in disagreement with the Schumpeterian version of the bourgeois in "Capitalism, socialism, and democracy". The salaried manager-entrepreneurs at the head of large corporations lead contemporary capitalism in the phase of its most intense development. A Schumpeterian hero like Henry Ford – who prefers to destroy his management rather than share power with it – is overwhelmed by the "grey manager" Alfred Sloan, pioneer at GM of the M-Form, the ideal container of the triumphant managerial capitalism. From Chandler's work emerges clearly the fact that, when speaking of big business, the real

innovation is the organizational one that allows the strongest stimulus for human capital of which the company is detainer and which is its best asset. Curiously, Chandler as business historian was formed at the Research Center in Entrepreneurial History founded at Harvard in 1949 by Arthur Cole and by Schumpeter himself (Miller 1952; Sass 1986). By that year even the Austrian economist thought that, with the advent and consolidation of big business, entrepreneurship was to be found inside “corporate personality” (Schumpeter 1949).

5. A return to the animal spirits

It was the late Robert D. Cuff who, in a rich essay which appeared in the Spring 2002 issue of the Business History Review, effectively explained why the Research Center in Entrepreneurial History moved its focus from the “Carusos of economic life” (Cuff 2002: 163) to one which examined entrepreneurship within organizations. Cuff singled out external and internal factors. The former have to do with the general climate that emerged from the national mobilization in World War II which emphasized the importance and the pervasiveness of large scale organizations. This plight is, for instance, well delineated in Peter Drucker’s book, The Concept of the Corporation (1946), a study that stressed the capacity of General Motors’ huge but flexible organization in responding to wartime demands. Nevertheless, there is a reason for this organizational tendency that has more to do with an intellectual evolution of business historians. It is the desire, under the influence of sociologist Talcott Parsons, of writing a non-judgmental “scientific” history, a difficult goal to reach if at the center of the stage there are exceptional personalities. These two elements shed light on the fact that for almost thirty years (1950s-1980s) the main unit of

analysis for American business history (with all the impact that this choice has at a global level) has been corporate entrepreneurship. But times are changing. "... Reagan in the White House; intensified global competition; disillusionment with American managers and management education; fascination with the Silicon Valley phenomenon; changing forms of business organization, including the growth of alliances, networks, "virtual corporations" and so forth; renewed appreciation of small business as a source of employment; the media cult of the entrepreneur—a wide range of factors external to the field can help to account for the change" (Cuff 2002: 30).

It is significant in this respect that in the entry on Entrepreneurship prepared in 1980 for the Encyclopedia of American Economic History, Jonathan R. T. Hughes chose to emphasize the profound foundations of the phenomenon: free ownership of land, maximum flexibility in transactions, stability of the legal framework, limited social control, and the frontier squatter as progenitor of the Schumpeterian entrepreneur (Hughes 1980: 224). The distance from the Chandlerian model of the manager-entrepreneur who allows Weber's theories to materialize appears remarkable indeed. The individual entrepreneur seems to return as the main character while the more compelling issue for historians seems to be finding out how the entrepreneur is able to break down constraints rather than identify social factors which channel actions. In the array of social sciences which historians have to look at, sociology has for sure to be complemented by psychology (Cuff 2002: 131). Important contributions in this direction have appeared since the early Sixties. In 1961, David McClelland published his famous book Achieving Society whereby he examined the issue that some societies are more fertile than others in producing entrepreneurs. The explanation seems to be found in the fact that they inculcate in their children the need for achievement by creating a tension towards standards of excellence,

self-confidence, in a climate of high maternal support and scarce paternal presence-- need for achievement that can be found early in folk and juvenile readers, in primary school textbooks. In 1962 Everett Hagen, in a study that puts together a psychoanalytical interpretation of the entrepreneurial personality with an analysis of cultural deviance, emphasized the entrepreneurial action of disadvantaged minorities like Jews and Protestants (Hagen 1962). More recently, several works looking for an outline of the entrepreneurial personality found inspiration in cognitive psychology (Busenitz and Barney 1997). What emerges is a strong tendency in decision making to overconfidence and to overgeneralize from just a few observations. At the same time, few researchers have tried to distinguish the traits of the entrepreneurial personality from the managerial one. The latter—risk adverse— seems interested above all in the control of resources, while the former, in searching for opportunities, does not disdain risks (Lynskey 2000: 34). But, in the end, it is possible to say that this kind of research offers limited evidence.

More solid work seemed to be found in a study published at the end of the Seventies which examined the capacity of independent small entrepreneurs in creating jobs. Based on a huge data base, David Birch's The Job Generation Process set out to demonstrate that, during the Seventies, 60% of all jobs in the United States were created by firms with no more than 20 employees (Birch 1979; Acs 1984). Birch's work has been sharply criticized (Storey and Johnson 1987; Storey 1994; Harrison 1994) but the idea that connected entrepreneurship and small business proved to be resistant. In those same years, a group of Italian economists (Giorgio Fuà, Giacomo Becattini, and Sebastiano Brusco) (Becattini 2004), observing the reality of areas in the central and northern parts of their country, rediscovered the concept of the industrial districts — a territory characterized by a coordinated ensemble of small enterprises — which had been

elaborated almost a century before by Alfred Marshall. In the last three decades of the 20th century, industrial districts in Italy provided one of the country's distinct competitive advantages (Porter 1990: 421-453) but, more in general, their theoretical resurrection had a wide impact on studies and policies for regional development (Landström 2004: 26-27). In the districts, a key role has always been played by entrepreneurs, especially in their social function of mobilizing the collaboration of skilled workers ready to adapt to changing economic scenarios.

6. Against Sharp Divides

The manager-entrepreneur at the head of a large corporation described by Chandler as capable of blending Schumpeterian impetus with Weberian systematism is challenged – as we have already seen – by the dramatic changes which occurred in the real economy in the final decades of the 20th century. But the Chandlerian model is also criticized – a sign of the times – from a theoretical point of view by several scholars who blame its determinism, its vision which only sees big business as the dynamic format, and its incapacity to encompass the social and political sides of entrepreneurial action (Zeitlin 2003). In this respect, probably the most radical challenge to the Chandlerian model is produced by the so-called “historical alternative” approach started in the early Eighties with the joint work of Charles Sabel and Jonathan Zeitlin and then further expanded on by a sound ensemble of empirical research work on European, American, and Japanese industrial history. In such a conceptual framework, entrepreneurial action cannot be mounted in rigid epochs scanned by an exogenous technological change, as Chandler did when he sharply divided the First – the age of small business – from the Second (the

triumph of large corporations) Industrial Revolution. In reality, economic actors can intervene on the trajectories of technological progress that in this way appears as an endogenous process substantially influenced by entrepreneurial strategies. Far from technological determinism—an unavoidable pursuing of economies of scale and scope—the entrepreneurial action materializes in “economies of varieties”, i.e., “the capacity to adjust the volume and composition of output flexibly and to introduce new products in response to shifting demand and business strategy” (Zeitlin 2003: 64). A good example of “economies of varieties” is the “practical manufacturer” described by Philip Scranton in **Endless Novelty: Specialty Production and American Industrialization 1865-1925** (1997).

Active in specialized engineering manufacture, this individual appears to be radically different from the characters of standardized production. He owes his strength to technical competence, to an extreme sensitivity to market change, but also to the capacity to take advantage of a positive interaction with the surrounding social environment: members of an extended family who help him financially; workers ready to adapt to business needs and motivated to problem-solving; competitors with whom it is possible to establish a form of cooperation as each respects the rules of an environment founded on trust. In such a framework, innovation is not a dramatic change but a gradual process made by a set of small adjustments. At the same time, it is impossible to neatly sever the actor from the context in which he operates (Caron 2005).

7. Entrepreneurship and the broad environment

Whatever definition and/or representation we can give of entrepreneurship, we cannot avoid including it inside the economic, social, cultural, political system of which it is part. This is so true that, according to some authors, entrepreneurship is a variable which

depends upon the terrain where it is planted (Martinelli 1994: 481). In his wonderful book on pre-industrial Europe, Carlo Cipolla copes clearly with this problem facing the topical subject of productivity. It is not satisfactory to correlate increase of production with that of physical inputs. Nevertheless the idea of naming that «plus» «creative reaction of history», as Schumpeter does, is not convincing. According to Cipolla, the Austrian economist makes the mistake of reducing a whole to a part that in this specific case is the entrepreneurial activity. “This is an important and necessary element but I don’t think” – Cipolla writes – “it is enough”. As it has been sketched out about the labour factor it is «human vitality» of an entire society that at a certain point – if it exists – can enter into the game with a decisive effect, sparking off «the creative reaction of history” (Cipolla 1976: 98-99). In this way the residual remains mysterious, explained only by «intangibles», in their turn the fruit of a collective social process. In this respect Cipolla catches again the Durkhemian notion of «collective effervescence» that occurs when the intensity of social interaction reaches such a peak as to overflow into the diffusion of innovation. Durkheim took as an example of this condition the Renaissance or the French Revolution. The Swedish sociologist Richard Swedberg trying to translate this elaboration in contemporary economic terms mentions the first stages of the Industrial Revolution in England, the period around 1900 in the United States or the more recent history of Silicon Valley (Swedberg 2000: 28-29).

7.1 A famous debate

The relationship between the entrepreneur and his environment is the main focus of a well-known debate that took place at a round table on Economic Progress organized by the International Economic Association in 1953 (Sawyer 1952; Landes 1951; Gerschenkron 1953). The controversy opposed two scholars at the time active in the Harvard Research

Center in Entrepreneurial History - John E. Sawyer and David Landes - to the economic historian Alexander Gerschenkron. The knot of the confrontation was whether entrepreneurship could develop in an unfavorable cultural and social setting. Sawyer and Landes, focusing on the French case compared with the American, denied that entrepreneurial flourishing could blend with social disapproval, while, according to Gerschenkron, social and cultural benevolence is a minor factor in explaining the entrepreneurial spurt. In France it is the lack of social legitimation which Sawyer sees as the major restriction to the spread and the establishment of entrepreneurship; an element that has direct implications on the scarce dynamism of the country's economy in the course of the 19th and in the first part of the 20th century. National differences can be explained by the system of values.

In this respect Sawyer observes that in the United States industrial capitalism - of which entrepreneurs are an essential component - is successful in shaping social values thanks to the Puritan and Illuminist heritage, to the frontier spirit, to the tradition of a country that has not experienced feudal agriculture. In the end the entrepreneur is a national hero even if not without oppositions - it is enough to remember the muckrakers literature. On the contrary in France, notwithstanding the Revolution the new world has grown up inside the feudal heritage so that the tendency of the French bourgeoisie is to ennoble itself and the élites tend to practice professions distant from the field *par excellence* the seedbed of entrepreneurship - that is industry - severely reducing the basis for enrollment. In this plight it is easy to understand that the self-made man is not a highly considered character; there is little incentive to break the limits of a traditional family controlled enterprise, to undertake the adventure of «creative destruction» and mass production. The cases of the Pèreire brothers and of André Citroen are undoubtedly exceptions and the hostility they

encountered meaningful indeed. Landes draws on the issue of the constraint imposed to the entrepreneurial action by the idea of the deep ties between family and enterprise not considered as a goal in itself but as a means destined to guarantee prestige and safety for the former. In it prevails an overwhelming caution which imposes a self-limit to growth. And such an attitude is so widespread that, in this respect, substantial differences between large and small firms don't seem to emerge. Landes completes Sawyer's argument about the effects on the demand side of a social structure more hierarchically rigid in France as compared to the United States. The fact that everyone is convinced to have his own well-defined position in the society creates conditions for a fragmented demand, for an excess of diversification on the supply side that certainly do not foster growth. In it prevails a tendency towards a high profit per unit versus the total one, towards a sense of certainty versus an attraction to risk. At the same time, agreements and a «live and let live attitude» are preferred to competition which is seen as a threat for social stability. In the end, Landes characterizes the French system as a deep rooted neo-corporatism that is part of a more general «civilization».

Gerschenkron is rather severe with the two representatives of the Center. He blames first the inappropriate comparison between France and the United States - too different for geographical size, position, historical context (much more realistic would have been a comparison between France and Germany). But, above all, Gerschenkron criticizes the Parsonsian position of Sawyer and Landes (and of the entire Center). This theoretical construction envisions as central element of the social system the concept of role whose principal component in turn is made by role expectations. Gerschenkron wonders how it is possible that students interested in explaining economic change opt to rely on concepts which essentially concern a static system. But, in general, he affirms that explaining the

differences among entrepreneurial behaviors in various countries in terms of role expectations and values orientations is for sure not justified. The variations in entrepreneurial behaviors may have nothing to do with the dominating value system and with the degree of social approval. They are, rather, the outcome of various factors such as different levels of income, living conditions, availability of natural resources.

In order to support his assertions, Gerschenkron raises the example of the *fermiers generaux* who in eighteenth-century France, while hated, despised and even persecuted, actually progressed and prospered economically and socially without diminishing their entrepreneurial vigor. He also makes the case of the serfs in Russia, who after having obtained freedom in 1861, even operating inside a value system dominated by traditional agrarian values were involved in various entrepreneurial activities, included the magnificent adventure of building and operating the Volga river mercantile fleet.

In the end, Gerschenkron does not deny that the entrepreneur is an integral part of a broader framework – he is just critical towards the sociological reductionism of the Center at Harvard. On his own, he located the entrepreneur in an evolutionary economic and technological perspective. The background of the Gerschenkronian model is given by that grand, self-propelling phenomenon called Industrial Revolution. All depends on the technological complexities of its various stages and on the development degree of a country at the moment of its entry on the industrialization scene. In the first phase, the British one, the relative simplicity of technology – the epitome is textile – and the relatively low impact of fixed capital make the single entrepreneur the main character of the economic scene. In the following phases, those in which the reference sectors are the railways and the core branches of the Second Industrial Revolution, the presence of other institutional agents, “substitutive factors” as the universal bank and the State are

necessary. They can either support the entrepreneur in a decisive way or they themselves can assume the entrepreneurial function. This is the case of Germany, but also of Czarist Russia, of Italy after Unification, of Meiji Japan (Gerschenkron 1962). At the end of the 1970s, Gerschenkron's scheme was taken up again by Nathaniel Leff, who writes that public intervention in addition to the action of another institutional agent that Gerschenkron does not mention - the Group (similar to a Japanese *zaibatsu* or to an American conglomerate) - ends up making the entrepreneurial issue less dramatic in less developed countries (Leff 1979).

7.2 A stereotype: the "declining" British entrepreneur

The case of British entrepreneurs appears paradoxical indeed. There is no doubt that the United Kingdom experienced a relative decline around the turn of the nineteenth century. The first industrial nation has been unmistakably surpassed (at least as industrial output is concerned) by the United States and Germany. The British entrepreneur has been considered by a very influential historiography in the Fifties and Sixties as a crucial element of this decline. He is portrayed as limp, incapable of looking at wide time horizons, inclined to work for "sport" and to play as a real work (Landes 1969: 336-337). Yet both those who have studied in depth company histories and those who have made cliometrician analyses are not able to blame him. In fact, given the historical conditions surrounding him, we can say he has operated with wisdom and rationality.

Peter Payne well expresses this contradiction when he writes "that British entrepreneurs did not fail, but that there was a failure of industrial entrepreneurship" (Payne 1990). In this way he returns to the characters of the general framework. The position of company historians and cliometricians has been heavily criticized in Elbaum and Lazonick's

institutional approach (Elbaum and Lazonick 1986). Late nineteenth century British entrepreneurs did not fail as perfect neoclassical actors, but surely did as Schumpeterian heroes who strongly try to modify the environment in which they operate. In Elbaum and Lazonick's argument, it is a central fact that the British entrepreneur was unable to overcome those institutional rigidities which constituted an unsurpassable barrier for the rise of the large corporation – an indispensable tool for growth in a modern economy. This position appears convincing and well-grounded. What is still to understand are the deep reasons of this failed passage. The shortage of technical and managerial education does not seem persuasive. In this respect, rather than an inadequate offer, it seems more appropriate to talk about the scarcity of demand.

Similarly not convincing appear the indications of Martin Wiener on the decline of British industrial spirit, though they are certainly very thought-provoking (Wiener 1981). Wiener makes mistakes regarding the chronology, since there is no evidence that the social prestige of business declined after 1850, and he is also at least partially wrong when he writes that aristocratic values were anti-industrial. But, more in general, Wiener does not arrive at the idea that, after 1850, in British industry there wasn't a scarcity of entrepreneurial spirit but, rather, an abundance of it. The problem is caused by the peculiarities of this entrepreneurship, too aggressive and individualistic. It is the reflex of a stratified and hierarchical society to which correspond fragmentated markets where each component – included labor – finds its advantageous niche and takes little care of a general change in cooperation with the other actors for the sake of the wealth of a nation.

This hypothesis is proposed by Peter Payne in the very interesting survey essay mentioned above. As the author recognizes, it deserves of course an intensive investigation but it seems worthy to be seriously considered.

7.3. New fields of research: ethnics and gender

The issue of the relationship between entrepreneurship and the environment emerges clearly in the many examples of successful emigration of ethnic minorities such as the Jews in Europe and in the United States, the Chinese in South-East Asia and the example of the Greek Diaspora. There are many cultural advantages of the ethnic group that have their origins in the particular relationship these emigrants have with their homeland. A recurring pattern is the lack of entrepreneurial spirit among the locals. The ethnic minorities are able to enjoy the advantages of the “insiders” as they can share knowledge and financial solidarity. Usually there is a long story of international emigration as with the Asiatic minorities that arrive in the United Kingdom in the 1950s but this time via East Africa, or as the Chinese in Asia –entrepreneurs who form a very cohesive group because all come from a few specific regions in south-east China. Another recurrent pattern can be found in the fact that there is a long story of skill in commerce while in the original homeland there is an absence of specialized agriculture (Godley, 2006). A particularly interesting case is that of the Greek diaspora. Ioannides and Minoglou (2005) examine the Chiot clan (from the island of Chios) – an ensemble of Greek trading companies active in the 19th century but that will serve as a permanent example. The authors use the concept of “market embedded clan” that needs a spirit of equity which, in turn, requires a strong solidarity among its members. In this respect history (the ties matured over a long past) is very important. This form of clan, different from family networks, has three major advantages: first, it gives to its members a superior knowledge of profit opportunities; second, there is coordination among the members given the trust, the common knowledge

pool and the common cultural background; and, third, it gives a superiority to its members in spreading risks.

Certainly the business world for women entrepreneurs can not be characterized as a favorable environment. Editing a major collection of essays in 1999 ("Women in Business"), Mary Yeager notices that almost half a century passed before the publication of a work that can be seen as a counterpart to William Miller's "Men in Business", one of the most important outcomes of the Center in Entrepreneurial History. As a matter of fact, no woman was at the lead of the great transformation of the 19th century, while by 1990 women in America can be considered to be important protagonists of the economy. "*The number of American companies owned or controlled by women had grown to the point where they now employ more people than had all the Fortune 500; three American women headed Fortune 500 companies with revenues exceeding 1 billion US dollars... women own 50% of the business in the United States*" (Yeager, 1999: XIII). Mary Yeager underlined the need to incorporate gender into business and entrepreneurial history. The issue must be located in four intertwined systems: the family, the firm, the market and the State. Lina Galvez Munoz, focusing on the Southern European case, stresses the fact that-- as in the case of men-- female entrepreneurship is seldom a Schumpeterian one. Given educational, legal and cultural barriers, female entrepreneurship appears especially in self-employment and in small businesses. Not infrequently, it is a kind of invisible entrepreneurship, performed especially in the first developing stage of the family firm (Galvez Munoz, 2005).

8. Regional Orientations of Historiography

8.1 USA

In an essay on American capitalism, Thomas K. McCraw defines the formation of the country as “one long entrepreneurial adventure”. In his view, no other nation has been an example of “creative destruction”, no other “people have revealed an overwhelming preference for an extreme form of competitive individualism” (McCraw 1997: 302, 348). It seems, in some respects, that no other work better catches the spirit of these affirmations than that of Jonathan Hughes’ The Vital Few (1986) in which the figure of the “Heroic Entrepreneur Archetype” is clearly proposed. With the role of the government taken as a given, the American economy as it has historically evolved appears as the product of initiatives undertaken by individuals. “There are no *masses*. There are only individuals. There are no *forces of history*, only human action...” (Hughes 1986: 2). But if it is relatively easy, in Hughes’ words, for political and military leaders to understand this concept, their Puritan personalities in addition to the nation’s egalitarian ideals makes it difficult to refer this idea to entrepreneurs. Such an attitude prevented them from seeing that in America only entrepreneurs have been able to realize that mobilization of resources which brings about economic growth.

These men represent a very limited proportion of the population but they are the “vital few”: idealists such as William Penn and Brigham Young, inventors such as Eli Whitney and Thomas Edison, innovators as exemplified by Andrew Carnegie and Henry Ford, organizers capable of changing the structure of entire branches of the economy such as Edward Harriman and Henry Ford. The “Heroic Entrepreneur Archetype” is well embodied in some biographies which can be described as “sympathetic” to entrepreneurs such as Allan Nevins’ works on John D. Rockefeller and Henry Ford (Nevins 1941, Nevins with Frank Ernest Hill, 1954, 1957, and 1963). In a more sophisticated- when compared to Hughes’ volume – work, this tradition has recently been rediscovered by Anthony J. Mayo

and Nitin Nohria who in their study on the major American business leaders of the 20th century, focus on one hundred individuals classified under three typologies: Entrepreneurs, Managers, and Leaders. While the latter's special ability is to understand and utilize the contextual factors (government intervention, global affairs, demography, social mores, technology and labor), entrepreneurs are not constrained by the context or by the times in which they live. A' la Schumpeter, they are revolutionary, able to overcome insurmountable obstacles and to make the unthinkable materialize (Mayo and Nohria 2005). As a polar opposite to the "Heroic Entrepreneur Archetype" we have the "Corporate Entrepreneurship Archetype" (Hounshell, 2002) that has its origins in the rethinking of the concept of the Entrepreneur by Schumpeter and Arthur Cole at the time they founded the Research Center in Entrepreneurial History (Schumpeter 1949, Cole 1959). As has been written, both scholars had become convinced that with the advent of the large corporation the entrepreneur had been transformed into a collective entity with entrepreneurship an everyday function of the modern enterprise. If the publication of Drucker's Concept of the Corporation—where the superiority of the M-Form is clearly affirmed-- marks an important step in the rise of the "Corporate Entrepreneurship Archetype", the decisive contribution in this direction is the work of Alfred Chandler. Hegemonic in American business history for almost three decades (from the Sixties through the Eighties), Chandlerism has been accused of having "killed" entrepreneurial history. Within the Chandlerian paradigm we can position David Hounshell and John Kenly Smith's important volume dedicated to an activity which is innovative par excellence, R & D (Science and Corporate Strategy: DuPont R & D, 1902-1980; New York: Cambridge University Press, 1988). In the middle of the Chandlerian era we also find an interesting affirmation by Harold Livesay who sees an "entrepreneurial persistence

through the bureaucratic age" (Livesay 1977). Blaming business history as having focused on institutions rather than people and as having lost followers along the way, Livesay uses as examples the stories of men such as Andrew Carnegie, Henry Ford II, and the banker Howard Stoddard; he shows that it is possible to study large, modern bureaucracies as a means to materialize the design of an individual. This is further proof of the fact that even in the age of anonymous organization, individual entrepreneurs are still alive. On the other end, Livesay stresses the continuous appearance of new firms strictly controlled by an owner, a sign of the vitality of a capitalism which is far from at its end. This phrase sends us back to Scranton's reflections (previously mentioned in his book, Endless Novelty) on the entrepreneur as an "ordinary person".

This typology is effectively exemplified by Amar V. Bhide in the section of his landmark work on American entrepreneurship in the last quarter of the 20th century which he dedicates to promising start-ups. Bhide takes his sample of 100 units from the 1989 "Inc. 500" list which considers the fastest growing privately held companies in the US. In 1988 the average firm had an income of \$ 15 million, 135 employees, and a rate of sales growth of more than 1400% in the previous five years. The companies in this group were spread across relatively advanced sectors such as computer-related, business services, industrial equipment, and medical and pharmaceuticals. Here the main feature of the entrepreneur was to position himself in the middle. His familiar background and his "human capital equipment" was not too scarce (otherwise he would have ended up in a marginal venture) nor too high (since, in this case, he would have looked for more prestigious and financially rewarding positions). The entrepreneur's most important quality is found in his tolerance for ambiguity, a mixture of tactical ingenuity, capability of accepting a refusal with flexibility, and promptness in ridding himself of wrong ideas (Bhide 2000).

8.2 Europe

Even though recently various important works examining European enterprise in an historical perspective have been written (including Whittington and Mayer 2000), many would wonder if it is possible to talk about Europe since the national and the regional varieties are so many. It is hardly questionable, though, that when compared to the United States there are at least three features that distinguish the European enterprise: 1) in general, European firms have a smaller dimension than their American counterpart; 2) there is a stronger persistence of the personal or family business; 3) there is a greater extension of State-owned enterprises. This is the framework in which European historiography on entrepreneurship has distinguished itself from the American (Cassis and Gourvish 2002). Particular attention is usually given to the role of the founders, who more than in America are seen as outsiders, an element that contributes to underline a Schumpeterian exceptionalism (Cassis 2005). An exceptionalism that not infrequently brings about an autocratic style of command that may even take the company to the brink of bankruptcy, as in the case of Herbert Austin (Church 1979) and André Citroën (Schweitzer 1992). But they can also be good organizers, able to delegate power as in the example of August Thyssen (Fear 1997) and Louis Renault (Fridenson 1972). In this task, they are often helped by alter-egos from the family. The delegation of power outside the family may encounter some resistance as in the relationship between Wilhelm von Siemens and Alfred Berliner (Kocka 1971). On the other hand not even inside dynasties the relationships are easy, as is shown by the conflict between Armand Peugeot – a real entrepreneur – and his family (Sedillot 1960). In any case, family entrepreneurship and dynasties prove to be extremely vital in Europe, either in large enterprises or in small and

medium size companies, as for instance in the Italian industrial districts and in the German Mittelstand. In this respect such a vitality challenges the Chandlerian images of a unique model of successful managerial enterprise (Colli and Rose in this volume).

It is not easy to speak about entrepreneurship in state-owned enterprise for the heterogeneity of cases, for the different forms of market in which they operate, for the political constraints that they have to face (Toninelli 2000). Nevertheless, examples do not lack of real Schumpeterian entrepreneurship in state-owned sectors as is the case with the Italian steel sector (Amatori 2000), the British gas industry (Goodal 1992), and the French railway experience of the TGV (Meunier 2002). It must be stressed that often the inferiority of state-owned enterprises as compared to the private has revealed itself to be only a myth (Gourvish 1986).

8.3 Japan

It seems that the main issues have been outlined in the Cambridge Economic History Essay on Japan written by Kozo Yamamura (Yamamura 1978) who compared two visions and their accompanying realities on the origins of modern entrepreneurship in Japan. One is represented by “samurai” who-- for the sake of the country-- turned into businessmen in a sort of idealistic way. The other by the “chonin” merchants who, instead, reveal themselves to be profit and market oriented. These arguments have been picked up by a more recent historiography (Kawabe 2002 and Yui 2002) that emphasizes the role of political affiliations in order to overcome the turmoil of the Meiji era. But at the same time independent entrepreneurs such as Soichiro Asano (who, starting from a small commercial activity, slowly but surely accumulates financial resources and diversifies in various industrial sectors including cement and - via interests in the shipping industry -

steel) are examined in depth. In the studies of the years between the two wars focus is centered on the emergence of big business and the appearance of a managerial capitalism inside groups aimed at creating political-speculative networks. At the same time, greater attention is given to entrepreneurs more tied to the consumer needs like the legendary Konosuche Matsushita. Even in the years following WWII, this dualism between entrepreneurs tied up with groups and strong individuals emerges. In this case, especially relevant are the leaders of “zaikai” (business communities) who, representing the interests of big business, cooperate with the government to regulate the national economy. As could be expected, the most powerful of them turns out to be the “Keidanren”, a federation of economic associations founded in 1946. But naturally, given the prodigious economic expansion of the country, tales of Schumpeterian entrepreneurs are not lacking and can be found in the case of Soikiro Honda, an example of what commonly in Japan was just part of an entrepreneurial team. He concentrated on technology and production, while his partner Takeo Fujisawa was dedicated to finance, sales and management. Entrepreneurial adventures have been studied also for the recent “third industrial revolution”. A typical example is the one about Son Masayoshi, who at the age of 24 (in 1981) started a business in the distribution of pc software – the “Soft Bank” – which evolved into a financial holding diversified into various businesses connected with Internet.

9. Concluding remarks: measuring entrepreneurship?

However elusive the phenomenon of entrepreneurship can be, there have been various attempts to measure it. One example is given by the sociologist Paul H. Wilken (Wilken 1979), who wanted to understand the impact of entrepreneurship on national economic

development. Wilken singled out four variables: O (opportunities); Y (economic growth); X (non economic factors); E (entrepreneurship). Basing his work on secondary sources Wilken considered the case of development in 19th century Great Britain, France, Germany, Japan, United States and Russia arriving at the apparently odd result that-- in both the UK and in the US-- entrepreneurship had a very low impact . The problem of such an attempt is that it seems very arduous to draw a clear line between the variables. An economist like James Foreman Peck, instead, prefers to measure entrepreneurship in France during the Second Empire using sophisticated statistical methods such as DEA (data envelopment analysis) and SFA (stochastic frontier analysis) (Foreman Peck 2005 in Cassis Minoglou). He focuses on the creation of new enterprises and their performances. Certainly this is an important contribution but it does not seem exhaustive of what we would like to know about entrepreneurs. It could be interesting to follow with a sharp focus on entrepreneurs a Chandlerian methodology, i.e. to pursue an international comparative research based on collective biographies (see for instance Jeremy 1984). It would be necessary to reconsider the existing biographical dictionaries, to update them, to promote the making of new ones, processing the sources according to a common questionnaire shedding light on origins, education, motivations and values, initial business idea, strategies and organizations worked out to materialize them, relationship with the environment and particularly with political and social issues. Thanks to this widely comparative methodology certainly we could not grasp Protheus but we could surely watch him from up close.

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