

Understanding Entrepreneurship:
A Definition and Model Based on Economic Activity and
the Pursuit of Self-identity

by

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ABSTRACT

Entrepreneurship is a growing and important field of practice. Research in the field of entrepreneurship has been hampered by the lack of a clear paradigm of research and a common definition of the topic. This study reports the collection and analysis of 25 oral histories of self-identified entrepreneurs. The study describes the use of oral narrative by entrepreneurs to exchange important information and induces a new definition of entrepreneurship. The definition is simply stated as: "Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity." The definition is developed into a model, which reconciles the roles of successful founder, serial entrepreneur, small business manager and charter-holder as forms of entrepreneurship. Preliminary testing of the model has shown it to successfully predict the entrepreneurial roles associated with the 55 ventures described by the entrepreneurs who participated in this study.

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I hope this dissertation does justice to the richness of the experiences each and every one of you has shared with me.

DEDICATION

I dedicate this dissertation to Molly McKenzie. It has been my greatest fortune to have Molly by my side since our teenage years: for better for worse, for richer for poorer, in sickness and in health. I am honored to have been loved and cherished by such a fine person all these years of my life.

CHAPTER I

INTRODUCTION

“Interdisciplinary work, so much discussed these days, is not about confronting already constituted disciplines (none of which, in fact, is willing to let itself go). To do something interdisciplinary it’s not enough to choose a ‘subject’ (a theme) and gather around it two or three sciences. Interdisciplinarity consists in creating a new object that belongs to no one.”

Roland Barthes (Barthes 1989, p.72)

The thesis of this dissertation is that oral histories of entrepreneurs can be used to develop important new understanding of the phenomenon of entrepreneurship.

Background of This Study

This study began in May of 1996, although I did not know it at the time. As a Master of Business Administration (MBA) student taking part in the University of Victoria’s Business Practicum in Malaysia, I was living in Kuala Lumpur with 35 other students. My cohort was a mix of graduate and undergraduate students, most of whom were significantly younger than myself. I was surprised that every evening, one or another of the undergraduate students would insist on having supper or a coffee with me. During our time together, each of them would ask me to tell my life story. Their interest centered on how I had reached the ripe old age of 48 without ever having held a traditional job.

I had never thought of my life story as being exceptional. My wife, Molly and I both grew up in family businesses. My parents owned a hotel and her parents owned a resort in British Columbia’s Okanagan valley. Molly and I started our first business in

1971, a year after we were married. The recession of the early 1970s had made it difficult for either of us to get a decent job. So, when we spotted a new block of shops being built on a busy street in Vancouver's downtown, we decided to open a retail store. I spent two weeks in the Vancouver Public Library doing research; we borrowed \$5,000 from our parents to finance the business; signed a lease and opened a store. Of course there were a lot of bumps in the road. Neither of us had any formal business training, and our concept, a store specializing in herbs and spices, was naive at best. However, we were fortunate in being adaptable and prone to the kindness of strangers.

In 1972, our liabilities far outweighed our assets. The same year, Molly was forced to endure an extended hospital stay for treatment of thyroid cancer. We struggled through rounds of surgery and radiation therapy along with rounds of borrowing to cover the continuing losses of our fledgling venture. Molly survived, although her voice was reduced to a whisper by a miscalculated move during a difficult surgical operation.

As soon as that crisis was over, another one emerged. In early 1973, the bank called the demand note, which was covering our significant losses. Molly and I were full of fighting spirit as a result of her battle with cancer and we could not give in to the banks. British Columbia was in the midst of a provincial election at the time. The opposition party was promising to institute an agricultural land freeze throughout the province if they were elected. I could see that, if the promised legislation was enacted, the conversion of farmland into residential land would stop and house prices in Vancouver would go up. We looked around and found a great deal on a house. The owner had done 80% of a renovation before he had run out of enthusiasm and money.

The house was empty and not yet listed with a real estate agent. We came up with a financing plan in which we borrowed another \$5,000 from our parents and used this money to secure a low-ratio mortgage on the purchase of the house. However we tied the re-financing of the business loan to the mortgage proposal; promising to re-mortgage the house as soon as prices went up. I shopped this package to a half dozen banks and finally found one that was responsive.

We secured the mortgage, bought the house for \$25,500 and re-financed the store's demand note with a term loan. The New Democratic Party swept in to power and immediately enacted the agricultural land freeze. Molly ran the store, while I finished the renovation to the house and put a suite in the basement. By the end of the year, the value of the house had doubled and we re-financed, converting all of our indebtedness into a first mortgage, which the rent from the basement suite almost covered. The next year, the business turned profitable and Molly's cancer was declared to be in remission. In 1977, Molly underwent re-constructive surgery and regained the use of her voice. We hired a manager to run the store and took a year out to think about our next adventure.

Our next adventure involved buying a classic yacht, and almost 20 years of involvement in the Wooden Boat Revival movement. We started a number of businesses; devoted a great deal of time to travel; lived on a boat for 6½ years and somehow ended up with all the trappings of success honored by middle class America: a beautiful home with two new cars and a boat in the driveway. In 1990, the North American boating industry suffered a dramatic setback. United States industry gross sales fell from \$17.9 billion in 1988 to \$10.6 billion in 1991 (NMMA 2002, p.6). My small boat building and

repair business was isolated from the impact of this setback until 1993 due to the large backlog of orders I had built up through the late 1980s. However, by 1994, my business had stalled and I realized that my plans to expand had to be put on hold. I decided to pursue a Masters of Business Administration (MBA) degree at the University of Victoria with the thought of developing a production boat building business once I had acquired better managerial skills.

The students I talked to, over coffee in Malaysia in 1996, were facing anxiety over their first career decisions: where would they find their first job? Somehow my life story offered them an alternative. My conversations with these students made me aware of the lack of information available about entrepreneurship as well as the growing interest in entrepreneurship.

The practice of entrepreneurship has become pervasive throughout Canada and the United States. It is estimated that four percent of American households were involved in starting new firms throughout the 1990s (Reynolds 1997, p.8). New and growing firms create the majority of new jobs (Dennis 2000, p.31) and innovations in the United States (Acs and Audretsch 1990; Alvarez and Glover 1996, p.140) and Canada (Balderson 1998, p.15; Tal 2002). Further, there appears to be a distinct trend moving towards increasing entrepreneurship in the United States (Gartner and Shane 1995, p.295) and Canada (Lagacé 1997, p.2).

The telling and re-telling of my life story led me to develop a curriculum in entrepreneurship as my MBA graduating thesis. I discovered that the development of entrepreneurship as a field of practice has been paralleled by the development of

entrepreneurship as a field of study. Myles Mace at Harvard Business School offered the first academic course in entrepreneurship in 1947 (Cooper, Markman et al. 2000, p.116). Since that first offering, entrepreneurship as a field of academic study can be seen to have grown around three pivotal events¹. These events mark (1) the realization of the importance of entrepreneurship, (2) the active creation of an infrastructure for its development and (3) the affirmation of the potential rewards of the process.

The first pivotal event in the growth of entrepreneurship as a field of academic study was David Birch's discovery, in 1978, of empirical evidence suggesting small business created the majority of all net new jobs (Carney 1995). The publication of "Job Creation in America" (Birch 1987) overthrew the established belief that large corporations were the drivers of growth in the economy. Through the analysis of 12 million businesses tracked by Dun and Bradstreet over the period 1969 to 1986, Birch and his Massachusetts Institute of Technology (MIT) research team discovered that small firms created about 88% of all net new jobs (Birch 1987, p.16). Birch's work has withstood criticism of its methodology (Armington and Odle 1982; Davis, Haltiwanger et al. 1994), disapproval of its underlying metaphor of dynamic job generation (Brown, Hamilton et al. 1990) and censure of its political economic position (Harrison 1994). The common acceptance of small business as the primary source of net new employment (Dennis, Phillips et al. 1994) has led to government commitment to programs fostering

¹ I would like to thank Harold Welsch, Coleman Chair at DePaul University for sharing this insight in a panel discussion: "Building Bridges: Creating an Entrepreneurship Education Delivery Team" Second Annual USASBE/SBIDA Joint

the development of small business and entrepreneurship in both Canada and the United States.² Coincidental to the publication of Birch's findings, the popular press developed magazines such as Inc. (founded in 1979) and Success (founded in 1987) that addressed entrepreneurship and small business. "Job Creation in America" set the stage for the rapid development of entrepreneurship as a field of study by making governments and non-government endowments aware of the importance of entrepreneurship as an area likely to provide social benefits.

The second pivotal event in the growth of entrepreneurship as a field of academic study was the review of management education commissioned by the American Assembly of Collegiate Schools of Business (AACSB) in 1988 (Porter and McKibbin 1988). The principals of this review, Lyman Porter and Lawrence McKibbin, recognized entrepreneurism as one of five economic variables relevant to the future of management education (Porter and McKibbin 1988, pp. 29-31). While noting that increases in the rate of entrepreneurship tend to be a function of economic change; Porter and McKibbin concluded the information economy is likely to include a higher level of entrepreneurship than had been experienced during the industrial era. The report specifically criticized business schools for preparing students for employment in large organizations rather than teaching students how to start and operate small organizations. Porter and McKibbin's

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² The U.S. Small Business Administration, (founded in 1953) began its very successful Small Business Development Center program in 1979 (Chrisman, Ryan et al. 1985, p.2). The Federal Business Development Bank (FBDB) was established as a Crown corporation in 1975. Throughout the 1970s, FBDB developed a roster of over

survey of business school deans revealed a strong endorsement of entrepreneurship as a topic to be added specifically to their curriculum or to be spread discretely throughout the curriculum. Business schools throughout Canada and the United States responded to this endorsement by rapidly increasing the number of entrepreneurship courses offered. In 1974, 85 business schools offered courses in entrepreneurship. By 1991, the number had increased to 369 (Gartner and Vesper 1994, p.180)³. Entrepreneurship faculty positions have increased by 253% over the period 1989 to 1998 outstripping the supply of qualified faculty (Finkle and Deeds 2001). By 1999, the field of entrepreneurship had grown to include 271 endowed chairs (Katz 1999; Meyer 2001) and 58 research publications (Katz 1999). Porter and McKibbin's work preceded and likely precipitated the active creation of an infrastructure for the development of entrepreneurship as a distinct field of academic study.

The third pivotal event in the growth of entrepreneurship as a field of study was the economic disequilibria caused by the development of communications technology (Hafner and Lyon 1996; Berners-Lee and Fischetti 1999) throughout the latter half of the 1990s. The rapid economic change fostered by the development of low-cost, pervasive access to information led to what has been described as "the largest act of legal wealth creation in history" (Kaplan 2000). Business students responded to this environment by

1100 experienced business counselors as a part of its CASE counseling service.

³ The most recent accounting of schools offering entrepreneurship courses, done in 1999, more narrowly defined entrepreneurship as business start-up as opposed to the ongoing management of small business and still counted 504 business schools offering courses (Vesper and Gartner 1999, p.3).

participating in start-ups at an unprecedented rate (Booker 1999; Morris 1999). Some researchers (Williamson 1975; Naisbitt 1982; Greider 1997) have suggested that movement towards entrepreneurship is a temporary phenomenon associated with the adoption of new technology. Other researchers (Drucker 1994; Albrow 1997; Wacker and Taylor 1997; Hamel 2000) believe that the world economy is undergoing a fundamental transformation and that entrepreneurship will be a characteristic of the new economic order. Whether the current entrepreneurial boom is short-lived or a more fundamental change in society, publicity surrounding the success of those who have built new ventures has affirmed, in young people's minds, the rewards of the process of entrepreneurship.

These three events: the publication of "Job Creation in America", the adoption of Porter and McKibbin's recommendations and the rapid increase in entrepreneurial activity sparked by the development of communications technology have reinforced the belief that entrepreneurship, as a field of study, has a valuable connection to the development of personal and social wealth. The growing legitimacy of entrepreneurship as a field of study is seen in the growth from the first research conference held in 1970 (McCarthy and Nicholls-Nixon 2001, p.28) to the establishment of the Entrepreneurship Division of the Academy of Management in 1987 (Cooper 1998, p.1).

The Domain of Entrepreneurship

Although entrepreneurship has been gaining popularity as a field of study, entrepreneurship research is still without a central research paradigm (Carsrud, Olm et al. 1986, p.367; Bygrave 1989, p.22; Cooper 1998, p.3). Thomas Kuhn has suggested that

fields of study in the pre-paradigmatic stage are characterized by a lack of rigid central definition (Kuhn 1962, pp. 15-19). Without a rigid central definition, research becomes a nearly random activity characterized by divergence of fact gathering and analysis.

The divergence of fact gathering and analysis undertaken in the name of entrepreneurship is indeed broad. Included within the domain of entrepreneurship there have been studies of chaos theory (Bygrave 1989; Stevenson and Harmeling 1990), cognition (Gatewood, Shaver et al. 1995; Palich and Bagby 1995; Busenitz and Lau 1996; Baron 1998; Krueger 2000), decision theory (Campbell 1992), economic theory (Casson 1982; Kirzner 1982; Barreto 1989; Baumol 1993; Amit, Muller et al. 1995; Arthur 1996), education (Block and Stumpf 1992; Robinson and Sexton 1994; Charney and Libecap 2000), franchising (Bates 1995), global business (McDougall and Oviatt 2000; Mitchell, Smith et al. 2001), innovation (Drucker 1985; Acs and Audretsch 1992), intrapreneurship (Morris and Jones 1999), marketing (Hills and LaForge 1992), population ecology (Aldrich and Wiedenmayer 1993), psychology (Brockhaus and Horowitz 1986; Carsrud and Krueger 1995), resource-base theory (Alvarez and Barney 2000), small business (Carland, Hoy et al. 1984), strategy (Biggadike 1976; Rumelt 1987; Bhide 1994), social entrepreneurship (Dees 1998), sociology (Reynolds 1991; Thornton 1999), stakeholder theory (Venkataraman 1999), venture capital (Barney, Busenitz et al. 1996) and venture performance (Sandberg 1984; McDougall 1987; Herron 1990; Chrisman, Bauerschmidt et al. 1998). The inclusion of studies of so many differing perspectives has led to confusion about the nature of the phenomenon being studied. One study of the domain of entrepreneurship likened it to the Hindu fable: "The Blind Men and the Elephant" (Brazeal and Herbert 1999, p.30), where six blind men form very

different concepts of the nature of the animal based on the part they were touching.

The search for a common definition of entrepreneurship has become a central debate within the study of entrepreneurship. The nature of this debate is evidenced in a comparison of the Coleman White Papers presented at the 2000 and 2001 United States Association of Small Business and Entrepreneurship (USASBE) / Small Business Institute Directors' Association (SBIDA) Joint National Conferences. In 2000, Howard Stevenson presented a Coleman White Paper (Stevenson 2000) that credited the success of Harvard's entrepreneurship research program to that institution's adoption of a common working definition of entrepreneurship, "Entrepreneurship is the pursuit of opportunity beyond the resources you currently control" (Stevenson 1983; Stevenson and Gumpert 1985; Stevenson 2000). In 2001, Dale Meyer presented a Coleman White Paper (Meyer 2001) that referenced the importance of a much broader topography of entrepreneurship, "Entrepreneurship as a scholarly field seeks to understand how opportunities to bring into existence 'future' goods and services are discovered, created and exploited, by whom, and with what consequences" (Venkataraman 1997, p.120). These definitions differ both in terms of bias and orientation. The Stevenson et al definition relates a behavioral bias (the pursuit of opportunity) to a strategic orientation (without regard to alienable resources they currently control) and focuses on the activity of the individual. The Meyers/Venkataraman definition relates a creativity bias (how opportunities to bring into existence future goods and services are discovered, created and exploited) to an organizational orientation (by whom and with what consequences) and focuses on the social consequences of this action.

A study done by William Gartner (Gartner 1990) found a similar divergence of opinion surrounding the definition of entrepreneurship. Gartner utilized the research technique of a Policy Delphi (Linstone and Turoff 1975; Mitroff and Linstone 1993, pp.20-29) to explore the underlying meanings which 44 academic researchers and business leaders attached to entrepreneurship. The study reported two groupings of the participants. One group (21% of the respondents) defined entrepreneurship in terms of outcomes, requiring the creation of value or personal gain, similar to the behavioral/strategic definition. The other group (79% of the respondents) focused on the characteristics of the process, requiring innovation, growth or uniqueness, similar to the creativity/organizational definition.

There appears to be a paradox associated with entrepreneurship research. The lack of a central definition creates a rich diversity of voices from many academic disciplines. However, the lack of a central definition limits the usefulness of entrepreneurship research. Neil Churchill and Virginia Lewis described the field of entrepreneurship research in the mid 1980s as, "...a young, complex, involved in a process of discovery and transition..." (Churchill and Lewis 1986, p.334). A recent article published in the *Academy of Management Review* is more pointed in its criticism: "Rather than explaining and predicting a unique set of empirical phenomena, *entrepreneurship* has become a broad label under which a hodgepodge of research is housed" (Shane and Venkataraman 2000, p.217 italics in original). There is growing concern that debate over a central definition has directed research efforts away from the development of a distinctive theory of entrepreneurship (Bull and Willard 1993, p. 185).

Research Logic in the Domain of Entrepreneurship

William Bygrave developed the argument that the lack of a distinctive theory of entrepreneurship has led to entrepreneurship researchers borrowing theories and methods of research from other sciences (Bygrave 1989, p.7). In particular, Bygrave criticized entrepreneurship researchers for being guilty of physics envy, which he defines as the inappropriate imitation of the theoretical and empirical methods of advanced rational scientific paradigms (Bygrave 1989, p. 16). It is common for researchers in the field of business management to utilize a quasi-experimental method of hypothesis testing and causal inference in an attempt to gain respectability from their academic peers (Easterby-Smith, Thorpe et al. 1991, p.5). Max Wortman noted the primary methodologies of US entrepreneurship research are mail questionnaires and directed interviews (Wortman 1986, p.277). When specific instruments are used, they are generally taken from other fields of study. These methodologies may not be best suited to entrepreneurship research, since entrepreneurship consists of idiosyncratic phenomena connected by non-linear relationships often with reciprocal causality (Stevenson and Harmeling 1990, p.2). Morton Huse and Hans Landstrom correlated the use of quantitative methodologies used by entrepreneurship scholars to the importance of publishing in academic journals in U.S. academic society. They noted that European entrepreneurship scholars, who are subject to less pressure for journal publication, show much more openness towards methodological diversity (Huse and Landstrom 1997, p.9).

Alex Stewart, the Chair-elect of the Entrepreneurship Division of the Academy of Management has suggested that ethnography is well suited to the study of

entrepreneurship (Stewart 1991, p.77). Stewart has pointed out participant observation allows scholars a unique glimpse of entrepreneurship's crucial lore (Stewart 1991, p.78). Low and MacMillan indicated the need for more contextual and process oriented research in the field of entrepreneurship (Low and MacMillan 1988, p.156). Howard Aldrich and Ted Baker claim ethnographic methods allow researchers to gain new insight from their field observations (Aldrich and Baker 1997, p.393). If new and promising research is to be conducted in the domain of entrepreneurship, it follows that it must be done in the field.

A growing number of ethnographic studies have been produced as PhD dissertations in Europe (Steyaert 1997, p.15). In one of these studies, Chris Steyaert (Steyaert 1995) investigated the development of local knowledge of entrepreneurship through the writing of narratives. In this study, storytelling was found to be complementary to the creativity inherent in entrepreneurship. The study suggested that, through narrative, the storyteller was able to capture the sequences of events and context of the evolving development of the new venture (Steyaert 1997, p.30). David Boje has described storytelling in organizations as "...the preferred sense-making currency of human relationships..." (Boje 1991, p.106). He noted the contextually embedded nature of stories, describing the narrative discourse as a "performance event" (Boje 1991, p.109). Research that seeks to interpret stories allows phenomena to be viewed through the subject's eyes (emic point of view), rather than from the more limited viewpoint of an outsider (etic point of view) (Hansen and Kahnweiler 1993, p.1401). Thus, it would appear that the study of the oral histories of entrepreneurs is likely to be fertile ground for theory building in the field of entrepreneurship.

The Purpose of This Study

This study sets out to gain understanding of entrepreneurship from an investigation of the tacit knowledge of working entrepreneurs. The study utilizes the ethnographic technique of oral history collection and analysis in a search for evidence of theory inherent in these narratives.

The popular press is full of biographies and histories of successful entrepreneurs (Fallon and Srodes 1983; Sculley and Byrne 1987; Trump and Schwartz 1988; Rothchild 1991; Barton 1998; Frolick 1999; Gates and Hemingway 1999; Kaplan 2000, to name a few). The field of business management has a long history of utilizing storytelling in the form of case studies as a pedagogic tool (Alvarez and Merchan 1992, p.29) and more recently has begun to utilize case studies in research (Kanter 1983; Eisenhardt 1989, p.534; Chetty 1996). However, research that utilizes narrative is relatively rare in the field of entrepreneurship. A thorough search of past dissertations in entrepreneurship suggests that this study is the first dissertation that undertakes collection and analysis of oral histories of entrepreneurs. This study is by nature interdisciplinary, embracing the fields of anthropology, business management, English literature and developmental psychology. The study investigates two specific research questions:

1. Do entrepreneurs use oral narrative to exchange important information?
2. Do the oral histories of entrepreneurs contain common features from which one could induce a definition of entrepreneurship?

This study proceeds in the following manner. In Chapter II, the historical

development of the research literature of the field is reviewed. Chapter III questions the dominant mode of analysis used in entrepreneurship research and suggests interpretation as an epistemological alternative. Chapter IV outlines the methodology of data collection used in this study. Chapter V provides an ethnographic description of the study's fieldwork. Chapter VI interprets the data collected in the fieldwork and develops six propositions, which have been summarized in Table 1.

Table 1
Summary of Propositions Developed in This Study

Proposition	Statement	Page
Preliminary Definition	Entrepreneurship describes the activity of entrepreneurs both generally and normatively.	90
Proposition 1:	Entrepreneurs use oral narrative to exchange important information.	207
Proposition 2:	Entrepreneurs' narratives reveal a common underlying structure or genre that can be used in the development of a narrative theory of entrepreneurship.	216
Proposition 3:	The genre of entrepreneurs' oral narratives reveals that entrepreneurs act in the pursuit of self-identity.	218
Proposition 4:	Social individuals resolve self-identity changes by reconciling their inner self with their reflection of social values.	222
Proposition 5:	Entrepreneurs are social individuals.	223
Proposition 6:	Entrepreneurs are engaged in economic activity.	227

These six propositions lead to a new definition of entrepreneurship, which is stated as:

“Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity”. This definition is extended into a model, which reconciles the roles of successful founder, serial entrepreneur, small-business manager and charterholder as forms of entrepreneurship. Chapter VII discusses the implications of this research.

A recent examination of the state-of-the-art of entrepreneurship research (Aldrich and Baker 1997, p.394) found that only one percent of the 528 articles surveyed were ethnographic studies. An extensive search of the entrepreneurship literature by the author has revealed only one study utilizing oral history in entrepreneurship research. That study (Mitchell 1996) used a collection of 23 directed interviews of entrepreneurs to investigate the attitudes of serial entrepreneurs towards success and failure. It does not appear that any research has been undertaken which questions the use of oral narrative by entrepreneurs to exchange information. Analysis of oral narrative has proven beneficial in developing theory in fields such as aboriginal studies (Ridington 1990), aging (Stephenson, Wolfe et al. 1999), technical knowledge (Orr 1996), and organizational culture (Boje 1995). It is hoped this research project will contribute to the field of entrepreneurship research by adding veracity to the current diverse fact gathering through analysis of the voice of the practicing entrepreneur.

Summary

Entrepreneurship is a growing and important field of practice. Policy makers and academics have become aware of the importance of research in the field of entrepreneurship. Business management scholars have identified entrepreneurship as an important component of management education. Research in the field of entrepreneurship is hampered by the lack of a clear paradigm of research, or a common definition of the topic. It has been suggested that the use of theoretical and empirical methods borrowed from more rational scientific fields of study are not suited to the non-linear and idiosyncratic relationships characteristic of the phenomenon of

entrepreneurship. Ethnography in general, and the analysis of oral narrative in particular hold promise as being well suited to the study of entrepreneurship. This study reports the collection and analysis of oral histories of self-identified entrepreneurs and describes new understanding of the methods entrepreneurs use to exchange data in particular and of entrepreneurship theory in general.

CHAPTER II

LITERATURE REVIEW

“Like every topic in the social sciences, entrepreneurship, if viewed historically and if analyzed deeply enough, leads one into nearly all fields of knowledge.”

Arthur Cole (Cole 1959, p.29)

The entrepreneurship curriculum I developed as my M.B.A. graduating thesis was well received. Human Resources Development Canada (HRDC) provided funding for a post-graduate program: Youth Environmental Entrepreneurship, which used my curriculum in the Vancouver Island area. The success of this program led to me being hired as an adjunct member of the Faculty of Business at the University of Victoria.

It did not take me very long to realize that, in order to have a voice in academic circles, I had to possess a Ph.D. I began looking for a Ph.D. program in entrepreneurship and quickly discovered that, while there were over 500 courses in entrepreneurship offered at universities throughout the world (Vesper and Gartner 1999, p.3), there were very few universities which offered degrees in entrepreneurship (Vesper and McMullan 1988, p.8) and no universities in North America which offered a doctoral program specifically in entrepreneurship (Vesper and Gartner 1999, p.6). I set about creating my own doctoral program by special arrangement through the Faculty of Graduate Studies at the University of Victoria. My syllabus of studies included a careful examination of the development of entrepreneurship theory.

Early Entrepreneurship Theory

The term entrepreneur is derived from the French words “entre” and “preneur”, which literally translated means “to take between” (Bird and West 1997). The previous chapter has identified the exploitation of opportunity⁴ as fundamental to current definitions of the phenomenon of entrepreneurship. Opportunity exploitation is rooted in the processes of reciprocity, redistribution and exchange and thus is social in nature and culturally embedded. James Soltow has noted, “...entrepreneurial history has stressed the relationship between economic change and the socio-cultural setting within which that change takes place” (Soltow 1968, p. 88).” It is not clear whether or not entrepreneurship exists in primitive economies. The formalist position in economic anthropology would argue that the bigman phenomenon in Melanesian society is a form of entrepreneurial behavior (Stewart 1990, p.144), as is the phenomenon of the adventurer in feudal economies (Nerlich 1987, pp.51-75). Countering these arguments, the substantivist position would be that, in both these cases, exploitation of opportunity is so deeply embedded in interdependent social intercourse as make it indistinguishable as a unique phenomenon. The formalist versus substantivist debate has been described as being ultimately grounded in individual anthropologist’s unique ways of perceiving the world (De Montoya 2000, p.17). However, it is clear that it was not until the separation

⁴ The word opportunity derives from the Latin words “ob” and “portus”, which can be literally translated as “at the port”. It is interesting to note that early markets tended to develop at natural ports of trans-shipment: seaports, fords and riverheads. Thus the relationship between opportunity exploitation and trading is definitional (Guralink and Friend 1966, Polanyi, 1968 #1246).

of economic processes from the fabric of social life, described by Mark Granovetter as economic embeddedness (Granovetter 1985), that the distinctive phenomenon of entrepreneurship was identified.

Mercantilist Entrepreneurship Theory

Richard Cantillon (1680? – 1734) is credited with the development of the first theory of entrepreneurship (Redlich 1949, p.2; Hoselitz 1960, p.234). Richard Cantillon was an Irish wine merchant who made a fortune in Paris at the expense of John Law's inflationary stock manipulation of the Mississippi Company (Hayek 1985, p.236; Murphy 1985, pp.200-203). Writing in 1755, Cantillon described the role of entrepreneurs in this way, "The circulation and exchange of goods and merchandise as well as their production are carried on in Europe by Undertakers, and at a risk" (Cantillon 1755, part 1, chapter 13). Cantillon's undertaker or entrepreneur functioned as a middleman, exercising business judgment in the face of uncertain future demand (Bull and Willard 1993, p.185). Landes describes the economic system of Cantillon's entrepreneur as the putting-out system: "Merchant manufacturers 'put out' raw materials – raw wool, yarn, metal rods as the case might be – to dispersed cottage labor, to be worked up into finished or semi finished products" (Landes 1966, p.13). The entrepreneur, as defined by Cantillon, formed a crucial explanation of the political and economic transformation that was taking place as Europe left the feudal system by providing a mechanism that explained how social change was accomplished.

The feudal economy was based on production and consumption in relatively self-sufficient village communities (Landes 1966, p.1). A number of technological

innovations were instrumental in disrupting the feudal economic system. These included: the invention of moveable type by Johan Gutenberg in 1455 (McLuhan 1962, p.124) which promoted literacy and the spread of ideas; the introduction of double entry bookkeeping by Pacioli in 1494 (Short and Chesley 1994, p.9; Crosby 1998, p.210) which facilitated complex trading actions; the development of three-field cropping in the 15th Century (Bruchey 1990) which increased agricultural efficiency and freed labour for uses other than subsistence; the spread of metallurgy techniques by Biringuccio in 1540 (Cardwell 1994, p.63) which increased the availability of material suitable for machine production and the advances in shipbuilding and navigation throughout the 15th and 16th centuries (Harland and Myers 1984) which facilitated trade. Fundamental to the shift from medieval to market economics was the movement from an economy embedded in local social order towards an economy which could be visualized as relatively independent of local social order (Polanyi 1968, p.82). Trade moved from a process of reciprocity (Malinowski 1922, pp.81-104; Stephenson 1942, pp.15-39) towards a process of contractual exchange (Casson 1998, pp.9-10).

The putting-out system provided a social alternative to peasants who had become displaced from the agrarian social order through the adoption of the three-field crop rotation system throughout Europe⁵. Three-field crop rotation provided a 50% increase in the productivity of land, but required a major change in the social relationships

⁵ Although the acts of enclosure associated with the adoption of the three-field crop rotation system began in the 15th century, they are generally associated with the mid-18th century (Braun 1966, pp.53-55).

surrounding the use of land (Bruchey 1990, p.9). Karl Polanyi has claimed that the acts of enclosure amounted to the commercialization of soil (Polanyi 1944, pp.38-39), which turned nature into the commodity: land. In turn, the exploitation of land led to the dispossession of peasantry from traditional village life as their social claims to nature were subjugated to the legal claims of land title. The putting-out system coordinated the work of humans as a commodity: labour, and thus acted as a bridge between feudal social order and the new market economy.

An important technology in the facilitation of the movement from the feudal order to the market economy was the widespread use of money. Thomas Crump identified two types of monetary systems: bounded and un-bounded systems (Crump 1981, pp.122-133). The boundaries of feudal monetary systems were the villages' social systems. Within these systems the principles of reciprocity amongst families, re-distribution through the auspices of the church or the lord, and house holding or production for one's own use were embedded in social patterns of behavior (Polanyi 1944, p.55). Cantillon's undertaker acted as the conduit from this system to the unbounded system of long-distance trade, which centered on the marketplace. Surplus goods from local trade were exchanged in market places or at fairs held throughout Europe, thus creating a series of relationships amongst geographically dispersed social orders. Cantillon (Cantillon 1755, part 3, chapter 2) described the mechanism of bills of exchange as a practical way in which traders mitigated the risk of loss from the physical movement of money over long distances (through robbery or cost of safe movement) by exchanging letters of exchange. The trade in these bills of exchange led to the establishment of paper money and eventually to the switch from giro-banking (where all deposits kept in storage) to reserve

banking (where only a fraction of all deposits kept in storage) (Crump 1981, pp.151-152). This turned money into an un-bounded monetary system. As the value of un-bounded money became more and more apparent, many of the feudal obligations that previously had been paid in kind were monetarized (Heilbroner 1970, p.59). The breakdown of the reciprocity of feudal obligations furthered the movement towards a market society.

Entrepreneurship in Laissez-faire Capitalism

In “The Wealth of Nations” (Smith 1776), Adam Smith (1723-1790) defined three economic forces: land, labour and capital⁶. When left to their own devices (laissez-faire), these forces combine into the most efficient combinations through the invisible hand of the marketplace (Smith 1776, book 4, chapter 1). Smith noted that the division of labour in the workshops of the day had greatly improved the productivity of workers (Smith 1776, book 1, chapter 1). He extrapolated that a similar division of labour in society could improve the productivity of society as far as markets for labour could be developed (Polanyi, Arensberg et al. 1968, p.128). One of these markets for labour was the need for projectors, which Smith defined as someone who carries on projects for profit.

While Adam Smith’s invisible hand explained the mechanics of the workhouses of the early industrial revolution, it could not explain what would cause the emergence of

⁶ Polanyi points out that the treatment of land, labour and capital as commodities was unique to Smith, and the laissez-faire capitalism world-view (Polanyi 1968, p.62). Previously, land was simply considered nature, labour was considered to be human welfare, and capital was embedded in social standing. The creation of commodity constructs for land, labour and capital formed a new type of society.

wholly new forms of production such as integrated mills. The laws of supply and demand worked for incremental change, but even the existence of projectors could not explain investment in radical new processes or products. It remained for J.B. Say (1767 – 1832), a French intellectual who had set up and managed a cotton spinning factory between 1804 and 1815 before becoming the first professor of economics in Europe (Say and Palmer 1997), to tackle the issue: how, in the absence of a current market, do future goods and services manage to come into existence?

Say approached the question of the market for future goods from both the macro and micro level of analysis. On the macro level, he developed what has become known as Say's Law, which was briefly stated by John Maynard Keynes as "supply creates its own demand" (Keynes 1935, p 25). While Say's Law has become a focal point in the economic debate over the causes of market gluts and the ensuing unemployment (Thweatt 1979; Baumol 1997; Blaug 1997; Kates 1997), its original purpose was to explain how markets arise for goods not yet conceived nor produced. In contrast to the zero-sum exchange system described by Adam Smith, J.B. Say asserted that the production of new goods increased the wealth of all mankind (Say 1828, p.58), thus making entrepreneurship an increasing sum exchange system. On the micro level, J.B. Say developed a working level theory of the entrepreneur. In this theory, human industry is divided into three distinct operations. The first operation is scientific: "studying the laws and course of nature of the product" (Say 1828, p.33). The second operation is entrepreneurial: "the application of knowledge to a useful purpose" (Say 1828, p.33). The third operation is the act of production: "the execution of the manual labour" (Say 1828, p.33). Say pointed out that the same person may perform all three operations or

each of the operations may be performed by a number of different persons. The entrepreneur is the person who applies knowledge to a useful purpose, thus performing a vital social function. It can be argued that the division of labour created by the separation of economic processes from the fabric of social life was a necessary pre-condition to the first formal identification of the role of entrepreneur as a unique vocation.

Vignette

An exemplar of the role identified by Cantillon, Smith and Say is Francis Cabot Lowell (1775–1817), a successful New England merchant and land speculator who became an entrepreneur. The end of the American Revolution brought Lowell rising profits from trade, but also rising risks. Searching for a steady stream of income, Lowell spent the years 1810 to 1812 living in Edinburgh, where he studied the economic and social theories of the Scottish Enlightenment and noted the model of development used in the local textile manufacturing industry. Lowell returned to Massachusetts and formed the Boston Manufacturing Company in 1813. Working with a brilliant mechanic, Paul Moody, Lowell reproduced working versions of the machinery he had seen in Scotland from memory. In 1814, Lowell's machinery began production in Waltham (Sobel 1974, pp.1-40; Dalzell 1987). Lowell functions in all three roles set out by J.B. Say: studying the nature of the new endeavor, applying this knowledge to the useful purpose of forming a new venture and supervising the execution of the manual labour. Lowell clearly identified himself as a specialized agent, whose function is to develop new economic systems, thus fulfilling Smith's requirement as an entrepreneur. He also functions as the force that undertook the production and circulation of goods at his own risk, thus

fulfilling the function described by Cantillon.

The Entrepreneur in Classic Economics

Following Adam Smith's basic tenet of the invisible hand, a group of economists including David Ricardo, T.R. Malthus and John Stuart Mill developed what is known as Classical Economic Theory. Classical Economic Theory consists of a number of interlocking models (Barreto 1989, p.2) that focus on the rational action of individuals acting through the forces of supply and demand in the marketplace. With only a few exceptions, the concept of the entrepreneur is not a part of the Classical Economic Model (Baumol 1968, pp.66-68).

Jeremy Bentham, in England, and J. H. von Thünen, in Germany, pointed out the lack of the entrepreneurial function in Classical Economic Theory. Jeremy Bentham (1748-1832)⁷, a working entrepreneur, looked at economics as a practical branch of politics and legislation: a combination of both art and science (Hébert and Link 1982, p.42). Bentham differed from the mainstream of Classical Economics in that he saw utilitarianism as a recursive function that created a role for the entrepreneur beyond arbitrage (Casson 1992, p.1158). Bentham defined the entrepreneur as "...all such persons as, in the pursuit of wealth, strike out into any new channel, and more especially into any channel of invention" (Bentham 1787). With this definition, Bentham clearly

⁷ Bentham's primary contribution to Classical Economic Theory is his part in the definition of economic utilitarianism: the presumption that individual optimal choices are determinate. Utilitarianism was critical to the rational explanation, which Classical Economics offered for the optimization of supply and demand (Warke 2000).

stated a new view of the entrepreneur: the creative economic agent (Redlich 1949, p.7). Johann Heinrich von Thünen (1783 – 1850) is primarily known in economics for the development of spatial economics. In “The Isolated State”, Von Thunen set out an explanation of entrepreneurial gain (von Thünen and Hall 1842, Volume II) which he defined as “...profit minus (1) interest on invested capital, (2) insurance against business losses, and (3) the wages of management” (Hébert and Link 1982, p.43). In this definition, von Thünen synthesized Cantillon’s description of the entrepreneur as risk bearer and Bentham’s description of the entrepreneur as creative economic agent. However, von Thünen went one step further and identifies entrepreneurial rent as a specific stream of earnings.

General Equilibrium Theory

Alfred Marshall (1842 – 1924) is synonymous with the establishment of neo-classical General Equilibrium economic model in mainstream economics⁸. General Equilibrium posits that an economy, which produces and distributes goods efficiently, does so by matching supply and demand in all markets simultaneously (Pindyck and Rubinfeld 1992, p.572). General Equilibrium theory became the dominant paradigm of economic analysis from shortly after the publishing of Marshall’s “Principles of Economics” (Marshall 1890) until the latter part of the twentieth century (Samuelson 1961). Marshall’s principles relegated the work of the entrepreneur to superintendence: a

⁸ Marshall taught and influenced the leading economists such as Francis Edgeworth, John Maynard Keynes, A.C. Pigou and Paul Samuelson: all of who were

function that includes organization of production, forecasting, risk taking and leadership (Marshall 1890, Book IV). The highly specialized role of superintendence became associated with the earnings of management rather than being specifically attributed to entrepreneurship.

The General Equilibrium model provides a highly rational (Wagner 1891, p.320), tightly focused (Casson 1995, p.7) and internally consistent (Kirchhoff 1991, p.95) solution to the question of how social order is constructed based on three fundamental assumptions: the production function, the logic of rational choice and perfect information (Barreto 1989, pp.102-107). The production function assumes that production output is a function of a combination of inputs, allowing profitable levels of production to be calculated. Rational choice assumes that individuals and firms make rational choices in their use of scarce resources and in their choice of limited ends. Perfect information assumes that individuals and firms are completely aware of all considerations affecting their decisions. Barreto effectively argued that the concept of the entrepreneur was incompatible with these assumptions (Barreto 1989, pp.101-117). The entrepreneur as innovator, described by Say and Bentham, created an open system that defied the assumptions of production function and rational choice. The entrepreneur as uncertainty bearer, described by Cantillon and Von Thunen, nullifies the assumption of perfect information. Even the limited function of the entrepreneur as coordinator, described by Smith, conflicts with the assumption of perfect information since perfect information reduces decision-making to a managerial role. Thus, the introduction of the entrepreneur

instrumental in the development of neo-classical economics.

into General Equilibrium theory was seen as an attack on the consistency of General Equilibrium theory.

The Austrian Entrepreneur

Carl Menger (1840 – 1921) is credited with founding the Austrian school of economics (Alter 1990, p.313; McMullan and Long 1990, p.61; Vaughn 1990, p.379), which centered economic theory on the subjectivity of economic values (Knight 1981, p.19). Menger's research goal was to reconcile the inconsistency inherent in General Equilibrium theory by grounding price determination in human action (Salerno 2001, p.2). Menger began by describing a general theory of goods. Four conditions are prerequisite for a thing to become a good:

1. A human need.
2. Such properties as render the thing capable of being brought into a causal connection with the satisfaction of this need.
3. Human knowledge of this causal connection.
4. Command of the thing sufficient to direct it to the satisfaction of the need. (Menger 1871, p.52)

Menger elaborated that goods can be of material nature or useful human actions or can even be imaginary in nature (goods that are assumed to fulfill human needs). Changes in the relative value of goods take place through the mechanism of entrepreneurial activity, which Menger defined as:

Entrepreneurial activity includes: (a) obtaining *information* about the economic situation; (b) economic *calculation* – all the various computations that must be made if a production process is to be efficient (provided that it is economic in other respects; (c) the *act of will* by which goods of higher order (or goods in general – under conditions of developed commerce, where any economic good can be exchanged for any other) are assigned to a particular production process; and finally (d) *supervision* of the execution of the production plan so that it may be carried through as economically as possible. (Menger 1871, p.160 italics)

in original)

Menger acknowledged that, in simple situations, entrepreneurial activity might be indivisible from the normal economic activities of the individual. However, with the division of labour, entrepreneurial activity can stand on its own as a useful activity and thus be considered a good in its own right (Menger 1871, p.161).

Menger's theory of entrepreneurship was based in an epistemology of methodological individualism (Alter 1990, p.328), which clearly stated that economic phenomena can only be explained by showing that they are the outcome of individual behaviors (Menger 1883, P.193). Menger's claim that national economies were a fiction (Menger 1883, p.196) created the first paradigmatic division in the field of economics⁹. Menger's association of the entrepreneur with the process of social change also set the stage for the modern view of entrepreneurship as an individual endeavor, rather than as a process of collective social action. This position was challenged in the socialist calculation debate.

Entrepreneurship and the Socialist Calculation Debate

Léon Walras (1834-1910) opposed Menger's theory of entrepreneurship three years later, when he laid out Walras' Law (Walras 1874), which stated "...the total value of all goods supplied equals the total value of all goods demanded" (Yeager 1994, p.159).

⁹ This paradigmatic debate is referred to as the "Methodenstreit" or "Battle of the Methods". The debate pitted Menger and his supporters against Gustav von Schmoller and his supporters. Max Weber attempted to re-join the two factions under the paradigm of social economics (Swedberg 1991, pp.16-19).

While the concept of goods used in Walras' Law is identical to the one laid out by Menger, there is an implied negation of the role of the entrepreneur. Walras' student, Vilfredo Pareto (1848-1923), made this implied negation explicit when he noted that the formal process of resource allocation in both socialist and market economies required the same solution of Walras' Law (Cottrell and Cockshott 1993, p.2).

Ludwig von Mises (1881-1973) disputed Pareto's claim by arguing that pricing systems in socialist economies were necessarily deficient because they did not recognize the judgments of the people participating in economic transactions (von Mises 1920). Von Mises' argument was based on a distinction between the idealized entrepreneur of economics and the practicing entrepreneur (von Mises 1949, p.62). While the idealized entrepreneur could be defined as "acting man in regard to the changes occurring in the data of the market" (von Mises 1949, p.255), the practicing entrepreneur was defined as "acting man seen from the aspect of the uncertainty inherent in every action" (von Mises 1949, p.254). Thus, von Mises argued that all consumers act in some extent as entrepreneurs. Further, since short-term market equilibrium was only achieved through the actions of individuals acting in the presence of uncertainty, real-world prices may only be trivially true and not be a reflection of long-term equilibrium (Kirzner 1999, p.218).

Oskar Lange and Abba P. Lerner countered von Mises' argument by suggesting a theory of efficient socialist planning, which had central planners fixing market prices for production inputs (Lange 1936; Lange 1937; Lerner 1937; Lange 1947). The resulting surpluses or shortages of inputs would signal to central planners the need to adjust prices

upwards or downwards thus creating equilibrium without the intervention of the entrepreneur described by Menger (Kirzner 1997, p.15).

Friedrich Hayek (1899 – 1992) argued against the theories of Lange/Lerner by claiming that socialist planning could not achieve greater efficiency in resource allocation than free market allocation because the information any planner could possibly acquire was inferior to the price-mechanism of a market (Cottrell and Cockshott 1993, p.13). Hayek defined market equilibrium as a state of affairs characterized by the merging of knowledge and intentions of different members of society. The actions of one individual are the data on which other individuals make their decisions (Hayek 1937, p.38). Thus, Hayek argued the concept of General Equilibrium was a fabrication of the statistical aggregates used by economists (Hayek 1945, p.524). According to Hayek, equilibrium in the marketplace is configured by the mutual compensation of a large number of independent discoveries of circumstantial knowledge (Kirzner 1997, p.71).

Israel Kirzner has defined the theory of entrepreneurial discovery as, "...the alert becoming aware of what has been overlooked. The essence of entrepreneurship consists in seeing through the fog created by the uncertainty of the future" (Kirzner 1997, p. 51). The theory of entrepreneurial discovery provided several explanations that were lacking in General Equilibrium theory (Kirzner 1997, p.52). First, the role of advertising in the economic process was explained. Whereas General Equilibrium theory suggested that advertising increases the demand for consumer products (Galbraith 1969, p.157), the theory of entrepreneurial discovery suggested that advertising directs consumers to information and to goods that are available (Kirzner 1997, p.57). Second, the temporary

nature of entrepreneurial profits was predicted (Jacobson 1992, p.785). The concept of entrepreneurial rent can be defined as the difference between a venture's payment stream and the cost of resources combined to form the venture (Rumelt 1987, p.143). Third, an explanation was offered for the role of luck. Although entrepreneurial rents occur as a result of action, the time delay between the entrepreneurial discovery and the payment of the rent associated with this discovery may blur the cause and effect relationship. Similarly, the exploitation of an opportunity may not occur on a conscious level. Either of these conditions, previously considered to be luck, can be explained through the theory of entrepreneurial discovery (Kirzner 1979, pp.154-181).

The theory of entrepreneurial discovery lent support to Menger's epistemology of methodological individualism (Menger 1883, pp.139-151) by showing the mechanism by which the entrepreneur appears only occurs when analysis is done at the level of the individual. When the "atomistic, fully informed rational actor" (Starr and MacMillan 1991, p.228) of General Equilibrium theory is assumed, the entrepreneur disappears; subsumed to the aggregation of the epistemology of collectivism or universality. Clifford Geertz found support for entrepreneurial discovery in his study of information searches in Morocco's Bazaar. This study showed how even simple economic transactions are not so much rational in nature as formed by incomplete and conflicting information (Geertz 1992, p.228).

Vignette

Samuel Goldwyn (1879? – 1974) provides an example of the theory of entrepreneurial discovery. Born Schmuel Gelbfisz in Warsaw Poland, he immigrated to

the United States in 1899. He began his working career as a glove salesman in Gloversville N.Y., but left this position when tariffs were removed from imported gloves, ruining the domestic producers. Goldwyn used his savings to enter the motion picture industry in 1913. He moved to Hollywood, and became one of the world's most successful producers. Goldwyn's active working life consisted of searching for and hiring accomplished writers, discovering and nurturing talented actors and actresses and interacting with directors in the complex process of creating artistically and financially successful movies. Goldwyn had a flair for promotion and developed a strong publicity infrastructure. He used his social network to develop Paramount, Metro-Goldwyn-Mayer, and United Artists studios; but left each as market conditions changed. His final independent film company, Samuel Goldwyn Company, was estimated to include hundreds of millions of dollars of intangible assets such as movie rights and production contracts, when Goldwyn died in 1974 (Berg 1989).

Samuel Goldwyn epitomizes the Austrian role of the entrepreneur. His work included the four types of activity suggested by Menger: obtaining information about resources and markets; economic calculation of the likelihood of financial success; the act of will which brought together these resources into a new good: the motion picture; and supervision of the execution of the production. The talent described by Kirzner, entrepreneurial discovery, was used by Goldwyn to match productions to the current market. His work was, in essence, the management of complex information flows. Goldwyn's entrepreneurial profits were temporary in nature and received after a timing delay. He effectively used advertising to direct consumers to information about the entertainment they were about to receive.

Entrepreneurship, Risk and Innovation

The past two sections have shown the development of general theories of entrepreneurship based on the economic or social development perspective. These general theories have raised issues concerning the relationship between the construct of entrepreneurship and the constructs of risk and innovation. This section shows the development of specific theories of entrepreneurship at the level of practice, which deal with risk and innovation.

Risk

The ability to understand, measure and weigh the consequences of risk has been identified as fundamental to the ideology of modernity (Bernstein 1996, pp.1-2). The development of probability theory in the 17th century¹⁰ ended the long-standing notion that luck and fate controlled the future. Similarly, the development of theories of risk have tended to diminish the long-standing notion that luck and fate control investment decisions. One of Menger's early followers, Eugen von Böhm-Bawerk (1851 – 1914), differentiated between the role of enterprise and the role of capital (Bohm-Bawerk 1891), stating that capital forms a "capacity for labour" on the part of the capitalist (Bohm-Bawerk 1884, book 5, chapter 1). According to Böhm-Bawerk, interest consists of the premium placed on goods, which are made available at the beginning of a period of time instead of at the end (Clark 1895, p.257).

¹⁰ The development of probability theory is credited to Blaise Pascal and Pierre de Fermat in the mid-17th century. However, their work built on that of Riolamo Cardano,

The American economist and entrepreneur Frederick Hawley, contested Böhm-Bawerk's thesis (Hawley 1892, p.282). Hawley claimed that the function of the entrepreneur was to relieve others of risk (Hawley 1892, p. 283). This role differentiated the entrepreneur from the role of coordinator, since the entrepreneur's profit is the reward from assuming risk (Hawley 1893, p.479). Hawley's entrepreneur gains his profit from availing himself of opportunity by taking responsibility for production having taken place for his benefit (Hawley 1901, p.90). The entrepreneur's profit is derived from a combination of his enterprising rewards and the rewards for taking risk.

Frank Knight (1885-1972) advanced Hawley's definition of the entrepreneur in his doctoral dissertation, published in 1921 as "Risk, Uncertainty and Profit" (Knight 1921). In this work, Knight made a distinction between risk, which he defines as "randomness with knowable probabilities" and uncertainty, which he defines as "randomness with unknowable probabilities" (Knight 1921, p.233). Knight's theory of entrepreneurship placed the entrepreneur in the position of making decisions in the face of uncertainty and being responsible for those decisions (Barreto 1989, p.40). Thus a manager becomes an entrepreneur when:

...the managerial function comes to require the exercise of judgment involving liability to error, and when in consequence the assumption of responsibility for the correctness of his opinions becomes a condition prerequisite to getting the other members of the group to submit to the manager's direction. (Knight 1921, p.276)

The functional role, which Knight attributed to the entrepreneur, recognized that the management of uncertainty is a skill that can be developed.

who published *Ars Magna* in 1545.

Contemporary researchers have identified important functional theories of entrepreneurial risk. While research has not identified a significant difference between the risk-taking propensity of entrepreneurs and that of business managers (Brockhaus 1980), there is evidence to suggest a difference in the way entrepreneurs engage risk (Palich and Bagby 1995). Robert Baron suggested entrepreneurs find it easier to admit past mistakes both to themselves and to others (Baron 1999). Two particular theories have emerged from financial management theories that outline specific methods entrepreneurs use to effectively deal with risk: the dual risk model and real options reasoning.

Peter Dickson and Joseph Giglierano developed the dual risk model as a conceptual model that describes entrepreneurs attempting to balance between two types of risk: the risk of venture failure and the risk of missing opportunities (Dickson and Giglierano 1986). These two conceptualizations of risk differentiate between the risks of business failure, which the authors refer to as sinking-the-boat risk and the risks of missed opportunities, which the authors refer to as missing-the-boat risk. The authors relate these two types of failure to Type I and Type II errors in statistical hypothesis testing. The implication for entrepreneurship theory is that entrepreneurs must engage in both rational decision-making, to avoid sink-the-boat risk, and in visionary action, to avoid missing-the-boat risk.

Rita McGrath has developed a conceptual model of entrepreneurial risk in which entrepreneurs minimize their exposure to risk by investing in bundles of real options (McGrath 1999, p.14). A real option is a contract that allows the purchaser to hold a

choice open at the risk of losing only the cost of purchasing the option (Bowman and Hurry 1993, p.761). Thus a real option involves a right, but not the obligation to acquire a particular asset (Luehrman 1995, p.2). McGrath's model suggested that successful entrepreneurs do not avoid failure, but rather manage the cost of failure by limiting their downside exposure while preserving access to attractive opportunities (McGrath 1999, p.16). Real options reasoning offers an explanation for the attraction of risky opportunities to entrepreneurs. Since the value of a real option is directly related to the potential variance in returns, entrepreneurs find higher upside potential in situations characterized by high risk (high variation in potential returns) than in situations characterized by low risk (low variation in potential returns). Successful use of real options reasoning allows entrepreneurs to limit the potential downside of their investments through the structuring of the option.

William Baumol has argued that the incidence of entrepreneurship is related to the relative payoff to entrepreneurs compared to the payoff of other activities the entrepreneur may engage in. In turn, the structure of these payoffs is related to social traditions and cultural patterns (Baumol 1993, p.203). This would suggest that the incidence of entrepreneurship in an economic grouping is not so much a function of the risk-taking propensity of its population, but rather a function of the relative importance of economic change within the economy. This claim is born out by research conducted showing that entrepreneurs in different cultures share similar value orientations (McGrath, MacMillan et al. 1992) and cognitive processes (Mitchell, Seawright et al. 1999; Mitchell, Smith et al. 2000) in spite of differences in the rate of entrepreneurship amongst their cultures.

Innovation

Joseph Schumpeter (1883-1950) has been described as a product of the German Historical School of Economics (Hébert and Link 1982, p.76), which included Gustav Schmoller, Werner Sombart and Max Weber. The German Historical School posited that the enterprising spirit was a unique central factor present in all economic history (Schmoller 1884). Sombart (Sombart 1915) and Weber (Weber 1904) elaborated the description of this role to point out the nature of entrepreneurship as creative innovation. Schumpeter, in “Theory Of Economic Development” (Schumpeter 1934), transformed this argument into the first evolutionary theory of entrepreneurship (Herron, Sapienza et al. 1991, p.12).

Beginning with Menger’s definition of goods and the neo-classical description of the productive process of combining land, labour and capital, Schumpeter defined economic equilibrium as the circular flow of goods. However, this state does not take into account the constant process of increasing flow caused by economic development. Development is defined as the carrying out of new combinations. Schumpeter specifically listed five forms of new combination:

1. The introduction of a new good – that is one with which consumers are not yet familiar – or of a new quality of a good.
2. The introduction of a new method of production, that is one not yet tested by experience in the branch of manufacture concerned, which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially.
3. The opening of a new market, that is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before.
4. The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created.

5. The carrying out of the new organization of any industry like the creation of a monopoly position (for example through trustification) or the breaking up of a monopoly position. (Schumpeter 1934, p.66)

These new combinations brought dis-equilibrium to the marketplace, resulting in a process of economic development, which Schumpeter described as creative destruction (Schumpeter 1975, pp.81-86).

Schumpeter noted that the entrepreneur he defined is different from the entrepreneur of Mill's or Marshall's time, but claimed that the functions were included in the work of Mill's manufacturer or Marshall's manager. Increasing specialization of tasks has led to the definition of entrepreneurship as a specialized vocation. Schumpeter defined entrepreneurship as a function in which "...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 businesses" (Schumpeter 1934, p.78). Schumpeter denied the entrepreneur is a risk-bearer, insisting that entrepreneurial profits came from the surplus received after all costs (including the cost of capital) are deducted. Thus entrepreneurial profits are transitory, existing only upon the first establishment of the new combination. After that first establishment, the value of the new combination is diffused into the economy resulting in general economic development.

Vignette

Howard Hughes' creation of Trans World Airlines (TWA) provides an example of the entrepreneur as risk bearer and creator of new combinations. Howard Hughes used the fortune he inherited from his father's Hughes Tool Company to indulge in his passion

for flying. Between 1936 and 1939, Hughes, through Hughes Tool Company, purchased 78% of the shares of Transcontinental and Western Air. Hughes then combined the lessons he had learned as a record setting sports aviator with the ambitions Jack Frye had to develop Transcontinental and Western Air. At the end of World War II, Hughes and Frye expanded the company into an international airline. Hughes financed the expansion of the company, renamed Trans World Airlines, by personally lending money for the purchase of new aircraft, while being able to offset the losses created by these loans against profits made by Hughes Tool Company, of which he was the sole shareholder. This financing strategy allowed Hughes to separate the risk from the exploitation of the entrepreneurial opportunity. Hughes used this strategy to exploit the opportunity offered by the development of commercial jet aircraft. Jets were well suited to TWA's route structure and posed an opportunity for TWA to gain competitive advantage over other airlines. Between 1956 and 1960, utilizing a real-options strategy, Hughes committed to purchasing 350 jet engines from General Electric and United Aircraft in an attempt to corner the jet engine market so he could control the delivery schedules of new jet aircraft. The enormous task of financing Hughes' commitment for aircraft and engines led to a situation where Hughes had to place his interest in TWA into the hands of a group of trustees. In 1960, the trustees of TWA became embroiled in a series of lawsuits and counter suits with Hughes and the Hughes Tool Company over the control of TWA and the delivery of aircraft. Hughes delayed the settlement of these legal actions, which were in essence one part of his holdings taking action against another part of his holdings, by effectively disappearing. In 1965, the Supreme Court ruled in favor of the trustees of TWA. While Hughes was seen to have lost the court battle, he sold out his TWA shares

for six times their market value at the beginning of the legal action¹¹ (Gerber 1967; Tinnin 1973; Phelan 1976; Barlett and Steele 1979; Barton 1998).

The example of Hughes shows the effects of dis-equilibrium that can be caused by Schumpeterian new combinations as well as the potential for entrepreneurial profit making. It also shows how difficult it can be to secure entrepreneurial profits before these profits become diffused into general economic development.

Entrepreneurship Shifts from Economics to Business Management

In addition to his contribution to entrepreneurship as a scholar, Schumpeter was one of the founders of Harvard's Research Center in Entrepreneurial History, established in 1948 (anonymous 1996, p.2). At the end of World War II, Donald K. David, Dean of Harvard Business School foresaw the opportunity to establish Harvard as a leader in entrepreneurship education. He encouraged Miles Mace to set up the first course in entrepreneurship: "The Management of New Enterprises" in 1947 (Cooper, Markman et al. 2000, p.116). He also oversaw the formation of the Research Center in Entrepreneurial History, which developed the first research journal in the field of entrepreneurship (Hébert and Link 1982, p.86). The Research Center in Entrepreneurial History acted as a bridge between the discipline of economics' study of entrepreneurship theory and the discipline of business management's study of entrepreneurship practice.

¹¹ In 1960, TWA shares were trading at \$13, making Hughes' 6,584,937 shares worth \$85.6 million. In 1965, he sold at \$86 per share for a net of \$546.5 million after brokerage (Barlett and Steele 1979, p.274).

Arthur Cole (1889 – 1974) believed with Schumpeter that the entrepreneur was a central figure in modern economic development (Cole 1959, p.28). However, Cole did not accept Schumpeter's thesis that innovation was essential to the practice of entrepreneurship. Rather, Cole saw the study of entrepreneurship as a broad, interdisciplinary view of social and economic change, saying:

In sum, the study of entrepreneurship, especially when viewed as a changing phenomenon, parallels or overlaps studies of various sorts in the social sciences, those of leadership, group dynamics, business operations, prestigious symbols, economic productivity, and the like. It seems to require particular attention to the flow of social thought and the activities of social institutions, which help to shape the form and quality of entrepreneurial performance. It demands the adoption of a pace, or rate of change, and of an open-end path of development that are not common in economics; and it counsels a regard for social, differentiating factors and for economic and social meaning that is usually absent in the study of business administration. (Cole 1959, p.22)

Cole's major contribution to entrepreneurship research was his detailed outline of a research program centered on understanding the phenomenon of entrepreneurship. Since the entrepreneur described by Cole was involved in broad social change, Cole insisted that the study of entrepreneurship include the use of research methodologies from a broad range of disciplines (Cole 1959, p.230). Cole's proposed research program consisted of three parts: the study of entrepreneurial structure, the study of motivation and the study of the process of entrepreneurial change (Cole 1959, p.232).

In 1982, Howard Stevenson was appointed to Harvard Business School's Sarofim-Rock¹² chair (anonymous 1996). The next year, Stevenson set out an agenda for

¹² This chair was financed by two members of the Harvard Business School class

entrepreneurship research at Harvard. This agenda included a definition of entrepreneurship as: “the pursuit of opportunity without regard to resources currently controlled” (Stevenson 1983, p.3). With this definition, the collaborative effort of Harvard researchers such as Amar V. Bhide (Bhide 1992; Bhide 1994; Bhide 1996), Clayton Christensen (Christensen 1997), David E. Gumpert (Stevenson and Gumpert 1985), Susan Harmeling (Stevenson and Harmeling 1990), J. Carlos Jarillo (Stevenson and Jarillo 1990), Michael J. Roberts (Roberts, Stevenson et al. 2000) and William A. Sahlman (Sahlman and Stevenson 1991) focused attention on the research program laid out by Stevenson and Cole. The Harvard scholars based most of their studies on field research conducted in the rapidly growing technology center located in the Route 128 area of Boston¹³.

The results of Harvard research studies have found both support for Schumpeter’s theory of discontinuous innovation and evidence to the contrary. Clayton Christensen’s study of the computer hard disk industry between 1979 and 1989 found support for Schumpeter’s theory (Christensen 1997). Further, Christensen noted that disruptive technologies are almost impossible to predict, since the criteria for the adoption of new technology is performance relative to customer needs, not absolute performance (Christensen 1997, p.188). However, Amar Bhide’s study of 100 founders of the 1989 Inc. 500 List of Companies found evidence that new combinations displace existing

of 1942 who went on to become very successful venture capital investors: Fayed Sarofim and Arthur Rock.

¹³ Coincidentally, Harvard led American universities in venture investing, with an

structures gradually (Bhide 2000, p.331). Bhide suggested that the ability to adapt quickly to change is more important to the success of new firms than the uniqueness of their original new combination.

The Traits Approach to Entrepreneurship Research

In 1959 a psychologist at Harvard University, David C. McClelland, published “The Achieving Society” (McClelland 1961) and launched a new branch of investigation into the phenomenon of entrepreneurship. McClelland’s key hypothesis was that the Protestant Reformation represented a shift towards self-reliance, which acted through a learned behavior (the need for achievement) to create the capitalistic spirit that fueled the economic development of the western world (McClelland 1961, pp.46-50). McClelland recorded significant correlation between cultures with strong need for achievement¹⁴ and entrepreneurship within those cultures¹⁵. From this correlation, McClelland extrapolated the characteristics of entrepreneurial behavior, and thus developed a theory of the psychological characteristics of individual entrepreneurs. However, in forming this theory, McClelland did not clearly differentiate between entrepreneurs and business managers (McClelland 1961, p. 260).

emphasis on Route 128 technology companies (Rosegrant and Lampe 1992, p.135).

¹⁴ McClelland measured the need for achievement by counting the number of “achievement images” in “representative” folk tales adjusted for the length of the stories (McClelland 1961, pp.70-79).

¹⁵ McClelland measured entrepreneurship with a number of proxies: the exercise of control over the means of production (McClelland 1961, p.65), economic growth (McClelland 1961, p.89) and trade patterns (McClelland 1961, p.115).

The promise of McClelland's work was the ability to identify entrepreneurs by their psychological profile, as well as the ability to increase economic development by increasing the availability of individuals with the psychological traits necessary for entrepreneurship (McClelland 1986). Jeffrey Timmons noted that venture capitalists use the quality of the entrepreneur as a determinant of the likelihood of success of new ventures (Timmons 1979, p.198). To assist entrepreneurs in self-assessment, Timmons developed a detailed model of the preferred psychological characteristics of entrepreneurs and entrepreneurial teams (Timmons 1999, pp.217-225), which included the key components of need for achievement, propensity towards risk and high locus of control. However studies by Robert Brockhaus concluded that need for achievement was a weak predictor of an individual's tendency to start a business (Brockhaus 1982, p.42); that there is no significant statistical difference in the risk preference patterns of entrepreneurs and managers who did not own their businesses (Brockhaus 1980, p.516) and that locus-of-control beliefs did not distinguish entrepreneurs from business managers (Brockhaus and Horowitz 1986).

William Gartner argued that the reasoning behind traits research is fundamentally flawed. Gartner's reasoning is that, since the study of entrepreneurship is based on the founding of organizations, this fact alone differentiates entrepreneurs from non-entrepreneurs (Gartner, Carland et al. 1988). According to Gartner's argument, entrepreneurs do not cause entrepreneurship $E = f(e)^{16}$, but rather entrepreneurship

¹⁶ Where 'E' represents entrepreneurship and 'e' represents entrepreneurs.

creates entrepreneurs $e = f(E)$ (Gartner 1989). While Gartner's reasoning appears sound, it does not explain why some individuals will start new ventures, while other individuals faced with the same opportunity will not.

Alan Carsrud and Norris Krueger suggested that the traits approach to entrepreneurship research has been limited by simplistic assumptions about relationships between personality and entrepreneurial behavior (Carsrud and Krueger 1995, p.77). Lanny Herron added that correlation between personality traits and venture performance is difficult to detect due to the influence of moderating and mediating variables (Herron 1990). Nevertheless, two new schools of research have developed which utilize more advanced social psychological models: the cognitions approach and the intentions and planned behavior approach.

While Gartner's article (Gartner, Carland et al. 1988) marked a turning point in the traits stream of entrepreneurship research, it did not mark the end. In 1988, Barbara Bird published work (Bird 1988; Bird and Jelinek 1988; Bird 1989) presenting the case for a model in which entrepreneurial intentions set the direction for the actions of entrepreneurs. Bird defined intentions as the state of mind that directs attention, experience and action towards a specific goal (Bird 1988, p.442), thus restating the traits stream in behavioral setting (Bird and Jelinek 1988, p.26). A study published in 1992 by Rita McGrath, Ian MacMillan and Sari Scheinberg found evidence of "persistent and characteristic value orientation" (McGrath, MacMillan et al. 1992, p.133) amongst entrepreneurs from a variety of cultures when entrepreneurs were defined as the founders of new businesses. The study surveyed 1217 entrepreneurs and 1206 non-entrepreneurs

in eight countries using constructs of cultural influence (Kluckhohn and Strodtbeck 1961; Hofstede 1980). The implication drawn from this study was that people who have started businesses share certain predictable beliefs (McGrath, MacMillan et al. 1992, p.132). A study published the following year by Norris Krueger and Peter Dickson reported a significant association between the individuals' perception of opportunity and his or her belief in self or perception of self-efficacy (Krueger and Dickson 1993). A study by Holly Buttner and Nur Gyskiewicz utilized Michael Kirton's Adaption-Innovation theory (Kirton 1976) of problem solving cognitions to find support for the hypothesis that entrepreneurs are more innovative than general managers of large corporations (Buttner and Gyskiewicz 1993). Krueger and Dickson followed up their 1993 findings with a comprehensive model of the operation of perception of self-efficacy, finding that positive changes in self-efficacy increase the perception of opportunities and negative changes in self-efficacy increase the perception of threats (Krueger and Dickson 1994, p.389). Robert Baron elaborated on the cognitive mechanisms of entrepreneurs, suggesting that entrepreneurs are affected by counterfactual thinking, affect infusion, attribution style, planning fallacy and self-justification (Baron 1998). A follow-up study by Baron (Baron 1999) tested counterfactual thinking and attribution style, finding entrepreneurs to be less likely to engage in counterfactual thinking than non-entrepreneurs (Baron 1999, p.85) and that entrepreneurs found it significantly easier to admit mistakes to themselves and others (Baron 1999, p.86).

Research focusing on the psychological traits of entrepreneurs appears to be evolving rather than disappearing. Howard Aldrich and Ted Baker, in a review of entrepreneurship research undertaken in 1997, suggested that the traits stream of research

garners support because the topics it defines are interesting (Aldrich and Baker 1997, p.396). Cooper has proposed the identification of cognitive structures of entrepreneurs might give insight into new ways that organizations can solve problems or deal with ambiguity (Meyer and Heppard 2000, p.18). Mitchell et al have found evidence supporting the concept that a base set of cognitive structures is common to entrepreneurs from a number of different cultures (Mitchell, Smith et al. 2002).

The Rates Approach to Entrepreneurship Research

Howard Aldrich has framed the central question of the evolutionary or rates approach to entrepreneurship research as: “Through what process do organizations emerge?” (Aldrich 1999, p.77). The evolutionary approach had its origins in the difficulties faced by researchers in answering the simple question: “What is the failure rate of new ventures?” An early study by the U.S. Department of Commerce reported 46% discontinuity within one and a half years of start-up (Churchill 1955). However, a subsequent study, correcting discontinuity for changes of ownership or location, reported only 34% discontinuity within two years of start-up (Shapiro and Giglierano 1982). An extensive longitudinal study undertaken in 1985-1987 under the auspices of the National Federation of Independent Business (NFIB) reported a discontinuance rate of merely 23.5% within two years of start-up (Cooper, Dunkelberg et al. 1988). As researchers delved into the difference reported in each of these studies, they came to the conclusion that the definitions of business start-up and business discontinuance greatly influenced the reported rate of failure (Reynolds 1992). Research shifted from the initial question of failure rate, to questions surrounding obstacles to organizational founding and survival

(Aldrich and Auster 1986; Aldrich, Kalleberg et al. 1989; Aldrich 1990).

The evolutionary approach to entrepreneurship research is characterized by two general assumptions: (1) entrepreneurship is a social process and (2) the form of entrepreneurship varies by context (Low and Abrahamson 1997, p.437). The study of business formation as a social process has encouraged investigation of the influence of initial conditions (Bamford, Dean et al. 2000), the sequence of events involved in starting a new venture (Carter, Gartner et al. 1996), the effect of social networks (Aldrich and Zimmer 1986), and population density at the time of founding (Aldrich 1990; Aldrich and Wiedenmayer 1993). The study of entrepreneurship as a form that varies by context has encouraged investigation of the relationship between ethnicity and entrepreneurship (Aldrich and Waldinger 1990), gender and entrepreneurship (Shane, Kolvereid et al. 1991; Carter, Williams et al. 1997), size of firm and entrepreneurship (Aldrich and Auster 1986; Hornsby, Naffziger et al. 1993) and social entrepreneurship (Cornwall 1998; Dees 1998).

An interesting sub-set of the evolutionary approach to entrepreneurship research is the study of the diffusion of innovation. Everett M. Rogers opened this field of investigation with the publication of "Diffusion of Innovations" in 1962. Rogers defined diffusion as "...the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers 1995, p.11). Rogers noted that the individuals most likely to lead in the diffusion of innovations are not the most innovative members of a society, for they are likely to be perceived as deviants from the social norms, but change agents or individuals who are opinion leaders in a

society (Rogers 1995, pp.26-27). Eric von Hippel's research, published in 1988 as "The Sources of Innovation", proposed that the functional sources of innovations are highly correlated to the potential innovator's expectation of innovation-related rents (von Hippel 1988, p.44). Von Hippel's study effectively demonstrates the complex social behavior associated with innovation. Zoltan Acs and David Audretsch separate innovative activities into two technological regimes: the entrepreneurial regime (characterized by radical innovative activity of small firms) and the routinized regime (characterized by incremental innovative activity of large firms) (Acs and Audretsch 1990, p.90). Their findings suggested that turbulence, caused by simultaneous entry and exit, is one third greater in entrepreneurial regimes than in routinized regimes (Acs and Audretsch 1992, p.65).

Harvey Leibenstein offered an economic theory, the X-Efficiency Paradigm,¹⁷ which suggested that entrepreneurship could be divided into two broad groups: Schumpeterian or new type entrepreneurship and corporate or routinized entrepreneurship (Leibenstein 1968, p.72). Leibenstein argued that neither individuals, nor firms work as hard as they could at searching for new information (Leibenstein 1979), which causes slack. The existence of slack means that the profitability of opportunities is often difficult to establish. If slack occurs in the new type of entrepreneurship, it acts to restrict the supply of exploiters of opportunities; but if it

¹⁷ Leibenstein argues that the term entrepreneur is archaic and leads to confusion. In the same way grocer today does not offer an adequate explanation for the world of supermarkets, the term entrepreneur limits our understanding of the amalgam of activities

occurs in routinized entrepreneurship, it acts to create opportunities. Researchers Nitin Nohria and Rnajak Gulati have reported evidence for an inverse U-shaped relationship between slack and innovation in organizations (Nohria and Gulati 1996).

There appears to be general similarity between the empirical findings of Acs and Audretsch and Nohria and Gulati and the theory of Leibenstein's X-Efficiency Paradigm. Both the empirical evidence and the theory suggest the process of entrepreneurship can be divided into two distinct activities based on the basis of organizational context. The next section discusses the practice of corporate or routinized entrepreneurship by reviewing the interface between entrepreneurship research and business policy or strategy research.

Corporate Entrepreneurship Research

Entrepreneurship was first proposed as a way of viewing business policy and planning by Charles Hofer and Dan Schendel in 1979 (Hofer and Schendel 1979, p.515). However, it was Peter Drucker's publication of "Innovation and Entrepreneurship: Practice and Principles" in 1985, that consolidated the practice of entrepreneurship as a tool for the strategic management of organizations (Kuratko, Hornsby et al. 1993, p.28). Drucker defined innovation as "...the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service" (Drucker 1985, p.19). Drucker suggested that, while the principle of entrepreneurship is constant regardless of organizational size, the practice of entrepreneurship varies by

we refer to in using the word (Leibenstein 1979, p.127-128).

organizational size and type. Richard Rumelt examined the locus of entrepreneurship, and theorized that the practice of entrepreneurship by individuals revolved around the creation of new markets, while the practice of entrepreneurship by large organizations revolved around the re-deployment of resources to increase competitive positioning (Rumelt 1987, p.152).

Gifford Pinchot coined the term intrapreneurship to describe the process of entrepreneurship within the context of large organizations (Pinchot 1985, p.6). Robert Burgelman and Leonard Sayles studied the development cycle of new ventures within a large U.S. high-technology firm between 1975 and 1977 (Burgelman and Sayles 1986). They found the process of new venture formation required a dedicated individual, often the research and development team leader who was chartered to start a new venture within the firm. This individual acted much as an independent entrepreneur but with the support of a larger corporation.

Jeffrey Cornwall and Baron Perlman differentiated the process of the charterholder operating within an existing organization or intrapreneurship from the process of an existing corporation acting entrepreneurially, which they defined as organizational entrepreneurship (Cornwall and Perlman 1990, p.8). Cornwall and Perlman suggested that organizational entrepreneurship operates through the medium of corporate culture¹⁸.

¹⁸ Edgar Schein defines organizational culture as "...the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the

Corporate cultures, which promote organizational learning as a core competence, enhance their ability to act entrepreneurially, since the creation of new knowledge is critical to innovation (Hitt and Reed 2000, pp.41-42). Rosabeth Moss Kanter defined entrepreneurial corporations as those, which focus resources on what they do not yet know (Kanter 1983, p.27). Shona Brown and Kathleen Eisenhardt argued organizations which have learning-based cultures are at a competitive advantage in industries characterized by rapid change (Eisenhardt, Brown et al. 2000, p.53). Brown and Eisenhardt identified the processes of improvisation, co-adaptation, patching, regeneration, experimentation and time pacing as common to corporations able to act entrepreneurially (Brown and Eisenhardt 1998). Mintzberg described the corporation behaving entrepreneurially when it follows the vision of an entrepreneurial leader through a process of radical change (Mintzberg, Ahlstrand et al. 1998, p.143).

When William Guth and Ari Ginsberg introduced corporate entrepreneurship in a special edition of *Strategic Management Journal*, they defined the domain of corporate entrepreneurship as "...all changes in firms' pattern of resource deployment stemming from the carrying out of new combinations" (Guth and Ginsberg 1990, p.6). This definition synthesized the concepts of corporate venturing (Covin and Miles 1999, p.48) and organizational entrepreneurship (Cornwall and Perlman 1990, p.8). The Guth/Ginsberg definition also includes a very specialized stream of research called the new venture performance stream.

correct way to perceive, think and feel in relation to those problems" (Schein 1984).

The new venture performance (NVP) stream sought to understand which factors influence the performance of new ventures. The stream of research began with a comparative study by Ralph Biggadike into the effectiveness of strategies established firms employed to enter new markets (Biggadike 1976). Biggadike's work was followed by a study done as William Sandberg's dissertation under the direction of Charles Hofer (Sandberg 1984). The Sandberg and Hofer model specified the performance of a new venture was a function of the attributes of the entrepreneur, the structure of the industry entered, and the strategy employed: $NVP = f(E, IS, S)^{19}$. Patricia McDougall investigated NVP in her dissertation (McDougall 1987) and found three variables to be of significant influence: the strategy of the new venture, the industry structure, and the interaction between strategy and industry structure, suggesting: $NVP = f(S, IS, S*IS)$. Lanny Herron used his dissertation (Herron 1990) to review Sandberg's study in an attempt to determine whether or not the characteristics of the entrepreneur had an impact on NVP. His study revealed entrepreneurial skills explaining 40% of the variance in new venture performance, thus: $NVP = f(E, S, IS, S*IS)$. Scott Kunkel (Kunkel 1991) and Kenneth Robinson (Robinson 1995) undertook independent studies that corroborated the Sandberg & Hofer model, but found that strategy was a stronger determinant of performance than industry structure. James Chrisman, Alan Bauerschmidt and Charles Hofer used the evidence of these studies to argue that NVP is a special case of strategic management theory (Chrisman, Bauerschmidt et al. 1998). The strong empirical nature of NVP

¹⁹ The following notation is used in the discussion of New Venture Performance (NVP): entrepreneurship (E), industry structure (IS), strategy (S),

research masks the ambiguity of the difficult constructs utilized in the research. Financial indicators such as return on investment (ROI) and return on equity (ROE) have proven to be unreliable indicators of performance and so most studies in this stream have relied on a subjective proxy for performance measurement. Similarly, the measurements of strategy and industry structure are, in the main, constructed from Likkert scale measurements of management opinion.

Pragmatic Entrepreneurship Research

This review of the literature of entrepreneurship research within business management has revealed two differing approaches. The first approach has been the multi-paradigm approach taken by traits and rates scholars. This approach combines methods from economics, financial management, innovation, psychology, behavior sciences, and sociology. The second approach has been the single paradigm approach taken by corporate entrepreneurship scholars. A third approach has been identified. This approach is pragmatic, primarily concerned with topicality, uniqueness and usefulness (Aldrich and Baker 1997, pp.395-398). This approach has been used by a small, but influential group of researchers in studying independent entrepreneurship.

Arnold Cooper was the organizer of the first research conference on entrepreneurship, held at Purdue in 1970 (McCarthy and Nicholls-Nixon 2001, p.28). Cooper's initial research, conducted in Silicon Valley in the 1960s, suggested that small firms were more efficient than large firms at innovation (Cooper 1964). He followed this

organizational structure (OS).

with a number of studies of survival rates of new ventures (Cooper, Dunkelberg et al. 1987; Cooper, Dunkelberg et al. 1988) and the causes of success (Woo and Cooper 1982; Dunkelberg and Cooper 1987; Cooper, Woo et al. 1988; Cooper, Gimeno-Gascon et al. 1994; Cooper, Folta et al. 1995; Cooper, Ramachandran et al. 1997). Cooper has also published a number of studies of the field of entrepreneurship research (Cooper and Dunkelberg 1987; Cooper 1993; Cooper 1998; Cooper, Markman et al. 2000).

Karl Vesper is best known as the organizer, in 1974, of the interest group that became the Entrepreneurship Division of the Academy of Management (McCarthy and Nicholls-Nixon 2001, p.28). Vesper's background as a Marine Engineer led him to an interest in the development of innovation and from that to research in entrepreneurship (Vesper 1998). The focus of his research activities has been the study of entrepreneurship education (Vesper 1974; Vesper 1985) and the application of independent entrepreneurship (Vesper 1979). Vesper is a champion of experiential learning in the field of entrepreneurship (Vesper and McMullan 1997) and has been influential in the development of studies in entrepreneurship education with Gartner (Gartner, Mitchell et al. 1989; Gartner and Vesper 1994; Vesper and Gartner 1997; Vesper and Gartner 1999) and Ed McMullan (McMullan and Vesper 1987; McMullan and Vesper 1987; Vesper and McMullan 1988; Vesper and McMullan 1997).

Surprisingly little research has developed out of this promising approach. Robert Lussier has modeled the success factors of independent business creation and tested these models for accuracy (Lussier 1995; Lussier 1995; Lussier, et al. 1996; Lussier and Pfeifer 2000). Jim Chrisman has carefully analyzed the impact of Small Business

Development Center assistance to independent entrepreneurs (Chrisman, Ryan et al. 1985; Chrisman and Leslie 1989; Chrisman, Carsrud et al. 1990; Chrisman and Katrishen 1994; Chrisman and McMullan 1996; Chrisman and McMullan 1999; Chrisman and McMullan 2000). Scott Shane has investigated the relationship between culture and opportunity identification (Shane, Kolvereid et al. 1991; Shane 1992; Shane 2000). However, little research has been done towards building prescriptive theories of entrepreneurship, primarily because the field does not lend itself to methodologies utilizing mail questionnaires and directed interviews, the traditional tools of management researchers.

Vignette

Jim Clark, a man who has been called “the greatest entrepreneur of his time” (Kaplan 2000, p.33), provides an example of the entrepreneur as seen through the lens of Business Management. Clark was born in Plainview, Texas in 1944. He was expelled from high school in his junior year for offending his elders (Lewis 2000, p.44-45). He joined the US Navy in 1961 and was soon categorized as a juvenile delinquent. The humiliation of being assigned to clean-up chores at sea instilled in Clark a strong need for achievement (Lewis 2000, p.46). He discovered that he had an aptitude for mathematics and returned to school. Within eight years, Clark had completed his high school education, received an undergraduate degree, a masters degree in physics and a Ph.D. in computer science. However, Clark could not settle into traditional academic life. Between 1970 and 1978, he married twice, moved across the country three times and held at least four different jobs (Lewis 2000, p.46). When his second wife left him, Clark fell

into a depression that lasted a year and a half. At the age of 38, Clark said: "I developed this maniacal passion for wanting to achieve something" (Lewis 2000, p.47). He drew upon his past success as a scholar to develop a new sense of self-efficacy. Clark took a teaching position at Stanford and with a group of graduate students developed an integrated circuit he named "Geometry Engine" (Hiltzik 1999, p.300) at Xerox's Palo Alto Research Center (PARC). This innovation led Clark to form Silicon Graphics Incorporated (SGI) as a corporate vehicle for its exploitation. Silicon Graphics attracted some of the most talented engineers in the USA due to the company's reputation for innovation and corporate entrepreneurship (Lewis 2000, p.54). Between 1986 and 1996, SGI grew at a rate of about 40 percent per year. By the end of 1996 SGI's annual revenues were in excess of \$2 billion and the company had over 7,000 employees. However, Jim Clark was on to other things.

In 1992, Clark had published a description of a device he called a telecomputer (Clark 1992). The device was a low cost video-on-demand computer (Press 1993, p.21). The reluctance of the directors of SGI to develop this device had led Clark to leave the company in 1994. As he searched for software for his proposed machine, he stumbled upon Marc Andreessen, an undergraduate student at the University of Illinois. Andreessen was the leader of a team of programmers who had created "Mosaic" (Andreessen and Bina 1992) an Internet information browser and World Wide Web client. Immediately, Clark realized this software would revolutionize personal computing. Clark valued the work done by the Mosaic team at \$3 million and invested \$3 million of his own money in exchange for a 50% ownership (Clark and Edwards 1999, p.57) of the new company, which became known as Netscape Inc. On August 9th, 1995, when shares of Netscape

were offered to the public, the company was valued at over \$2.7 billion (Reid 1997, p.44). Jim Clark's share of the company made him a billionaire (Clark and Edwards 1999, p.19).

Jim Clark's psychological profile matches most of the characteristics set out by the traits approach to entrepreneurship research. Clark demonstrates a high need for achievement, a propensity towards risk and a high degree of self-efficacy. His development of both Silicon Graphics and Netscape followed the tenets laid out for success in the rates approach to entrepreneurship research. The acceptance of SGI computers by Hollywood animators, automobile designers and engineers followed the path suggested by Rogers' Diffusion of Innovations (Rogers 1995). Clark was able to instill a spirit of corporate entrepreneurship in both SGI and Netscape. He did this by hiring bright engineers and encouraging them to perform at the leading edge through a program of employee stock ownership. Clark's entrepreneurship is pragmatic. While his innovations have been revolutionary and while these innovations have thrown whole industries into turmoil, they have been geared towards explicit and basic needs in society (Lewis 2000, p.14).

Summary

This broad review of the literature of entrepreneurship has revealed three major phases in the development of entrepreneurship as a distinctive field of study. The first phase of entrepreneurship research included attempts by early theorists such as Cantillon, Smith and Say to describe a phenomenon which may or may not have existed before the early industrial revolution but which became obvious during it. The second phase of

entrepreneurship research developed when economists such as Bentham and Von Thüen attempted to synthesize these descriptive theories into the principals of the new science of classical economics laid down by Smith, Ricardo and Malthus. Controversy over the need for an entrepreneurial function in economic theory continued into the debate between the neo-classical economists: Marshall, Walras and Pareto and the Austrian economists: Menger, von Mises and Hayek. This debate brought the issues of risk and innovation to light as areas whose investigation fell within the domain of entrepreneurship research. Knight's investigation of risk (Knight 1921) and Schumpeter's investigation of innovation (Schumpeter 1934) formed the theoretical underpinnings of a new focus on entrepreneurship research from the new social science of business management.

Entrepreneurship research shifted into its third phase shortly after World War II when the Harvard School of Business pioneered entrepreneurship as a field of education and research within management studies. Researchers, influenced by McClelland (McClelland 1961), attempted to identify entrepreneurs by their psychological profiles, but found that the constructs: need for achievement, propensity towards risk and locus of control were weak predictors of entrepreneurial behavior. As this research, commonly referred to as the traits stream, evolved into the study of the behavior patterns of entrepreneurs important discoveries were made suggesting the importance of self efficacy (Krueger and Dickson 1994), innovation (Buttner and Gyskiewicz 1993) and cognitive mechanisms (Baron 1998) in entrepreneurship. Management researchers in the rates stream were deterred by measurement difficulties in their attempts to determine the success rate of new business foundings and the overall prevalence of entrepreneurship in

society. The interface between entrepreneurship and strategy has been explored both to gain understanding of how corporations use entrepreneurship to gain competitive advantage, the corporate entrepreneurship stream and to gain understanding of how strategy acts as a factor affecting the performance of new ventures. the new venture performance stream.

Entrepreneurship research within management has, in general, not accumulated its research findings (Fiet 2001, p.105; Gartner 2001, p.28). It has been speculated that this is because entrepreneurship has derived its theory from other sources (Hannah 1984), because research often embodies academic autobiography (Fiet 2001, p.4) and because entrepreneurship research has been hesitant to replicate previous findings or publish negative results (Aldrich and Baker 1997, pp.389-391). Further, there has been constant criticism of entrepreneurship researchers for their use of research methods inappropriate to the phenomenon being studied (Paulin, Coffee et al. 1982; Churchill and Lewis 1986; Wortman 1986; Aldrich 1992; Aldrich and Baker 1997). It is necessary to look at epistemology to gain insight into the reasons entrepreneurship research has made such little progress within the field of management.

CHAPTER III

EPISTEMOLOGY

“Science is not just – or even largely – about facts: it is about traditions and ways of looking at things.”

Robert M. Young (Young 1992, p.170)

In my first year of doctoral studies, I became the associate editor of the Academy of Management’s Entrepreneurship Division newsletter. This position put me on a first-name basis with the most active researchers in the field of entrepreneurship, a vantage point from which I was able to watch them at their work. Clifford Geertz has said,

...if you want to understand what a science is, you should look in at the first instance not at its theories or its findings, and certainly not at what its apologists say about it; you should look at what the practitioners of it do.
(Geertz 1973, p.5)

What I could see entrepreneurship researchers doing, by and large, was collecting survey information using questionnaires. My observation was confirmed by a number of state of the art of entrepreneurship research articles written between 1982 and 1997 (Paulin, Coffee et al. 1982; Churchill and Lewis 1986; Wortman 1986; Aldrich 1992) as well as by a similar study done in 2001 (Chandler and Lyon 2001). These studies classified research presented at the Babson Kauffman Entrepreneurship Research Conference (BKERC) and articles published in the top entrepreneurship journals by their subject matter and research methodologies. Brief comments on the prevailing methodology found in each of these studies are summarized in Table 2.

Table 2

Summary of Entrepreneurship Research Design Studies

Article Title	n	Findings
“Entrepreneurship research: Methods and directions”	81	“Sample survey was by far the most common entrepreneurship research strategy, employed in 64 % of the sampled studies.” (Paulin, Coffee et al. 1982, p.357)
“A unified framework, research typologies and research prospectuses for the interface between entrepreneurship and small business”	51	“Throughout these studies, the use of mail questionnaires and interviews with structured or non-structured schedules is the overwhelming type of research methods used by most researchers.” (Wortman 1986, p.277)
“Entrepreneurship research: Directions and methods”	298	“An examination of the methodologies utilized in the research studies shows a preponderance (77%) of observational and contemplative theory building and surveys and few (less than 4%) field studies.” (Churchill and Lewis 1986, p.345)
“Methods in our madness? Trends in entrepreneurship research”	322	“Investigators still relied heavily upon nonsystematic methods of data collection, and when they ventured out to collect data, they depended heavily upon surveys.” (Aldrich 1992, p.199)
“Blinded by the cites? Has there been progress in entrepreneurship research?”	528	“Research design and sources of data have not changed very much over the past 15 years, other than a decisive break with journalistic and armchair methods by the journals after 1985.” (Aldrich and Baker 1997, p.383)
“Issues of research design and construct measurement in entrepreneurship research: The past decade”	416	“Seventy five percent of the empirical papers used primary data. Of the studies using primary data, 66% used paper surveys, 25% used interview methodologies, 3% used phone interviews, 4% used experiments. Only four studies (2%) used participant observation.” (Chandler and Lyon 2001, p.104)

Every one of these studies pointed to the administration of questionnaires as the dominant method of data collection amongst entrepreneurship researchers. My years as a working entrepreneur had taught me first-hand the inaccuracy resulting from asking entrepreneurs to fill out questionnaires. All the entrepreneurs that I had known were busy men and women, who disliked paperwork. In addition, research based upon questionnaire surveys

faced the difficulty of concise measurement. Entrepreneurship, as it has been described in the literature, is about contingency (Sarasvathy 2001, p.17), creation (Meyer, Gartner et al. 2000), market pioneering (Covin, Slevin et al. 2000, p.177), newness (Gartner and Brush 1999, p.7) and organization initiation (Aldrich and Martinez 2001, p.42). These constructs do not lend themselves to the linear measurement of surveys and questionnaires (Bygrave 1989, p.28).

On the other hand, in my teaching I had discovered that entrepreneurs were generally keen to share their experiences and loved to tell stories. I regularly brought working entrepreneurs into my classes to tell their life stories and never had an entrepreneur say “no” to my request for his or her time. My students and I always came away from these sessions with unique insights into the practice of entrepreneurship. My experience in learning directly from working entrepreneurs was backed up in the literature. Thomas Hopkins suggested that entrepreneurship courses should be taught by practicing entrepreneurs (Hopkins and Feldman 1989, p.29). Sarah Jack and Alistair Anderson elaborated by suggesting that the process of entrepreneurship is a mixture of art and science, requiring the input of experiences and heuristics of successful entrepreneurs (Jack and Anderson 1999, p.111).

The disparity between what I saw to be standard practice in entrepreneurship research and what I had seen to be effective practice led me to look into the ways that we gain knowledge.

Ways of Knowing

Epistemology is the study of the nature, conditions and extent of human knowledge (Sosa, Kim et al. 2000, p.ix). Fundamental to epistemology is the issue of skepticism: the claim that we do not have the knowledge we think we have (Crumley 1999, p. 23). Early skepticism provided a stance for ancient Greek philosophers between the Dogmatists, who claimed to have discovered the truth and the Academics, who asserted that the truth could not be apprehended (Sextus, Annas et al. 2000, p.3). The skeptics sought “tranquility in matters of opinion and moderation of feeling in matters forced upon us” (Sextus, Annas et al. 2000, p.10) through the suspension of judgment about everything (Sextus, Annas et al. 2000, p.11).

Later skepticism, developed from the work of the 17th century philosopher René Descartes (Descartes, Anscombe et al. 1971), took a more theoretical stance (Burnyeat 1982, p.39) questioning our knowledge of the external world (Stroud 1984, p.13). Cartesian skepticism imposed a limit to the ability of men and women to command an objective view of the world (Williams 1991, p.6). Richard Fumerton has differentiated two types of skepticism: weak skepticism, which is the doubting of the certainty of knowledge and strong skepticism, which is the doubting of justified or rational belief (Fumerton 1995, pp. 29-31). Fumerton’s weak skepticism closely parallels the pervasive doubt of the early Greek skeptics, while his strong skepticism more closely resembles the more specific doubting of justified true belief of Cartesian skepticism. Throughout this chapter I am using skepticism in the way the early Greek skeptics used the term or what Fumerton calls the weak form, that is to say as a criticism of knowledge in general.

Two approaches have been developed to solving the problem posed by the early form of skepticism: how can we know anything with certainty. These approaches are (1) attempt to refute the skepticism by creating objective justified true belief (Pollock 1986, pp.180-193) or (2) accept skepticism by believing that all knowledge is socially constructed (Longino 2002, p.11). These two viewpoints can broadly be described as the fields of scientific inquiry and humanistic inquiry. Leonard Nash placed the separation of scientific inquiry from the humanities in the 17th century Copernican revolution, stating that Copernicus' theory "forced a re-appraisal of the nature of the cosmos and man's place in it" (Nash 1963, p.95). This dichotomous approach to typifying knowledge is over simplistic, to be sure. However, as C.P. Snow pointed out in his 1959 Rede lecture: "Two Cultures" there seems to be few places where scientific inquiry and humanistic inquiry meet (Snow 1959, p.21).

Contemporary scholars who have used similar dichotomous typologies of the ways of knowing include the philosopher Ruth Weintraub, the feminist theorist Evelyn Fox Keller, the philosopher of the humanities Paisley Livingston and the philosopher of science A.F. Chalmers. Ruth Weintraub described problem of skepticism in terms of "consequential skepticism", in which skepticism is overcome by reason (Weintraub 1997, p.32) and "antecedent skepticism", in which skepticism is accepted as a "propaedeutic to any investigation" (Weintraub 1997, p.31). These constructs can be seen to parallel scientific inquiry and humanistic inquiry as they are used in this study. Evelyn Fox Keller has typified the forms that knowledge can take in this way:

"The question of whether scientific knowledge is objective or relative is at least in part a question about the claim of scientists to absolute authority. If there is only one truth, and scientists are privy to it...then the authority

of science is unassailable. But if truth is relative, if science is divorced from nature and married instead to culture then the privileged status of that authority is fatally undermined." (Keller 1987)

Keller's typology parallels that used in this study in which science embraces justified true belief and humanism embraces socially constructed reality as ways to overcome skepticism. Paisley Livingston used what he refers to as the "skeptical challenge" to differentiate between the natural sciences and the social sciences (Livingston 1988, pp.44-49), the constructs called scientific inquiry and humanistic inquiry in this study. In the introduction to his thesis he stated his goal:

"...to reopen literary criticism's dialogue with the natural and social scientific disciplines. My conviction is that literary theory should seek to clarify the relations between literary research and other models of knowledge. I contend that literary critics should recognize that the basic scientific project is not reducible to scientism or to a group of arbitrary worldviews - as the sterile opposition between positivists and relativists would have it." (Livingston 1988, p.4).

A.F. Chalmers set out three contrasting approaches to what he terms "scientific knowledge" and what this study would call knowledge: the subjective approach, which corresponds to scientific inquiry in this study, the consensus approach, which corresponds to humanistic inquiry in this study and the objective approach, which corresponds to interpretation in this study (Chalmers 1976, pp.98-101). Chalmers defined the subjective approach as "a set of special kinds of beliefs held by individual scientists" (Chalmers 1976, p.98) and cited logical positivists as an example. His reasoning for the use of subjective as a descriptor goes like this:

"For them, a firm basis on which to build secure scientific knowledge consists of a set of statements the truth of which is in some way guaranteed by the private experiences (or sense data) of individual observers." (Chalmers 1976, p.)

Generally, and certainly within the context of the typology used in this study, this would be taken as an objective worldview. Chalmers defined the consensus approach as a form of socially constructed reality thus incorporating relativism (Chalmers 1976, p.99). This would conform to what this study calls humanistic inquiry. Chalmers defined the objective approach in this way: "Scientific theories bear certain relationships to each other and to available evidence, consistent or inconsistent, and so on, and they possess those properties independently of whether individual scientists or communities of scientists realize it or not" (Chalmers 1976, p.100). I would suggest this sounds a lot like interpretation

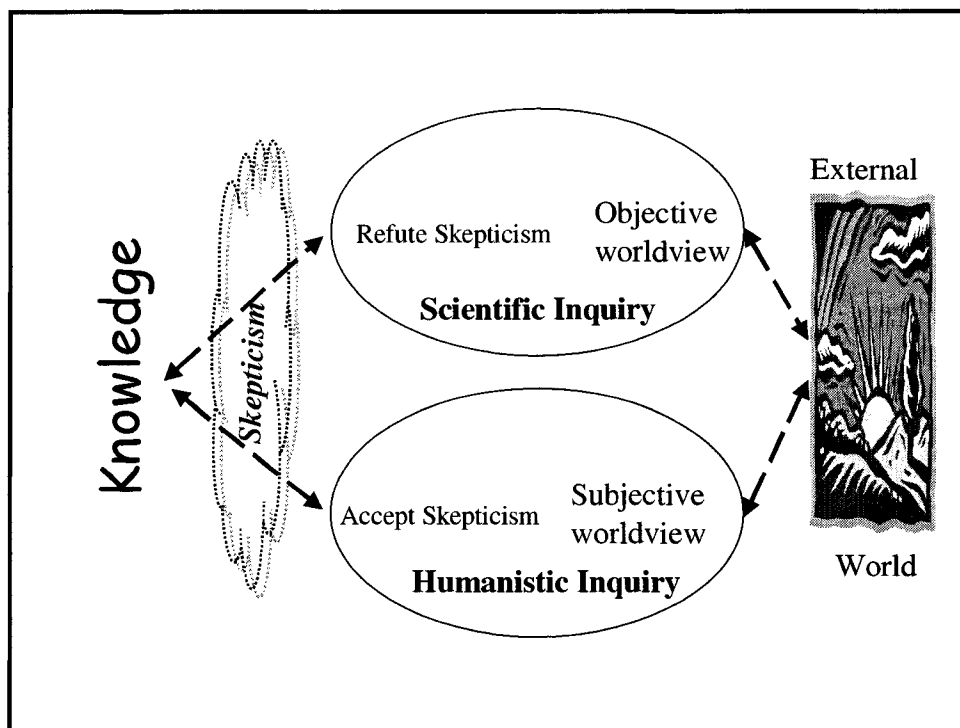
Paisley Livingston demonstrated the fundamentally different languages of the two cultures by citing the different ways that scientific inquiry and humanistic inquiry use the word "theory" (Livingston 1988, pp.9–16). In scientific inquiry, theory has been defined as "...a systematically related set of statements, including some lawlike generalizations, that is empirically testable" (Rudner 1966, p.10). The same word, theory, has been defined in humanistic inquiry as "...statements of general principles regarding the methods, aims, functions and characteristics of this particular art form" (Carlson 1984, p.9). The difference between these two definitions is striking. The first includes a reference to the testability or skeptical refutation of the statements and thus implies an objective worldview. The second refers only to the general guidelines for the social construction of the form of inquiry and thus implies a subjective worldview.

The path I will take through the maze of epistemology is circuitous, so I have developed a series of maps, which I hope will guide the reader through this labyrinth.

The first map (Figure 1) outlines the position already stated: if we divide the acquisition of knowledge dichotomously based on the reaction to skepticism, we broadly define the realms of scientific inquiry and humanistic inquiry.

Figure 1

Skepticism Divides Scientific Inquiry from Humanistic Inquiry



Scientific inquiry attempts to refute skepticism by creating an objective worldview. Humanistic inquiry accepts skepticism because, in a subjective worldview, all reality is socially constructed. The next step in this line of reasoning develops the nature of the differences between scientific inquiry and humanistic inquiry in a search for understanding of the nature of some neutral ground.

Scientific Inquiry

Fundamental to scientific inquiry is the principle that justified true belief is objective and can be derived from certain and infallible claims through the consistent application of the rational methods of the natural sciences (von Dietze 2001, p.9). This belief structure has been named foundationalism and traces its roots to the 17th and 18th century rationalists René Descartes, John Locke, Benedict Spinoza and Gottfried Leibniz (Ross 1998, p.1). Modern foundationalism is attributed to the work of Ludwig Wittgenstein (Wittgenstein and Kolak 1998) and the members of the Vienna Circle: Rudolph Carnap, Herbert Feigl, Philipp Frank, Hans Hahn, Victor Kraft, Otto Neurath, Moritz Schlick, and Friedrich Waismann.

Influenced by the Vienna Circle, A.J. Ayer popularized the term logical positivism to describe a view that the veracity of a statement is ultimately tested by experience (Ayer 1936, p.99). The methodology of logical positivism hangs on three main assumptions: that science begins with observation, that observation yields a secure basis for knowledge and that there is a direct correspondence between observation and the world (von Dietze 2001, p.18). However, each of these three assumptions can be challenged. First observation is, of itself, theory dependent (Harris 1979, pp.10-18). Second, logical positivism does not solve the “problem of induction” laid out by David Hume (Hume 1963, pp.78-118), simply stated as: even if the premise of an inductive argument is true, the conclusion is not necessarily true (Chalmers 1976, pp.12-13). Third, logical positivism fails to take into account difficulties surrounding observation and the creation of observation statements. As Norwood Hansen said, “...there is more

to seeing than meets the eyeball” (Hanson 1958, p.7).

Karl Popper, in “The Logic of Scientific Discovery” (Popper 1934), defended the use of reason as a means of choosing amongst differing theories, a problem which he referred to as “the problem of demarcation” (Popper 1934, p.40). Popper suggested a deductive method of testing theoretical systems; one that set falsification rather than verifiability as the criterion for demarcation. In doing so, Popper’s epistemology ruled out the ideal of absolute certainty to gain objectivity. In Popper’s words, “The old scientific ideal of ‘epistémé’ – of absolutely certain, demonstrable knowledge – has proved to be an idol. The demand for scientific objectivity makes it inevitable that every scientific statement must remain tentative for ever” (Popper 1934, p.280). Popper’s falsification doctrine implied that science progresses by trial and error, in a manner similar to Darwinian evolution (Popper 1996, pp.7-8).

By 1950, Popper was one of the most influential philosophers of science in the western world (Stove 1991, p.5). However, the epistemology of falsification was criticized on a number of fronts. Ayer pointed out that existential statements, such as abominable snowmen exist, could not be falsified (Ayer 1973, p.29). Leonard Nash criticized Popper for grossly over-simplifying the complex social process of theory development (Nash 1963, p.61). Paul Feyerabend objected to the idea that science could be made to conform to external standards, suggesting that the reason of science determines its own rationality (Feyerabend 1978, p.99). Feyerabend claimed that science, as currently practiced, does not and could not live by the rules laid out by Popper (Feyerabend 1975, pp.171-175). Imre Lakatos provided a defense of falsification by

suggesting that, although the criticism of dogmatic falsification had merit at the level of hypothesis testing, a sophisticated version of methodological falsification provided an important tool for choosing amongst research programs (Lakatos 1970, pp.131-132).

An alternative to falsification was provided by the concept of coherence.

Coherence theory rejects the foundationalist notion of verification by confrontation (Williams 1991, p.271). Instead, it posits that a belief is justified “by its coherence with other beliefs one holds” (Audi 1993, p.137). The concept of coherence allows the comparison of differing paradigms of knowledge based on their logical and probabilistic consistency, the presence or absence of internal connections between its component beliefs and the presence of unexplained anomalies (BonJour 1985, pp.93-101). Thomas Kuhn’s “The Structure of Scientific Revolutions” developed coherence theory into a sociological explanation for the way in which scientists choose amongst a group of differing theories (Kuhn 1970, pp.19-21).

Kuhn drew from research into the history of science (Kuhn 1962, pp.vii-xii) to explain changes in the acceptance of scientific knowledge. Briefly stated, Kuhn’s paradigm theory described a process cycle of theory choice which includes: pre-science – normal science – crisis – revolution – new normal science – new crisis – new revolution – etc. (von Dietze 2001, p.32). Kuhn’s pre-science stage has been characterized by random fact gathering and inter-school debate (Kuhn 1962, pp.15-16). The acceptance of a general theory, which provides a synthesis attractive to the next generation of researchers, marks the transition to normal science (Kuhn 1962, p.18). Kuhn described normal science as the work scientists do under the umbrella of a common paradigm: the

determination of significant fact, the matching of facts with theory and the articulation of theory (Kuhn 1962, pp.23-34). Crisis comes to normal science through new discoveries or through the persistent failure of the existing paradigm to explain problems (Kuhn 1962, pp.66-68). The response to this crisis is the development of a new competing paradigm, which Kuhn noted is usually made by a scientist new to the field and thus not committed to the traditions of the field (Kuhn 1962, p.90). The acceptance of this new paradigm creates a gestalt-like shift in the world view of scientists in the field (Kuhn 1962, pp.111-112). Kuhn likened the shift in perception involved in a paradigm change to Wittgenstein's duck-rabbit image (Kuhn 1962, p.114). Once the perceptual switch is made, the entire image changes instantaneously and the image is either a duck or a rabbit, but cannot be seen as both. The radical nature of this change of vision rules out the possibility of the rational choice between theories since the new paradigm is incommensurable with its predecessor (von Dietze 2001, p.35).

When Popper strongly criticized the incommensurability associated with Kuhn's paradigm theory as a form of relativism (Popper 1970, p.55; Popper 1996), Kuhn responded by saying that Popper's criticism was an example of a "minor culture clash" described by paradigm theory (Kuhn 1970, p.232). Kuhn argued that the criterion of verisimilitude proposed by Popper was impossible, since the ontological limits of competing theories cannot be defined (Kuhn 1970, p.265). Kuhn reminded his critics of the origin of the term incommensurability:

The hypotenuse of an isosceles right triangle is incommensurable with its side or the circumference of a circle with its radius in the sense that there is no unit of length contained without residue an integral number of times in each member of the pair. There is thus no common measure. But lack of a common measure does not make comparison impossible. (Kuhn

2000)

Incommensurability is an integral feature of competing paradigms since each contains a unique disciplinary matrix. Kuhn defined disciplinary matrices as being made up of three components: commonly defined symbolic generalizations, shared commitment to beliefs and shared values (Kuhn 1962, p. 182-184). A disciplinary matrix is embedded in the language system of the paradigm through the paradigm's lexical taxonomy or lexicon (von Dietze 2001, p.89). Incommensurability is intrinsic to the difficulty in translating from the terms used in old paradigms into the terms used in a newly proposed paradigm, that is to say from one lexicon to another (Lewis 1970, p.427).

This inquiry into the practice of scientific inquiry provides a principled explanation for the discrepancy between what I had observed as standard practice in the field of entrepreneurship research and what I had seen to be effective practice. Coherence theory suggests that scholars in the field share common research practices because they share a common and coherent belief system or paradigm of what research in the field should be. Entrepreneurship scholars adhered to this paradigm, in spite of warnings such as Bygrave's against "physics envy" (Bygrave 1989, p.17), because they had been trained to believe that objective true belief could be justified through the tenets of foundationalism. Anthony Rucci, former Dean of the University of Illinois at Chicago's College of Business Administration, provided a practical reason for this doggedness. Rucci has stated that American corporations have sent the message to schools of business management that they want graduates who are "objective, quantitative, analytical and logical" (Linder and Smith 1992, p.17). In other words, they want graduates who subscribe to foundationalist beliefs. Herman Simon has noted that

management scholars subscribe to these intellectual qualities because they are rewarded for pursuing foundationalist-based research, research which focuses on “quantification, model building, mathematical sophistication, statistics and the like” (Linder and Smith 1992, p.14). While management researchers can justify their use of foundationalist epistemology through a claim to be matching the needs of the marketplace; the same justification does not apply to researchers in the field of entrepreneurship. Robert Chia has argued that “intellectual entrepreneurship” (Chia 1996, p.411), the application of imagination and resourcefulness to research, is better suited to the cultivation of entrepreneurial spirit in students.

The extent of the gap between individuals who are innovative and resourceful and those who are objective, quantitative, analytical and logical was brought home to me in the second service position I held during the first years of my doctoral studies. I had been appointed Coordinator of Canadian Youth Business Foundation (CYBF) for Vancouver Island. CYBF is a not-for-profit organization supporting young entrepreneurs in the development of new business ventures (Risley and Pell 2000) primarily by making small, low-cost, un-secured loans. My position put me directly between an endless parade of innovative and resourceful young entrepreneurs and the objective, quantitative, analytical and logical members of the CYBF Loan Approval Team.

Ostensibly, my job as CYBF coordinator was purely administrative. I was to market the program to local youth, collect their applications, present these applications impartially to the Loan Approval Team and then convey the decision of the Loan Approval Team back to the applicant. However, the transactional reality of this not-for-

profit loan program made my job much more difficult. Most young entrepreneurs had a vague outline of their new business venture, no idea what a business plan should look like and needed immediate access to cash in order to take advantage of the opportunity they had identified. The Loan Approval Team was made up of local bankers, accountants and lawyers who had been trained by their years of professional practice to never make loans to people like our young applicants. Marketing the program to local youth became round after round of public speaking engagements. Collecting applications became the provisioning of assistance (student help, writing guides or business plan software) to assist each applicant in the crafting of his or her business plan. Presenting each of these literary works to the Loan Approval Team became a fascinating study of the parsing of business plans into the categories of fiction or non-fiction. Finally, since most business plans were deemed to be fiction by the Loan Approval Team, my job of conveying the decision of the Loan Approval Team back to the applicant became an exercise in tact and grace under duress.

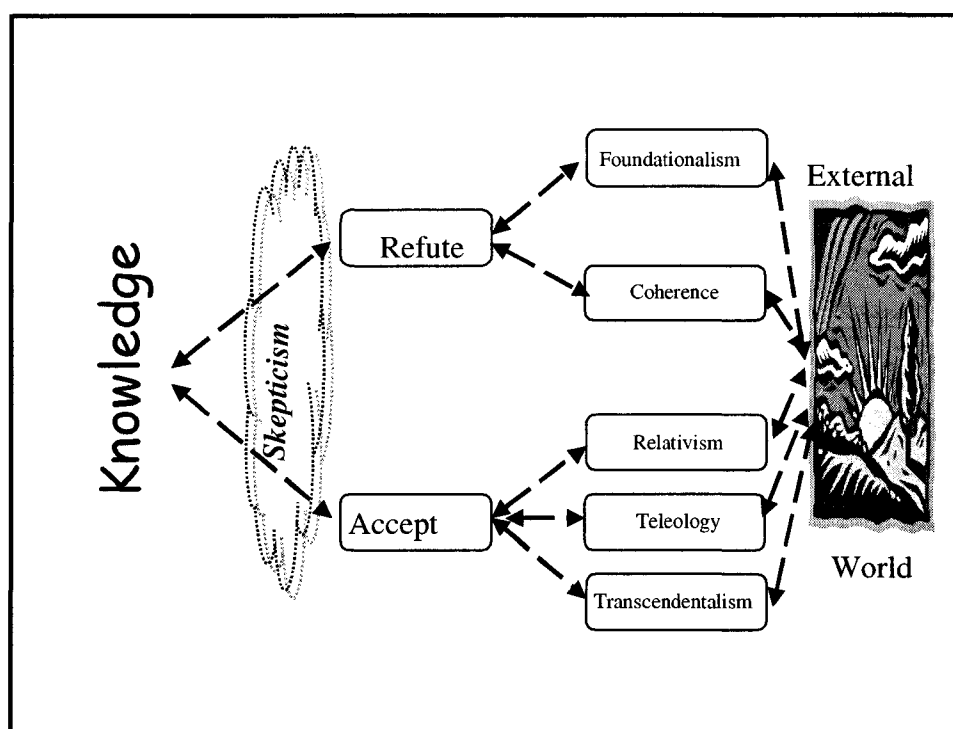
The problem I had as coordinator of CYBF was not one of knowing which businesses would succeed. Such knowledge was impossible. If any of us had certainty of the future, we would start our own ventures and be guaranteed success. Instead, I had the problem of needing to come to some kind of an understanding of the likelihood of success perceived by each young entrepreneur and reconcile this with an understanding of the likelihood of failure perceived by the Loan Approval Team. The understanding of human interests and values is the realm of humanistic inquiry.

This brief segmentation of the divisions within scientific inquiry and the divisions

about to be examined within humanistic inquiry are summarized in the second map (Figure 2). This map outlines foundationalism and coherence as two characteristics of scientific inquiry, and sets the stage for the discussion of three characteristics of humanistic inquiry.

Figure 2

Characteristic Divisions within Scientific and Humanistic Inquiry



Humanistic Inquiry

Humanistic inquiry is founded on the premise that knowledge is socially constructed (Longino 2002, p.11) and includes not just the empirical but also the imagined. Skepticism, in the form of methodical doubt, is accepted as an integral part of humanistic inquiry, allowing individuals to determine the authority of their reality

(Eldridge 2001, pp.189-204; Velkley 2002, p.3).

It could be argued that, prior to the Copernican revolution, all inquiry was humanistic in nature (Smith 1982, p.65). However, humanistic inquiry, as a unique approach to gaining knowledge, developed during the 18th century as a reaction to the philosophy of rationalism that came to dominance during the Enlightenment (Black 2002, p.21). Alfred North Whitehead succinctly characterized one cause of this reaction in his statement: “As science grew, minds shrank in width of comprehension” (Whitehead 1968, p.44). What Whitehead was lamenting in his comment was the loss of generalized understanding that resulted from the specialization of thought inherent in scientific inquiry. In an attempt to define humanistic inquiry as a distinct domain, the economist, Fritz Machlup, proposed:

...the systems of integrating knowledge that concern themselves with human culture, studying artifacts and historical materials and using them as foundation and framework for the presentation of the languages, literatures, philosophies, religions, values, arts and customs of the civilizations which have contributed to the shaping of the contemporary outlook in life. (Machlup 1980, v.1, p.70)

The premise that all knowledge is socially constructed gives rise to three implications. The first implication is the acceptance of transcendentalism: the possibility of search for new knowledge through imagination or through spiritual intuition (Whitehead 1968, p.102). The second implication of a socially constructed reality is an acceptance of teleological reasoning: even if we were able, through a yet-to-be-created procedure of perfect investigation, to discover the truth about reality; we would still be faced with the problem of knowing how to bring these discoveries to bear on the human situation (Eldridge 2001, p.105). The third implication of a socially constructed reality is

the acceptance of relativism: if we think we could lead our lives in accordance with the understanding brought about by new knowledge; then we are required to accept that our reference to knowledge is open to transformation through new understanding (Eldridge 2001, p.87). These three implications, arising from the acceptance of knowledge as a social construction, form the basis for differentiation between humanistic inquiry and scientific inquiry.

The acceptance of transcendentalism had its roots in romanticism, which originated in Germany in the late-18th century (Black 2002, p.22) as a polar opposite to foundationalism. Philosophers such as Jean-Jacques Rousseau, Immanuel Kant, and Friedrich von Schelling reacted to the terrible social conditions imposed on the peasant class, which had been displaced by the adoption of the three-field crop rotation system throughout Europe. The separation of the results of powerful technologies emerging through scientific inquiry from the benefits to mankind prompted doubts about the validity of foundationalism (Velkley 2002, p.1). The romantics offered, as an alternative, a child-like passive skepticism that manifested itself in a return to nature and a re-discovery of the subjective (Cavell 1979, pp.466-467). Rousseau's criticism of scientific inquiry (Rousseau and Gourevitch 1997) suggested three levels of human education: original naturalness, exposure to corrupting civilization and true culture (Velkley 2002, p.18). These levels of human education were developed into the seven theses of romanticism in the anonymous publication, in 1796, of "The System Program of German Idealism". The seven theses posed the aesthetic as the highest form of reason and developed the representation of the individual as a free being in a moral world as the

essence of metaphysical study (Black 2002, pp.22-28). This position juxtaposed the values of the old medieval system upon the new development of knowledge occurring as a result of the enlightenment (Black 2002, p.31).

Immanuel Kant saw a parallel between the three levels of human understanding and the relationship between knowledge and skepticism. Kant described the first stage of knowledge as dogmatism. The second stage, in which judgment has been improved by experience, is described as skepticism. The third stage, which Kant describes as perfect certainty, is obtained through the process of critical reasoning (Kant, Guyer et al. 1998, p.607). Kant's model of knowledge led to his conceptualization of the dialectic of reason (Velkley 2002, p.58). This dialectic is simply stated as the peculiar quality of being at once burdened by questions one is able to ignore while at the same time not able to answer (Kant, Guyer et al. 1998, p.7). Thus Kant sees skepticism, not as a condition imposed on humanistic inquiry, but rather as an essential condition of human inquiry (Stroud 2000, p.59).

Kant proposed transcendentalism as the means by which skepticism could be overcome through a process of imposing objective validity on the subjective conditions of thought (Stroud 2000, pp.84-89). Friedrich Wilhelm Joseph von Schelling coupled Kant's notion of transcendentalism to artistic creation in his "System of Transcendental Idealism", published in 1800 (von Schelling and Heath 1978). In this work, von Schelling made the proposal that artistic intuition was able to comprehend a totality, which overcame the dialectic of reason (Velkley 2002, p.111). The aesthetic, in von Schelling's proposal, became the model of freedom breaking both the bounds of

objectivism and of historicism (Ferris 2000, pp.92-107).

The modern acceptance of teleological reasoning had its roots in the involvement of science in a number of human-made catastrophes in the 20th century (Sloan and Charles F. Kettering Foundation. 1983, pp.7-10). Events such as the use of poison gas at Ypres (Perutz 1998, pp.9-10), the bombing of Dresden (Vonnegut Jr. 1968; McKee 1982) and the development of the atomic bomb (Perutz 1998, pp.31-44) prompted anguish over what Stanley Cavell has termed the abrogation of human nature (Cavell 1979, p.419). While scientific inquiry had created powerful insights into the nature of physical reality, mankind still faced the problem of knowing how to harness these discoveries for the betterment of mankind. Huston Smith has pointed out that scientific inquiry fails to deal with normative values, purposes, global and existential meanings and qualities (Smith 1982, pp.66-68). The need to deal with these four domains of humanity has led to the acceptance of some form of teleological reasoning.

The return to teleological reasoning has taken a number of forms, ranging from a return to traditional religious belief systems to the reification of scientific inquiry as a modern form of the entity LaPlace described as:

An intellect which at any given moment knew all of the forces that animate nature and the mutual positions of the beings that compose it, if this intellect were vast enough to submit the data to analysis, could condense into a single formula the movement of the greatest bodies of the universe and that of the lightest atom; for such an intellect nothing could be uncertain and the future just like the past would be present before its eyes. (LaPlace 1951, p.4)

Common to both religious belief systems and to Laplacian authority is the tenet of teleological reasoning. Teleological reasoning is the suggestion that intelligent order

within the universe implies an intelligent source equal to or greater than this intelligent order.

J. David Black has suggested that modern society's reification of the thought processes is a reaction to the de-humanizing nature of their complexity (Black 2002, pp. 38-41). Thus, the complex interaction of technological innovation, the market system, global trade, political welfare and foreign policy have become reified as the "military industrial complex" (Eisenhower 1961). Similarly, we have reified the complex issues surrounding the convergence of telecommunications infrastructure, computer hardware and software development, and content delivery as "the information highway" (Johnston and Council 1995). Thomas Homer-Dixon has connected the process of reification to teleological reasoning in his study of how societies adapt to complex stresses. Homer-Dixon's thesis is that there is a gap between the scientific thinking that can be applied to the solution of social problems such as pollution, global warming and overpopulation and the humanistic thinking required to successfully define the problems within an acceptable social context. Homer-Dixon reifies technical solutions to social problems as technological ingenuity and the definition of social problems as social ingenuity (Homer-Dixon 1995, p.591). He refers to the missing knowledge between these two types of ingenuity as the ingenuity gap (Homer-Dixon 2000, p.193). This ingenuity gap constitutes the requirement for teleological reasoning or, as Homer-Dixon describes it, the ability of individuals and their social mechanisms to find governance of global affairs (Homer-Dixon 2000, p.398).

The social sciences of sociology, anthropology and political science have

embodied teleological reasoning in what has become known as functionalism (Rudner 1966, p.84). Functionalism allows for multiple ways of viewing the entity being defined (Dennett 1996, p.68). The problem with functional definitions is that they are causal in nature: the function of an entity is defined by the output resulting from (or caused by) the input. Some functional outputs appear to precede the causal input and thus are teleological in nature (Rudner 1966, pp. 84-89). For example, the functional statement that the white coat of a snowshoe rabbit makes it difficult to be seen by its prey implies teleological reasoning. This teleological reasoning can be made explicit by a statement of belief that an all-powerful creator designed the system to be the way it is or by a complex process of reasoning such as the theory of mutation and natural selection.

The acceptance of relativism is the third implication of a socially constructed reality. Relativism is the thesis that a number of belief systems can be equally valid. Arthur Eddington's demonstration of the validity of Albert Einstein's special and general theories of relativity (Einstein 1961) in 1919, demonstrated that even a paragon of justified true belief such as Isaac Newton's universal theory of gravity (Newton, Cohen et al. 1999) was subject to modification dependant upon the viewpoint of the observer (Greene 1999, p.77). Newton's theory held the foundationalist position that "... all matter attracts all other matter with a force proportional to the product of their masses and inversely proportional to the square of the distance between them." (Cajori 1966, pp.670-671). However, Einstein's theory held that the mass of matter and the distance between matters were subject to relative measurement, specifically measurement within the framework of time (Greene 1999, p.62). The dramatic reversal of one of the basic tenets of physics led to a renewed interest in the relative nature of reality.

Richard Rorty has made the claim that the validity of a socially constructed reality is contingent upon the vocabulary available to individuals to describe their reality (Rorty 1989, pp.7-9). To the relativist, intellectual progress is a process of developing increasingly useful metaphors as opposed to the discovery of some underlying justified true belief. Rorty defined this process as re-contextualization (Rorty 1991, p.79) and suggested that skepticism takes the form of irony within re-contextualization (Rorty 1989, p.73). Irony is the doubt that an individual has about his or her final vocabulary. This doubt is generated by the impression that other vocabularies have on the individual and the inability of the individual to argue that his or her vocabulary is superior.

David Bloor has cited the controversy in geology over the origin of the parallel roads of Glen Roy in Scotland as an example of how perception of reality can be influenced by the context of an individual's vocabulary (Bloor 1991, p.25). Charles Darwin, with his vocabulary derived from his experience aboard "Beagle" theorized that the parallel roads of Glen Roy were caused by the action of the sea. Louis Agassiz, with his vocabulary derived from his experience of glaciers in Switzerland theorized that retreating glaciers caused the same phenomenon. Bloor refers to the assumption that we all exist in an objective reality that has a determinate structure as the materialist function (Bloor 1991, p.41). Richard Bernstein has declared that relativism, in its strongest form, is the conviction that all materialist functions are relative to "a specific conceptual scheme, theoretical framework, paradigm, form of life, society or culture" (Bernstein 1983, p.8).

This inquiry into the practice of humanistic inquiry has provided a principled

explanation for the problem I had reconciling the interests and values of each young entrepreneur serviced by Canadian Youth Business Federation to the interests and values of the Loan Approval Team. Some form of transcendental thinking had inspired each young entrepreneur who had applied for a loan. The transcendental nature of their inspiration explained the difficulty each entrepreneur had experienced in trying to describe their vision of their proposed venture. Canadian Youth Business Foundation, as an organization, was inspired through a form of teleological reasoning to make the loans to these young entrepreneurs. The Foundation was the product of a desire to build a future base of growth for the Canadian economy. The loan program was a means by which CYBF reified this desire. The members of the Loan Approval Team suffered under the weight of an imposed relativistic process of inquiry. All of them knew that within the context of traditional lending guidelines, none of the young entrepreneurs would qualify for a loan. Over time, however, the Loan Approval Team built a new metaphor of what lending guidelines would look like if they were to make loans to young, unsecured businessmen and women. My position as the coordinator was effectively that of the interpreter, the interested man in the middle, who was trying to make sense of what was going on around himself.

The Interpretive Turn

Interpretation seeks a middle ground between the process of scientific inquiry and the process of humanistic inquiry. This middle ground is seen as a way in which the subjective values of the “unique and ineradicable meaningfulness of human phenomena” (Thompson 1981, p.1) can be studied within an objective framework. The problem faced

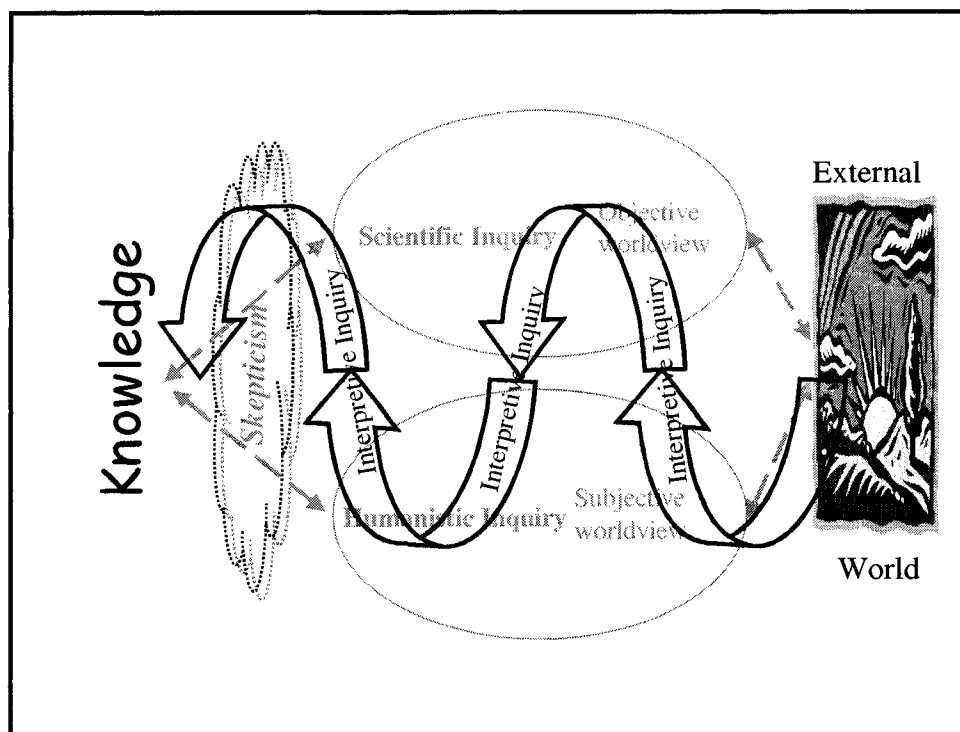
by researchers in the field of the social sciences has been this. If we do not accept the certainty of knowledge; and if we do not accept a system of socially constructed knowledge; then new knowledge will be what we think we know until something else happens to change our minds again. Movement towards the acceptance of this way of thinking as an acceptable third method of inquiry has been termed “the interpretive turn” (Rabinow and Sullivan 1979, p.4; Bohman, Hiley et al. 1991, p.1).

Interpretation, as a method of study, originated as a way of adapting classical legal or theological texts to contemporary situations (Gadamer 1975, p.275). This method of interpretation was dubbed hermeneutics after the Greek word “hermêneuô”, meaning to interpret or to translate. Wilhelm Dilthey, a member of the Frankfurt school of philosophy, sought an epistemological foundation for the objectification of humanistic inquiry (Thompson 1981, pp.37-38) and adopted the technique of hermeneutics (Rickman 1976, p.11). Another member of this school, Edmond Husserl attempted to explain the changing nature of the appearance of the objective world through the metaphor of the cycle of spheres of understanding and reason (Husserl 1958, pp.423-427). Hans-Georg Gadamer connected the pre-conditions of knowledge to the later conditions of understanding through the changing use of language incorporated in the hermeneutic cycle (Gadamer 1975, pp.345-346). However, the concept of pre-conditions of knowledge raised the problem of ethnocentrism in Gadamer’s cycle of interpretation (Hoy 1991, pp.161-167). Pre-conditions of knowledge serve to place knowledge in the context of prejudice or ethnocentrism. Charles Taylor has suggested that expanding the hermeneutic cycle to the level of dialogue can provide a way to move understanding beyond the limitation of ethnocentrism (Taylor 1991, p.310).

Paul Ricoeur has been credited with moving interpretation away from the purely semantic argument of hermeneutics towards a more general theory of understanding (Thompson 1981, p.53). Ricoeur built his theory upon an expansion of the hermeneutic cycle to include a critical consciousness (Ricoeur and Thompson 1981, pp.87-100). Ricoeur explained critical consciousness as the movement or dialectic between explanation and understanding. Explanation concerns the ability to represent meaning in text or discourse (Ricoeur and Thompson 1981, p.146). Understanding concerns the grasp of the intention or meaning of a text or discourse and thus the appropriation of meaning (Rabinow and Sullivan 1979, p.98). Depth of understanding or the movement from naive interpretation to critical interpretation [Thompson, 1981 #1751, p.54] provides another way of overcoming skepticism.

Interpretive inquiry has expanded to include a broad set of epistemological perspectives including deconstructive, hermeneutic, literary, reflexive, structural and symbolic analysis (Lett 1997, p.5). The breadth of these perspectives has led to Gadamer's assertion that "all understanding is interpretation" (Gadamer 1975, p.350). Interpretation offers a third way of dealing with the problem of skepticism. Whereas scientific inquiry attempts to refute skepticism and humanistic inquiry attempts to accept skepticism; interpretation attempts to contextualize skepticism. James Bohman outlined skeptical contextualism as a two-part thesis: (1) that interpretation is universal and (2) that interpretation is holistic (Bohman 1991, p.130). The implication is that no interpretation can be singled out as being uniquely correct since that assertion would be in itself an interpretation. Thus skepticism is neither refuted nor accepted, but rather contextualized within the cycle of interpretation as diagrammed in Figure 3.

Figure 3
The Interpretive Cycle



Rationale for This Study

As outlined in Chapter I of this study, the focus of theory building in the field of entrepreneurship has revolved around either the outcomes of entrepreneurship (Stevenson 2000) or the process of entrepreneurship (Meyer 2001). In Chapter II of this study, the literature of entrepreneurship research has shown that entrepreneurship researchers have tended to not accumulate their research findings (Fiet 2001, p.105; Gartner 2001, p.28).

Raphael Amit and his co-authors have gone so far as to say:

Although instructive in providing factual information about entrepreneurship, the received literature fails to offer answers, anchored in theory, to a range of core questions. What are the factors that induce entrepreneurial activity? Who is more likely to become a successful entrepreneur? How and why do entrepreneurs decide to invest their time,

talent and treasure in their venture ideas? What market, regulatory, and organization environments foster more fruitful entrepreneurial activity? More fundamentally, we simply do not know, *ex ante*, why some new ventures succeed while others fail. (Amit, Glosten et al. 1993, pp.815-816)

Chapter III has outlined a principled account of the rationale that has led past research in the field of entrepreneurship to take the form of scientific inquiry. This study takes the point of view that entrepreneurship research might be better served by utilizing a form of inquiry that incorporates both scientific and humanistic perspectives. The starting point for this study is the concept that entrepreneurship is a generality of the action undertaken by a group of people who identify themselves as entrepreneurs. The “_ship” suffix in the word “entrepreneurship” refers to the ability or skill of the person denoted by the “_ship” (Guralink and Friend 1966, p.1345) in the way that the word “seamanship” refers to the ability or skill of seamen. Thus the study begins with the following preliminary definition:

PELIMINARY DEFINITION:

Entrepreneurship describes the activity of entrepreneurs both generally and normatively.

General description clearly identifies practices. Normative description provides guidance for practice, suggesting the right action for particular circumstances.

This study utilizes interpretive cycles of inquiry to develop an understanding of entrepreneurship. The first interpretive cycle of this study has already been stated. My own experiences as a practicing entrepreneur led to my interest in the study of entrepreneurship and a detailed search of the academic literature. The second interpretive cycle of this study arose from my work as an academic in the field of entrepreneurship. My experiences with researchers and practitioners in the field of entrepreneurship led to

questions about the ways one could better gain understanding of the field. The results of this interpretive cycle have been detailed in the first part of this chapter. The next interpretive cycle in this investigation is a field study that seeks to come to an understanding of the abilities and skills of self-identified entrepreneurs.

The next chapters of this study report an ethnographic investigation of entrepreneurship through the collection and analysis of the oral histories of self-identified entrepreneurs. Ethnography has been described as the inscription of social discourse (Geertz 1973, p.19) and is a tool of the qualitative research technique of participant-observation (Emerson, Fretz et al. 1995, p.1). Clifford Geertz outlines three characteristics of ethnographic description:

...it is interpretive; what it is interpretive of is the flow of social discourse; and the interpreting involved consists in trying to rescue the 'said' of such discourse from its perishing occasions and fix it in perusable terms.
(Geertz 1973, p.20)

Ethnography attempts a holistic rendering of the subject matter relating discourse to its socio-cultural setting (Stewart 1998, p.11). The goal of good ethnography is to articulate both the discursive and the presentational (Langer 1942, pp.75-94) representations of the subject it studies.

Ethnographic research is particularly suited to the study of entrepreneurship (Stewart 1991). The entrepreneur's pursuit of opportunity occurs in a fluid socio-cultural setting (Glade 1967, p.248), involves tacit knowledge (Baumard 1999, p.102), is dependent upon social networks (Reynolds 1991, p.63) and is focused in action (von Mises 1949, p.254). Ethnographic fieldwork has been shown to be effective in gaining understanding of fluid socio-cultural settings (Stephenson 1991), tacit knowledge (Orr

1996), social networks involving wealth (Marcus 1998), and complex action (Malinowski 1922).

Geertz has identified two problems associated with ethnographic research. The first problem he describes as the issue of being there (Geertz 1988, p.8). The ethnographic researcher is expected to produce a convincing amount of cultural detail to persuade the reader of the verisimilitude of his or her text. However, the researcher is also expected to preserve his or her objectivity, clearly distinguishing between being there and being one separated from the phenomenon and thus objective (Goodenough 1970, pp.98-112). The second problem identified by Geertz (Geertz 1988, p.17) is the discourse problem: what is the work that the author authors? Roland Barthes tackles this issue by looking at the levels at which a text can be authored: as a constituent of a genre, as a device for understanding, as a determination of reality, or as a collection of the words of others (Barthes 1989, pp.56-64). Edward Bruner suggests all ethnographies are guided by implicit narrative structures (Bruner 1986, p.139) and consequently must be seen as merged subjective/objective interpretations of the dominant narrative structure of the time (Bruner 1986, pp.149-150). This study makes use of oral history as a particular form of ethnography in an attempt to resolve these important issues.

Oral history collection, as a form of ethnography, is both a very old phenomenon and a very new one. David Henige traces the origins of oral history collection to Homer's 800 B.C. account of the fall of Troy (Henige 1982, p.7). On the other hand, the origin of contemporary oral history collection is credited to Allan Nevins, who established the Columbia University "Great Man" recording project in 1948 (Evans,

1987, p.34; Lummis, 1987, p.17; Nevins, 1996, p.33; Thompson, 1988, p.58). While earlier collections had been undertaken by Lawrence Reddick (1934-1935) and the Federal Writers Project (1935-1943) (Starr 1996, p.43); it was the development of portable tape recorders that led to acceptance of oral histories as a source of historical material and then to the recognition of oral histories as valuable data in their own right (Rosenberg 1978, p.xiv).

Oral history evidence, which is referred to as an actuality (Ridington 2001, p.1), has been defined as "...an account of first hand experience recalled retrospectively, communicated to an interviewer for historical purposes and preserved on a system of reproducible sound" (Lummis 1987, p.27). As a scholarly tool, oral history is an accurate collection of subjective evidence (Moss 1974, p.11) created by the memoirist in dialogue with the interviewer (Moss and Mazikana 1986, p.25). Much of the problem, described by Geertz as the issue of being there, is removed from the ethnographic process by the use of oral history evidence. The actuality documents the lived-in experience of the data collection, and requires little, if any added detail to transmit the verisimilitude of the text. The discourse problem, identified by Geertz, is also reduced through the use of oral history evidence. It is important to recognize that the actuality represents the discourse between its two authors: the interviewer and the memoirist and that the actuality is defined by a particular moment in time (Portelli 1998, p.23). However, within these two bounds, the discourse is clearly identified as a faithful document (Thompson 1988, p.108; Ridington 2001). Life stories are derived from the perceptions of individuals (Thompson 1988, p.150), modified by their interpretation of these perceptions (Grele and Terkel 1985, p.133) after a period of reflection (Friedlander 1998, p.314-318) and are presented

in a form of narrative determined to be suited to the listener (Kopijin 1998, p.145).

Whether or not oral histories are factual is a moot point. What is important for this study is the “thick description” (Geertz 1973, p.6) of the memoirist’s understanding of their entrepreneurial experience: their contemporary consciousness (Lummis 1987, p.133). In this light, the factors of lapsed time and modified perceptions increase the memoirist’s understanding of the phenomenon he or she has participated in (Hoopes 1979, p.47) and thus add to the thickness of the description.

Two factors make life stories unique. First, life stories are not contemporaneous accounts of events; rather they represent the memoirist’s attempt to recount events, as these events were perceived to have happened (Watson and Watson-Franke 1985, p.3). Thus, the story is not an account of events as they happened, but rather an attempt by the memoirist to make sense of his or her relationship to past events, often communicated in the form of a series of anecdotes centered on past events (Allen and Montell 1981, pp.28-29). Second, life histories are not self-initiated, but rather are discourses between the interviewer and the memoirist (Thompson 1988, p.199) and between the actuality and the interpreter of the actuality (Dudley 1998, p.165). While the primary role of the interviewer is to act as a sounding board for the memoirist (Evans 1987, p.26-27), an important secondary role for the interviewer is to act as the mediator who draws societal meaning out of the memoirist’s internalized perception of events (Mintz 1996, pp.302-303). Thus, while the memoirist claims authorship of his or her life history, the interviewer claims authorship of what Edward Bruner describes as “the three tellings of fieldwork” (Bruner 1986, p.147). The first of these tellings is the direction of the memoirist’s recollection by telling what information the interviewer is seeking. The

second telling is the part the interviewer plays in the creation of the actuality: both as a listener and as a questioner. The third telling is the summary and analysis the interviewer creates for the audience of his or her scholarly work.

Articles by Robin Ridington (Ridington 1993) and Ann Miller and Peter Stephenson (Miller and Stephenson 1980) demonstrate the complex interplay of temporality and authorship of life histories. The Ridington article: "A Tree That Stands Burning" combines the authorship of Ridington, the 1911 ethnography of Alice Fletcher and Francis La Flesche, transcriptions of oral traditions, and transcriptions of modern speeches including a speech given by Ridington which combined all of these sources of authorship. Ridington's intent in this article was to bring authorship together in a demonstration of ultimate authority: "a power by which things are brought to pass" (Ridington 1993, p.50). In the process, he interweaves events and the cultural framework of events that took place over more than a century. The Miller/ Stephenson article: "Jakob Hutter: An interpretation of the individual man and his people" overlays a modern dialogue between the two authors on top of three types of analysis of Hutter's life. In this article, authorship shifts from a description of other authors' interpretation of Hutter's life, to an analysis of Hutter's texts by Miller and Stephenson, to a dialogue between Miller and Stephenson centered on their interpretation of Hutter's texts. The goal of this poly-vocal approach is to gain understanding of Hutter's life over the temporal span of four centuries.

The temporal and authorial flexibility of life histories make the medium well suited to the understanding of entrepreneurship (Phillips 1995). The process of new

venture creation often does not conform to linear progression (Hansen and Bird 1997) and entrepreneurs often have to balance their perceptions of present and future (Fischer, Reuber et al. 1997; Eisenhardt and Brown 1998). Similarly the founding of new ventures is often the work of a complex network of founding figures (Aldrich and Zimmer 1986; Weinstein 1999). Joint authorship of organizational life histories help entrepreneurs to explain events without explicit agreement on criteria (Aldrich and Fiol 1994, p.652), develop a cohesive vision for action (Alvarez and Merchan 1992, p.40) and build organizational hegemony (Boje, Luhman et al. 1999, p.358).

Summary

Different ways of knowing can be classified according to the dichotomy of scientific inquiry and humanistic inquiry. Scientific inquiry has been defined as attempts to refute skepticism through a system that builds an objective worldview through justified true belief. Humanistic inquiry has been defined as the acceptance of skepticism through maintenance of a subjective worldview of socially constructed reality. A number of ideological positions within each of these contrasting ways of knowing have been identified.

Interpretation has been identified as an epistemological middle ground between scientific and humanistic inquiry. Interpretation contextualizes skepticism as the problem of transferring understanding through the process of explanation. Implied in the logic of interpretation is that knowledge can only approximate an objective worldview through cycles of critical understanding and explanation. Each cycle deepens the proximity of understanding to a broad socially agreed upon construction of reality.

This study utilizes a series of interpretive cycles to come to an understanding of entrepreneurship. In particular, the life stories of a number of entrepreneurs are collected and interpreted in an attempt to create a new definition of entrepreneurship.

CHAPTER IV

METHODOLOGY

“Perhaps one of the challenges of entrepreneurship research is that we may have to invent some new technologies of doing research in this area if you truly want to understand this domain.”

S. Venkataraman (Sarasvathy 2000, p.37).

As I approached the fieldwork portion of this research project, I found that my experience as a working entrepreneur provided both benefits and difficulties. The chief benefits were a working knowledge of the language of entrepreneurship and an understanding of the culture of entrepreneurship. The difficulty was the pre-conditioned judgments that my working experience imposed. In order to overcome this difficulty, I had exposed myself to a wide range of theory in the area of entrepreneurship. I now set out to gather a diverse set of first-hand accounts of the experience of entrepreneurship. My aim was to keep an open mind through this process.

Data Collection

Approximately 22 hours of interviews with 25 self-identified entrepreneurs were recorded in the course of this research project. The entrepreneurs who agreed to be a part of this study were from a wide variety of industries: clothing, communications, consulting, health care, hospitality, manufacturing, retail, software development, trading and yachting. They ranged in age from 27 years to 76 years. The majority of the entrepreneurs, 13 were American, eight were Canadian and four were immigrants to

Canada from other countries. One third of the entrepreneurs, eight, were women and two thirds, 17, were men. The demographics of the entrepreneurs interviewed are shown in Table 3.

Table 3
Demographics of Entrepreneurs Interviewed

Memoirist	Gender	Nationality	Approximate Age	Primary Industry	Interview Length (min.)
Dodie Eastaugh	female	English / Canadian	52	Personal Care	38
Terry Farmer	male	Canadian	62	Hotels	32
Dave Feinleib	male	American	27	Software	70
Sean Fillion	male	Canadian	30	Retail	57
Pat Hackett	male	American	50	Boatbuilding	19
Diane Haelsig	female	American	62	Software	34
Marilyn Holt	female	American	52	Consulting	54
Jeannette Hughes	female	Canadian	70	Personal Care	95
Tom Keffer	male	American	50	Software	42
Stacy Kuiack	male	Canadian	32	Personal Care	39
Luke Melchior	male	Canadian	30	Retail	54
Tony Melli	male	Canadian	41	Software	58
Stan Miritello	male	American	76	Sales	45
Ron Morgan	male	American	54	Various	54
Dan Newell	male	American	42	Software	95
Peter Newman	male	Welsh/Canadian	56	Manufacturing	65
Sorin Pop	male	Romanian/Canadian	35	Software	40
Nathan Rothman	male	American	57	Trading	86
Chris Stephens	female	American	42	Software	101
Roger Van Dyken	male	American	55	Yacht Sales/Leasing	36
Tim Vasko	male	American/Canadian	40	Internet	49
Shirley Vickers	female	Canadian	49	Consulting	56
Steven Villegas	male	American	30	Apparel	22
Cathie Walker	female	Canadian	45	Internet	41
Lisa Wellman	female	American	60	Internet	45
total					22:07
mean			48		53
std. deviation			13		22

Male entrepreneurs made up 68% of the population of this study. This approximates the finding of the Global Entrepreneurship Monitor study, which found males made up 62%

of the total number of entrepreneurs in the US and 67% of the total entrepreneurs in Canada (Reynolds, Hay et al. 1999, p.24). Table 3 shows a relatively high standard deviation of 27% from the average age of 48. This kind of standard deviation is to be expected if a wide range of subjects had been included in the study.

Selection of Memoirists

Before I began the process of data collection, I did a test interview (which I have included in this study) in order to determine whether or not new information could be uncovered from the study of oral histories. For this test, I chose to interview my cousin Sean Fillion, primarily because I had some depth of knowledge of his life story but also because Fillion and his partner Scott Hendrickson had been recognized as two of Canada's leading young entrepreneurs in the 2000 Business Development Bank of Canada Young Entrepreneur Awards (Arab and Ilchena 2000). Fillion and I met to record his life story in September of 2001. I was surprised to discover the richness of detail included in Sean's narrative. I had expected that there would be some hesitation on his part to share the details of past failures and disappointments in his life. Instead, Fillion shared an intimacy greater than I had ever known from any of my relatives. I had known that Fillion had started his business at the time when his mother's business had failed. However, I had never before known the impact of those difficulties on Sean. He described the stress he experienced at the start of his retail clothing business this way:

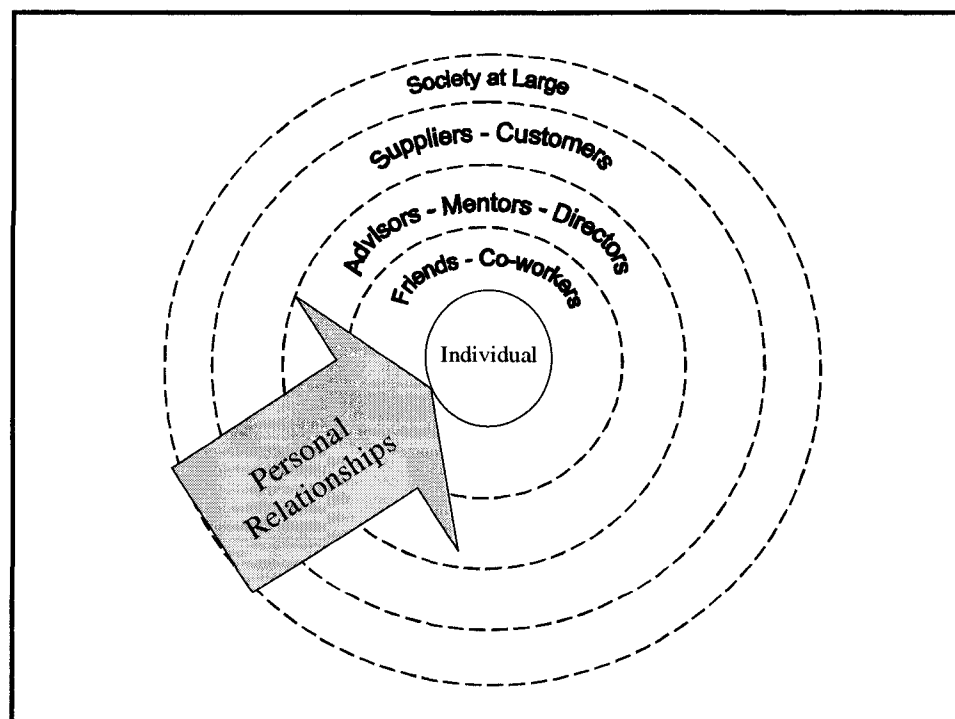
If it didn't make it, Mom and I and Nick and Erica were looking at going on the street because we were all so screwed. Out of all of us, Erica wasn't working, I had the shop and Mom went bankrupt. Nick was the only one working. And that month that we started doing better, they were going to foreclose the house. So, you know it was just will, pure will. Because I could easily have went and worked for somebody else, and

whatever else but I didn't see it that way. I didn't see it that way. (Fillion and McKenzie 2002, 21:20 – 21:49)

The experience of interviewing Fillion convinced me that important new information about entrepreneurship could be extracted from the oral histories of entrepreneurs. However, the experience also led me to the belief that I would have to build personal relationships with each of the entrepreneurs strong enough to warrant their trust as a confidant. In order to do this, I had to make my way through each entrepreneur's social network. An entrepreneur's social network can be modeled as a series of outwardly expanding rings of intimacy (Adler 1985, p.64) as shown in Figure 4.

Figure 4

Model of an Entrepreneur's Social Network



My starting position as a researcher was that of a member of society at large. The path towards a position of trust as a confidant meant building personal relationships with advisors, mentors or directors of the company or with the entrepreneur's friends or members of his or her organization. Four paths were used to build a position of trust with the memoirists selected for this research: friends or friends of friends, introductions from trusted advisors, introductions through networking agencies and social affinity. Eight of the memoirists included in this study were friends or were introduced to me by friends (i.e. friends of friends). This group included Terry Farmer, Sean Fillion, Stacy Kuiack, Luke Melchior, Ron Morgan, Peter Newman, Sorin Pop and Tim Vasko. Two people, who could be considered advisors to entrepreneurs, introduced six of the memoirists to me. These two advisors were Bill Cooke, the President of the Vancouver Island Advanced Technology Centre (VIATeC) and Janis Machala, the President, Northwest Entrepreneur Network (NWEN). Both these organizations provide mentoring and venture capital to entrepreneurs. Bill and Janis introduced me to Dave Feinleib, Diane Haelsig, Tony Melli, Dan Newell, Chris Stephens and Cathie Walker. Five of the memoirists volunteered to be interviewed after receiving a personal message from me through the agency of venture forums. Dodie Eastaugh, Jeannette Hughes and Shirley Vickers introduced themselves to me after I spoke about my research project at a VIATeC meeting. Marilyn Holt and Lisa Wellman volunteered as memoirists after I sent an e-mail message outlining my research project to all the members of the Northwest Forum for Women Entrepreneurs (Northwest FWE). Six memoirists were approached directly without prior personal connection or introduction. However in all of these cases,

some form of strong social affinity was utilized to develop trust. The social affinity was sailing in the cases of Tom Keffer, Stan Miritello, and Roger Van Dyken; ownership of a Valiant 40 sailboat in the cases of Pat Hackett and Nathan Rothman and an interest in kilts in the case of Steven Villegas.

I was surprised to discover how open entrepreneurs were to being interviewed. Only one of the many entrepreneurs I made contact with refused to be interviewed. The one entrepreneur who did not want to be interviewed explained to me that he had been in a Ph.D. program at the University of Washington before pursuing a career as a working entrepreneur. He stated very clearly he did not want to be involved in a study that might promote "...some arcane, removed from practice theory of entrepreneurship..." (Bryant 2002). I felt this opinion constituted rejection of my invitation to be a part of this study.

The success of this approach to the development of trust as a confidant is shown in the interview of Tim Vasko. I have known Tim for five years as a friend and as a colleague in my teaching at the University of Victoria where Tim was the Entrepreneur in Residence. I think both Tim and I were surprised at the level of intimacy he revealed in telling the story of a business failure he had experienced in Denver in the early 1990s. Tim's voice choked with emotion as he said:

It took me 15 years to build a company up to \$30 million or \$25 million or whatever it was and four days for it to crumble. And...uh...I moved to start again, and decided I would go into business again and I moved to Portland Oregon and did a consulting business and so forth; came up with this concept called Convergent Media Network, and I thought this was where the internet was going to go and this is what's going to happen there; but I really didn't have any energy to do anything to be honest...and in...This may be more than you want to know about my personal life. On Thanksgiving in November my wife told me that she wanted me to leave and I found myself out without a family; without a business and the only

thing that happened was that Christmas I got my kids and they have lived with me ever since. (Vasko and McKenzie 2002, 38:24 – 39:50)

More than once, throughout the process of data collection, I reflected on how open entrepreneurs were to my invitation to be interviewed. I wondered if this openness to participate in the experiences of others was a characteristic of entrepreneurs in general, or a reflection of my method of recruitment.

Data Quality

Data quality is usually measured in terms of validity and reliability. Validity is defined as measurement of the accuracy of information and its generalizability (Creswell 1994, p.158). In qualitative research, the construct of validity is generalized to truthfulness of investigation (Kvale 1995, p.25). Reliability has been defined as a measurement of the likelihood of similar conditions giving rise to similar observations (Aunger 1995, p.99). In qualitative research, the construct of reliability is generalized to craftsmanship on the part of the researcher (Mays and Pope 1995, p.110).

Validity

Validity can be broken down into two constructs: internal validity, which concerns the accuracy of information and external validity, which concerns the generalizability of findings. The construct of internal validity in positivist science corresponds to veracity or the degree of correspondence with objective (Kvale 1995, p.23). Postmodern philosophy of science disputes the notion of objective reality (Feyerabend 1975, pp.81-92) and substitutes “spirit of truth” (Ricoeur 1965, pp.189-190) as the measurement of veracity. In this study, veracity has been tested by comparing the

events described in the actuality for conformity with printed records (Allen and Montell 1981, p.85). The construct of external validity in positivist science corresponds to generalizability and is generally treated as a sampling issue in interpretive inquiry (Zikmund 1994, p.259).

Sampling

This study utilized a process of theoretical sampling (Glaser and Strauss 1967, p.45) in the determination of the number and types of candidates to be interviewed. Simply stated, theoretical sampling means that the ethnographer chooses the next people to interview when he or she feels the need for data to compare to the data already collected (Agar 1980, p.124). Barney Glaser and Anselm Strauss refer to this point as theoretical saturation (Glaser and Strauss 1967, p.61).

Overall theoretical saturation was tested by comparing the data collected to a typology of eight entrepreneurial archetypes described by William Gartner (Gartner 1982). These archetypes have been defined as the following. Sales to Consumer: this archetype can be conceptualized as a typical retail store, but can also include Internet sales and manufacturing for the retail market (Gartner 1982, pp.96-100). Putting the Deal Together: this archetype involves the entrepreneur in a process of assembly of the elements of a deal. However, the entrepreneur in this archetype tends to stay out of participation in the day-to-day operation of venture, restricting him or herself to the creation of the deal (Gartner 1982, pp.101-103). The Professional Startup: this archetype provides goods or services that are based on the professional expertise of the owner (Gartner 1982, pp.103-105). Purchasing a Firm: this archetype involves the purchase of a

going concern by an individual with interest or expertise similar to the going concern (Gartner 1982, pp.105-107). The Expert: this archetype involves an individual determining there is a new opportunity in the field that he or she has a great deal of experience in (Gartner 1982, pp.107-110). The Aggressive Service Firm: this archetype involves the entrepreneur offering superior service in an area that the entrepreneur has professional or technical expertise (Gartner 1982, pp.110-113). The Unique Idea for a Product/Market: this archetype involves the entrepreneur spotting an opportunity to bring a unique product to market or to create a unique market for an existing product (Gartner 1982, pp.113-115). The Methodical Startup: in this archetype, the entrepreneur devotes a great deal of time to all aspects of the business. The firm's products or services are not unique, but the firm offers some unique twist in manufacturing or marketing (Gartner 1982, pp115-118).

Table 4 details the ventures aligned to the archetypes and the memoirist whose interview described the venture.

Table 4

Alignment of Ventures to Gartner's Archetypes

Archetype	Ventures Described in Interviews	Memoirist
Sales to	Echohouse	Sean Fillion
Consumer	J. Hughes' husband's business	Jeannette Hughes
	Mountain View Adventure Gear	Luke Melchior
	Gas Station	Stan Miritello
	Alsop division manager	Ron Morgan
	Cargo Jacket	Ron Morgan
	Weirs Beach Resort	Peter Newman
	Clothing Store	Nathan Rothman
	Spring Street Bar	Nathan Rothman
	Valiant Yachts	Nathan Rothman
	San Juan Sailing	Roger Van Dyken
	Sporteze	Tim Vasko

Archetype	Ventures Described in Interviews	Memoirist
Putting the Deal Together	Home Care Supply manager	Shirley Vickers
	Utilikilt®	Steven Villegas
	Vigil Health Management	Stacy Kuiack
	Thumbnail® framing fastener	Ron Morgan
	Port of Bellingham director	Ron Morgan
	China Interface	Nathan Rothman
	Trade Interface	Nathan Rothman
	Getco	Nathan Rothman
	Canal Barge venture	Roger Van Dyken
	VIP Global Capital Inc.	Tim Vasko
The Professional Startup	Holt Capital	Marilyn Holt
	Project Intercede	Jeannette Hughes
	Squarepost Consulting	Luke Melchior
	Advertising Specialty Sales	Stan Miritello
	P&C Engineering	Peter Newman
	Melioro Systems	Sorin Pop
	Vasko Investment Products	Tim Vasko
Purchasing a Firm	Farmer Construction	Terry Farmer
	Doret Hotel	Terry Farmer
	Chariot Manufacturing	Peter Newman
	Crystal Point Software	Chris Stephens
	PowerLine	Tim Vasko
The Expert	Peopleware	Diane Haelsig
	MS Support Group	Jeannette Hughes
	Freelance Author	Jeannette Hughes
	Rogue Wave Software	Tom Keffer
	Ontario Hydro programmer	Tony Melli
	CKM Mediation	Ron Morgan
	HR Consulting	Shirley Vickers
	VIATeC Consultant	Shirley Vickers
	Silly Girl	Cathie Walker
	PR Director	Lisa Wellman
The Aggressive Service Firm	OnDevice	Dave Fienlieb
	Versatile Manufacturing	Peter Newman
	Tony Melli's brother's firm	Tony Melli
	American Tobacco salesman	Stan Miritello
	Progressive Plastic	Peter Newman
	Convergent Media Network	Tim Vasko
	Gas drilling company	Shirley Vickers
The Unique Idea for a Product/Market	Engineered wooden kayaks	Pat Hackett
	Beacon Hill Systems	Tony Melli
	Maximum Separation	Peter Newman
	Tangis	Dan Newell
	Low-cost Housing Venture	Nathan Rothman
Water/gas drilling company	Shirley Vickers	

Archetype	Ventures Described in Interviews	Memoirist
The Methodical Startup	Center for the Easily Amused	Cathy Walker
	Apple VP	Lisa Wellman
	Nightingale Home Support Services	Dodie Eastaugh
	Stay and Save Motels	Terry Farmer
	BlueRidge Motels	Terry Farmer
	DeepCanyon	Lisa Wellman
	Campus CE	Lisa Wellman

It will be noted that a total of 64 ventures have been described in Table 4, two and a half times the number of interviews collected. This is a result of 14 of the 25 memoirists describing their participation in more than one venture during their life stories. Table 4 provides evidence that the data collected for this research fulfills the depth of sampling requirements of theoretical saturation (Glaser and Strauss 1967, p.70). Theoretical saturation has been assured by observing that all categories of Gartner's typology are represented by at least five ventures represented.

Reliability

Evidentiary reliability is an evaluation of the internal consistency of the memoirist's narrative (Lummis 1987, p.83). While remembering that it is the sense-making of the memoirist's relationship to past that is being recorded, each actuality was tested for reliability by ensuring the story had coherence, consistence and was free of contradictions (Fisher 1985 p.364). Reliability in the interpretation of actualities can be much more difficult to establish. Care has been taken in the documentation and the referencing of the interpretation process to ensure that a clear trail of the researcher's work has been left. The design of the documentation of this trail is laid out in the following discussion of protocols used in this study.

Protocols Used in This Study

The primary responsibility of the researcher in this study is an obligation to truth. The protocols outlined in this section are intended to ensure the authenticity of data collection and replication. In all cases, the actuality recorded with the memoirist has been considered the document of reference. Transcriptions have been made of only sections referred to in the documentation and interpretation of the interviews. These transcriptions have been made accurately and without editing grammar or syntax (Davis, Back et al. 1977, p.48-49). Otherwise, the actualities recorded are held to be the oral document of this study.

Authorship

Authorship of interviews has been clearly indicated as: “(subject name) and (interviewer name)”. In all cases, the interviewer has been considered the primary author of the interview, while the memoirist has been considered the author of his or her actual words (Thompson 1988, p.224). Copyright for the recording is held by the interviewer, retaining the rights to publish the recording for the first time, to reproduce the recording in any material form, to rent it out, and to authorize any such acts (Parliament Of Canada 2001, part 2, section 18). However, any royalties received from any recording will be split equally between the interviewer and the memoirist of that recording (Parliament Of Canada 2001, part 2, section 19, subsection 3). Authorship and copyright issues were clearly laid out in the Participant Consent Form.

Ethical Considerations

The cardinal principle of research ethics is respect for human dignity (Medical Research Council, Natural Sciences and Engineering Research Council et al. 1998, i.5). The spoken word is open to interpretation (Borland 1996), which can lead to harm of the subjects. The importance of gaining understanding of the process of entrepreneurship must be balanced against the potential for harm. The memoirists who have participated in this study can reasonably expect minimal risk of harm resulting from their participation in this study. Minimum risk of harm is defined as:

...the probability and magnitude of possible harms implied by participation in the research project will be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research. (Medical Research Council, Natural Sciences and Engineering Research Council et al. 1998, 1.5)

All subjects participating in this study have done so with free and informed consent. Prior to each interview, I presented and read through a Participant Consent Form with each entrepreneur. This form had been reviewed and approved for use by the Office of the Vice-President, Research Human Research Ethics Committee at the University of Victoria. A copy of this form has been included as Appendix I of this study. Each participant was informed that he or she could withdraw from the research project at any time without any consequences or any explanation. Further, it was explained to each participant that he or she would receive a complimentary compact disc copy of the actuality produced with him or her. I asked each entrepreneur to review this complimentary copy to ensure that there was no material that he or she felt should be kept off the record. In the case where there was controversial material in the recording, I

agreed in advance that I would edit the offending material from the Master Original and make a new Master Original (marked Master Original – Edited) and the old Master Original would be destroyed. A new Complimentary Copy would be issued to the memoirist as proof of acceptance of the edit. Only one memoirist requested editing of their interview, and this request was to insert additional material into the interview to aid in clarification of a particular chain of events. This edit was added to the end of the Master Original. Questions from participants about the research project were dealt with openly and honestly. Each participant was required to sign a copy of the Participant Consent Form before the interview process began. I also asked each participant to consent to the donation of their recording to the Aural History Programme of the Provincial Archives of British Columbia by adding their signature to mine on a standard Tape Release Form used by the Provincial Archives (Langlois 1976, p.19). Copies of both the Participant Consent Form and the Tape Release Form were given to each participant.

Recording

Recordings were made with a Sony ECM-MS907 stereo microphone and a Sony MZ-R900 mini-disc portable recorder. The Sony EMC-MS907 microphone is a one point stereo microphone consisting of two uni-directional electret condenser microphones configured with a switchable directive angle of 90 or 120 degrees (anonymous 1996). The microphone offers a frequency response between 100 and 15,000 hertz. The Sony MZ-R900 Mini-Disc portable recorder utilizes Adaptive Transform Acoustic Coding (ATRAC) compression system to store digital signals on a magneto-optical recording

disc using a 4.5mW semiconductor laser (Yoshida 1994). The mini-disc portable recorder disc is capable of recording two channels of information (stereo) through a frequency range between 5 and 20,000 hertz. Recordings were made on Sony MDW74D mini discs; each disc is capable of recording up to 74 minutes of data, and has an estimated archival stability in excess of 10 years.

Documentation

In preparation for each recording, I labeled a recordable magneto-optical disc with the name of the memoirist and the date of the recording. An aural note of the date, location and memoirist recorded in each session was made at the beginning of each session. If the session extended beyond the length of a single disc, a second disc was labeled as soon after the session as was feasible.

Immediately after each session, I thanked the memoirist and activated the play-only tab on the mini-disc in order to protect the disc from erasure. As soon after the interview as feasible, a Master Original was copied from the actuality and an outline was created. A Complimentary Copy was made from the Master Original and sent to the memoirist along with a letter of thanks. The Original Recording was then placed in a safety deposit box and the Master Original was placed in a fireproof storage box.

An outline of each recording was created as a Microsoft Word²⁰ document in which a summary of the memoirist's conversation was noted against a time scale of two-

²⁰ Produced by Microsoft Corporation, One Microsoft Way, Redmond,

minute intervals. The outline of each recording was kept as a separate document filed with the memoirist's first and last name. These outlines contain a summary of the conversation at each two-minute mark in time (McCracken, Bronstein et al. 1974, p.11; Hitch and Norris 1988, p.26). General information, including the memoirist's contact information has been stored in a recording catalog. This catalog was created in Microsoft Access database²¹ software in a format designed to be compatible with B.C. Provincial Archives Aural History document retrievals system standards (Langlois 1976, p.24). The format of the recording catalog is shown in Appendix II of this study.

A separate physical file has been kept for each interview. This file contains copies of correspondence between the interviewer and memoirist, the signed Participant Consent Form, a paper copy of the recording outline and a Working Copy of the interview, as well as any previous or subsequent documentation of the memoirist and his or her ventures. These files are kept in a locked cabinet at the principal researcher's workstation. A working copy of the recording catalog has been stored on the principal researcher's computer; a back-up copy is kept in the locked fireproof box with the Master Original recordings.

Preservation and Archiving

Security of data has been ensured through a strategy of distributed storage. This strategy is based upon data being stored in multiple media formats in multiple locations.

Washington, USA 98052

²¹ Produced by Microsoft Corporation, One Microsoft Way, Redmond,

At the completion of each recording session, the play-only tab was activated on each mini disc, and each was stored in a separate plastic case for transportation to the recording studio. As soon as possible after the recording session, the data on each tape was transferred to an archival compact disc. The process began with conversion of the digital signal to analogue output utilizing the ATRAC compression system. The psycho-acoustic bit allocation and time-frequency splitting algorithms utilized by the ATRAC system resulted in an imperceptible difference between the ATRAC audio output signal and the source audio signal (Tsutsui, Suzuki et al. 1992). The analogue signal was transferred through a shielded cable to the microphone input connection of a Creative Sound Blaster PCI 128 audio card. Goldwave Digital Audio Editor (version 4.24) software²² was used to convert the signal to WAVE format in 16 bit stereo mode at a sampling rate of 44100 hertz. The resulting file was recorded on an HHB brand Compact Disc Recordable (CDR) 74 gold or silver recordable compact disc using Adaptec Easy CD Creator (version 3.5) software²³. HHB CDR 74 gold or silver recordable compact discs have archival stability estimated to be in excess of 100 years. This disc was labeled with the name of the memoirist, the date of the recording and the appropriate identification number as well as the words "Master Original". Two other compact disc copies were made at this time, using any available brand of CDR disc. Each was labeled

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²² Produced by GoldWave Inc., P.O. Box 51, St. John's, NFLD, Canada, A1C 5H5

²³ Produced by Adaptec, Inc., 691 South Milpitas Boulevard, Milpitas, CA, USA 95035

with the name of the memoirist, the interviewer, the date of the recording and the appropriate identification number. One of these was identified with the words: “Working Copy”, the other was identified with the words: “Complimentary Copy”. The medium, storage and access restrictions of each copy of the interviews collected have been summarized in Table 5.

Table 5
Summary of Storage and Access to Recordings

Description	Medium	Storage	Access
Original Recording	Sony MDW74D recordable magneto-optical disc	Safety deposit box	Principal researcher only to create Master Original
Master Original	HHB brand CDR 74 gold or silver recordable compact disc	Locked fire-proof box in different location from Original Recording	Principal researcher only to create Working Copies
Working Copy (number)	Generic CDR 74 recordable compact disc	Locked filing cabinet at principal researcher’s work station	Principal researcher and others with specific permission
Complimentary Copy	Generic CDR 74 recordable compact disc	Delivered to memoirist	Memoirist
MP3 Copy	Generic CDR 74 recordable compact disc	Locked filing cabinet at principal researcher’s work station and computer hard-drive	General

A second working copy of each interview was created from the Master Original in MP3 format using Thompson MP3PRO Player/Encoder²⁴. MP3 is an acronym for Motion Pictures Experts Group Audio Layer-3 (Jones 2000, p.1), an audio coding

²⁴ Produced by Coding Technologies, 707 - 444 Castro Street, Mountain View,

algorithm developed at the Fraunhofer Institut in Germany, which shrinks digital audio signals by a factor of 10 - 12 without perceptual loss of sound quality. Thompson MP3PRO Player/Encoder is a high quality MPEG 3 encoder produced by Coding Technologies and distributed Thompson Multimedia Inc., a partner of RCA Electronics. Encoding interviews into MP3 format allowed all data collected to be stored on one compact disc and on the hard drives of multiple computers to further distribute the data.

All labels were of archival quality to prevent diminishment of the archival stability of the compact disc. The Original Recordings were used only in the creation of the Master Originals (Langlois 1974, p.28). All Master Originals have been stored together in a locked fireproof box (UL rating 350-1/2hr) kept in an environment with a low, constant temperature (8 C – 18 C) and constant humidity (40%) (Linstead 2001). The Master Originals are intended for use only in the creation of the Working Copies.

Editing

Accuracy is the central goal of editing oral history recordings (Wilmsen 2001, p.65). The accuracy of the actuality can be diminished through poor recording quality, mis-statement by the memoirist, or misrepresentation of the discourse of the interview process. My decision to edit an interview would have been made only after discussion with the memoirist or when the memoirist specifically asked that comments made during an interview be kept off the record. No memoirists in this study asked that edits be made after their recording session. Damaged or excess compact discs were destroyed

according to current best practices. This method consists of placing each disc to be destroyed on a non-metallic stand in a microwave oven and subjecting it to 15 seconds of high temperature radiation (Ardant 2000).

Transcription

Transcriptions have only been made of sections referenced in the documentation and interpretation of the interviews. Paul Thompson has pointed out that transcription is a literary form requiring interpretation of the grammar and phrasing of an oral document (Thompson 1988, pp.229-232). In this study, the actuality recorded with the memoirist has been considered the document of reference and so no attempt has been made to transcribe interviews in their entirety.

I have utilized Express Scribe Transcription Playback Software²⁵ produced by NCH Swift Sound was used as an aid to accurate transcription. Express Scribe Transcription Playback Software allows the transcriber to slow down the playback of recordings to an appropriate speed for accurate transcription. The software uses the function keys of a standard computer keyboard to control the playback of a recording. This facilitates the transcriber's ability to stop, rewind and manipulate the speed of the recording without having to remove his or her fingers from the keyboard. Transcriptions have been limited to the quotes used in this dissertation and the accompanying appendices.

²⁵ Produced by NCH Swift Sound, 7 Dines Place, Bruce, Australia 2617

Summary

This ethnographic study of entrepreneurship utilizes a collection of oral histories of 25 self-identified entrepreneurs, from Canada and the United States, to represent the lived-in experience of entrepreneurship. Entrepreneurs were introduced to this study through their social networks in an effort to assure rapport with the researcher. Eight entrepreneurs were friends, or friends of friends; six entrepreneurs were introduced to the study by trusted advisors, five were approached through entrepreneurship networking agencies and six entrepreneurs were discovered through social affinity. Reliability was ensured through the inherent reliability of the medium and careful documentation of re-recording. Testing the data for theoretical saturation using Gartner's typology of entrepreneurial archetypes (Gartner 1982) ensured validity.

Recordings were made using a Sony mini-disc portable recorder. Actualities were transferred to compact disc through an analogue feed through a digital audio editor. An outline of each recording was made at the time of this transfer. Each outline summarizes the narrative against a time scale marked in two-minute intervals. A catalog containing each memoirist's contact information has been created in a format compatible with B.C. Provincial Archives Aural History Program's standards. The original mini-disc recordings have been stored in a safety deposit box and the compact disc masters have been stored in a locked fireproof box. Protocols have been established to ensure respect for the human subjects participating in this study as well as for the quality of data collection and storage.

CHAPTER V

FIELDWORK

“Who was that research
I saw you with last night?
That was no research,
That was my life!”

Peter Reason (Reason 1988, p.18)

In the spring of 2001, I made a decision to stop working as an adjunct faculty member and turn to full-time studies. I had worked full-time throughout the first four years of my PhD program. The experience of working in an academic community had outweighed all the disadvantages of long nights and weekends of study. However, I had come to the realization that, in order to do the field research project I had envisioned, I had to take time away from working. It was with some trepidation that I asked to be relieved from my duties as an Adjunct Professor at the end of the 2000 – 2001 academic term.

In September of 2001, I came to the startling realization that I was no longer an entrepreneur. In order to take full advantage of my self-funded sabbatical, I had forced myself to turn down all offers to participate in projects, no matter how interesting or lucrative they might be. The experience was confusing. I found myself not knowing what to say when people asked me what I did for a living. I wasn't retired and I wasn't really on sabbatical, nor was I unemployed. I met with Peter Stephenson, the chair of my PhD committee and told him how strange it felt to not be working for the first time since I was a teenager. Peter reminded me that full-time studies constituted a job and that I

should get on with it. Peter's advice was taken and from that day on, I referred to myself as a full-time student.

The fieldwork for this research took place in the Spring of 2002. I was eager to re-enter the world of entrepreneurship, even if it was only as an observer. As I waited for the University of Victoria Human Subjects Research Ethics Committee to approve my research, I did the spring maintenance on the boat Molly and I had purchased the year before. "Dorothy" was a 40-foot long, canoe-stern pilothouse sloop built by Valiant Yachts in 1981. My plan was to use Dorothy as a floating home and office while I did the US portion of the fieldwork. In preparation for this trip, I installed a computer on the boat. This computer was equipped with navigation software and the digital audio editing, compact disk recording and transcription software required for this research.

Canadian Fieldwork

On March 14, 2002, I attended a breakfast meeting sponsored by VIATeC. Prior to the meeting, I had asked the coordinator if I might have a couple of minutes to outline my research project and ask for volunteers. These breakfast meetings are relatively intimate, drawing an attendance of 20 to 25 people. Since the coordinator of the meetings has the position of an advisor or mentor to most of the attendees, his introduction of me to the group served to improve the quality of my relationship from a member of society at large to a position equivalent to that of an advisor or mentor. I was delighted to have two people respond to my invitation to be interviewed at the end of the meeting.

The first person I interviewed as a result of the VIATeC introduction was Jeannette Hughes. Hughes began her interview by asking me:

What I need to clarify, first, is if you mean “entrepreneur” that I make a living out of what I do or whether it is how I have been able to accomplish a lot of things, not necessarily making money out of it for myself. (Hughes and McKenzie 2002, 00:25-00:45)

When I responded that, for this study, I was taking a very broad definition of entrepreneurship, Hughes said, "Then I have actually accomplished a great deal, but I don't necessarily set up things to make money for myself" (Hughes and McKenzie 2002, 01:12-01:17). She proceeded to weave a fascinating story of her life: how she managed her husband's brick laying business, designed and built her own home and raised a family all the while suffering episodes of Multiple Sclerosis (MS). Hughes described this period of her life in these words:

And I also set up a business for my husband who is a bricklayer by trade. And we had our own company and I was also doing bookwork for other people. And that led me to a job. That the group that I was doing the book work for got a grant and they hired me to do community development, which I had never actually done that before, but I gave it a shot. And part of what really helped me deal with this at this time, I set up the first MS support group and that was in the early '70s when support groups weren't really a common event. And I had no knowledge of other work that had been going on in other parts of North America, like California there were already a number of things going on down there about support groups but I had never seen anything about it but it came to me at one point in time when I was struggling to get back on my feet from a severe attack of MS. When my...I had so much...so many symptoms that I had no feeling in my whole body from my neck down. So it meant for weeks, I couldn't do anything. I could hardly feed myself. And that's a pretty stressful thing to think about when you have five children. At that point they were about 12 and under. (Hughes and McKenzie 2002, 07:35-09:08)

This experience led to advocacy work on behalf of the disabled and a career in policy planning with the Ministry of Health. When her health and her relationship with her

husband deteriorated, Hughes struck out on her own. She described this experience with these words:

So, when I left my home in Deep Cove in my Mustang with my scooter (laughs) I first, as I mentioned just stayed for the summer with different places and then in September I decided that I was going to move into an apartment. And so I looked for an apartment by myself. I actually asked some social workers to help me when I was in Queenswood for a few days and I decided that I had to change direction in my life, I asked for help and these two social workers came and visited me and they said you know... I said "I need to find a way to re-establish myself in the community." And their only suggestion was about putting me in a group home with young handicapped adults. I said: "Why would I want to do that?" I said: "I need to find a way to survive in the community on my own." Well they didn't really have any suggestions. Like they couldn't look outside the box. (Hughes and McKenzie 2002, 34:58-36:04)

Hughes did re-establish herself in the community. She re-married and started writing non-fiction, producing video documentaries, public speaking and teaching. When she and her second husband moved to Sidney, Hughes became involved in civic politics and was elected to the city council, where she continues to work as an advocate for the disabled. One of Hughes' projects was the advocacy of building into new housing a structure that can easily be adapted to wheelchair access. She described it this way:

This whole thing that I had brought a proposal to town about creating adaptable housing and building it in. And we created...I worked with staff on it... We created it in the way that the developer got a density bonus for doing it. So you didn't have to thump them on the head to do it. They're happy to do it because they made more money out of it because they had more units per hectare for doing it and they had to do 20% of the units had to be adaptable. And we gave the guidelines for what that meant. You know like how much turning room for the kitchens and bathrooms and stuff. And those things that I worked with town staff and created have now gone on. Like in North Vancouver, my original advice...you know...talking with the town planner there has created a whole three-tier bylaw or guidelines to create adaptable housing and, you know, they have changed their whole community. And its like, I didn't know anything about it until I spoke at a conference with this gal and she was the overall speaker and when she came...her name was Cheryl...I just talked to her last week...she gave me this pack of papers and she said 'I

just wanted you to know that all of the work I've done in North Vancouver is a direct result of your advice to me on how we could approach this.”
(Hughes and McKenzie 2002, 86:52-88:27)

Hughes had certainly lived up to her definition of entrepreneurship as “being able to accomplish a great deal.” This idea was repeated in the other interview that came out of my VIATeC introduction.

Shirley Vickers grew up on a farm in Southern Alberta and “could hardly wait to leave” (Vickers and McKenzie 2002, 01:21) She described what happened when she finished school:

Three days after grade 12, I left and went to the city...as fast as I could go. And I went to Business College then...when I went to the city...to Edmonton. And went to what was called Business College. It was really a secretarial school. Because, women didn't have a lot of choices in those days of what they were going to do. You could go into be nursing or secretary or a teacher basically is how you were guided. It's not that you couldn't. I'm sure you could have, but, you know where I grew up, it was still pretty traditional. And so those were kind of the options that were presented to me...of what you could do with your life. (Vickers and McKenzie 2002, 01:23-02:08)

Vickers worked as a secretary at University Hospital in Edmonton, but her career as a secretary was short-lived, because, as she said, "it was so boring." (Vickers and McKenzie 2002, 03:14). She trained as a respiratory technician because she saw they “didn't stay nailed down in one spot in the hospital” (Vickers and McKenzie 2002, 04:17). This led to a 14 year career in the respiratory therapy clinic of a Vancouver Island hospital. Vickers left the hospital for a better job working for a private firm. She described the change this way.

And I went to work for a company here. I was supposed to be seeing people in their homes who were...as a respiratory therapist. But the person who hired me was actually a businessperson and he said to me after I'd been there a couple of days that I was going to be doing sales and

marketing. And I said, "I can't do that, you know I'm a respiratory therapist". And he said "No, I think you can do it...and I'm going to teach you how." And my whole life changed. (Vickers and McKenzie 2002, 12:12-12:44)

Vickers was very successful as a salesperson and was promoted to manager of Vancouver Island division. When the company lost its contract with the provincial government, Vickers was forced to do a turn-around of the Vancouver Island division. This was so successful that her responsibilities were increased to include the lower mainland of British Columbia. Vickers recalled the day, shortly after she had returned this division to profitability, when the Chief Executive Officer (CEO) of the company visited her:

He came out one day to meet with me in my Vancouver office and we had gone out for breakfast. And he said he had decided I should go back to Vancouver Island. To Vancouver Island because the other person who was doing the interior was going to come in...who happened to be a shareholder. It was a privately held company. There were only eight shareholders in the company. He was going to come and do some work in the lower mainland. Well that was where the power was in the company. It was there because that was the revenue potential. And all of a sudden it dawned on me that I had been setup...go in and do the dirty work, get the contract, get things going and then you bring the person who is in the succession line up to generate the revenues and reap the benefits of that. So it was not a happy time, it was not happy for me at all. (Vickers and McKenzie 2002, 32:47-33:49)

Vickers left the company. While looking for another job, she met with the head of a small company that was having problems re-structuring. She described the meeting this way:

I'd gone out with the President for lunch. It was a small company. They were just getting going and doing some re-structuring. And so we'd gone for lunch and I was saying to him he was telling me his problems and I'm going, "Why don't you do this and this and this." And then finally, I said to him, "You know, like you should actually be hiring me to do consulting. You know I should manage this for you and turn this around

the way you want it to go.” And he said, “Yeah, OK.” And I ran home and I remember phoning my friend and said, “I think I'm in business.” (Vickers and McKenzie 2002, 37:33-38:07)

This contract led to the establishment of a Public Relations (PR) consulting company.

Vickers used her talents to help her brother win contracts for his oil and gas drilling business in Alberta and became a partner in this firm.

In 1999, Vickers decided to do an MBA at Royal Roads. When she graduated, in 2001, she continued her consulting work, becoming involved with VIATeC as a human resources (HR) specialist. Vickers is currently working with her brother to develop a new shallow well drilling business. When I asked Vickers if she could see a common thread tying her entrepreneurial career together, she replied:

I see opportunity. Where other people can see a problem or an obstacle, I can see that, but I can see an opportunity. And, I don't know why that is, but in every instance, like all of those things that would be the common thing. Whether it was setting up a pulmonary rehab programs because I happened to have a need for different kind of hours than others because I had a different kind of life. I saw I saw a need and so I came up with this idea to fill that need. Or, whether if it's doing this, that we've done with the oil company. We've built a rig that can drill either water or shallow gas. So, we know that there is a need for water wells, you know. Ok, there's a need for gas now, but there's an opportunity there, where other people will see oil prices dropping and so they don't build things now. I don't know, I can just do that. (Vickers and McKenzie 2002, 51:12-52:29)

My next interview was with Terry Farmer, a member of a long-standing Victoria family business involved in construction, Farmer Construction Ltd. The interview began with a pattern I was beginning to develop: walking through the Participant Consent Form and asking for a signature, then explaining that my research involved collecting the life stories of entrepreneurs. Farmer was surprised that I was really interested in his life story, rather than his corporate story. He started the interview by saying: “Oh you want

my real life story” (Farmer and McKenzie 2002, 00:33–00:35). It was interesting to note, throughout this interview that, while Farmer was very open in sharing his life experiences, there was a very definite barrier to the amount of intimacy shared. I was offered no insight into the relationships inside the family. Relationships between the family and the outside world were openly discussed, but no glimpse was allowed within the family decision making process. For example, Farmer gave this account of what must have been a very complex family decision:

...at that point I realized that was what I wanted to do. It was more in the hospitality industry. Maybe it was that they were having more fun than I was, I don't know. And so my partners, who are my brother and my cousin and I at the time had just bought out my father in the construction company. And we desperately wanted to buy the Chateau Victoria, my father's interest. But we couldn't afford it and the whole thing was for sale actually and we couldn't afford half or the whole thing because we were paying off the construction company. And we needed a lot of equity for bonding and that and we were fairly young guys and so we didn't have much. So it was sold. (Farmer and McKenzie 2002, 08:08-08:55)

I could have interrupted the interview to ask specifically for more information about this decision-making process, but the cost of this kind of detail would have been a decrease in the overall reliability of the data.

Reliability can be seen as a function of both the phenomenon being observed and the effect that observation has on the phenomenon being observed (White 1990, p.110). Oral history has inherent reliability in that the actuality created through the discourse of the interview represents an accurate account of the encounter (Thompson 1988, p.108, Hoffman, 1996 #1498, p. 91). However, it is important for the interviewer to keep in mind the effect that observation has on the phenomenon being observed. This was my reasoning when I did not press Farmer for more information. My goal was to be an

attentive and empathetic listener (Davis, Back et al. 1977, p.19). George Ewart Evans described the process of minimizing observer effect in this way: “Hang back, and in the silence that follows the speaker will grasp that he is intended to fill it” (Evans 1987, p.27). Trevor Lummis has observed that individuals present different images of themselves to different people at different times (Lummis 1987, p.51). His practice, in response to this observation, has been to accept information with little comment or challenge (Lummis 1987, p.68). James Hoopes concurs with Lummis’ technique, stating the importance of controlling the impression the interviewer makes on the memoirist (Hoopes 1979, p.87).

Terry Farmer grew up in the environment of a family construction business in Victoria. He studied business administration at the University of British Columbia (UBC) and then took a job in Montreal working for a large trust company. In this job, his primary responsibility was to develop financing proposals for large real estate development projects. Farmer returned to Victoria and started a residential construction venture affiliated with his father’s commercial construction company. After assisting his father in building the Chateau Victoria hotel, Farmer decided he wanted to get involved in the hotel business. As he said:

Once it was opening, of course I stepped aside. Because the manager could then get it going, look after the day-to-day operations. But really at that point, I realized that was what I wanted to do...was more in the hospitality industry. Maybe it was that they were having more fun than I was. (Farmer and McKenzie 2002, 08:07-08:29)

Farmer realized that he could not afford to purchase the Chateau Victoria because he had just purchased his father’s construction business in partnership with his cousin and his brother. Instead, he purchased a small rundown motel in Victoria, the Doret. Farmer

turned this business around and then looked for a location for the construction of a new motel where he could apply the service principles he had developed at the Doret. Farmer settled on building his first Stay and Save Motel on the site that had previously been his father's construction yard. The motel was a huge success and Farmer developed similar motels in Vancouver, Kamloops and Kelowna.

Farmer had difficulty finding sites for further expansion of the Stay and Save chain, so he attempted to develop a new strategy around renovating existing motels. This led to the purchase of the Slumber Lodge in Victoria and its re-development into the Blue Ridge Inns concept. Farmer describes the problems he has had with this concept:

We thought if this does well, then we can buy up other existing buildings. Well, it took a while for Blue Ridge to get off the...to do really well. Maybe we spent more money than we should have...I don't know. But today, it does very, very well. So I was extremely pleased. But it took a couple of years to get going. Consequently, I haven't bought any others to retro-fit yet. But eventually we will. (Farmer and McKenzie 2002, 19:57-20:24)

In 1998, Farmer sold the Doret motel. He has recently devoted his efforts to re-branding Stay and Save as the Accent Inns. Farmer and his partners have also purchased a prime downtown location with the intention of building a five star hotel on the site.

The week after my interview with Terry Farmer, I attended a luncheon seminar "What It Takes to Grow a Successful Company in Today's Capital and Corporate IT Spending Markets" which featured Janis Machala, a partner in a Seattle venture capital firm. At the end of the seminar, I approached Machala, and told her about my research project. I asked if she could suggest a few Seattle-area entrepreneurs as prospective interview subjects. Machala was very helpful, and sent me a list of people she felt would

make good interview candidates. I began the process of arranging interviews with these people immediately by sending each of them an e-mail message introducing my research project and myself and inviting them to participate.

That same afternoon, I met with Luke Melchior, an entrepreneur whom Jeannette Hughes had told me I must include in my study. I had corresponded with Melchior via e-mail and dutifully arrived at his home at the appointed time. When I rang Melchior's doorbell, I was surprised to have the door pop open automatically. I was even more surprised when Melchior wheeled up in his motorized wheelchair. As I reached out to shake hands, I realized that Melchior did not have the use of either of his arms or either of his legs. His mobility was limited to being able to turn his head and move his two thumbs. I sat down and began one of my most memorable interviews.

Seated around the kitchen table in Melchior's townhouse, with his orange and white tabby cat on his lap, Melchior began the interview by explaining his disability to me:

In terms of my disability, I guess that's something I've dealt with my whole life. So that with those challenges you know I've always been self-managing a lot and overcoming a lot of barriers. And you know always hearing people say, "No you can't do that you're disabled, you can't do that." And so that's been facing me all my life. I found out I had a disability when I was five years old and that coincided with the time I should have been starting going to school. And at that point they told my parents: "Oh he's disabled, he can't go to regular school. That just won't work. What happens when he needs a wheelchair one day." But my parents persevered and got me into regular school. And so, right from the start, I was always trying to prove myself...that I belonged there. And so I figured that because physically I couldn't keep up with the other kids, I'd concentrate on my mental fitness and concentrate on doing well at school. (Melchior and McKenzie 2002 00:35–01:47)

Melchior has a most captivating smile. His good humor was evident throughout the

interview. He told me about the challenges he had faced in going through college and explained that, during the course of his business administration studies, he had found two partners and developed an on-line retail business, Modern Outpost, with them. Melchior operates this venture out of his house and communicates with his two partners by phone and e-mail. Melchior spoke about the effect computer technology had on his life:

And me...being on the computer is when I'm the most functional. It's when I can type and take down notes and work on documents. For me a computer is essential. If there weren't computers, I would be useless. I wouldn't be able to start any business. So really, computer technology is what has made me viable economically and without that I wouldn't be. (Melchior and McKenzie 2002, 0:29:49.1-0:29:16.7)

In addition to his on-line retail venture, Melchior has developed a consulting business, Squarepost Consulting, which specializes in offering business advice to clients with physical disabilities.

Towards the end of our interview, I took the opportunity to ask Melchior some specific questions. First I asked what he thought was the difference between the entrepreneur and the non-entrepreneur. He answered:

I think it's having the drive but also having the ability to follow through. I mean I see lots of people who are like: 'if I was so and so I could invent that I'd be rich' or whatever. But they don't follow through. So those are dreamers. That's the difference between a dreamer and an entrepreneur. The entrepreneur actually goes and does it. I think that's it. But there are some people who aren't even dreamers, right. Now they're content with the world around them and what they are offered. But I think being a dreamer is the first stage. Having ideas of what you would like to do and then being an entrepreneur is putting your feet on the pavement and going for it. (Melchior and McKenzie 2002, 40:38-41:32)

Melchior was obviously one of those people who had put their feet on the pavement. I wondered what failure meant to this self-assured young man and asked Melchior how he felt about failure. His answer spoke volumes of his inner strength:

I guess it's hard for me to relate because I've been disabled and it's just, you know. It's created huge barriers but it's not a big deal. So I've nothing to fear, you know I've faced death, I've faced everything like...you know...I guess...yeh. I know aside from death itself, I don't what there is to be afraid of, you know. And even that you don't have any control over, so what's the point. So, I don't know, it's hard for me to understand to understand that. (Melchior and McKenzie 2002, 43:46–44:16)

At the conclusion of the interview, I offered Melchior the chance to make any concluding comments. He answered:

I wish I could have done this in a more neat and orderly manner, but it's I guess its hard to...There are so many things that play and so many factors that lead to success or towards success that to try and pinpoint all of those are... I guess it's complicated. (Melchior and McKenzie 2002 48:00–48:34)

I left the interview with Melchior humbled by the strength and integrity of this remarkable young man.

The next day I met with Cathie Walker, an entrepreneur who had been named “Queen of the Internet” (Napoli 1998) by the New York Times. Walker created one of the early portals on the Internet in 1995. She named the site Centre for the Easily Amused and attracted an on-line audience of 500,000 page-views per day. What surprised me was that she had started this venture while working as an employee of the University of Victoria. Walker described the instant hit she created:

It was called “Centre for the Easily Amused” because I always signed my memos at UVic: Cathie Walker Director, Centre for the Easily Amused, University of Victoria. And it was basically, I didn't just want to create a web page that was “This is me, this is my dog, Marilyn Manson rocks.” I wanted to have a purpose, so I thought, “OK well there are a few humor sites out there.” Back then it wasn't just all academic so I thought OK, like I'll make a directory. So I remember I put a picture of Mr. Potato-head on it. CEA, but I put asterisks between the “C” and the “E” and between the “E” and the “A” to make it look pretty. And an introduction and then these links to these other sites in these different categories. And I submitted it to Lycos, Yahoo and Netscape, and Netscape, which was now

in version 1. And Netscape picked it up and Netscape featured it on their what's cool page. And it blew up Islandnet's server. So the site is two weeks old, and it's getting so much traffic that it brings everybody on Islandnet to a halt. And they had to put in a timer, five minutes on and five minutes off. They didn't know what to do because their servers couldn't handle it. And I can't remember how much traffic it was getting, but it was nothing compared to what it was getting a while ago. (Walker and McKenzie 2002, 05:33–06:55)

Walker managed the site part-time on a borrowed computer while she continued as an employee of the University of Victoria. In 1997, she sold her company to a New York firm, Uproar. She described the sale this way:

I didn't sell it to them for a million dollars. I just wanted to change my life. What did I sell it to them for? US \$50,000. Which, at that time was amazing. But again changing my life. I would have sold it to them for ten dollars, just get me out of this secretarial job. (Walker and McKenzie 2002, 13:03–13:19)

As an employee of Uproar, Walker built a team of programmers and developed Centre for the Easily Amused site into a very popular Internet community. Uproar was sold to Vivendi Universal, and Vivendi decided to shut down the site in May of 2001. The loss of her Internet community forced Walker to start another company: Silly Girl. She is currently building the new venture; motivated by her passion for the community she has built. As she described it:

“I'm just doing it because I love it. I mean every time you know you're up until one in the morning, and you're thinking, “I can't do this any more, Maybe I should just admit that it's not going to work.” Then you get a fan letter from an eleven-year-old girl, who says she comes to your site every day and she idolizes you. In fact, she said I was her “roll motel” that's R-O-L-L M-O-T-E-L and she wanted to be just like me when she grew up. That makes it all worthwhile. They send me presents...its just...yeh...its just the greatest thing in the world. And if it makes money, that's wonderful. But if it doesn't, I'm going to keep on doing it anyhow. (Walker and McKenzie 2002, 22:24–23:05)

Two long-term business acquaintances were my next two interview subjects.

Peter Newman was a member of the original Victoria CYBF Loan Approval Team I had set up and continues to be active in this role. Stacy Kuiack has been a long-standing member of Board of Advisors of the University of Victoria's Faculty of Business. Both had responded very positively when I had asked them if they would be available for an interview.

I met with Peter Newman while he was in the midst of moving from one office to another. Once again, I was surprised at how shallow my knowledge of Newman's background had previously been. I did know that he had immigrated to Canada from Britain and had been very successful with his Prince George fabrication company: Versatile Fabrication. However, I had no idea the extent of Newman's entrepreneurial activities. I discovered that he had been involved in furniture manufacturing, automotive retailing, plastics distribution and had even operated a resort.

Newman was born in Cardiff, Wales and as a young man apprenticed to a high precision engineering firm, Price and Offen Limited. He worked for several years as an engineer in the planning office of a gear manufacturing plant and then became general manager of a manufacturing company that was starting production in the Midlands Development Region of Wales. Newman described how he came to start his first venture:

Along came a customer who had a particular piece of tubing he wanted bent that had to fit in the casting for the back of a tractor that was for export to the US. And the machinery we had wouldn't hold the tolerances. This thing conducted the hydraulic oil through this casting and it had about 10 bends in about two feet. So I said to the customer, I said, "Look, if I go and buy a new machine, will you give me the contract to do these things?" So he said, "Sure, no problem." So that's how I started out in my entrepreneurship. I went and bought a new machine, set up and got this

contract to do these parts for this tractor. (Newman and McKenzie 2002, 07:47-08:33)

Newman called this company P&C Engineering. The venture specialized in making high-end bicycle crankshafts and then moved into rollover cages for tractors. However, by 1979 the British economy was weak and Newman had to scramble for business. He had just married and he and his new wife made the decision to immigrate to Canada.

Newman traveled to Vancouver and met a fellow British emigrant who convinced Newman to move to Prince George to run his company, QM Industries. A year later, Newman and a partner started their own fabricating company, Versatile Manufacturing. Newman described the strategy he had employed in this new venture:

We did a few things that nobody had ever done in the past and that's why we were successful. The current system up until that time, had been that when you bought steel for a job, you just bought stock lengths of steel. You bought it in 20s or 40s and what ever you cut off it, you had what they called the bone yard. And the one at PG Fab, where I used to be, was full of we culled about \$100,000 worth of steel out of there when we finally sorted it out one spring. But nobody wanted to go out there and look for a piece of steel. They would just order a new piece. So there was... we decided we couldn't afford to do that. So we changed the way we did things. Or maybe I changed the way we did things. And what we did there was we persuaded...we were lucky. A friend of ours had started up a new steel service, and we said, "OK, we'll give you all of our work, provided that you cut all of our steel to length for us. And we'll give you the cut lengths and all that." Now there's way more work for me because we had to do take-offs on the engineering drawings and give him the cut lengths for every piece of steel. But there was no waste. And then we got him doing all of our burning as well...torching all of our plates...and everything else...and everything else. And the beauty of it was that we had...and then we got him marking...it progressed from there to marking the job number on all the pieces of steel. And so the beauty of it was that when the steel truck arrived it all came like a Meccano set...all cut to length, and all we had to do was assemble it. (Newman and McKenzie 2002, 22:15-23:41)

Newman's low-cost producer strategy was very different from the strategy employed by

other manufacturers of sawmill equipment in British Columbia. By jobbing out many of the functions that commonly were done in house, Newman was able to take on large projects with a small staff. In slack times, his lean production system meant he did not have to lay off core staff. Newman soon bought out his partner and then diversified into other areas. He purchased a company that manufactured car dollies, Chariot Manufacturing, and started a plastics distribution business, Progressive Plastics. In 1989, Newman purchased Weirs Beach Resort in Victoria and moved his family to Victoria in 1994. When I spoke to him, he had divested himself of most of these ventures. Newman explained to me that his current position as General Manager of Maximum Separation Systems was a unique situation for him. It was the first time, since 1984, that he had worked for somebody other than himself (Newman and McKenzie 2002, 36:08 - 36:25). He explained the difference between working as an entrepreneur and working for somebody else in this way:

An entrepreneur...now mind you my wife would tell you now...I only work three days a week for this company because I don't want to interfere with my golf and the other stuff I get involved in...but my wife tells me now that I work in it three days a week and I work on it seven days a week already. An entrepreneur basically never turns off the switch. You are always thinking and you are always looking and you are always watching. Like when you're an entrepreneur, you are always looking for an opportunity all the time. You are always listening to people. You meet people you talk to them you ask them and they say you know I wish I had this or you know how much we pay for this or we buy this from the US. As soon as somebody says that they buy it from the US your ears should prick right up because right now you know you probably can make it cheaper. (Newman and McKenzie 2002, 38:18–39:02)

After the interview, Newman took me on a tour of Maximum Separation Systems. The company manufactures a proprietary filtering system that removes dental amalgam from the wastewater stream, as required by law in most states and provinces. I could tell by

the excitement in his voice that Pete was intrigued by the new industry he had discovered.

The other business acquaintance I interviewed, Stacy Kuiack, was in his twenties when he built Vigil Health Management from a marketing plan he did with a group of University of Victoria MBA students to a venture with 22 employees. Once again, I was surprised at the new depth of knowledge I gained about this remarkable young entrepreneur during the interview. Kuiack began by describing his experiences growing up in an entrepreneurial family. He pointed out there were advantages and disadvantages:

So the good side was I was exposed to a whole bunch of different business issues at a really early age from a whole bunch of different angles. Mostly it was trial by fire. We made a lot of really, really, bad mistakes. Had three mortgages on the house. I remember being ten years old in 1981 and knowing what mortgage rates were because it was a topic of discussion because there was three of them on the house when it was going when we were in a big recession here in B.C. (Kuiack and McKenzie 2002, 04:18–04:39)

Kuiack's own start as an entrepreneur came when he entered the family business at the age of sixteen. He took control of one of the many ventures managed by his family and turned this venture into his own firm in a process which he described this way:

We spun Vigil out of the family business about four and a half years ago. I officially got the boot out of the office cause I was working on the business plan when I was at MPI. It's a technology that was developed in Australia. They came to me while I was the VP at the family group of companies. And I recognized it as a great opportunity that was going to get wrapped up or sacrificed amongst all the other companies that we were running there. The sales cycle is longer; the effort required was a lot more. We had to hire around it: buy programmers and things like that, so it would have died on the vine within MPI. So I pulled it out: one to do my own thing and two as an exit strategy. I was either going to take over MPI or I was going to go somewhere else, so this gave me a good bit of both. So I pulled it over. (Kuiack and McKenzie 2002, 05:30–06:18)

Kuiack negotiated proprietary rights covering the technology of this system from its

Australian developers. The Vigil Health Management System monitors the activity patterns of patients suffering from dementia and Alzheimers disease (Mallet 2002, p.1). Kuiack then built a management team, and worked tirelessly as the venture's salesman. In June of 2000, Vigil Health Management received venture funding from Discovery Capital Corporation. In November of 2001 the company hired an experienced CEO away from a large US health care firm. At the end of the interview, I asked Kuiack what success meant to him. I was surprised by his answer when he said:

For a long time it was a company that was big enough to have its own postal code. I wanted something that got that much mail. But now its every single day 6,800 people have a better quality of life because of our system. And that difference came when my grandfather moved from one site to another and the one that he moved into had a Vigil enabled bed, and so I went and spent nights with him as he was regressing through the ravages of the disease. He eventually passed away suffering from Alzheimers, and that kind of quality of life issue became an intensely personal experience. (Kuiack and McKenzie 2002, 31:39–32:20)

By this time, a full month had passed since I began my fieldwork. I attended another VIATeC breakfast meeting and had a chance once again to talk with Jeannette Hughes. Hughes thanked me for the Complimentary Copy of the interview I had sent to her. Hughes introduced me to Dodie Easthaugh, who had started and currently manages a Home Care business. Easthaugh agreed to be interviewed the next week. At this same meeting, I met Sorin Pop.

Sorin Pop had been one of the students in the entrepreneurship program I developed as my MBA thesis. I had not seen him for over four years, so we caught up on what had happened in each of our lives over the intervening years. Pop agreed to be a participant in my study and we met the next day to record his story. He began the interview by telling me his early history:

At age seventeen, I moved here from Romania. At age seventeen, I was obviously still there and it was under a communist regime and it was a time when I decided that I don't want to live my life in that manner. So I made a choice to find a way to get into the west world. So anyways fast-forward a few years, I finished graduate university in Romania and became an engineer. I had an opportunity to start a PhD there. Worked as faculty, did it for about a year. Got another opportunity to work in Egypt for a joint venture with an Italian company, which I took right away because it was actually a way out of Romania, I guess. So I was looking for a way out. And in the meantime I was applying to different universities in countries like the US, Canada, Australia, UK, wherever English was spoken. So I got admitted to the University of Victoria full scholarship, which was the determining factor of why I came to Victoria. Essentially it was an act of faith or whatever. So again the first years were really determined by my decision to emigrate from Romania. (Pop and McKenzie 2002, 04:50-06:07)

Pop had graduated with a Master of Applied Science degree, finishing his program with the Youth Environment Entrepreneurship program where he had been my student. He thought of starting an engineering consulting firm, but decided to get more experience by working for a large firm. Pop took a position with Parametric Technology Corporation and progressed to managing a group within the firm. Pop lost his job when the company downsized at the end of 2001. He had decided to use this turning point as a time to develop a new business. He described his business concept in this way:

So I guess it was February 1st, 2002, when I just decided it was going to be in improving business processes for small to medium sized enterprises. Specifically, my main goal was to remove what I call intermediate media: that means business that is paper. And again it is by no means a new idea. I just think that my niche would be how this would be applied and who the market would be and how I would actually make it work. (Pop and McKenzie 2002, 11:00-11:36)

I found it fascinating to hear Pop tell me about the steps he was going through in the process of starting his new business. Many of them, I realized, mirrored the lessons I had taught him and the other students in the Youth Environmental Entrepreneurship program.

At the luncheon seminar where I met Janis Machala, I happened to be sitting at the same table as Tony Melli. I had explained to him the nature of my research and he had volunteered to be interviewed. I arranged to meet with Melli at the University of Victoria Graduate Centre. Tony Melli was born and raised in Toronto in an entrepreneurial family. He obtained a Computer Science degree and took part in a number of software ventures with his older brother. He worked for a short time at Ontario Hydro, but found the corporate structure limited his ambition. In his words:

They set up a little section in a department which was applications. And it was basically built around me at the time. But I couldn't manage it, because I was too young. And that was one of the frustrating parts, because there was two of us, in that department of a thousand, who were writing almost all the applications that were becoming...now I'm not talking about all the applications...I'm just talking about a certain class of applications that were small utilities that ...corporate wide. You just write it...corporate wide. Everyone would start using them on the LAN. So it would be equivalent to almost like web things today. That like something, you know really popular that everyone just starts using. So we found it very frustrating that even though we were getting all this recognition corporate wide, we could not go up the corporate ladder because of structure and it just doesn't happen. (Melli and McKenzie 2002, 14:24-15:18)

Melli and his wife moved to Victoria in the early 1990s. His first job in Victoria was consulting work with a local Apple Computer dealer. This led to a number of contracts with the British Columbia Ministry of Forests, and the development of a unique automatic vehicle location software system. Melli and the other programmers involved in the automatic vehicle location software development team started a venture to develop and market an Internet version of the product. They raised \$1 million in the first round of venture financing. Melli describes the following events:

And of course everything was moving very, very quickly. So we had a list of what we had to do to get our second round. So, part of it, as well, was one of the things that happened in between that was getting more clients,

more partnerships, talking to a lot of partners in the States. Talking to European partners. We were thinking it was beyond Victoria. Victoria was no market for us. Neither was B.C., so we ended up partnering with a few companies and we started to go for our second round.

Our second round we started off asking for \$10 million dollars cause we thought that's what we needed, Canadian. In those days that was only \$7 million US, which we thought was going to be easy. No, it wasn't easy. We just couldn't prove to the people that we should get that kind of money. Even though our competitor in the States had raised \$20 million. So that's what we were comparing it to. So we ended up settling for \$5 million. We had signed on 3.5 million and we were about to close off the other \$1.5 million, when one of the partners that we asked if they wanted to invest in us and that was SignalSoft said "Well, what would it take if we were to buy the whole round and buy you out completely?" (Melli and McKenzie 2002, 44:59–46:17)

Melli and his partners sold out to SignalSoft in April of 2000 (Frederick 2000). Melli is currently building a new company, which he refers to as an “incubator on steroids.” He described the kind of opportunities he is looking for:

Going forward one of the things I'm going to look for as we start to build up these other companies is almost what our angel tried to find in us: a couple of bright young people who really believe in what they are doing and aren't quite there yet. (Melli and McKenzie 2002, 55:48–56:05)

I had scheduled my meeting with Dodie Eastaugh right after my interview with Tony Melli. As I drove to Eastaugh's home-office, I could not help but reflect on the wide variety of forms of activity that the participants in my study had all termed to be entrepreneurship. My interview with Eastaugh continued this diversity of form. Dodie Eastaugh probably gave me the most concise life story I have ever heard:

I was born in New York, raised in Connecticut, moved to London, England when I was 10. Grew up in London and went to school there and got married and lived there for 18 years...I was married for 18 years. And then my marriage went sour unfortunately and to my great joy I connected up with my first love, my first boyfriend who lived in Canada. And he said, "Come to Canada." And so that's what I did and I haven't looked back. Canada's been great to me and I love living here. (Eastaugh and McKenzie 2002, 00:50-01:36)

Eastaugh worked for a private school for five years immediately after her arrival in Canada, then moved into home support, which she said she loved. She spent three years as one of the full-time staff of the Commonwealth Games in Victoria. After the Games, she decided to start her own home support agency. Eastaugh's new venture was sponsored by Human Resource Development Canada, a process that she described in this way:

They sponsored my new business and I was able to claim U.I. whilst setting up my business for the first year. So that gave me a buffer and it was a huge help. They put me through marketing and sales and advertising and all sorts of different programs. You have to attend all their lectures to qualify for the program. And you have to write a business plan and do everything by the book. Everything properly. Everything must be done properly and you must have your business registered properly and go through all the hoops in the correct order. So they were just wonderful and great enthusiasm and they helped me get on the right track. (Eastaugh and McKenzie 2002, 09:13-09:54)

Eastaugh has grown her business to the point where she is the largest private home support agency on Vancouver Island. She explained the opportunity she had seen while working as a home support worker:

I remember two instances very vividly and they stuck in my mind and I said if I was ever going to start up my own business I would remember these two instances. And I'll be brief here.

One was a lady and I only visited her once. She sat in a small room and all she did is go from her bed to her chair, which was by the window. And her window, the moment I walked in, she couldn't see out of her window it was filthy. So the first thing I did, I cleaned her window. And she sat there with tears pouring down her face and she said: "Dodie thank you so much. I can see my garden, it's wonderful. You're the best blah, blah blah." Anyways she ended up by telling the agency how wonderful I was and I got supreme you-know-what from the agency because we were not allowed to clean windows. It wasn't on the list on the wall. I was only supposed to make her bed, help her with her bath and give her her lunch. Anyways, so I got in big trouble for that.

And the next lady. I never saw that one again. And the next lady she asked me to mail a letter for her. She had it all ready, stamped, ready to go. She said, "There is a mailbox just outside the front door. Would

you mind posting this in the letterbox?" I said, "No, no problem, no problem." Well of course again I never saw the woman again and this is only a relief position I took. And she said: "Dodie mailed my letter last week, why can't you?" So I got in trouble again for that because we weren't allowed to handle any written material for the client. We weren't allowed to handle money or anything paperwork at all. We could do shopping for them if they gave us the money to go and do shopping that was it. We weren't allowed to mail letters.

So I had those two instances in mind and I thought if I ever get my own company I want to do what the client requires; what they really what matters to them what their needs are. Not necessarily what the supervisor puts down on a sheet on the wall, which we have to follow. So those two things, and I thought I'm going to start my own private agency and do what the client requires. Because, these seniors have so much to give. They have so many stories. And quite often it's just because their sight has been impaired or their hearing or their mobility and they can't stand to make a meal or they need help getting in the shower. Basically common sense. It's a lot of easy stuff. They just need a helping hand. And if you can maintain the independence in the home you're halfway there. As soon as you move a client into a facility, you find that they go downhill really fast because they've lost their independence, or the majority of it. So it's good to see them in their own home. (Eastaugh and McKenzie 2002, 19:24–22:04)

Eastaugh's venture has been very successful, but when I asked her if she had plans to expand, she said that she was thinking more of preparing for retirement.

It was fitting that Tim Vasko would be the last entrepreneur I interviewed in Canada. Vasko asked me, since he was a recent emigrant from the US, "Are you going to categorize me as a Canadian or as an American?" He smiled as I said he was categorized as a Canadian in my research. I recorded Vasko's life story in his third floor Convergent Media Network office. Vasko began his entrepreneurial career when he started a renovation company at the age of 19. He developed a custom t-shirt marketing company, Sporteze, in his third year of university and developed an investment banking company, Vasko Investment Products, after graduation. Vasko did a lot of wheeling and dealing in oil drilling and real estate partnerships. However, his big win occurred during the US

Savings and Loans crisis of the late 1980s. Vasko described how his VIP Global Capital made a great deal of money while unwinding real estate investment partnerships:

I just told people that we're going to need your help to save your real estate....to save your real estate investment. The real estate wasn't all that important to the people who invested. Most of them were doctors, lawyers, high-income individuals. It wasn't the money they had invested they were concerned about. It was this thing called phantom income. When real estate got foreclosed, they would get all of these tax write-offs as if they had sold the property. And what is called the negative capital account would accumulate up and be distributed to them with no cash. According to the IRS tax status they would have to pay tax on it. So they were all trying to protect their tax benefits. So my deal was you keep your tax benefits and I'll keep the real estate. And that's how I'll get paid. And so we put all the money back into real estate and saved the tax benefits until the capital accounts had expired on them. And ultimately I ended up with a portfolio of real estate and that's really how I made my money. And that's how I got started. And, it was the best investment I ever made: of time, work, education or anything. (Vasko and McKenzie 2002, 23:16-24:32)

Vasko used the equity of this real estate base and his financial acumen to build a conglomerate of operating companies under the umbrella name Powerline. However, as I have already detailed in chapter IV, Vasko lost the company in 1996 and moved to Canada in 1997. Vasko spent two years as Entrepreneur-in-Residence to the Faculty of Business at the University of Victoria and then started Convergent Media Network.

Vasko ended his interview by outlining what kept him going:

I think I like to figure things out. I think first and the most, most important thing I like to figure things out and the proof in figuring things out is making a moper. So there's a lot of at least I've seen, in my experience a lot of entrepreneurs, cause most of the people I've done with companies entrepreneurs of one fashion or another, and they were either in a business and they always said, "Well we don't have enough money." And my comeback to that was, "Well what did you do with the money you had in the first place... what's to guarantee that you're not going to make the same bad decisions that you would make if I gave you more money right now?" Then, there's the dreamer types. Like the electronics guy who thought he was a 20 million dollar a year company but was just a

million dollar a year company and he was spending like he was a 20 million dollar company. But yet visionary...but didn't have it. So to me it was the one thing that always tied them together was that I liked figuring things out. I think that's the one commonality. Whether it was figuring out how to go in and do an insurance/financial securities portfolio for somebody to whether it was figuring out, "Oh man, this is a big problem how do you solve this one?" or "...and where's the pony in that pile?" Right! And I think that's the common... I mean if I have to look at myself at this age because there's really no other reason I would have kept going or been persistent. I think that's it. (Vasko and McKenzie 2002, 46:46-48:26)

I was intrigued by Vasko's response. It seemed to me that all of the entrepreneurs I had met so far had derived their success from figuring out a unique and useful solution to a social problem. Vasko's remark about "making a mopery" was his way of saying that the marketplace offers a teleological reward to entrepreneurs for the excellence of their solutions to problems that the marketplace deems to be important.

U.S. Fieldwork

On April 21, 2002, I began the US fieldwork for this research project by sailing to Bellingham WA with my wife, Molly, and our Springer Spaniel Emma. Molly and I spent a day getting the boat settled in Squilicum Harbor Marina. Then, Molly took the ferry back to Victoria to take part in an art show and to bring our car over to Bellingham. Thus, I spent my first week in the US living by myself aboard Dorothy.

Dorothy shared a finger float with a gleaming new sailboat named "Cat's Paw." I soon discovered that her owner's name was Tom Keffer and that he was preparing his boat for a voyage to Alaska. Keffer was experiencing some anxiety over not being able to get his dinghy tied down on deck in a manner that allowed free movement of all the lines controlling the sails. I offered to give him a hand and we ended up spending parts

of the next three days working together on this project. Helping Keffer outfit his boat reminded me of the many days I had spent working with my boat-building clients over the years. There is a pleasant and intimate chatter that develops as you work through the many fourhanded tasks of shipwrighting. Preparing a boat for sea requires a mental process akin to Tim Vasko's "figuring things out." One has to look ahead to the potential difficulties the boat will encounter at sea and always be mindful of the interconnectedness of all the parts of the yacht.

Keffer and I sat down to record his life story aboard Dorothy on April 25, 2002. Keffer grew up in what he describes as a "very rich intellectual household" (Keffer and McKenzie 2002, 03:03–03:07). He did an undergraduate degree in biology and physics at Cornell, but then decided that he was more of a physicist than a biologist. Keffer described the difference this way:

I liked physics because it was more...I liked the sense that underneath it all there was simple models, there to figure out. Biology seems so arbitrary. And I like that as a naturalist. I'm very interested in things like birding and it amazes me as something to watch. But when you get into the nitty-gritty chemistry it's just...it's a lot of disconnected oddball things you've got to memorize and stuff like that. And it didn't satisfy me in the sense that some underlying meta-biological sense to it all. And I think you're using the wrong methods to discover something about life. Whereas physics is...it's a lot purer, it's a lot...the whole point of physics is to simplify, is to create some laws and the vision of the physical world around us that's consistent and yet simple. You know that appealed to me and so that's eventually what I went on to do. (Keffer and McKenzie 2002, 4:43-05:53)

Keffer went on to do a Ph.D. in physical oceanography and geophysical fluid dynamics. He then joined the faculty at Woods Hole Oceanographic Institution. Keffer described the pleasure he derived from being a part of an intellectually brilliant community, "Excellence attracts excellence...wants it around. And man, when you get into that kind

of environment it's very exciting and so I really enjoyed that" (Keffer and McKenzie 2002, 09:43-09:52). After five years in Massachusetts, Keffer took a faculty position at the University of Washington. In his research at Woods Hole and the University of Washington, Keffer had used large numeric models of ocean circulation patterns. These models had been written in Fortran and "survived because of graduate student labour" (Keffer and McKenzie 2002, 11:52 - 11:54). Keffer became intrigued by object oriented programming as a way of building an improved numeric modeling technique. In 1989, he left the University of Washington to develop this idea into a business. Keffer described his business concept:

This technology was 10 to 20 years old in the software world, but never done in the numerical modeling world and I think it was very effective. It worked very well. The problem was though when I did these models, these little modular units didn't exist. I had to write them all. And out of that was the germ of a business idea. That if I could generalize these units into something that had more of a business focus and less of a physics focus; perhaps people would pay for them rather than write their own. So that was the idea behind which I started the business in 1989 with a graduate student buddy of mine. (Keffer and McKenzie 2002, 13:37-14:17)

Keffer pointed out to me that he had never set out to make a lot of money. Primarily, he wanted to get out of academia. He described his goal in starting Rogue Wave Software this way:

I should mention my goal in all of this was not only to get out of academia, but I...one of the things I didn't like about academia is that it's very individual. You succeed or fail on how many papers you write or something like that. Your success or failure is frequently at the expense of somebody else. It's a zero sum game. And I just hated that. I really enjoyed working with other people in this fast-paced environment and that's what I wanted to create. And so my goal in starting Rogue Wave was never really the money. I thought what I wanted was to have maybe 20 really smart people around me and just doing some interesting things and really getting excited by what we were doing. So that was my goal. (Keffer and McKenzie 2002, 16:17-17:06)

The company proved to be very successful growing from \$200,000 in sales in 1992 to \$20 million in sales by 1996. Keffer took the company public in 1996 and acted as the CEO of the company until 1998. He then stepped down from the operations of the company acting as the Chairman of the Board of Directors until a week before our interview (Cole 2002). He describes his decade long experience growing Rogue Wave Software this way, “So it was really a wild and very successful, very fun, exactly what I was looking for type time. Although much more successful than I had expected” (Keffer and McKenzie 2002, 18:33-18:44).

John Drew, one of the members of my yacht club, had given me an introduction to the next entrepreneur I interviewed in Bellingham. I called Ron Morgan and told him that Drew had suggested I meet with him as a part of my research. Morgan agreed to meet at Squaticum Harbor Marina the next day. Morgan came aboard Dorothy, sat down on the swiveling helm seat, accepted a hot drink and started right in on his life story:

I'll give you a few quick examples: One is I'm a twin, supposedly identical. I'm not sure, the doctor just came out of the army and I think he had a drinking problem so we're not sure. We don't look a lot alike, but we think a lot alike. We were very competitive. Like at an early age, I think in the third or fourth grade, we were making plaster of Paris molds and painting them and selling them, and then we sold worms, and you know had paper routes and in high school we went to the local newspaper and were putting inserts in working from 12 o'clock on Saturday night until six o'clock in the morning Sunday morning. So we always I think we always kind of had a good work ethic. (Morgan and McKenzie 2002, 00:43–01:31)

Morgan and his brother attended the University of Colorado in Denver on academic scholarships. While at university, Morgan's brother was in a bad car accident, which changed the relationship between the two brothers. Morgan's brother immigrated to

Australia so Morgan went along to make sure he was all right there. Morgan ended up marrying an Australian girl but returned to the US to study law at Georgetown University. He worked part-time as an assistant legislative clerk in the US Senate during the Watergate era. After graduating from law school, Morgan immigrated to Australia with his wife. However, after a year, Morgan and his wife returned to the US, settling in Centralia Oregon. Morgan worked as a lawyer and as a judge in Centralia until the death of his infant daughter. He describes that time in these words:

And then in '78, my first-born got sick at nine months and with a herpes virus and at thirteen months she died and I just didn't want to do it any more. So I was contacted by a guy named Mike Alsop, who is from up here in Bellingham and I was a fraternity of his at the University of Denver and he knew kind of what I was going through and he says, "Hey why don't you come here?" (Morgan and McKenzie 2002, 08:12-08:40)

Morgan and his wife moved to Bellingham where Morgan assisted the Alsop family in marketing a tape deck cleaner. He built the marketing of this one product into the company's electronics division grossing over \$13 million a year. Morgan joined a group of Alsop employees who left the firm to form their own company, Homex, which marketed a texture gun for applying textured plaster. After two years, Morgan sold his shares in Homex and went out on his own as the Canadian distributor of their products. He also looked around for another product he could develop. Here's how he described what happened next:

About the time I was taking the rights to Canada, I called up my brother-in-law's brother. Now if you can follow this. I'm married to this Australian from Perth, who has a sister. And while I'm in Washington, DC this sister comes and lives with us in Washington DC and works for the World Bank. She meets this good old boy from West Virginia and marries him.

Well the guy from West Virginia has a brother who is now the Richmond...he's on the NBC station for Richmond ...he's the talking head,

you know. And he's just a hoot. And he's been the number one in his market for ages and this that and the other. But he is an incurable inventor. Many times people think I'm the inventor. I go: "No, I'm the fool that puts the money in. I'm not the inventor." This is a guy who's out in his garage regardless. He's going to be farting with something. One time it was a remote car starter for cold days. He's always...over the years...he's calling me.

So I call up my brother-in-law and I go, "What's that crazy brother of yours doing?" He sends me two things. He sends me one is a thing that you can hook in to an amplifier and so you can personalize 'cause his kid plays the guitar and it's too loud. And so he can get the effect. It's actually a good idea and it's a product now. But I didn't want to go in the electronics business.

The other one was this funny little idea and I actually had it sitting out and typical entrepreneurial fashion, I forgot to bring it. But basically...do you have a piece of paper? What he came up with is a machine if you think of a wooden frame...a wooden picture frame. Now, the guy became a picture framer because this is the guy who is the anchorperson on the Richmond TV. He is an inventor; but his wife is an artist. So he became a picture framer so that he could frame his wife's picture frames. So he came up with this idea. A machine that would simultaneously cut out each side of that "H" on the back of the wooden picture frame and then...I did bring a little show and tell, you put it together with one of three sizes of this little part. Called the Thumbnail®. Actually the genius of the thing is the name: "The Thumbnail®." It's now a trademark and it's generic in the industry. (Morgan and McKenzie 2002, 12:47-15:13)

Morgan developed the machinery to cut the mortises in the picture frames and developed the Thumbnail® into an industry standard. Morgan then leased the business to Neilson and Bainbridge, one of the largest manufacturers of frames in the world. He talks of the rewards of this arrangement in this way:

...at our peak we got up to 16 million parts. The irony, and when you see the math you will enjoy it, the irony is that this little part that costs a half a cent. My royalty on the first 10 million each year is 1.1 cents and 0.9 cents thereafter. (Morgan and McKenzie 2002, 23:23–23:42)

Morgan has continued to collect royalties on the Thumbnail® for the past fifteen years.

Unfortunately Morgan's next ventures were not successful. Morgan attempted to

market a plastic liner, called the Cargo Jacket, to owners of sports utility vehicles. The effort was unsuccessful and Morgan was forced to sell his million-dollar house on Lake Whatcom. He got a job as the Director of Properties at Port of Bellingham for four years and then re-wrote his bar exams. A friend suggested that Morgan try doing mediation as a profession. He got approved as a mediator in 1999 and has developed a successful practice, CKM Mediation. Morgan is enthusiastic about his new venture, claiming it is the most fulfilling work he has found: “Whereas in the past, I’ve always been the marketing guy, I’ve never created anything. I created this thing. Totally. And it’s evolved into something I’m driving. And it can go where I want it to go” (Morgan and McKenzie 2002, 44:26-44:37). Morgan ended the interview by referring to his past in this way: “I’ve broken my addiction” (Morgan and McKenzie 2002, 52:51 - 52:53) meaning he had ended his compulsion to develop and promote new products when he discovered the rewards of his new career as a mediator. As I said “good-bye” to Morgan, I could not help but wonder if he had, indeed, broken his addiction. If he had, I wondered why had this new career been such a stabilizing force?

Over the next couple of days, I met more of my neighbors on the dock at Squalicum Harbor. I thought it would be interesting to record a couple of non-entrepreneurial life stories to see how these compared to the stories I had been collecting.

I approached John Reddick, an offshore sailor and airline pilot. Reddick began the interview with this self-description:

Well, I’m an American born in northwest Indiana, about an hour from downtown Chicago. Actually had a little bit of a business spirit when I was younger. Actually tried to start a...actually started a couple of things but they started going so quick I wasn’t prepared to do them when I was

16 years old so I had to bail out pretty quick. But actually I kind of got sidetracked. I always wanted to fly. (Reddick and McKenzie 2002, 00:24–00:50)

Reddick received an engineering degree from Purdue and then joined the Marine Corps becoming an F18 pilot. He spent nine years flying in the US Armed Forces and then became an airline pilot. I found it interesting that this man, who had done such adventurous things in his life, was such a poor storyteller. I had to struggle to get details of what it was like to re-fuel an F18 over the Atlantic in pea soup fog or to sail single-handed through the Caribbean Islands.

I also interviewed Larry Pullar. Pullar was preparing his powerboat for shipping across Canada so that he could motor through the lakes and inland waterways from Ontario to Florida. Pullar had been born, raised and worked most of his career in Bellingham. Pullar became an airframe mechanic and then got his commercial aircraft pilot's license and then a helicopter pilot's license. He moved to Omaha, Nebraska to work as a helicopter pilot shuttling executives, but left after two years because he and his wife missed Bellingham. He planned to move into air traffic control, but ended up working at the Arco refinery in the instrument electrics shop for 24 years. He retired in 1994, at the age of 53, with what he called "a ton of money" (Pullar and McKenzie 2002, 05:48). Again, I was surprised at how such an interesting life story could be told so briefly. Pullar's recounting of his life story took a total of 12 minutes. I concluded, from these two examples that people, who saw themselves as non-entrepreneurs, seemed to have a lesser ability in storytelling. However, since it was not the intent of this study to differentiate between entrepreneurs and non-entrepreneurs, I made a decision not to pursue this line of inquiry any further.

The last interview I did in Bellingham was with Roger Van Dyken. Van Dyken was the founder and president of San Juan Sailing, a company that did sailing lessons, sailboat charter-holders, and sailboat sales. I had purchased my boat from one of Van Dyken's yacht brokers and received an introduction to him from that broker. We conducted the interview in Van Dyken's sales office with the busy sound of receptionists, brokers and customers all around us.

Roger Van Dyken was born in the Central Joaquin Valley of California of Calvinist Dutch hardscrabble farmers who immigrated to the USA. He received a degree in teaching from Dort College. At the end of his college program and at the height of the War in Vietnam, he managed his father's congressional campaign and then joined the Air Force to avoid being drafted into the Army. Van Dyken spent his time in the Air Force doing intelligence work and then worked as an assistant to a congressman in Washington D.C. and as Southern California field director for Richard Nixon's 1972 presidential campaign. At the end of this campaign, Van Dyken moved to Lynden Washington with his new wife, Marlene. Van Dyken worked as a teacher while he and his wife built up a beefalo farm. Van Dyken got involved in a statewide constitutional amendment campaign to allow independent private schools to receive state funding. This campaign was not successful. Van Dyken ran for public office and ended up serving three terms as a member of the Washington State House of Representatives. In 1982, when Van Dyken and his wife founded San Juan Sailing, Van Dyken had a lot of time commitments. As he described it:

At that time I was...I had rented out the farm, but we still had rentals there. So we had six rentals, I was serving in the legislature, I was in the Air Force reserves, I was the director of the One-to-One prison ministry

and I founded San Juan Sailing. (Van Dyken and McKenzie 2002, 12:19-12:38)

Van Dyken started the business as a result of a day's charter-boat rental when he decided to take a break from his busy schedule with his staff. Van Dyken fell in love with sailing, and soon he and his wife bought a small sailboat with two other couples. The group started renting out the boat and Van Dyken felt the calling to do this as a business. Van Dyken pointed out to me the effects that he had felt from being so busy at that time:

As a result, I neglected my wife, I neglected my kids, I didn't give them the investment of time and attention that I they deserved. I was too busy pursuing what I thought was important and neglecting some of those things that were important. (Van Dyken and McKenzie 2002, 12:57-13:14)

Van Dyken was offered space at Squalicum Harbor Marina and developed a business to exploit this site. He described the development of the business to me in this way:

Well, we started with whatever we could do. We recruited some sailboats for the fleet, we offered to teach people to sail, we offered to sell people's boats and we ended with three legs of the stool, mutually supported which have been really the foundation of our business" (Van Dyken and McKenzie 2002, 17:13-17:42)

Van Dyken described some of the lessons he learned from the uncertainty of the early years:

I learned to economize. I learned not to spend money that I didn't have. I never went to the bank for an operational loan. We did go to the bank for flooring loans when I became a new boat broker and we had to undertake the obligation of promising my future income, my home, my car in case we didn't sell the boat. There was a lot of risk involved. But I was young, foolish, full of optimism and didn't have that much...that many assets to...at risk, so we just did it. And there were some tenuous moments in the early, early years. Where I regularly paid more to the bank than to my wife to buy groceries. There were times when I didn't know if I would be in existence in a month. And whether we would change from

homeowners to home renters. But it changed. (Van Dyken and McKenzie 2002, 24:15-25:37)

Roger and Marlene Van Dyken have expanded their business by purchasing a powerboat charter-holder and sales company in Seattle, and by developing a canal touring business in Europe. Van Dyken described the way that he got into the canal touring business:

I referred earlier to the fact that I was investing too much time in other than family. I tried to redeem that by taking a year and a half sabbatical. And due to my nature, I tend to focus on something, glom onto an interest and really spend the time in it. So I knew that I really had to be isolated and do things with my family instead of away from my family. So we took our four kids and got on a plane, landed in Holland, rented a car and went around Holland for ten days until we found an old river barge, 1908, and then cruised that for a year and a half through the rivers and canals of Holland, Belgium. France and Germany. (Van Dyken and McKenzie 2002, 29:56-30:52)

Van Dyken had the pleasure of teaching his own kids “history and geography and lessons of life” (Van Dyken and McKenzie 2002, 33:26). He also took the time to write about his family adventure in a book, “Barging in Europe” (Dyken, Miller et al. 2001). The adventure turned into a company that does brokerage, tours and consulting on barging in Europe.

Molly returned to Bellingham with our car, and we hop scotched the boat and car down the coast from Bellingham to Seattle, stopping in Anacortes and Everett. We moored Dorothy at the visitor’s dock of Shilshole Bay Marina, and began to settle in to the community of Ballard. The first weekend of May is Opening Day for the boating season in Seattle waterfront. All of the Yacht clubs have synchronized their sail-past ceremonies to this weekend, and usually the waterfront is a riot of activity. This year, however, Opening Day was a bust. The weather was windy and raining and the tides were the highest and lowest of the year. We chose not to participate, but drove along the

waterfront to witness the soggy celebrations instead. We found a copy center that had e-mail access, so I was able to firm up the dates and times of my meetings with the entrepreneurs I had been introduced to by Janis Machala.

Molly and I took in the Fremont Street market, walking amongst the covered stalls of food and clothing and exotic merchandise. One of the more unusual sights was a group of young men sporting camouflage kilts, with army boots and muscle t-shirts. We met the owner of another Valiant 40. When he heard about my research project, he recommended that I interview Nathan Rothman, the entrepreneur who had built the Valiant Corporation. I tracked down Rothman's phone number and called to ask him if he would be interested in participating in my research project. He agreed to meet, but said he was busy for the next couple of weeks. We traded phone calls and finally agreed to meet on May 16th.

On May 7th, I drove through Seattle's morning rush hour traffic to Bothell to meet with Chris Stephens, one of the entrepreneurs I had been introduced to by Janis Machala. Stephens greeted me warmly at the offices of Crystal Point Software and we began the interview with her recounting of the early history of computers. Stephens explained that early computing was done primarily on big mainframes. These computers were accessed through terminals referred to as dumb terminals because they had no processing power of their own. When the personal computer (PC) arrived on the scene, in the mid-1980s, the companies selling them discovered that they could justify the cost of a PC if it could replace the mainframe terminal. However, to do this the PC needed a piece of software called a terminal emulator program. Stephens' husband, Fred created this software for a

PC retailer, Computerland. However, because he had created this software for the company, Computerland owned its intellectual property rights. When Computerland went bankrupt in 1986, Chris and Fred Stephens purchased the intellectual property rights to the software. Here's how Stephens described that time:

Fred negotiated with the Computerland owners and we purchased PC Term for \$150,000 and we paid royalties. If it was a single user, it was 10%. If it was a site license, it would be 40%. And we then contacted Ungerman & Bass and our company signed distribution with Ungerman & Bass. So Fred and I found ourselves working out of the bedroom. We had a 4-bedroom house and we set up a little office together in one of the rooms. I would say within a week that working together wasn't going to work, so he moved into another bedroom. So we had two offices in our house. We had literally that night come up with the name of the company, because we had to incorporate so that we could sign the Ungerman & Bass distribution agreement. And we were at some friends house and we were in the hot tub celebrating and I have no idea: something with the champagne and the hot tub and we came up with the name Crystal Point. And so we were fortunate in that we did have a contract, we did have some revenue coming in. And PC Term did have a very small local customer base. (Stephens and McKenzie 2002, 13:25-15:02)

The Stephens worked out of their house for two years developing their software into one of the leading PC emulators. This achievement was even more remarkable considering their lack of advanced education. Stephens described their background:

At first, Fred was the president. After all, this was his product, and I don't know, I think I was vice president, who knows. We had cards made up and we were just so excited. Neither one of us had any background. Matter of fact both of us had dropped out of high school. And Fred received his GED²⁶ in the army and I received my GED when I was 23 or 24. So we had...and we do not have close family, so we didn't have any mentors or close family connections. We had nothing but ourselves. (Stephens and McKenzie 2002. 17:21-17:58)

²⁶ General Educational Development. A GED diploma is considered the equivalent of High School Graduation.

Chris and Fred Stephens took their software to one of the first PC trade shows, held in New York City. This trade show turned into a financial disaster for them. At the end of the trade show, they showed up two hours late to tear down their display and discover that all their equipment has been stolen. Stephens described the situation they discovered themselves in when they got on the plane home:

And I looked down and realized that I had left my purse and briefcase at the ticket counter. And we literally left New York with nothing, nothing...nothing. Nothing.

And that was our first trade show. And we got home we were panicked, because that was Fred's work machine and it was everything. Plus now we had to pay back. The rental company was trying to tell us that we owed them. We had to get a system for our friend. We had to figure out how to get another card (to replace one borrowed from a government agency). And we had no money, zero. We were almost in foreclosure with our house. (Stephens and McKenzie 2002, 26:20-27:09)

Stephens was able to get their insurance company to provide some compensation. She realized that Crystal Point had to focus its marketing on one or two mainframe systems and chose to specialize in systems by Tandem Computers Incorporated. This led to a contract to develop a Tandem terminal emulator for the new OS2 language that was being developed by IBM and Microsoft. When OS2 turned out to be a failure in the marketplace, Crystal Point was given another contract to develop a terminal emulator for Windows. Over time, Stephens was able to develop a brand name for Crystal Point. In 1994, when the new 32-bit technology arrived on the scene, Stephens began negotiations on a different licensing arrangement with Tandem. Tandem claimed that they owned the source code for the terminal emulator software and Stephens responded in this way:

And I finally said to the guy we were dealing with, 'If you think for one moment, that I'm going to let you have the source code; I said you're nuts. I will tear this company down. I will fold this company before I will ever, ever give you the source code. I will fight this in court to my last breath.

Don't mess with me on this one.' And that was the last guy...and they dropped it. (Stephens and McKenzie 2002, 57:24-57:56)

As a result, Crystal Point developed the new version on their own and distributed it directly.

The company grew from \$2.3 million to \$5 million in sales and from a staff of six people to a staff of over 40. Stephens told me that these were the heady days of software development in the Seattle area. To give me an idea of some of the situations she had faced in terms of personnel issues she told this story:

This programmer, this is a guy who is \$60,000 plus...you have...you don't just pay them salary mind you, and great benefits, you have to give them a bonus to meet their deadlines. So now you've got like \$10,000 you're going to pay them if they make their deadlines. So this guy was making more money than I was. It was ridiculous. He comes in to my...who is now my COO. And he says, "You know I don't eat candy and but I chew gum and I would like Crystal Point to buy my gum."

And my COO looks at him and says: "Excuse me?"

And he says: "Well, I don't think its fair. I mean I don't eat candy, and...you know...I chew gum and it helps me to program. It helps me to concentrate. And so I think Crystal Point should buy my gum."

And the COO just...when he told me it was a couple of months later... and I started laughing it was so ridiculous. And I said, "What did you tell him?"

He said, he goes...he's very calm, a very gentle man. And he said, "I just looked at him and I said: Brian, I want you to turn around and I want you to leave my office. And I don't want you ever, ever come back in my office and ask me for gum again." (Stephens and McKenzie 2002, 66:39-68:16)

By 1998, the company was sitting on cash reserves of over \$1 million. However, the software was out of date; terminal emulator software had become a commodity.

Stephens developed a Board of Directors and invited them to develop a strategic plan.

She described the results of this meeting:

And we did an off-site strategic meeting. I was still working with my mentor. And every single person said we should fold. Including Fred.

Because Fred couldn't think of anything to do, I mean any thing new to bring to the table. And he, he's the guy who created...he's the creator. We were sitting on a lot of money and they felt we'd never have that earning power again. Cause terminal emulation was an old technology. At the time...and mainframes were going to be dead and gone...everything was going to client server. And you know, it was discouraging. And we I had scheduled the room in the hotel for four hours and we weren't there an hour...a little over an hour

And I remember, Dale, my mentor came out and he said, "It's pretty clear that we need to fold." And we laughed and you know I thought about it for a couple of days and thought you know it's just not time. I mean I'm personally tired and all the facts that are coming forward are true. I cannot deny the facts and the market. But it's just, for some reason it's just not time. You know there is a certain responsibility you get to your customer base. We're loyal to our customers. What are we going to tell the customer? "Sorry, we're not in business anymore." And then just start taking all this money out? And, what do you tell your staff. Do you start lying to them? Do you...you know it was just...and...I just didn't want to end that way. I didn't do all this just to feel defeated in the end. And that's what it would have felt like to me. (Stephens and McKenzie 2002, 74:06-76:17)

Fred Stephens felt that client server technology would prove to be unreliable for large corporations, and felt that some applications would continue to utilize mainframe computers. He found a piece of software that provided a graphical user interface for legacy mainframe applications, and the Stephens decided to rebuild Crystal Point around the concept of rejuvenation of legacy applications. However, the company was severely impacted by current events: "So now were in recession. We get hit with you know the Y2K - IT budgets being frozen and then of course the disaster of 911. Which really did impact us" (Stephens and McKenzie 2002, 86:46-87:02). Stephens ended the interview on a positive note, telling me that Crystal Point had developed a new release of the new rejuvenation software. She was convinced that the company was poised for new growth.

I did not have any interviews scheduled for the day after my meeting with Chris

Stephens. Molly and I woke up to a beautiful sunny spring day. I was having my morning tea in the cockpit when an elderly gentleman, walking by with a black Keeshound, stopped to talk with me. We talked about boats and I mentioned my research project in explaining what Molly and I were doing moored in Ballard. He introduced himself as Stan Miritello and told me that he was an entrepreneur. When I asked Miritello if he would like to participate in my study, he readily agreed. I poured a cup of tea for Miritello and pulled out my mini disc recorder.

Stan Miritello started his story with a recounting of his grandparents' and parents' immigration to America from Sicily. He could remember being very poor as a child during the depression, and prejudice against Italians. He joined the Coast Guard to get away from the poverty he was experiencing. Miritello spent a great deal of time recounting his experiences during World War II. He was a seaman in both the European and Pacific theaters of war. Miritello's recollections were enthusiastic in the telling and vivid in their detail.

After the war, Miritello said that he was not very motivated to take on a new career right away. He described the experience this way: "I had a chance to go back to school, I didn't right away. I don't remember what I did. I guess I sort of...I guess I didn't want to face a lot of responsibility. I was still scared, and I was a skinny kid" (Miritello and McKenzie 2002, 26:04-26:22). He eventually got a job in sales with the American Tobacco Company through a family connection. He worked there for five or six years before moving on to a job as a plywood salesman. Miritello did very well in this position. He described it this way:

I was doing great. Everything I touched was golden. Everything I touched...I was doing a million a year then, that was 1968. And, if I had stayed, I would probably be doing several hundred million. And I liked it. Everything I touched. I got along with people. But I also didn't think my...I didn't stink, if you know what I mean. And I was sort of a hard guy. I had bought a 60-acre farm, had three horses for the kids, I had a Harley-Davidson. Oh, I've had the sports car, I was doing great. But I was away all the time, and I got lonely, I'd sit in first class, cause the company would let me travel first class. And one day a gal was sitting next to me, I'll never forget it, I was in Omaha and I turned away from her, and I almost had tears in my eyes. I was almost ready to break down. (Miritello and McKenzie 2002, 28:34-29:29)

When the company asked him to move to Michigan, Miritello quit and moved to Florida in 1972, where he opened up a gas station. He did not enjoy the work and so got a job selling condominiums. Miritello said, of this time:

“But things just didn't seem to want to go right. And I got caught up...I was...there was a lot of women. And I knew that was wrong. And I got unhealthy, and unhappy. So I finally left that, and then what happened? Oh I don't remember, and then I had a minute (small) job, and I felt a little better and I became very good at it.” (Miritello and McKenzie 2002, 35:25-35:54. parenthesis added for clarification)

Miritello's wife asked him for divorce during this time, and Miritello drove around the US, finally settling in Seattle to get a new start. He developed a venture selling specialty advertising, which he told me that he continues to operate on a part time basis.

When Miritello left, Molly and I drove in to Ballard to find the library that a dockside neighbor had told us about. One of the shortcomings of living on a boat is that you do not have access to the Internet and I needed to find out if there were any women's entrepreneurship groups in the Seattle area. My list of potential memoirists in the US was heavily male dominated and I wanted to strike more of a gender balance. We found the Ballard Public Library and were given a one-time half-hour of free Internet time as visitors to the community. I found three women's entrepreneurship groups in the Seattle

area, and telephoned each to ask if they would circulate an invitation to their members introducing my study. I was only able to reach one of the groups: the Forum for Women Entrepreneurs (FEW). I spoke to the Executive Director, Penny Harger, who told me she would send a message to the membership if I would e-mail it to her. We returned to the boat and while I was writing this message, we had another visitor.

Pat Hackett was another Valiant 40 owner, visiting Seattle from Portland. I invited him on board to show him some of the modifications I had made to Dorothy. In the process of our discussions, I once again mentioned my research project, and once again discovered that Hackett was an entrepreneur. I was surprised to get two interviews with newly made friends in one day.

Pat Hackett told me he was starting his career as an entrepreneur rather late in life.

In his words:

I've been involved in high technology since the late 70s, and raising a couple of kids. And when my son turned 18, my youngest, I said to myself, "It's time to start doing what I really want to do. Now I'd better start figuring that out." (Hackett and McKenzie 2002, 00:53-01:10)

Hackett had worked in semi conductor manufacturing, implementing engineering concepts as production processes. He explained that his "little niche inside the corporate world" (Hackett and McKenzie 2002, 02:54) had come from growing up with parents who were both professional musicians. He outlined the progression this way:

It was real second nature for me to get into high tech stuff. So I get into test and measurement inside semi conductor manufacturer. And I find that it's almost identical to recording studio technology. You need high bandwidth, high signal noise ration, and you need do it within a reasonable cost. And be able to reproduce reliably and also there's an amazing amount of parallels that I was able to apply from my experience as a musician and recording engineer. Which was something I'd been playing

with since grade school. (Hackett and McKenzie 2002, 02:07-02:49)

Hackett had taken some of the severance he had received from his previous employer, Fujitsu, and used the money to develop a unique method of building wooden kayaks. He had taken the production techniques he had learned in semiconductor manufacturing and had tried to apply these to developing an advanced set of tooling for kayak manufacturing. His expectation was to be able to reduce the time it takes to build a kayak from the industry standard 70 man-hours to about 12 man-hours. Hackett told me he was concerned by how quickly the start-up was draining his life savings, however he was buoyed by the enthusiasm for his kayaks in the marketplace: “All I have to do is to put one of these things on top of my truck and park in a parking lot. And guaranteed within five minutes, I will have someone asking about it. ‘Cause they've never seen anything quite like it” (Hackett and McKenzie 2002, 15:54-16:05). At the conclusion of our interview, I wished Hackett the best of luck with the success of his new venture.

The next entrepreneur I interviewed was a model of instant success. Molly and I were on a sight-seeing drive along 15th Avenue on our way to downtown Seattle when we saw an industrial building fringed with the same camouflage kilts we had seen the young men wearing at the Fremont Street market. We stopped the car and went in to the factory-store to investigate. We spoke to Danielle Villegas, who told us that the Utilikilt® was the invention of her brother, Steven Villegas. When I asked if he might be willing to participate in my study, she called him and reported to us that he was working on his Lincoln, but would be happy to meet with us. Danielle gave us directions to Craig Boatworks and told us we would find Villegas there.

Molly and I drove through an industrial area south of the Ballard Locks and arrived at a run down concrete block industrial building. I didn't have to ask for Villegas; he was obviously the guy in the kilt grinding metal on a chopped 1980s vintage Lincoln. I introduced Molly and myself to Villegas and walked through the pre-interview formalities. He signed the Participant Consent Form on the hood of the Lincoln with a flourish that ended the life of my new ballpoint pen and left an indelible mark in the primer of the car. Villegas began the interview by saying:

Life story is that I knew that I had a purpose. And I knew that it wasn't in front of me: conventional world, conventional school, fitting the mould, getting a job, being a doctor. I was...I achieved high points in school. Wanted to impress the parents and that was about my whole life story. I was kind of a rebel. Not really, I was a closet rebel, I suppose all through growing up. And then, I realized that everyone was just full of shit in high school. And that was it, including the parents, so I gave up on that. I didn't go back to college. And well, it wasn't going to be easy street either. It was like you know when your parents tell you that they are going to put you through school if you go. So if you go, you show up. That didn't happen. They're like, "You pay for school." I'm like, "Come on City College here, can't afford that." And they're like "No, you do it." And I'm like, "Fuck that man." And that was it: trying to impress the parents. That was a whole episode...very limited chapter. And not productive for any entrepreneur, I suppose. Because they are not out working for themselves at that point; they're working to please...what the masses, i.e. the parents or the carry-over what the parents represent. They just want the kid to be a good guy, fit in and not hurt anybody and not make too much noise. So it didn't work. And then I spent an active 15 years looking for what it was I was supposed to do. (Villegas and McKenzie 2002, 01:03-02:45)

Villegas was performing as a busker in Spain when he had an idea that he wanted to buy a bus and turn it into a traveling theatre. He returned to Seattle and got a job as a painter so he could make enough money to buy a double-decker bus. Villegas describes how he was inspired to create the Utilikilt®:

I had wanted this army fatigue kilt with pockets that was washable and nobody had such a thing. So the day I ruined a pair of pants with paint on

them, I was “Well this is my favorite pants. I'm going to chop them up and make a dress out of them, or a skirt.” And I did and then I wore it and everyone was like, you know they didn't really notice, and if they did, they were like “Is that Scottish military?” So I didn't get any shit for that. And I realized that I was getting a lot of compliments. And then when I was hurt, it was well like it would be a good way to make money for this bus thing. The best way to make money is probably this kilt thing. Because it's a great idea...it's just...It's a great idea. (Villegas and McKenzie 2002, 07:39–08:21)

Villegas was injured on his painting job and while he was recovering, he developed the concept for Utilikilt®. He described the next step:

I'd done all the investigating, but the hardest part about it was actually the smallest step, which was showing up at the market and reserving a day and saying ‘I'm doing this’. Not...really betting that I'm putting myself out in the public and it's key, the words that you have to not worry that people are not going to steal a great idea. (Villegas and McKenzie 2002, 08:45-09:10)

The Utilikilt® were a hit at the Fremont Market, and Villegas got some publicity in the local media. However, when CNN picked up the story, he knew that he had a successful company.

And that's when we got into high gear. And we got legally we got some attorneys and got the name trademarked and all this shit. So that's how that went. Pretty quick. Really pretty quick. But believing in myself and committing and not dropping the load. When you felt that you were falling to catch yourself from falling. You hold on to the load and you just keep walking. You're either going to fall down and hurt your knee and keep your load. Or you're going to throw away your load and not hurt your knee. What's it going to be? It's like what an entrepreneur should be thinking or that's what he's got to be doing. And the good ones, I think, just say that the load is far more important than my knee. (Villegas and McKenzie 2002, 10:19–11:07)

Villegas built a team with his girlfriend, his sister and a fourth partner who quit his job as an accountant in Portland to become a part of the men-in-skirts movement. Villegas marvels at the success of his idea, when he said to me:

I mean if men can wear dresses, I mean there's a lot more unbelievable

things out there. There's not many more unbelievable things out there. You know if you were to think about it. It's like would you give a dollar to a man who said: "Hey I'm going to sell men's dresses and it's going to be a booming business." Would you give him a buck. I mean come on...maybe to make him go away ...but...Anything is possible and nothing is too good to be true. (Villegas and McKenzie 2002, 21:48-22:10)

The next day was a busy one. I had scheduled interviews with two of my Janis Machala referrals: Diane Haelsig and Dan Newell. Both meetings were to be in Bellevue, and so Molly and I had scouted out the routes on our sightseeing drive the day before.

I met with Diane Haelsig at her home. She met me at the door with a beautiful Dalmatian. We recorded her life story sitting at Haelsig's kitchen table with her parrot chattering in the background. Haelsig told me she had been raised in Longview, Washington and had moved to the Seattle area to study at the University of Washington. She had lived in the Seattle area ever since. Haelsig dropped her studies after her freshman year to marry and raise a family. She learned to program computers while working at the Physics Institute at the University of Washington. Haelsig worked in a number of senior programming positions, but found that the lack of a university degree limited her progress. Haelsig described going back to school this way:

And then I decided to go back to school because I wanted to go find another job and everybody expected me to have a masters degree and I didn't have a degree. So, while my kids were in high school and beginning college, I went back to school. And, I went to Seattle City College nights and weekends. And I completed my degree one year before my oldest daughter graduated from college. (Haelsig and McKenzie 2002, 08:11-08:49)

During this time at college, Haelsig was inspired by one of her marketing instructors to

start a consulting business. Haelsig accepted a contract to develop a data flow analysis for a sales training company. This contract led to Haelsig developing a software package that automated the training company's scheduling, correspondence, accounting and attendance. This software took a lot longer to produce than Haelsig had expected, so she looked for other markets for it. This led to founding of Peopleware, a company that has grown to 20 employees and annual sales of over \$3 million. Haelsig told me that she has now retired from active management of the company:

When with my husband was diagnosed with aggressive prostate cancer about six years ago, we were both running our own companies. He had an engineering company and I had Peopleware. And we didn't do much but work. And so we decided that maybe we weren't going to live forever and it was time to change our view on life and stuff. And so we promised each other that we would either sell our companies or retire or both. And he was successful in selling his. He sold it to a French company. But I haven't been successful in selling mine. But I did retire. I turned the company over to just a wonderful, wonderful woman who has done a terrific job of running it. Probably runs it better than I ever did. (Haelsig and McKenzie 2002, 24:29-25:22)

I asked Haelsig what she thought might be a common theme that held together all of her adventures. After a long moment of thought, she answered:

Having the courage and self-confidence to confront the problems that look like they are insurmountable. Because, there always seems to be a way over them, around them, under them, through them. And even when you are looking at them from the back going forward, they seem insurmountable, but when its all over and you look back they look like just little bumps on the road. So I guess that's it. You have to have, I think, the courage to know that sometimes you are going to fail, but it doesn't matter. I mean unless you wipe out your net worth, I mean that's a little devastating. But I think as I look at things and said well why did I do something that not many other women do? And a lot of it has to do with the fact that my parents were very, very supportive of me when I was a kid. "You can do anything you wanted to do as long as you are willing to work hard enough." And I really believed that. Sometimes I think I was stubborn, refused to fail and was so stubborn it was probably to my detriment; but that's just the way it is. (Haelsig and McKenzie 2002, 27:43-29:22)

My other interview that day was with Dan Newell. Newell had suggested that we meet at the Tulley's Coffee outlet in Medina, because it was on his way home from his office. I was fortunate to arrive half an hour early for the interview and spent the time searching the room for an acoustically quiet area to record the interview. In spite of my efforts, the tape is frantic with the bustling of this busy meeting place. When Newell arrived, I introduced myself and walked him through the Participant Consent Form. Newell asked if he could have a few minutes to prepare. He took out a pen and paper and for five minutes worked up an outline. Then, he began to tell me his life story.

Dan Newell was the son of an Air Force Colonel. As a child, he had traveled extensively. Newell took an engineering degree at Stanford University, and then interviewed at Microsoft. He described the environment he found at Microsoft at this time:

When I talked to people at other companies, you know I'd say, "How do you like working there?" And they'd say, "Yeh, this is a very good company and I enjoy working here." And when I talked to people at Microsoft, they just said, "TTS GREAT!" (Newell and McKenzie 2002, 03:55-04:08)

Newell's intention when he joined Microsoft was to work for a few years, save up his money and then start a business of his own. He began in the C Compiler group, and then moved into the CD ROM division as one of its early members. This group brought out the multimedia encyclopedia, Encarta, the interactive movie guide, Cinemania and the reference software, Microsoft Bookshelf. Dan says that he got sidetracked from his intention as the stock became more valuable over time. He tracked the growth of Microsoft in this way:

I had a little chart outside my window that plotted the course of Microsoft. And you know the next year was like \$70 million a year in revenue coming from \$30 to \$35 million. And Oreo cookies were \$90 million. And we were on our way to Bumblebee Tuna, which was about \$230 million. And, it kind of put Microsoft in perspective. I mean, just to think that you're about 18 inches of shelf space in a grocery store relative to what the food industry is and yet the grocery store is only one store on the block. It was really within the world of microcomputer software, Microsoft sort of vacillated number two, number three. It wasn't number one until later. (Newell and McKenzie 2002, 0:41-11:32)

The CD ROM division got re-organized and Newell found himself working under a supervisor that he did not respect. He decided to leave Microsoft, describing his financial situation as "...you know...30 years old...\$2 million it's not too bad" (Newell and McKenzie 2002, 21:33-21:35). Newell remodeled a 1906 house, traveled extensively and took a number of courses. However, he describes his activities as discrete events because each only involved a limited commitment of time. In contrast, he described things like deciding to do a law degree or start a business as choices, which have consequences. Over time, a sense of uneasiness crept into Newell's life. He described it this way:

The end of the day would go and I hadn't done anything. And it was an interesting time because it really forced me to learn to balance those choices and provide my own self-direction...you know, become self-directed. This is the choice I make. Nobody is telling me, nobody is tracking me, nobody is setting expectations. And you're never going to be reviewed on what I do and it's going to be up to me. And it's a freedom. And, an opportunity to have that kind of freedom and challenge, a lot of people don't get. And, one of the things I learned is, in the end people say 'Well I have to do my job' and you know 'like I've got a mortgage'. And I came to learn that 'no', you have absolute freedom to do whatever you want. I mean you can figure out how to make it work. If you don't want to be a CPA and you want to guide rafts in the Snake River, you can do, you can make a living at it. You're just making other things important. You basically...if you listen, you'll hear that they will put constraints on themselves that mean that all they can do is stay where they are. And so the whereas you really come to learn that those constraints are all self imposed. You are free to choose to a much greater degree than I had ever kind of imagined. So started looking for something to do and I tried to find work which wasn't just paying the bills. I didn't need to work.

Something that was more engaging. Something that I thought was important. I wanted something that in accomplishing it I was doing something significant. (Newell and McKenzie 2002, 23:33-25:34)

In 1992, Newell's brother, who was still working at Microsoft, suggested that Newell come back and join the Broadcast PC initiative. Newell was the lead architect of the group chartered to place a PC in every living room. However, a conflict with a senior VP and a divorce led Newell to leave Microsoft for a second time. Newell decided he would start a software company of his own. He described his vision this way:

I'd wanted to start a software company. And what would it be? I felt like I'd gotten to the point where I didn't just want to do anything. I'm not going to work for, you know, Arthur Anderson and the consulting group setting up back end services for tracking parts running through some, you know, auto plant. I was interested in, I felt capable of, I had some experience in trying to go take product development in directions that people had not gone before. And, you know, operating where there isn't a road map. And I wanted to do something and I also wanted to, if I could, re-create the kind of work environment initially at Microsoft. (Newell and McKenzie 2002, 32:32-33:26)

Newell made a list of business ideas, and explored several of them. In particular, he became interested in film and video, and worked on a number of productions. He found, however, a serious objection to developing a business in the film industry. Newell set out his objections this way:

One of the things that I found is that in the straight film and video, I didn't like the people. That it, and I'm going to be kind of sweeping stereotypes and I feel that this is reasonably true, is there is a core of people who are competent and they know they are and they know who else is and they are constantly having to fend off people who want to get in, who are just posers. In engineering you can't pose. You know, either you know how to write assembly code and do it or not. And a lot of what Microsoft's interview techniques are about is, "OK, here's a problem, do it." And if you can't, I mean if you fail, then you're not...it's not the right place. And, what I found with the people around film and video it's who knows who and "Oh, I can talk with them" and "I'll get the job because I've ingratiated myself with them" or "how can I ingratiate myself with them." It has little

to do with merits, and especially it's not quantitative it's not necessarily results oriented. It's very subjective as to what is and what isn't. And there's often easy and convenient ways to lay blame and everyone is pointing fingers and. But, none-the-less, I really liked the notion of narrative: how to tell a story. (Newell and McKenzie 2002, 34:19-35:52)

Newell developed a company he called XD, which is film editor shorthand for cross dissolve. Within this company, he explored new ideas around which narrative could be explored in what Newell saw as the new media of interactive computing. A friend from Microsoft joined him and the business concept changed to what Newell described as wearable computing. Newell defined wearable computing as:

Right now, when you want to use computing, you go to it. You sit down at a desk, or you pull out a laptop and you sort of kick it off, and you're drawn into that world. You've left the world; you're now dealing with your computer. Wearable computing is more the idea of, "How can computing facilitate whatever you are doing right now?" (Newell and McKenzie 2002, 42:39-43:05)

Newell felt that this business opportunity satisfied his criteria for undertaking an important mission. Newell and his friend re-named the company Tangis in 1996. Newell re-married during this time and set the goal of being able to free himself of the routine of the business. He hired a President for the company, but could not keep himself out of the day-to-day management of the company. Newell also realized that the company had conflicting long term and short-term missions. The long-term mission of the company was to develop a fundamentally new way of harnessing computing power. However, in the short-term the company had to replenish its financial reserves. Unfortunately, Newell tried to raise equity capital in 2000, just as the venture capital market markets were pulling away from technology investments. Newell reduced staffing to cut down on the rate at which Tangis was burning through capital. The general slow-down resulting from

the September 11th 2001 bombing of the World Trade Center forced Newell to put all of his staff on half furlong. On March 10, 2002, a couple of projects that Tangis was counting on for cash flow were delayed. Nine days before Dan Newell and I met, he had laid-off all the rest of his staff. Newell told me he was currently in the process of winding down the organization. He choked with emotion as he said, "I'm an entrepreneur. It didn't necessarily translate into another Microsoft, obviously" (Newell and McKenzie 2002, 65:12-65:18). Newell figured at this point, he had lost between US\$6 million and US\$7 million of his own money on the venture. He summarized the lesson he had learned from the experience:

Microsoft gets to do strategic initiatives because it has \$35 billion in the bank. It can afford to make a few billion-dollar missteps. So what we were doing is really ambitious and had a lot of moving parts, so you know a little chutzpah does not necessarily translate into financial success always. Sometimes you hit a home run, but there was no room for a single to be a success. (Newell and McKenzie 2002, 68:16-68:56)

My surprise at how well Newell appeared to be taking such a significant financial loss was mitigated, at the end of our interview, when I walked out to the parking lot with him. When I said good-bye to Dan Newell, he got into a brand new BMW 745 Li and drove off to his home in Bellevue. I thought of his words:

Right now, I really found, like two weeks ago when I was really shutting things down, just...a real...I... When you're funding, there is a kind of a suspension...I just have to not...I have to trust that we were doing this for a purpose. And I can't look at each cheque. I can't look at how many digits are on that cheque. I have to trust that this has been the right thing to do. (Newell and McKenzie 2002, 87:13-87:47)

Molly and I took the next weekend off from the bustle of living in Seattle. We sailed across Puget Sound to Port Madison and exercised our yacht club's reciprocity with the Port Madison Yacht Club. It was the first sunny weekend of the summer and we

basked in the warmth, while watching young sailors race in dinghies. The next week, I began my interviews with a meeting with another ex-Microsoft employee: Dave Feinleib, who had insisted on meeting aboard Dorothy because he was interested in boats.

Dave Feinleib was much younger than I had anticipated and was absolutely bubbling with energy. Feinleib was the only entrepreneur that I interviewed who asked me for a release, allowing him royalty-free use of the interview. I was happy to oblige, and noted how quickly Feinleib had recognized that an opportunity was being presented to him by my request for an interview. Feinleib began by telling me about his youth:

Well, let's see, when I was twelve, you know we were, we were pretty short on money. Not that we weren't, we were very comfortable, but it was hard to make ends meet. So, coincidentally I met through my mom a guy named Paul, who introduced me to computers. And one of the challenges at that time was how were we going to kind of make ends meet and pay for things for school and pay the rent and then all this stuff. And so computers turned out to be a good way to solve that problem, you know, of keeping life running, as we knew it at the time. (Feinleib and McKenzie 2002, 02:38-03:30)

His friend Paul Mariotti introduced Feinleib to programming in Turbo Pascal. When Feinleib started writing programs on his own in the sixth grade, Mariotti helped him get a job with a small consulting shop in Boston. Feinleib said his programming provided “a good escape from some of the family issues that were going on at the time” (Feinleib and McKenzie 2002, 06:42 - 06:51) and described his experience as a 12 year programmer this way:

It was great! I was bringing in money and building stuff and getting, you know, experience and.... If anything was bad about it, it was a little isolating because you were sort of working and all your friends were out playing. But it seemed. It was fun for me. (Feinleib and McKenzie 2002, 06:06-06:25)

Feinleib and a friend wrote articles for a Boston computer user magazine reviewing new games. When Microsoft Windows was released in the late 1980s, Mariotti gave him a pre-release version. Feinleib began writing programs for this new operating system and discovered a new way of making money:

I wrote these programs and I wrote a program called Winlock. Which turned out to be a fairly popular shareware application. And I remember being over at my dad's and getting the first cheque for \$12. And it was the most exciting thing to me because nobody had ever sent me a cheque before for something I had done. You know I had gotten paid for writing this stuff that someone said please build this thing. But it had never been the case where I had said I'm going to build this thing and put it out there and months later an envelope shows up and there's a cheque. (Feinleib and McKenzie 2002, 11:22-12:03)

Feinleib sold several thousand copies of his shareware suite of windows applications. He presented a copy of this suite to a Microsoft representative at an OS2 user's conference he attended. A few days later, a Microsoft recruiter contacted Feinleib and offered to fly him out to Seattle for an interview. Feinleib ended up working summers at Microsoft between high school and college and throughout his college years. Feinleib described his college years this way:

And I think Cornell, you know sort of gave me some time to mature. You know the business side of me had come a long way and the emotional side of me had been kind of limited while I was growing up. And so I had to have some time to let that fill out. So I think in hindsight it was kind of good to...you always have like one thing that's taking the lion's share of your attention. And so you know I had a little time to let the rest of my identity fill, in while I was at Cornell. (Feinleib and McKenzie 2002, 21:44-22:31)

At Microsoft, Feinleib came to understand how a product development process worked on a large scale. He was given a team to manage and learned the difficult process of coordinating the activities of a group of talented people. Feinleib felt that the problems that Microsoft had with the Department of Justice changed the atmosphere at Microsoft.

He said he had difficulty leaving the company because so much of his identity was wrapped up in Microsoft. However, in July of 2000, he left the company to found his own business.

The new company, named OnDevice, provided monitoring technology for wireless communications. Feinleib and his partners, Brian Moran and Chuck Mount each put up \$50,000 and this money was matched by outside start-up capital. The company developed a product and customers. In September of 2001, Keynote Systems acquired the company in an all-cash deal. Feinleib's reaction to the sale was summarized in this statement:

So when you look back you say "Boy that was great." And the fact that we could get out, you know, and pay back the investors. Everybody got a raise, the office got better, boy, things were. It was beautiful. And it truly was a success. Because we learned a lot, we built this product, we built the team, we had customers, we had from nothing created value and all the pieces that go into value. And somebody else, unknown to us 14 months prior, somebody we had never met before, said 'boy there's a certain value associated with what you...this package of stuff that you've put together and here's money for it.' And so that's that's another incredible thing to me. Boy that's very cool to be able to build something. But it's a much larger building of something. (Feinleib and McKenzie 2002, 48:14-49:17)

The rest of the team stayed with the acquiring company, but Feinleib decided that he wanted to move on and try another venture.

Feinleib approached Ignition, a Seattle venture capital firm, about starting a new company that will build management software for enterprise data centers. The company, which has been named Consera Software, has received funding, hired a salesman and is in the process of developing a product.

My next two interviews were with members of Forum of Women Entrepreneurs

who had responded to my invitation to participate in this research project. Coincidentally both interviews had been scheduled for the same day. The first interview was with Lisa Wellman, the CEO of a company that was right in the middle of a name change. The company had been named @Campus, but had just changed its name to Campus CE as a part of a re-start. We met at the Campus CE offices.

Lisa Wellman began the interview by explaining to me how she had discovered a mid-life career in high technology:

I am of a generation that, and an ethnic background that I did very well in school, but it was for the purposes of doing well in school, not with an idea of a career in fact. I studied to be a teacher because if God forbid something ever happened to my husband, because, of course, I was going to get married and have children, then I would have something to fall back on. And that was fairly common in the late 50s and early 60s. I actually dropped out of school and got married and had two children. And did some nursery school teaching and first grade teaching in private schools and things like that. And decided back in the 70s that I wanted, my brain was atrophying I had as an entrepreneur; I think that I had 12 W2's in one year. That means that I designed needlework, I did marketing surveys, I was the president of the library board, I did enrichment classes for the local school. Quite a number of different things to use the talents and even so I felt that I was not making use of my brain and so when it got to the point of where my children were coming in the door with a: "Hi Mom - Bye Mom" and you know what am I doing here? I went back to school and got my degree. Finished in education psychology because that was where I had the most credits. And graduated in 76 and then looked around for what I was going to do. My husband was in high tech and it seemed to me that if I wanted to have a relationship with him, the kind of partnership I had wanted to have, that I'd better figure out what this was all about because he was talking about nothing but technology and computers. And you know in the mid 70s that was not something that was on everybody's lips. I did one or two things that helped me to dabble in that area and decided to go to Allstate Insurance at that time. (Wellman and McKenzie 2002, 00:55-03:14)

Wellman was trained as an IBM programmer and systems analyst at Allstate. She found the rigid environment at Allstate to be confining and so she moved to a company that was

transitioning to desktop computers. Throughout the 1980s this company downsized repeatedly and with each lay-off, Wellman would be given new responsibilities.

Wellman's husband was transferred to New Jersey and she followed him. Wellman got a job in public relations and traveled extensively promoting the company. As a result of her own high exposure in the graphic arts market, Wellman was recruited by Apple to head up their commercial publishing initiative. Wellman and her husband moved to Cupertino California, this time with her husband following her career. Wellman described her work as an intrapreneur within Apple:

You really are creating the business, and so that's extremely exciting. You get to be quite an entrepreneur within Apple. Especially within the graphics arts market it is a platform that is extremely nice to stand on. So over the next six years, at Apple I went from heading up commercial publishing within the US to heading up the publishing markets and the entertainment and new media markets worldwide as Vice President of that group. (Wellman and McKenzie 2002, 16:48-17:28)

In 1998, Wellman left Apple and took on a number of consulting projects. She was offered a number of positions and finally took on the position of CEO of a company, which was being spun-off from Hewlett-Packard. Wellman and her husband moved to Seattle with the intention of settling there for good. Wellman summarized the problem she encountered with this start-up:

We were trying to develop technology at the same time that we were being content providers. So we were doing two separate things. The overhead was much, much too heavy. I was supporting a full development team. At one point we were up to about 45 people. So our monthly burn rate was huge. And I think that when the project started within HP, I don't think there were tools on the market to serve the business proposition. And they decided very much like Hewlett-Packard, we've got the team, we've got the engineers, we'll develop our own. Within two years or so, when they launched, there were a number of products you know on the market that really could have served our needs. (Wellman and McKenzie 2002, 24:47-25:39)

The company suffered from the technology downturn of 2000 - 2001 and Hewlett-Packard decided to fold the company. Wellman was approached by a group of Seattle venture capitalists to take over the company that became Campus CE.

Wellman said that she has completed a re-start of the company. When I asked her what a re-start was, she answered:

Oh it's a very complex set of steps involving a lot of...it makes a lot of lawyers very wealthy because of all the filings. But, the last funding that the company had received was a secured convertible note. That essentially made...you know kind of was...driving the company to insolvency because we were, even at the time when it was solved; we were never going to be able to re-pay it. So the creditors on that note essentially closed the company and bought the assets and so we have a clean cap table with no outstanding debt. So we restructured the outstanding stock etc. (Wellman and McKenzie 2002, 29:59-30:48)

Wellman described the company as small and struggling. The company provides software that is used in the administration of the resources of continuing education institutions. Wellman believes there will be strong growth in the continuing education market as continuous learning becomes more commonplace.

The second interview that day was with Marilyn Holt. Holt said she wanted to meet with me at Shilshole Marina because she worked out of her home and her husband slept during the day. I met Holt on the dock and invited her to come aboard Dorothy and offered her a cup of tea. She settled down on the settee and in a most relaxed manner began to tell me the story of her life.

Marilyn Holt was born in Tacoma and raised as an only child on a dairy farm. She said that "business was talked at the dinner table" (Holt and McKenzie 2002, 02:53) in her home. After undergraduate degrees in English, History and Education, Holt went

to graduate school at the University of Washington where she studied English Literature while supporting herself by doing technical writing. Holt told me how she became an entrepreneur:

I was sort of forced into it once again going my own way by the economics of the time and circumstance and how I read what people were saying...what society or people or the economy was saying. And basically was saying go out on your own and you'll make your way better on your own. And I made as much money in four months working as most of my friends did working all year long. And so I figured out real fast that there was an economic benefit.

And I did that for several years. And then, I sort of learned that I was the flea on the end of the dog. And I went into doing more business writing. Because while I was doing the technical writing, all those dinners at home, I'm going to wrap around to that first one, all those dinners at home I had learned small business managerial accounting and I understood how banks worked and I understood how money worked and I understood the value of money and that it's only a scorecard. And so that's what I came to starting to work with people who are entrepreneurs and I became...sort of became one myself. (Holt and McKenzie 2002 06:10–07:38)

Holt became involved in the burgeoning technology industry through her technical and business writing. While writing technical documentation for a technology company, she would inevitably be given the opportunity to write business plans for them as well. This would often lead to being asked to help raise money for the firm. Holt was one of the founders of the Northwest Venture Forum and was the editor of the group's newsletter for 10 years. She said that she did not get very rich through this process, and speculated that this was probably because she did not work as hard as she might have. Throughout this time, she and her husband had tried unsuccessfully to have a child and as a result, Holt said, "I would not make any long-term commitments" (Holt and McKenzie 2002, 20:36).

In the early 1990s, a change in the Securities Exchange Commission (SEC) regulations covering venture capital forced Holt to change her business model. She obtained her real estate broker's license and a number of SEC designations. Holt said that when the technology recession of 2000-2001 occurred she recognized the signs: "I know what this looks like, this looks like 1987. I've been here before. I just kept moving on. I started working with people who were trying to figure out how they were going to survive" (Holt and McKenzie 2002, 28:22-28:39).

Holt's father began to experience mental health problems, and she spent a year and a half helping with his care. She described how she carried on her work while nursing her father, "If you're an entrepreneur and if you don't have to be at a shop every day, you carry your business on a laptop. I did my business on a laptop and a cell phone at the United States Navy Hospital" (Holt and McKenzie 2002, 31:46-31:57). Her father's health deteriorated to the point that he would not wake up. Holt re-arranged her life so that she could be with her father throughout the next three months, while he died. She described the role she played:

One of the things I have learned in working in being an entrepreneur in working with people and working with businesses is that you have to shine a light on something and people respect what you shine that light on. People will be more interested in something you illuminate and that you make clear and personally give value to. And so my presence did that. And later his social worker, after he passed away, he passed away about three months later told me that she thought that he got better treatment than the average patient, particularly the average patient who was not able to communicate. Because I was there so much. (Holt and McKenzie 2002, 34:18-34:57)

Upon her father's death, Holt inherited the family farm. She and her husband are currently in the process of re-establishing her life. At the end of the interview, Holt made

a very interesting comparison between literature and business as areas of research. She said:

There's two things in entrepreneurship and business...and I'll just say...that are really, really the same. And one is it's the study of people and the motivation behind a person or a character. The other part of it is problem solving. Because you go through and you're looking at what a work does. My graduate work was on a medieval exegy, a biblical exegesis called Peers Plowman and you have this problem of what did they mean, what did the author mean and it doesn't make any difference if it's Peers Ploughman or if it's Faulkner or John Hawkes or John Barthe or whomever, Doris Lessing, any of these people, when you're reading something and you're looking at something you have to you're trying to understand what people want.

In literature you can go to the author. I know a number of authors. I went to Joanna Russ once and I said, "What did you mean by this?" And she looked at that book and she said, "I read it recently and I have no idea what I was talking about." And she may have a different story on that book now...that was a long time ago.

But the point is that you can't talk about the author and you can't talk about the entrepreneur. You talk about the work and you talk about the business. You try and figure out what each one is doing in its world. And I think it's more fun to play with businesses than it is to play with literature because business change and literature is solid...unless you're reading some interactive thing...it's solid. And you know that book is not going to probably change unless they do a textual intonation of it. But it's still going to be those words and somebody else's words. Criticism the body of criticism will grow and change but that work never will. In a business, it changes every minute of every day. It's just a living thing. It's growing and moving around and but it still has that commonality. (Holt and McKenzie 2002, 41:02-43:17)

The quality of the storytelling abilities of all of the participants in this research project had impressed me. However, fate had conspired to save the best until last: Nathan Rothman proved to be an Olympic-class storyteller. In my field notes, I wrote: "Nathan is young-faced 57 year old with a wonderful sense of energy" (McKenzie 2002, p.73). Rothman sized up my Valiant with the eye of a boat builder. He flushed with pride when I told him how pleased we were to own such a wonderful boat. Rothman

accepted a cup of coffee, made himself comfortable in the helmsman's chair and began his life story.

Nathan Rothman was born in New York City and was raised by his two older sisters because his mother had passed away three days after he was born. From the time he became a teenager, Rothman said he "kind of lived by myself" (Rothman and McKenzie 2002, 01:34). He described the impression that he felt this upbringing had made on his propensity for risk:

Having been brought up in an environment where you never knew from day to day, kind of, but you eventually got the sense that life went on. It was not the end of the world. I've been very attuned in my life to the ups and downs of business. It doesn't bother me at all. Both of my wives, who came from very traditional families where the father worked for a big company or a company and the salary was there every week and there was consistency in their lives in that regard and they always knew. When things have gotten a little more close to the wire for me in my life, my wives have been very "Oh what's going to happen?". And I say "Hey, no problem...life goes on". I'm capable. I've always maintained disability insurance in the event I get disabled. And other than that, I'll go out and earn a living. (Rothman and McKenzie 2002, 04:02-04:55)

Rothman attended college in Chicago. During his last couple of years there he started a clothing business with a girlfriend and another partner who was a designer. The store, which sold mod-clothing, was very successful and Rothman could see that soon there would be competition in the area. He decided to open another store in competition across the street from their store, in a ploy to keep competitors out of the area. Eventually, this venture grew to four locations and a small manufacturing plant. A large conglomerate offered to buy them out and the partners willingly sold. Rothman moved back to New York and opened a restaurant and bar in the Soho area of Manhattan. He bought a loft in the area and managed the restaurant until someone made Rothman "an offer I couldn't

refuse to sell my interest in that restaurant” (Rothman and McKenzie 2002, 15:00).

In 1971, Rothman and a new girlfriend decided to pursue Rothman’s long-time interest in boating. He chuckled as he told me about the larger purpose of his boat-building dream:

I thought you know gee, if I could do a nice boat for people, people could sail around the world, people culturally would learn about each other and more and maybe that's a nice way to help the world. Or at least I rationalized that by building the boats I would help save the world in some way or another. You know in reality people who have to own boats have to have a certain amount of money to own that boat and maintain that boat. And it’s not...it’s a little higher social economic element that owns the boats and those people usually are pretty aware of the world and what's going on. And having a boat sailing around the world is not going to save the world or change the world. (Rothman and McKenzie 2002, 16:27-17:07)

Rothman decided he would get involved in the industry to learn about it before he started his own company. He got a job as general manager of Jay Benford’s ferro-cement boat building operation in Seattle. He worked at this job for six months, during which time he got to know Bob Perry, who was working there as a draughtsman.

Rothman asked Perry to design a 40-foot cruising boat for him based on a double-ender named “Holger Dansk” moored in Seattle. Perry convinced Rothman to keep the traditional lines above the waterline, but to modify the underbody to the lines currently being used in three-quarter ton racing boats. Rothman described the process of starting the company this way:

So we did the design. I didn't have a whole lot of money. I met a bunch of guys here: an attorney an accountant here. And I said “Gee guys I want to raise some money and build this boat.” And these guys were...had agreed to put up some money and I raised \$40,000. And I put up 10 and these other guys collectively put up another 30,000. And then I went and applied for an SBA loan because we needed about 200,000 to get this

thing going. And I was going to build for myself. I was going to set up a small yard and kind of figured to build 10 - 12 boats a year. And just as we were kind of getting going the oil crisis came about. And there was no resin available because oil went on allocation and resin went on allocation and we couldn't get any resin. (Rothman and McKenzie 2002, 22:30-23:21)

Rothman decided to see if he could do a joint venture with one of the powerboat manufacturers because he felt that they would have the opposite problem. The oil shortage meant that demand for their powerboats would shrink while the powerboat manufacturers' allocations of resin remained constant. Rothman successfully negotiated a contract building arrangement with Uniflite in Bellingham. The first Valiant 40 was launched in late 1974 and was an instant hit, especially with cruising sailors. Francis Stokes won the 1980 Observer Single-handed Trans Atlantic Race (OSTAR) in 1980 in a Valiant 40 and British Ocean Challenge (BOC) racer Dan Byrne circumnavigated in Valiant 40 hull number one (Kretschmer 1999). Rothman describes the personal achievement he felt over the success of Valiant this way:

And we'd been you know we were the hot kids in town. Here we were pretty young guys and I mean I was 28...30...31 at the time...pretty young guys...pretty unconventional. You know I mean long hair, kind of hippy guy although I would put on a blue blazer at the boat shows and wear khakis or whatever and subscribed to that.

And I'm going to say another thing I remember. That the...we were awarded the Product of the Decade by Sail magazine for the Valiant 40. And they were going to hold the...and I was friendly with the folks at Sail magazine...and they were going to hold the awards...where they held the awards in New York, and I think eventually it was at the Plaza. There was some talk of the New York Yacht Club though the New York Yacht Club didn't admit Jews at the time and so there was you know...I don't know...I don't want to cast any dispersions...or say anything whether they...I had anything to do with it being changed or not...the guy who owns Sail magazine, Bernie Goldhurst though was a Jewish guy too. So anyways they held it at the Plaza Hotel in New York, whatever I went back there and my dad was there. My dad was still alive at the time. And my dad was there and that was you know...to see his son who was this hippy kind of guy whatever receive this award. And in an industry was

not you know. (Rothman and McKenzie 2002, 40:13–41:42)

Rothman expanded the Valiant line to include a 32-foot boat and a 47-foot boat. He also started a second line of boats, the Esprit 37, which he had built by a company that competed with Uniflite. In 1980, Uniflite attempted a hostile take-over. Rothman sold half the company to raise money to fight off this take-over. However, in 1981, Uniflite made a generous offer to purchase Valiant and Rothman and his partners accepted.

Rothman received a “Valiant 40 and a bunch of money” (Rothman and McKenzie 2002, 45:28) for his shares in the company. Soon, a group of investors looking to build yachts in China approached Rothman to see if he would be interested in overseeing the venture. In 1982, the company, China Interface, signed a contract with Shanghai Shipping Corporation to build boats in one of their yards. Rothman spent a year trying to instill American yacht-quality standards in the workers in China, but was not successful. However, he did find a very profitable market. At the time, US manufacturers were shutting down heavy industries. Rothman saw an opportunity in selling these factories to China and persuaded his partners to join him in exploiting it. The first deal they did was a ductile iron plant from Alberta. Rothman traded the factory for future delivery of product and was able to negotiate for the Bank of China to guarantee the transaction. Rothman described the deal this way:

I bought a plant from a Canadian...Canron...a Canadian producer, they are no longer in business...a Canadian company. They shut down a plant in Alberta. I bought the plant for 10 cents on the dollar for about a million and a half bucks. I sold it to the Chinese for about four and a half million bucks but I didn't have enough money to pull the transaction off. So again by talking to people and I hired a guy, Greg McGee who was an international finance guy for SeaFirst Bank, which is Bank of America now. And I said, “Greg, I got this problem. How am I going to solve this problem?” And we decided that we would get a bank of China guarantee.

The Bank of China had a very good credit standing because they had never defaulted on anything...but they hadn't done that much business either...but you know it was they had a good reputation. So we convinced the Chinese to give us a Bank of China guarantee and then the banks wouldn't accept that without our guarantee. And myself and the other partners didn't want to put up four million dollars worth of guarantees to pull this whole thing off. Because we bought it for a million and a half and we had to move it over there and we were going to make about a million and a half dollars on the deal but we had expenses moving it, getting it up and running, getting product back. So we convinced the Bank of China to give us an irrevocable unconditional guarantee, which meant we could draw it at any time. As long as we shipped the equipment they owed us the money. And we worked out that they would pay us the money over four years. And then I took that paper, those notes from the Bank of China, and discounted them with the Bank of Boston in Hong Kong and syndicated the loan. So we did that and we made a million and a half bucks on the deal. (Rothman and McKenzie 2002, 55:28-57:13)

China Interface did a number of these deals: a brewery, an optical lens plant, a Nike factory and a second ductile plant. However, as some of these plants could not deliver product to the world market, the Bank of China stopped giving out irrevocable and unconditional guarantees. Rothman renamed the company Trade Interface Corporation and moved his base of operations out of China and into Southeast Asia.

In the early 1990s, Rothman decided that he needed a business that could take the “wow and flutter” (Rothman and McKenzie 2002, 66:33) out of the deals he was doing.

He explained the problem this way:

We'd make a bunch of money all go out and buy Mercedes and new cars and whatever it was that people wanted and whatever. Then we'd go a couple of years and then we'd get to 'Wow, we're running out of money here. We'd better get another deal done soon, you know.' And we'd do another deal just at the last moment and it would work out and come together and whatever. And so I said I've got to buy a company that gives me cash flow on a consistent basis...take this up and down out of it. (Rothman and McKenzie 2002, 67:04-67:27)

Trade Interface purchased a company that built low cost housing using aluminum forms

to make pre-cast concrete modules. The company secured contracts with local partners to build low cost housing worth \$21 million in Thailand and \$12 million in Malaysia.

Rothman told me that he could see the slowdown of 1997 coming, but he could not move quickly enough to get the company out of harm's way. When the Thailand partner went bankrupt in late 1997, Trade Interface suffered a massive loss. Rothman described the winding down of Trade Interface this way:

I stuck with the company. I offered to resign and let them take over. "No you're the guy...we bet on you...you can't...you know." So the company finally collapsed. I paid everybody off. And that's an ethic that my father had that I think...is I'm not sure that that is the right thing. Because the big guys, the Rockefellers, whoever...they always go bankrupt and then they...but I'm of the, you know...and if I have a failing maybe that there's an altered sense of values in terms of business. Maybe I'm not quite as ruthless and that I should have declared 11 or bankruptcy though the directors didn't want to do that...I mean we discussed it. Anyways we paid everybody off and the shareholders took the hit. And the VC firms took the hit. We paid everybody off and collapsed the company and eventually had to sell that housing thing to recover some of their money. Their position was "Hey we're holding the bag for three plus million dollars." So we collapsed the company and Trade Interface Corporation is still in existence in name and license but it's nothing." (Rothman and McKenzie 2002, 77:49–79:06)

Rothman has started a new company named Global Equipment and Technology Corporation (GETCO). Inveterate entrepreneur that he is, Rothman said: "I'm doing those deals again" (Rothman and McKenzie 2002, 79:13).

Summary

On May 18th 2002, Molly drove our car back to Victoria while I made a few little repairs to the boat and worked on outlining the recordings I had made in the US. Molly returned the next day on the high-speed catamaran that runs between Victoria and Seattle. On May 20th, we left Seattle and sailed north. We took a leisurely six days to navigate

our way back to Victoria, stopping at Port Ludlow, Port Townsend, Friday Harbor and West Bay on Orcas Island. On the trip home, Molly and I talked about all the fascinating people I had interviewed. As we listened to the recordings, we were impressed with the can-do attitude that all of the entrepreneurs had exhibited. Not only were these folks great storytellers, but also they had great storytelling material.

Molly and I both noticed the high level of life activity revealed in the life stories of the entrepreneurs I had interviewed. None of these entrepreneurs were people who sat at home and thought about doing things; rather all of them were active participants in life. I thought back to Jeannette Hughes and Luke Melchior, two individuals whose medical conditions might have precluded active lives. Yet, both Hughes and Melchior revealed active management of both their physical and economic environments. In particular, I remember Hughes saying to me:

And it was just the way I did things. I've always been an organized person. I guess it came really from my growing up years, when I had to plan to accomplish the things I wanted to accomplish. I used to get up really, you know five or six in the morning to study because that was the time when our house was quiet with so many little kids. And so I just kind of developed that as a life pattern of being very organized. And I also worked from a very early age, probably about age eleven. (Hughes and McKenzie 2002, 77:54–78:29)

This same high level of active participation in life appeared to be demonstrated by the intrapreneurs who were interviewed in this study (Stan Miritello and Lisa Wellman).

Wellman spoke of how her entrepreneurial life seemed to utilize all of her personal resources, when she said:

Another thread is how fascinating it is to me that you utilize everything that you have, nothing is wasted. I talked sometimes about the fact that being a nursery and first grade teacher is absolutely fabulous background for working in a corporate environment. That kind of need to keep people

interested moving along, focused on the task at hand, letting them out to play, you know understanding the tenor of where people are at and how to capture their interest etc. My specialization in education was in learning abilities: what a great background for marketing; understanding that people learn using different modalities. You just use it all. (Wellman and McKenzie 2002, 41:35–42:30)

The serial entrepreneurs that I interviewed (Peter Newman, Tim Vasko, Ron Morgan, Marilyn Holt and Nathan Rothman) appeared to lead their lives at a very high rate of activity, a rate that might seem near manic to non-entrepreneurs. Morgan put it this way, “I think that, in the end, you need to be driven...if you're driven by money...I think that's dangerous. I think you have to be driven by that's what you want to do” (Morgan and McKenzie 2002, 47:32-47:46). I often found myself exhausted at the end of the recording sessions with each of the entrepreneurs in this study just from listening to their adventures.

Active participation in life appeared to be one of the reasons that entrepreneurs were able to discover new careers and develop new products. Many of the entrepreneurs, including Shirley Vickers, Cathie Walker, Dodie Eastaugh and Pat Hackett, changed their economic outlook after extensive careers as employees. This provided the second focus of the discussions that Molly and I had on the trip back to Victoria. The transition from career to entrepreneur did not seem to be one of massive change, but rather a shift in the economic focus of the lives of memoirists of this study. Vickers described the commonality she felt existed in her work as an entrepreneur and her work as an employee:

I see opportunity. Where other people can see a problem or an obstacle, I can see that, but I can see an opportunity. And, I don't know why that is, but in every instance, like all of those things that would be the common thing. (Vickers and McKenzie 2002, 51:12–51:33)

Hackett felt that timing created the difference between his working life and his entrepreneurial life. He summarized his life timetable in this way:

I've been involved in high technology since the late 70s, and raising a couple of kids. And when my son turned 18, my youngest, I said to myself, 'It's time to start doing what I really want to do. Now I'd better start figuring that out. (Hackett and McKenzie 2002, 00:53-01:10)

The two young entrepreneurs that I interviewed, Sean Fillion and Sorin Pop, anticipated entrepreneurship as movement towards more active management of their lives. Pop expressed the desire he was trying to fulfill through entrepreneurship as "I've always wanted to do work, you know, have the liberty, flexibility to be where I want; to do things the way that I think they should be done" (Pop and McKenzie 2002, 06:48-06:58). Fillion was explicit in what differentiated his career as an employee from his career as an entrepreneur, when he said, "...you know there's a lot of people that have to have that paycheck. Have to have that paycheck. And if you have to have that paycheck then you're not an entrepreneur. You're not" (Fillion and McKenzie 2002, 34:08-34:22).

The difference between working as an employee and working as an entrepreneur came to some of the memoirists through an interest in developing a business around a new product they had recognized in their work as an employee. Stephens successfully developed Crystal Point around the terminal emulator software her husband Fred had developed as an employee of Computerland. Haelsig recognized that community colleges and universities could use the program she had developed for a sales training company. Keffer formed Rogue Wave Software because he found a better way to do large-scale numeric modeling and thought there might be a large market for this programming in the business community. Keffer reiterated how demanding the activity

of entrepreneurship can be:

“I think successful entrepreneurs tend to be pretty unbalanced. They're very obsessed about...at least I was, about what they are working on. So they...it's not to say you can't be balanced over the long run, but I think to make something successful like that it's hard and it takes a manic focus on it.” (Keffer and McKenzie 2002, 33:04-33:24)

It appeared that the role of entrepreneurship was primarily an economic role.

Entrepreneurs clearly differentiated between their entrepreneurship and their creativity.

For example, Hackett said he felt his musical training had given him skills that he used in his work, but clearly differentiated between entrepreneurship and his music. Similarly, Villegas clearly differentiated between his art and “this kilt thing” (Villegas and McKenzie 2002, 08:18). The former was artistic expression; the latter was economic activity.

Molly and I discussed the way in which becoming an entrepreneur seemed to create a new personal identity in the individuals whose life stories were recorded for this study. Three of the memoirists, Terry Farmer, Stacy Kuiack and Tony Melli, had moved away from family businesses by developing their own ventures. In none of these cases did there appear to be animosity towards the family. Rather, the break from the family appeared to be a process of self-identification. Kuiack responded to my inquiry as to whether he had any thoughts of going back and taking over the family business with these words:

No, none whatsoever. I'll provide some really, really peripheral input on things, mostly finance issues or growth management or business planning issues. But, I keep my nose as far away. My little sister is involved in the business so she can have it. She'll do hers; I do mine. (Kuiack and McKenzie 2002, 07:05-07:23)

In a similar way, the two entrepreneurs in this study who were ex-Microsoft employees, Dan Newell and Dave Feinleib, identified their movement into entrepreneurship as the creation of identity different from that of Microsoft. Feinleib said, of leaving Microsoft,

It was really hard. I had sort-of grown up there. I had breathed the air. Microsoft was part of my identity as a human being. When people said you know asked me what I did, I just talked about the company. There wasn't any difference between me and the company. (Feinleib and McKenzie 2002, 35:04-35:20)

Two of the entrepreneurs interviewed (Roger Van Dyken and Steven Villegas) had found, in entrepreneurship, a new way to express their moral convictions. Villegas described his personal transformation this way, "I had isolated myself off into an elitist type environment myself: being king and God and I was going to get it all done. It's impossible. So I worked really hard at bending myself" (Villegas and McKenzie 2002, 06:39-06:51). Van Dyken described the way he felt when he first went sailing in Seattle as: "I was captured" (Van Dyken and McKenzie 2002, 14:50). So captured that he quickly transformed this new interest into a successful sailing school and yacht brokerage venture.

Over the next several months, these three themes: active participation in and management of life, entrepreneurship as economic activity and identity transformation would turn over in my mind. They were the starting point for uncovering a new definition and model of entrepreneurship.

CHAPTER VI

ANALYSIS OF DATA

“Theory is a matter of words, not worlds; of maps, not territories; of representations, not realities.”

John Van Maanen (Van Maanen 1995, p.134)

The purpose of this study has been to investigate two specific research questions. While these were stated in Chapter I, it is important to refer back to these questions prior to an explanation of the analysis of data. The research questions are:

1. Do entrepreneurs use oral narrative to exchange important information?
2. Do the oral histories of entrepreneurs contain common features from which one could induce a definition of entrepreneurship?

Oral narrative is defined in this study as the verbal presentation of a series of events meaningfully connected in a temporal and causal way (Onega Jaén and García Landa 1996, p.3). This study has taken the position that entrepreneurship is the activity engaged in by entrepreneurs and demonstrated by their abilities and skills (Preliminary Definition, p. 90). These activities, abilities and skills were examined through the recollections of the oral histories of the entrepreneurs who participated in this study. The intent of this analysis is to critically interpret the oral histories of the 25 self-identified entrepreneurs interviewed in this study into an abstraction of definition and model building.

No general consensus exists amongst management scholars of how the process of theory construction is accomplished (Sutton and Staw 1995, p.372). Christensen has described theory building as a process, which involves three stages: observation,

classification and abstraction (Christensen, Carlile et al. 2002, p.2). Karl Weick has described theorizing as a process of “disciplined imagination” (Weick 1989, p.516) and compared the process to marine navigation by radar (Weick 1989, pp.519-520). In this comparison, Weick positioned radar emissions as an abstraction of real movement through the environment and radar echoes as an abstraction for real objects. The selection of an echo-free route is an abstraction of a safe course in Weick’s example. Weick’s analogy shows the process of representation inherent in theory building. It also shows the power that good theory allows. In the example, the power is the ability to navigate safely at night. Weick used the radar analogy to point out the evolutionary nature of theory building. The discovery of anomalies not explained by the theory (in the example, accident reports of collisions involving ships using radar) requires variants of the original theory to be developed. Van Maanen has referred to the process of theory creation exemplified by Weick as “allegoric breaching” (Van Maanen 1995, p.135). Van Maanen has portrayed allegoric breaching as a process of metaphoric elaboration in which an abstraction is conveyed through written narration representing something other than what it concretely portrays.

Glaser and Strauss have differentiated between substantive and formal theories (Glaser and Strauss 1967, p.32). Substantive theories are those developed for a particular empirical area of inquiry. Formal theories, on the other hand, are theories that conceptualize entire domains of inquiry. This chapter works towards the development of theory by formulating a clear definition and model of entrepreneurship. The chapter begins with an examination of some of the specific abilities and skills that have been revealed through this study’s entrepreneurs’ use of narrative in an attempt to develop a

substantive theory. The second half of the chapter then looks more generally at the entrepreneurs' narratives in an effort to derive a formal definition and model of entrepreneurship.

How Entrepreneurs Use Oral Narrative

Do entrepreneurs use oral narrative to exchange important information? It would appear from an examination of the data collected in this study the simple answer to this question is an unqualified "yes". Statements of memoirists describing their use of narrative have been collected and are summarized in Appendix III. Table 6 classifies the ways that the entrepreneurs of this study described their use of oral narrative.

Table 6

Classification of Entrepreneurs' Use Of Narrative

Use of Narrative	Frequency	Male	Female
Organizing	19	29%	40%
Opportunity Identification	16	32%	20%
Sales	12	18%	25%
Financing	8	13%	15%
Other	3	8%	0%

It is interesting to note that the female entrepreneurs of this study reported using oral narrative as a tool for organizing and as a sales tool more frequently than male entrepreneurs. However, the male entrepreneurs reported using oral narrative as a tool for opportunity identification more frequently than the female entrepreneurs. It must be noted that the unstructured interview process used in the study limits the ability to generalize this finding to larger populations. Participants were asked to tell their life stories and questions were intended only to add clarification or to enhance the

conversation that the memoirist had initiated. None of the participants were specifically asked if they used oral narrative to exchange important information or what kind of information they exchanged using oral narrative.

Oral Narrative as a Tool for Organizing

Entrepreneurs in this study referenced oral narrative 19 times as a tool used for organizing. Management researchers Mills, Boylstein and Lorean have suggested that storytelling can be seen as “explanatory mythmaking or conceptual construction that interpret and frame organizational situations” (Mills, Boylstein et al. 2001, p.118). Tom Keffer provided an example of how he used narrative to create an organizational myth:

I wrote a company history up. And one of the anecdotes I gave in that is how when you were trapped at the phone all day long you couldn't go anywhere. This was before cell phones. So even something simple like taking a shower was a problem. And more than once the phone would ring when I was in the shower. I would take the phone in with me and when it would ring, and I would shut the water off and wait a few seconds for the gurgling noise to stop; pick up the phone and as calmly as I could, I would say: “Rogue Wave Software.” (Keffer and McKenzie 2002, 14:45-15:16)

Keffer made a habit of taking every new employee out for lunch at least once during his or her first week on the job. He also gave a copy of this company history to each new recruit so that he or she would have an appreciation of the culture of the organization. This particular myth frames the importance of customer service. To Keffer, customer service is so important that he would allow a customer to interrupt his bathing.

The use of narrative by management in the development of organizations has been well documented by management scholars (Hansen and Kahnweiler 1993; Boje, Luhman et al. 1999, for a review of this literature). Entrepreneurs in this study used narrative in

organizing in a wide variety of ways: to share best practices amongst organization members (Eastaugh and McKenzie 2002, 33:06-34:25; Hughes and McKenzie 2002, 17:30 – 18:16), as a way of documenting organizational structure (Haelsig and McKenzie 2002, 10:39-10:55; Hughes and McKenzie 2002, 20:00-21:30; Keffer and McKenzie 2002, 39:55-40:53), to learn business practices in a family setting (Kuiack and McKenzie 2002, 07:33-08:32), as a way of articulating the entrepreneur's vision to organization members (Keffer and McKenzie 2002, 14:44-15:30; Melchior and McKenzie 2002, 16:06-16:10), to describe a business model (Newman and McKenzie 2002, 22:16-27:22; Pop and McKenzie 2002, 13:51-20:14; Stephens and McKenzie 2002, 66:39-68:16; Van Dyken and McKenzie 2002, 17:33-17:42) and as a way of explaining complex relationships within the organization (Morgan 1997, 40:00-40:07; Eastaugh and McKenzie 2002, 23:42–24:55; Fillion and McKenzie 2002, 18:50-19:37; Vickers and McKenzie 2002, 42:12-43:52). In all of these cases, narrative appeared to have been used as a vehicle to exchange complex and rich information.

Organization theorist Ellen O'Connor views organizational decision making as the convergence of oral narratives claiming that the narrative's power comes from its ability to simultaneously render information and the meaning of that information (O'Connor 1997, p.309). Jan Kelly found that stories were used in high-tech firms to address equality, security and control (Kelly 1985, p.57). David Boje has observed that storytelling in organizations has two intertwined components, stories as texts and stories as performance (Boje 1991, pp.123-124). The majority of references that the entrepreneurs in this study made to oral narrative used as a way of organizing referred to stories as text. This would explain the logic of Keffer's writing down his narrative of the

history of Rogue Wave. By solidifying the story, he hoped to create a stable, predictable organizational culture. Similarly, Dodie Eastaugh's staff used stories as texts to share best practices. While these texts could be revised through dialogue, it is the content of the story, not the performance of the storytelling that is fundamental to the communication. On the other hand, the entrepreneurs of this study tended to engage in storytelling as performance more frequently when they needed to identify and communicate opportunities.

Oral Narrative Used to Identify and Communicate Opportunities

The entrepreneurs in this study reported 16 instances of the use of oral narrative for opportunity identification. The previous chapter recounted Ron Morgan's narrative of the discovery of the opportunity associated with the Thumbnail® picture-framing fastener (Morgan and McKenzie 2002, 12:47-15:13). Peter Newman provided a similar account of how he used oral narrative to identify the opportunity associated with the founding of Progressive Plastics:

We were running a campsite, which was a learning experience. We were running a campsite and we were running this fabricating shop in Prince George and doing all the estimating and everything else and Brad was looking after the shop. And, in the meantime, one of our plastics suppliers, one of the guys I knew there well. Him and I went for a beer one night and he was complaining about this company. And I said 'well why don't we start up our own plastics company?' So we started up a plastics...an industrial plastics supply company which he ran, and I was the joint partner with him. (Newman and McKenzie 2002, 30:06-30:39)

Throughout the interviews of this study, it was common for entrepreneurs to place their visions of opportunities into the context of a performance narrative. Often the product or market or combination of product and market that formed the basis of the opportunity did

not exist at the time the entrepreneur envisioned the opportunity. Thus, he or she created a story around the situation that created the opportunity. The stories that Dodie Eastaugh told about her unpleasant experiences as a home support worker provide an example of this use of narrative. Eastaugh did not do an extensive survey of the operational practices of home support. Rather, she created a story of poor support and used the performance of this narrative as the foundation of her home support agency. Similarly, Terry Farmer discovered an opportunity to build his first motel in a location that was counter to the prevailing wisdom. Farmer used oral narrative to explain the reasoning that identified the opportunity to him:

My friends were telling that I was on the wrong side of the road. That everyone who came into town wanted to turn right. But I'd done my research, so I knew that actually the experts were wrong. That if people saw an attractive looking building, they would turn around and come back to us. So what we did, we bought one of the lots on the back street so that people once they went past us could do the next left hand turn and go around that way, but I was sure, and this was from my own experience, that people might want to look at one or two other properties and if we were attractive enough, they would come back to us. So they might drive into town and then they would come back. Which people did. So then when they come back they would be on the right side of the road. (Farmer and McKenzie 2002, 12:34-13:24)

The very wording of this story implies performance. The story is action oriented in its concern with the likely driving patterns of visitors to Victoria.

Not only did the entrepreneurs in this study use narrative to uncover opportunities, but they also tended to use versions of the narratives they had created to convey the opportunity to others. This is a clear example of storytelling as performance. Nathan Rothman was explicit in describing the importance he placed on exchanging information about new business ideas with other people when he said, "I'm a big

advocate about talking to people about your business idea and getting other ideas from people” (Rothman and McKenzie 2002, 25:33-25:38). Opportunities, such as Rothman’s sale of the ductile iron plant into China, are difficult to identify. They appear to be constructed out of the interplay of the needs and desires of a diverse cast of characters framed by a limited duration of time. It would appear that narrative, used in discourse with others, allowed Rothman to synthesize the various components of this complex venture. Tim Vasko’s description of his identification of the opportunity in investment banking provided a simpler example of how a narrative can contain the interplay of characters, needs and desires and time:

I've always been interested in the stock market. It's always fascinated me as a kid and everything. So I got my license to sell mutual funds and...as part of...and it was just stages when nobody knew what a financial planner was. It didn't even exist. This was 1983. So in 1983, financial planning didn't exist. The stock market was about 700 in the US and Templeton, John Marks Templeton was saying it will go over 10,000 some day and everybody thought the guy was too old and crazy to know what he was talking about any more. And we were...and I got my mutual funds license and I made one sale. And so I was basically as salesman and I made one sale for...and the guy who sponsored me...the sale I made was a \$30,000 bond fund. And so I was expecting to get, the commission was four percent, so I was expecting to get \$1,200 or something less, maybe \$1,000. And I got a cheque for \$600. And I called the guy who had sponsored me to get my license and he goes, “Well half of it is mine”. And I said, “You mean, I went out, I found the person, you don't give me an office, you don't give me anything, you don't pay any of my bills, you don't pay for my gas and you're going to keep 50% of my money.” And he said, “Yeah, that's the way it works.” And I said, “Not for me it doesn't.” And so I decided that...I said, “Well, I'll just go and start my own company.” And the guy said. “Good luck.” (Vasko and McKenzie 2002, 07:05-09:08)

Contained within this brief oral narrative are a host of details about the operation of the marketplace in 1983, the prevailing attitudes of competitors, and the intentions of the storyteller. These details would be difficult to portray so concisely through a medium

other than oral narrative.

Oral narratives also served as a way of locking past opportunities into memory, acting as what cognitive psychologists call schemata (Fiske, Kinder et al. 1983, p.382; Glaser 1984, pp.99-102). Robert Glaser has described schemata as sophisticated knowledge, which represents “interrelationships between objects, situations, events and sequences of events that normally occur” (Glaser 1984, p.101). In his life story, Tony Melli told a story which reflected one of the schema ordering his knowledge of opportunities. Melli’s story of his father’s missed opportunity went like this:

My father once had a chance to buy a building and it was...I think, and you know...its looking back on it and its always easy when you look back into...you know...20/20 hindsight. I thought my dad could have done it. He and my mother talked about it and they decided not to go for that building. Well it was in a part of Toronto and it was a pretty big building that two years it shot through the roof. You know my parents would never have had to work again if they had bought that building when they had the chance to. Because it was offered to my father before it went on the market for a ridiculously low price. So the person who bought it ended up making a lot of money; the person who bought subsequently and we knew who that was as well. So I look back at that and you know it’s almost like the fear of not trying. In the future, you know when I’m 60 or 70...looking back and saying, “You know, I didn’t try it. What would it have been like?” (Melli and McKenzie 2002, 37:48-38:48)

The telling of this story is meant to make sense of Melli’s understanding of the risk involved in not seizing an opportunity. It is interesting to compare Tony Melli’s schema of the risk of missed opportunity to Dickson and Giglierano’s metaphor of missing-the-boat risk (Dickson and Giglierano 1986). Both these conceptual devices provide convenient mnemonics. However, the narrative is based on an individual’s personal experience, is situated within the context of time and includes a greater richness of detail than is possible in metaphor.

Oral Narrative as a Sales Tool

The ability of narrative to carry richness of detail suggests that it is well suited to use as a sales tool. The life stories collected in this study make 12 references to oral narrative being used as a tool to exchange information in the process of sales or marketing. Nathan Rothman tells this story about how he used oral narrative to sell a number of sailboats before he had built even one:

So I went out and actually pre-sold a couple of boats. There was a very well known guy here, who I actually just spoke to about a week ago, by the name of Bill Black. Who was a great...he and his wife Mary sailed a Valiant 40 around the world. They won the Cruising Club of America Award. He had raced competitively here. Great guy! And I showed the boat to Bill Black and I said, "Bill, you know, here's the design and thousand bucks holds you a spot in line." And I had another friend, at the time Stan Dabney. Stan and Sylvia Dabney, who are still in the boat business...Stan Dabney ran a printing company, later became our sales manager. But ran a printing company, but he was a good friend of mine. And I said, "Stanley, before I can go to Bill Black, I need to have somebody on the list, you know I need to have sold a boat to somebody else. So put your name on the list. You bought hull number three and we'll go to Bill and we'll go to other people and we'll tell them look three are sold already you'd better get on the line you better get on the list, or you know you're not going to get one, you know." And so we went to Bill, and Bill Black wrote a cheque for a thousand bucks. And we went to a fellow by the name of Sever Murphy who ran the Indoor Sun Shop, which was a florist and plant shop in the University District. And he wanted one, and we put him on the list, and we got a thousand bucks from him so we sold four or five boats. (Rothman and McKenzie 2002, 23:53-25:14)

Rothman's narrative builds tension within the prospective purchaser's mind that replaces their concern over not being able to see a boat with a new concern that the boats might all be gone by the time they actually get to see one. This tension could not have been built with facts and figures, since no boats actually existed nor had any actually had been sold. This tension could not have been created using print media, since the delay caused by

writing a report, delivering it and then waiting for it to be read takes too much time for the deft interplay between the characters that Rothman was manipulating. Rothman's use of narrative in sales took advantage of the difficulty the purchaser had in searching for accurate information. Geertz described the process of information search in the primarily oral bazaar economy as being "laborious, uncertain, complex and irregular" (Geertz 1992, p.227). Marc Weinstein's account of the used book trade in Gardena, California reveals similar characteristics in a North American setting (Weinstein 1999, pp.9-15). Rothman's clients were intent upon the purchase of a safe, reliable, fast and stylish sailboat, characteristics that were not necessarily mutually compatible. Rothman's narrative, like the bazaaris multidimensional bargaining, allowed each client to feel he was getting the best deal possible.

Tim Vasko realized the importance of direct verbal communication via narrative with his customers when he was doing real estate workouts. In order to be able to communicate directly with a large number of customers, he developed a unique strategy:

This new little thing had come out that wasn't too expensive called videotape. And I thought, 'Well, gee you know if I'm sitting in here and I'm selling Brian something face-to-face, and he believes me, what would happen if I made a video tape and just told the story face-to-face only send it out to people and all of them have new VCR's and all of them are looking for stuff to do?' Blockbuster didn't exist at the time. So I made these videotapes. We sent out 3000 of them. And I raised a million dollars. (Vasko and McKenzie 2002, 22:44-23:16)

Vasko's use of narrative in sales took advantage of the tacit nature of oral communication. Stuart Hannabuss has written that narrative "is full of unconscious tacit knowledge clues" (Hannabuss 2000, p.412). Vasko realized that face-to-face communication carries a number of these tacit clues, and took advantage of the new

media to enrich his mass-merchandising scheme.

More traditional uses of oral narrative to exchange information leading to sales were also found in listening to the oral histories recorded in this study. Peter Newman describes a friend's ability as: "...he could talk you out of anything" (Newman and McKenzie 2002, 48:19). Roger Van Dyken combined his oral sales skills with a written narrative (Van Dyken, Miller et al. 1997) to create a persuasive sales argument. A broader form of narrative was its use in public relations efforts, as recounted by Shirley Vickers (Vickers and McKenzie 2002, 39:05-42:07) and Lisa Wellman (Wellman and McKenzie 2002, 10:17-12:50).

Oral Narrative Used in Financing Ventures

The entrepreneurs in this study referenced oral narrative eight times as a tool used for financing their ventures. Ellen O'Connor has described the use of narrative by entrepreneurs seeking venture capital financing as the creation of generic stories (O'Connor 2002, p.45). Generic stories tend to be easy to tell and make intuitive sense with prospective investors. Tom Keffer described his experience touring the US to meet with investment professionals prior to Rogue Wave Software's Initial Public Offering (IPO) in these words.

It's the road show that's the got this mythic vision. But I don't know, I found the road show kind of boring. Because you have this presentation that you fix up and tune so that it's just...Oh...perfect. And you go out on the road and I gave that damn presentation 65 times in a row over two weeks. That's pretty dull, I'll tell you. It's not exciting or anything like that. It's just dull. (Keffer and McKenzie 2002, 24:48-25:30)

Keffer offered the only example of this level of financing sophistication amongst the

entrepreneurs interviewed in this study. However, other entrepreneurs used less heavily scripted narratives for the same purpose. We have already seen how Rothman pre-sold boats (Rothman and McKenzie 2002, 23:53-25:14) so he could attract investors to Valiant (Rothman and McKenzie 2002, 22:28-23:02). Stephens discovered factoring, when she told her neighbor the story of her problems financing a run of documentation for Crystal Point Software. She recounted that story in these words:

So we had three huge manuals that we had to print. And it would cost you know \$20,000 to print all of these manuals...to get any kind of reduction in per cost. So, we had no money to do that, so we borrowed. I had a neighbor who was very close to me. He was kind of my father-figure type...and he was an accountant, retired. And we factored our two ARs. So we said, "Here we have these orders from Hanford. We can't fill them because we don't have documentation. But we'll give you 10%." So it was kind of a risk-free for him it was a government agency, so you know he knew it would be fulfilled. And we did the same thing with a friend. He factored the other accounts receivable. And that's how we paid for our first production run. (Stephens and McKenzie 2002, 16:13-17:15)

Oral narrative was also used as a way of exchanging information about the correct timing of the ending of a venture. Chapter V has quoted the narrative of Chris Stephens' decision not to fold Crystal Point Software after a strategic decision-making retreat with her executive. Peter Newman told this story of a similar decision under very different circumstances:

I'll tell you a little story going back and this is what an entrepreneur is. We got a call we had a contract to manufacturer for a new chipping plant, we had a contract to manufacture the conveying system for this new chipping plant. And in all fairness to the company, we were late. However, it was just before Christmas and the temperature was in around minus 25 and there wasn't a lot of construction activity going on but they were hell bent that this thing was going to start up on January the 1st. OK. And we were having problems, but we were working on it. We got the phone call, we got the phone call, conference call, on December the 23rd, I believe it was, or December 24th, the day before Christmas, I think it was, that told us that if we didn't have this conveyor on site by January the

1st, they would come in, take everything out of our shop, give it to anybody who was prepared to do it and whatever the cost was they would back-charge us for it.

So, I spent Christmas day, Boxing day and the temperature dropped to minus 35 to 40. And myself and two other guys Brad and one other guy worked all throughout Christmas outside because we had to put these hoods on these things and we had to Hilti these hoods on these conveyors and then ship these things. And we spent all through those three days working, snowing, minus 30, putting these things together. We got it finished. We delivered them to site. They sat there for six weeks. I it was too cold to erect them. That's an entrepreneur for you. No choice. No choice. The threat and they would have done it. They told the next thing they told me they would do was unleash the corporate lawyers and we were dead meat. And now we were successful. I mean we were a successful company. I mean I'm talking about they would have killed the company because they would have just gone in there and killed the company. And they would have done it I've seen them do it to other companies. (Newman and McKenzie 2002, 41:18-43:23)

Newman's story not only recounted a particular incident in his working life; it also gave a clear indication to rivals that he was a man who would persevere in order to keep his company operating. The performance of this story reflects the intensely social nature of business dealings.

Other Uses of Oral Narrative by Entrepreneurs

The entrepreneurs in this study have also referenced oral narrative three times as a form of recreational socializing. However, there is no evidence within any of these references differentiating them from the normal use of oral narrative by non-entrepreneurs in recreational socializing.

Summing Up the Uses of Oral Narrative

It would appear that all the entrepreneurs whose life stories were collected in this study made some use of oral narrative to exchange important information. This finding

parallels the conclusion that management researcher Daphne Jameson came to in her study of 16 members of the regional leadership team of an international chain-restaurant company. Jameson's research found that these managers used narrative discourse as an "important way of resolving conflict, addressing issues and facing challenges" (Jameson 2001, p.476). Further, Jameson found that the managers of her study found narrative well suited to the expression of contextual complexity and the interpretation of evidence (Jameson 2001, p.507). The analysis of the 25 oral histories contained in this study has found that the entrepreneurs interviewed used oral narrative both as a text and as a performance as suggested by Boje (Boje 1991) in the exchange of important information. Both forms of narrative were used in the identification of opportunities, in the development of new organizations, in the arrangement of financing and in the process of making sales. This finding leads to the first proposition of this study, namely:

PROPOSITION 1:

Entrepreneurs use oral narrative to exchange important information.

Further empirical investigation of the use of oral narrative by entrepreneurs to exchange important information could provide evidence, which would differentiate entrepreneurs from non-entrepreneurs. Media scholars such as Marshall McLuhan (McLuhan 1964) and Walter Ong (Ong 1977) have differentiated between oral cultures and literate cultures. It is possible that an individual's ability to communicate using oral narrative is related to his or her ability to identify opportunities, to create organizations and to make sales; all key entrepreneurial activities. Walter Ong has noted that the act of writing is solitary and reflective, whereas oral narrative is communal and active. Ong has proposed, "primary orality fosters personality structures that in certain ways are more communal and externalized and less introspective than those common among literates"

(Ong 1982, p.69). McLuhan describes oral communication as a cool medium because the listener must fill in much of the information passed in oral communication. On the other hand, he describes print as a hot medium because the author impacts one single sense of the reader with densely packed information (McLuhan 1964, p.36). While all of the entrepreneurs examined in this study were extremely proficient in oral narrative, only seven of the 25 entrepreneurs of this study appeared to have the same proficiency in written narrative. I have collected the major literary works identified by the memoirists of this study and present these in Appendix IV.

Uncovering a Definition and Model of Entrepreneurship

Do the oral histories of entrepreneurs contain common features from which one could induce a definition and model of entrepreneurship? One of the most important pieces of information exchanged in the oral narratives of entrepreneurs is information the entrepreneurs share about themselves. The stories collected in this research project contain the common element of being good stories, all of which were well told. Anita Roddick, the founder of The Body Shop chain of cosmetics stores, has made the claim that every entrepreneur is a great storyteller (Roddick 2001, p.4). As I listened and re-listened to these 25 stories, I kept wondering if there was a common element that made each of these stories so fascinating.

Mieke Bal has divided the information communication process of a narrative text into three distinguishable layers: the text, the story and the fabula. Jerome Bruner has described the principle property of narrative as:

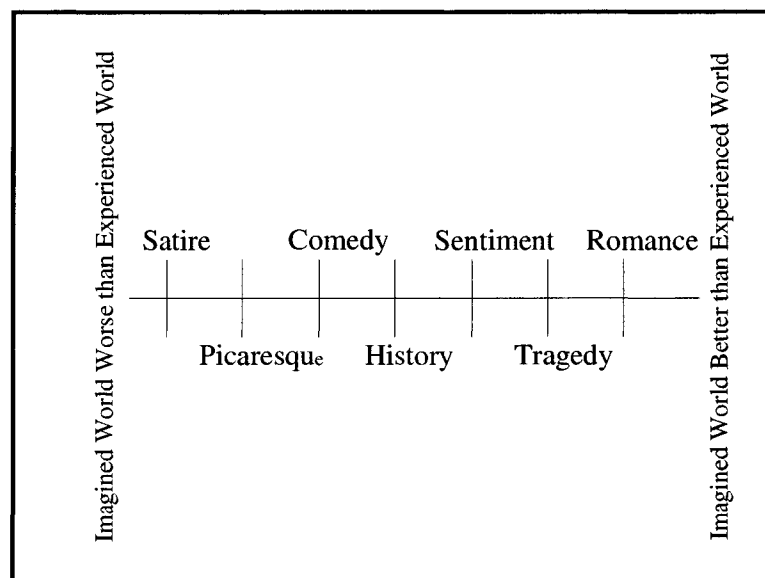
...its inherent sequentiality: a narrative is composed of a unique sequence

of events, mental states, happenings involving human beings as characters or actors. These are its constituents. But these constituents do not, as it were, have a life or meaning of their own. Their meaning is given by their place in the overall configuration of the sequence as a whole – its plot or *fabula*. (Bruner 1990, p.43 italics in original).

The fabula of a narrative is its deep structure of the narrative (Bal 1985, p.11). This deep structure can be typified as the genre, i.e. the structure of the medium through which the story is presented (Onega Jaén and García Landa 1996, p.2). Bruner has hypothesized that there is a direct relationship between the narrative genre chosen in autobiography and the individuation expressed by the memoirist (Bruner and Kalmar 1998, p.320). Robert Scholes has provided a continuum of narrative structures based on the worldview of the storyteller (Scholes 1974, p133).

Figure 5

Scholes Continuum of Narrative Structure



In Scholes' continuum, there are three possible relationships between the world as imagined and the world as experienced. The imagined world can be better than the world

of experience, worse than it, or the same. He relates these positions to seven possible genres shown in Figure 5.

The Structure of Entrepreneurs' Narrative

I summarized the plots, or plans of action, of each of the 25 narratives in an attempt to discover similarities in their genre. These summaries are presented in Appendix V. The similarity was the lack of cohesive plot development. One of the memoirists, Shirley Vickers described her story in this way, "So that's my entrepreneurial life, Brian. It's a bit weird, it's like people ask me what have you done, or what do you do, and I don't even want to tell them it's so all over the map" (Vickers and McKenzie 2002, 0:50:21 – 0:50:38). This plotting characteristic of being "all over the map" is a feature of all the life stories collected in this research project. None of the stories follows the plot of the academically constructed entrepreneurial stories such as McClelland's "tales of achievement" (McClelland 1961, p.43), nor the stereotypical romantic genre of the entrepreneur who succeeds through perseverance in overcoming adversity described by Casson (Casson 1982, pp.1-6), nor the heroic parvenu described by Robert Smith (Smith 2002, p.3). Instead, the oral histories collected in this study, at first glance, appeared to resemble the genre of picaresque.

Picaresque literature began with the publication of the novel "Lazarillo de Tormes", anonymously published in 1554 (Sherrill 2000, p.13). The central character, Lazarillo, is born to a servant and forced to live the life of a vagabond, or picaro. Ulrich Wicks has described the picaro in this way:

The picaro is a protean figure who can not only serve many masters but

play different roles, and his essential character trait is his inconstancy (of life roles, or self-identity), his own personality flux in the face of an inconstant world. (Wicks 1989, p.60)

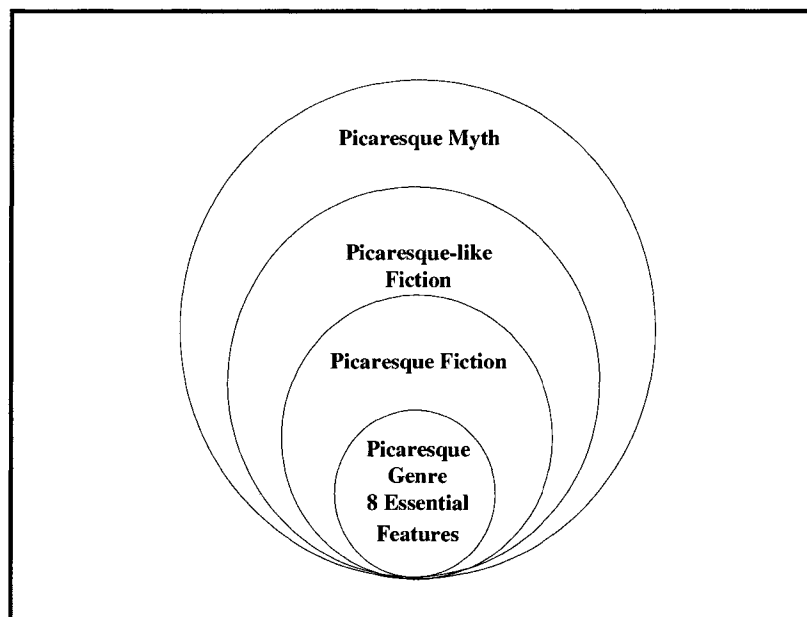
The publication of what is probably the most celebrated picaresque narrative, “Don Quixote de la Mancha” (Cervantes 1605) marked the emergence of an enormously popular genre in Spanish literature (Wicks 1989, p.13). The popularity of picaresque, as a genre, spread throughout Europe during the 17th and 18th centuries (Wicks 1989, p.13). Modern examples of picaresque novels include Jack Kerouac’s “On the Road” (Kerouac 1957) and Mordecai Richler’s “The Apprenticeship of Duddy Kravitz” (Richler 1959).

Claudio Guillén has developed a framework of eight distinguishing features that define the picaresque (Guillén 1961). These features are: (1) a dynamic psycho-sociological situation focused on a picaro or picara, a half-outsider who can neither join nor reject his or her society, (2) an autobiographical format, (3) a partial and prejudiced viewpoint, (4) a viewpoint that is reflective, philosophical and critical on religious or moral grounds, (5) stress on the material level of existence, (6) observation of a number of social classes or collective conditions, (7) an odyssey which moves horizontally through space and vertically through society and (8) episodic in pattern. Frederick Monteser described the genre of picaresque in framework similar to Guillén’s (Monteser 1975, pp.5-9) noting the peripatetic nature of the picaro’s quest. Stuart Miller acknowledges Guillén’s framework as insightful but contends the definition is tentative in nature (Miller 1967, footnote to p.4). Miller extended the definition of the genre by noting the complex identity of the picaro. “The picaresque hero is active in his personal chaos as rogue, essentially passive as protean character. As rogue, he adds to the world’s chaos and fights it; as protean character, he merely swims with the stream of events”

(Miller 1967, p.74). Wicks has acknowledged that the strength of Guillén's definitional framework lies in its usefulness as a definitional tool (Wicks 1989, p.38). He has explained that the framework is intended as a relative rather than an absolute statement of the norm of the picaresque genre. Guillén has contextualized his eight essential features of the picaresque genre within the larger ordering of the concept of the picaresque in a visual format (Guillén 1971, p.93). This visualization is presented in Figure 6.

Figure 6

Contextualization of Guillén's Definition of Picaresque



Guillén's eight-feature framework presents the core definition of the genre of picaresque. Beyond this core definition, other elements (such as Miller's elaboration of the picaro's complex identity) extend and enlarge the concept of picaresque.

Scholes paid tribute to the value of Guillén's framework with these words of praise:

The generic concepts enable us to do much. But, like every other feature

of structuralist thought, they are merely tools to be used. They will do no more than we know how to ask them to do, and do it no better than our skill in their use will allow. But for a scholar with the mind and the learning to use them they will augment his conceptual power like a magical gift awarded to the hero of a fairy tale. (Scholes 1974, p.141)

Each of the 25 life stories collected during the course of this research was screened against Guillén's definitional framework. The results of this screening are presented in Table 7. This analysis shows that the life stories collected during the course of this research match the definitional criteria set out by Guillén with an overall fit of 99.5 %.

The one case, Roger Van Dyken, which did not fit Guillén's first criterion, is investigated in the following paragraphs. Guillén's first criterion is a dynamic psychosociological situation focused on a picaro or picara, a half-outsider who can neither join nor reject his or her society. Central to this criterion is the exposition of the theme of freedom (Parker 1967, p.19). In a picaresque narrative, the individual attempts to free himself or herself from the constraints imposed or inherited from the society that he or she lives in (Wicks 1989, p.23). Nathan Rothman describes the constraints of his inherited society in this way:

Unfortunately my mother passed away three days after I was born. So I was raised without a mother. I had two older sisters and lived in Brooklyn and New York until I was about nine or ten years old and then we moved to the Bronx. From about the time I was thirteen or fourteen I kind of lived by myself. My dad was a workaholic and, while the small business was him and one or two other guys occasionally, it was a hand to mouth kind of business and by the time I was thirteen or fourteen my sisters had gone off and gone to college and moved out and so I lived with my dad but I lived kind of alone because he would work from eight in the morning and come home at ten or eleven o'clock at night. Which didn't do well for me in terms of my schooling and whatever. I went to an all-boys high school in the Bronx, which we will leave the name out. But of the

thousand boys in the graduating class, about fifty of us went off to college and the rest went out to kind of rape and plunder. (Rothman and McKenzie 2002, 01:13 – 02:26)

Table 7

Oral Histories Analyzed by Guillén's Definition of Picaresque

Life Story	1	2	3	4	5	6	7	8
Dodie Eastaugh	Y	Y	Y	Y	Y	Y	Y	Y
Terry Farmer	Y	Y	Y	Y	Y	Y	Y	Y
Dave Feinleib	Y	Y	Y	Y	Y	Y	Y	Y
Sean Fillion	Y	Y	Y	Y	Y	Y	Y	Y
Pat Hackett	Y	Y	Y	Y	Y	Y	Y	Y
Diane Haelsig	Y	Y	Y	Y	Y	Y	Y	Y
Marilyn Holt	Y	Y	Y	Y	Y	Y	Y	Y
Jeannette Hughes	Y	Y	Y	Y	Y	Y	Y	Y
Tom Keffer	Y	Y	Y	Y	Y	Y	Y	Y
Stacy Kuiack	Y	Y	Y	Y	Y	Y	Y	Y
Luke Melchior	Y	Y	Y	Y	Y	Y	Y	Y
Tony Melli	Y	Y	Y	Y	Y	Y	Y	Y
Stan Miritello	Y	Y	Y	Y	Y	Y	Y	Y
Ron Morgan	Y	Y	Y	Y	Y	Y	Y	Y
Dan Newell	Y	Y	Y	Y	Y	Y	Y	Y
Peter Newman	Y	Y	Y	Y	Y	Y	Y	Y
Sorin Pop	Y	Y	Y	Y	Y	Y	Y	Y
Nathan Rothman	Y	Y	Y	Y	Y	Y	Y	Y
Chris Stephens	Y	Y	Y	Y	Y	Y	Y	Y
Roger Van Dyken	N	Y	Y	Y	Y	Y	Y	Y
Tim Vasko	Y	Y	Y	Y	Y	Y	Y	Y
Shirley Vickers	Y	Y	Y	Y	Y	Y	Y	Y
Steven Villegas	Y	Y	Y	Y	Y	Y	Y	Y
Cathie Walker	Y	Y	Y	Y	Y	Y	Y	Y
Lisa Wellman	Y	Y	Y	Y	Y	Y	Y	Y

Note.

- (1) dynamic psycho-sociological situation focused on a picaro or picara
- (2) autobiographical format
- (3) partial and prejudiced viewpoint
- (4) viewpoint that is reflective, philosophical and critical
- (5) stress on the material level of existence
- (6) observation of a number of social classes or collective conditions
- (7) odyssey which moves through space and society
- (8) episodic in pattern.

Rothman's inherited society was a dramatic contrast from the society he moved into. Most of the other memoirists describe similar, if less dramatic, movement away from the constraints of their inherited societies. However one memoirist, Roger Van Dyken, did not openly describe his movement away from the constraints of his inherited society. Van Dyken is accepting of his religious upbringing, his political belief system and his social responsibilities. However, Van Dyken was troubled by his discovery that he had a variety of interests and was faced with the choice amongst these interests. Van Dyken describes how he learned to make this choice:

Now wondering which way I should go. I visited with my childhood pastor, the same one who baptized me and was still there when I went off to college. It was during my college years where kind of wrestling with these things and I went to him and asked his advice. I said, "How do I know?" And he said, "Roger, consider that you were in a room with many doors. And each door has a label on it that has the name of your interest. And you have many interests and so there are many doors." And he said, "What I would do; what I would suggest that you do, is to say a prayer and say: 'Lord open up the doors that you would like me to walk through' and then just go around that room and knock on all the doors: all your interest doors." And he said, "Which ever one opens, that's the one where the Lord would like you to go." And that's largely the philosophy that I've followed throughout life. And it's led me through some very interesting doors; fascinating pathways. (Van Dyken and McKenzie 2002, 27:52 – 29:02)

Van Dyken's philosophy of choice describes an important underpinning of the picaresque genre. The events in a picaresque narrative tend to occur in an accidental or episodic fashion, which minimizes the function of causality (Miller 1967, p.36). Sherrill recognized the inter-relatedness of the decision to break from the constraints of their inherited society or undertake a philosophy of choice and the acceptance of an accidental sequence of events (Sherrill 2000, pp.164-165). Once an individual has made a decision

to break from societal norms, he or she must open themselves up to others' worldviews. The ability to open himself or herself to others' points of view develops into a trait of being able to release oneself from one's own identity time and time again. This trait allows the individual access to the accidental or episodic and releases him or her from linear or causal social reality. Sherrill's interpretation of what constitutes a picaro or picara allows the inclusion of Van Dyken's case within this broader generalization of Guillén's first criterion.

Thus we can conclude that all of the narratives of this study conform to all of the criteria set out by Guillén as a definition of the picaresque genre. This close fit between the narratives collected in this study and the characteristics of the genre of picaresque leads to the formulation of Proposition 2:

PROPOSITION 2:

Entrepreneurs' narratives reveal a common underlying structure or genre that can be used in the development of a narrative theory of entrepreneurship.

Definition Development

Guillén has made the claim that the significance of picaresque novels is their handling of an important theme. This theme is stated as "...the dynamic relationship between the inwardness of the individual and his active career in a social and economic environment" (Guillén 1987, p.48). Sherrill has observed that, as the genre of picaresque moved into contemporary American literature, there was a blurring of the boundaries between fictional and non-fictional cases (Sherrill 2000, p.53). He has given the examples of the non-fiction picaresque works by contemporary American authors including William Trogon's "Blue Highways" (Heat Moon 1982) and John Steinbeck's

“Travels with Charley” (Steinbeck 1980).

Gilbert Ryle has claimed that the complexity of the notion of the self has been difficult for both theorists and non-theorists to grasp (Ryle 1949, p.186). The notion of “I” implies a high order of self-identification. This can be seen in the phrase “I introduced myself.” The high order of self-identification endows “I” with a mystifying uniqueness and adhesiveness such that it can act as the subject of the sentence (Ryle 1949, p.198). Charles Taylor has elaborated on the complexity of self-identification by showing it to contain the dimension of reflexivity. In his words, “There is one recurrent dimension of reflexivity, which consists in the fact that humans devise, or accept, or have thrust upon them descriptions of themselves and these descriptions help to make them what they are” (Taylor 1991, p.305). Jerome Bruner and David Kalmar have identified two functions in this reflexivity (Bruner and Kalmar 1998, pp.314-316). These functions are (1) individuation or the definition of private inner experience and (2) inter-subjective communication or the definition of the self in relation to social order. Life stories can bring these two functions together (Gergen 1994, p.187) because storytelling embraces both the text of a story and its performance (Boje 1991, pp.123-124). The holistic nature of oral narrative encompasses both the function of individuation in the text of the narrative and the function of inter-subjective communication in the performance of the narrative. However, in order for the storyteller to bring these two parts together, he or she must focus their story around a set of narrative conventions that contains his or her version of social order. Kenneth Gergen claims that these narrative conventions “constitute a syllabary of possible selves” (Gergen 1994, p.194).

It is a moot point whether or not the entrepreneurs in this study have knowingly or unwittingly used the picaresque genre as the basis for the underlying structure of their life stories. What is important is that the life stories collected in this study all appear to have a common underlying structure. Further, this underlying structure has been specifically defined by eight essential characteristics, which define a commonly accepted literary genre. The central theme of this genre has been stated as the quest for self-identity, which Guillén has defined as a changing relationship between the inner reality of the individual and its relationship to the social environment (Guillén 1987, p.48). The integration of the observation of the generic similarity of the oral narratives collected in this study and a parsing of the central theme of the genre leads to the statement of Proposition 3:

PROPOSITION 3:

The genre of entrepreneurs' oral narratives reveals that entrepreneurs act in the pursuit of self-identity.

Identity is one of the most important concepts studied in the social sciences (Côté and Levine 2002, p.xi) and questions of the nature of the self can be traced to metaphysical arguments. James Côté and Charles Levine have designated the psychologist Erik Erikson as the “father of the identity concept” (Côté and Levine 2002, p.xiii). Martin Sökefeld has described Erikson’s contribution as the combining of the archaic meaning of identity, the self-sameness or consistency of personality, with the modern meaning of identity, the sameness of the self with others (Sokefeld 1999, p.417). Erikson’s theory of identity grew out of the similarities he saw amongst his personal experiences immigrating to the US, the disturbances he had seen in conflicted young urban American patients and the strange disorder experienced by World War II victims

referred to as identity crisis (Erikson 1975, p.43). In all of these cases, Erikson thought that there appeared to have been a lost sense of connection to others (Erikson 1968, pp.15-19). Gwendolyn Sorell and Marilyn Montgomery have summarized Erikson's identity theory in this way:

Erikson proposed that people know who they are through participation in particularized socio-historical contexts and the ways in which self-definitions are composed vary across the life span as bodies grow and age and social opportunities, expectations and responsibilities evolve and change. (Sorell and Montgomery 2001, p.102)

Erikson's theory has been criticized on a number of fronts. Most of these criticisms have centered on methodological rather than conceptual issues. However, two major lines of conceptual criticism have developed. The first of these is centered on the overemphasis of biology in Erikson's theory. Sorell and Montgomery have censured Erikson's eight-stage life-span model (Erikson and Erikson 1997, pp.55-61) for imposing a simplistic and gender biased time frame to the process of psychological development (Sorell and Montgomery 2001, p.109). The second line of criticism is centered on the construct of personal identity. Erikson's acceptance of the construct of a coherent personal identity, "I" or "myself" (Erikson 1968, pp.216-221), has been contested by post-modernist critics who envision a projective identity resulting from multiple encounters with others in the world around us (Craib 1998, p.173). In spite of these criticisms, Erikson's influence on the conceptualization of identity is widely recognized (Côté and Levine 2002, p.14). Erikson's theory constructs self-identity from the interaction of two dimensions: the inner self and the self that emerges from social process. Côté and Levine have modeled these two dimensions as the well metaphor and the mirror metaphor (Côté and Levine 2002, pp.54-57).

The well metaphor refers to the process of looking inward to find the self. The roots of this metaphor trace to the philosophy of ethical individualism: the effort to live in accordance with the “true self” (Waterman 1984, p.15). The modern version of ethical individualism has been manifested in the humanistic school of psychology, which emerged in the 1950s and 1960s from the work of Karen Horney and the neo-Freudian school of psychoanalysis. Horney challenged the prevailing view of neuroses as dysfunctional instincts with a theory that neuroses are impediments to self-realization (Horney 1950). Embedded in Horney’s therapy is belief in an individual’s inherent capacity to grow and change. Abraham Maslow elaborated on this capacity to grow and change by defining a psychology of health (Maslow 1968, p.3). Maslow described psychological good health as self-actualization or “the full use and exploitation of talents, capacities, potentialities, etc.” (Maslow 1954, p.150). According to Maslow, the point of therapy is to help remove obstacles to individuals’ achieving their inner identity (Maslow 1954, p.262). Carl Rogers, a proponent of Maslow’s theory, developed a person-centered approach to psychotherapy (Rogers 1959). The central hypothesis of this approach is:

Individuals have within themselves vast resources for self-understanding and for altering their self-concepts, basic attitudes, and self-directed behavior; these resources can be tapped if a definable climate of facilitative psychological attitudes can be provided. (Rogers 1995, p.115)

Alan Waterman undertook a review of 574 research articles that tested various aspects of the theories of the psychological individualism proposed by Maslow, Rogers and their colleagues. Waterman reported that 56% of these studies found support for the positions taken by proponents of individualism, while only one percent supported the views of critics of individualism (Waterman 1984, p.152).

The mirror metaphor refers to the emergence of the self from the mirror of the social processes in which it participates. Charles Cooley has been credited with developing this metaphor for the social determination of the self (Hattie 1992, p.vii).

Cooley's description of the reflected self-definition is recursive:

In a very large and interesting class of cases, the social reference takes the form of a somewhat definite imagination of how one's self – that is any idea he appropriates – appears in a particular mind and the kind of self-feeling one has is determined by the attitude toward this attributed to that other mind. A social self of this sort might be called the reflected or looking glass self. (Cooley 1902, p.184)

George Mead argued against Cooley's initial position of the self having an essence other than that created out of social process (Mead 1934, p.173). Instead, Mead proposed that self-identity consisted of the "I" which was a response to the attitudes of others, and the "me" which was the organized set of attitudes from others that one assumes (Mead 1934, p.175). Mead's work became the foundation of the symbolic interactionist (SI) school of sociology and social psychology. Strauss has criticized the SI paradigm as overly simplistic because it failed to take into account the complex way in which identities changed over time (Strauss 1969, p.184). This criticism has developed into a complex debate amongst sociologists over the nature of human agency and its relationship with its surrounding social structures (Emirbayer and Mische 1998, summarizes the agency/structure debate).

Erikson described his theory of identity as a psycho-social theory in order to point out the integration of the metaphor of the well and the metaphor of the mirror (Erikson 1975, p.20). According to Erikson, identity formation can be seen as the ongoing integration of the inner self and the social self (Erikson 1950, pp.261-263). He defined

an identity crisis as the failure to successfully navigate one of the moments which he described as a "...necessary turning point, a crucial moment when development must move one way or another" (Erikson 1968, p.16). Erikson pointed out that well-adjusted social individuals are able to move through these turning points with a new resolution of the inner self and the social self, a process he referred to as the "epigenesis of identity" (Erikson 1968, pp.91-96). This statement of a healthy approach to identity resolution leads to the formulation of a normative definition of social individuality, stated here as Proposition 4:

PROPOSITION 4:

Social individuals resolve self-identity changes by reconciling their inner self with their reflection of social values.

It is interesting to observe that every one of the entrepreneurs who participated in this study described at least one major turning point in their life. Transcriptions of the entrepreneurs' descriptions of these turning points are presented in Appendix VI. The outcome of each of these turning points involved the creation of a new resolution of the inner self and the social self.

Sherrill has noted one of the essential themes of the contemporary American picaresque literature is: "the renewal of the world for the self and the restoration of the self to the world" (Sherrill 2000, p.84). This resolution of the self and society is not the only possible outcome of the literature of roguery. Frank Chandler has differentiated the picaresque from other genres, such as prison tracts and repentances, criminal biographies and the collected chronicles of crime; all of which involve a rogue (Chandler 1907, p.6). Common to these other genres is the anti-social behavior of the protagonist. Chandler has made it clear that this anti-social behavior is very different from the complex

interplay between individual and society that is characteristic of the picaresque (Chandler 1907, pp.411-412). The discrimination between the genre of picaresque and other genres of roguery provides an illustration of the difference between social and anti-social behavior. The specific exclusion of anti-social behavior from the character of entrepreneurs can thus be stated as Proposition 5:

PROPOSITION 5:
Entrepreneurs are social individuals.

All the entrepreneurs who participated in this study were found to conform to the fifth criterion of Guillén's framework of eight distinguishing features defining the picaresque: "stress on the material level of existence" (Guillén 1961, p.259). The buying and selling that accompanies the material level of existence is the fundamental process studied in economics (Barney and Ouchi 1986, p.18). While the word economics is today used in its macroeconomic sense, it is interesting to note that historically, economics was used in its microeconomic sense. Liah Greenfeld captured a 1744 definition of economics, "Oeconomic science is a practical science, wherein the wisdom, prudence and art of nearly all learned sciences are applied to the end of the rightful concern for the business of subsistence or householding" (Greenfeld 2002, p.95). Studies of state finance and studies of the marketplace were considered, during the time of Cantillon, Smith and Say, to be the parvenu of historians and political economists (Greenfeld 2002, p.96). As late as the end of the 19th century, Alfred Marshall opened his "Principles of Economics" with the words: "a study of mankind in the ordinary business of life" (Marshall 1890, p.1). Today, the study of exchange at the level of the individual and the firm is referred to as "organizational economics" (Barney and Ouchi 1986, p.18).

The entrepreneurs interviewed in this study recognized the scale of their economic actions. Dave Feinleib described the simple metric he uses to determine whether or not an idea is economic in nature:

And so, you know, I always come back to that when I'm thinking about new ideas. You know, you always...it's a simple idea: "Is somebody going to write you a cheque for that?" Either they are or they're not. If they are, you probably have the makings of a business. And you can think about scale and competitors and all that. If they are not going to write you a cheque: its a great idea, but its never going to be a business. (Feinleib and McKenzie 2002, 12:03-12:27)

Feinleib's heuristic is unlikely to be seen as a mainstream definition of economic activity. Nevertheless, this bright, well-educated and very successful entrepreneur is comfortable making very large commitments of resources based on this simple definition. Feinleib's heuristic points out the difference between simple daily transactions such as buying a cup of coffee in a restaurant and economic transactions such as the determination to start a coffee shop.

The economist, George Akerlof has developed a theory that he calls the lemons model to explain the difference between simple transactions and economic transactions (Akerlof 1970, p.494). The lemons model uses the market for used cars to show how the joint constructs of information asymmetries and opportunistic behavior create the conditions that define economic transactions. The presence of actors in the market who are prepared to act opportunistically in the presence of information dissimilarities creates a market cost. If this market cost is high enough, it will allow the formation of a venture that finds a way to minimize the opportunistic behavior (Akerlof 1970, p.496). Chapter II of this study described how Say's Law "supply creates its own demand" (Keynes 1935, p.25) was necessary as a corollary to Adam Smith's invisible hand in order to explain the

emergence of wholly new products or forms of production. Ron Morgan offered this description of the way an entrepreneur engages his or her decision making at the level of the marketplace when he said:

You've always got to be on the move as an entrepreneur. Because it's all survival. I think that it's harder for a rich person. He's been corn-fed all his life. I think it's harder for them to be maybe an entrepreneur. Because the safety net doesn't help you...the safety net makes you real dull. It's when it's real survival, you know, when you have to feed your family. (Morgan and McKenzie 2002, 48:50-49:13)

Morgan's words show the importance an entrepreneur places on the process of discovering new products or production processes. Akerlof's theory explains why this search is so important for entrepreneurs. New products or new production processes are embedded with asymmetric information. The entrepreneur can only command a price in excess of cost if he or she has exclusive rights to this embedded information. Over time others discover the information component of the product or process. The high value of the product or process in the marketplace is reduced as the invisible hand of supply and demand works towards equilibrium. Thus, in time, all new products erode to commodities. Tom Keffer described the importance of discovering a new product or production process this way:

You have to have an idea and I think even more important is being in the right market. There is no substitute for being in the right market. You can do well in the restaurant business but that's the hard way to do it, you know. But emerging markets where you're shrewd enough to see it and the potential is a very powerful resonance of idea and demand. (Keffer and McKenzie 2002, 36:14-36:39)

Keffer's reference the restaurant business being the hard way to do it makes an important distinction between two very different ways of creating value at the corporate level.

Ronald Coase presented a fundamental insight into the reason for creating an

ongoing business venture or firm. This insight was summarized as: “A firm has a role to play in the economic system if transactions can be organized within the firm at less cost than if the same transactions were carried out through the market” (Williamson and Winter 1993, p.90). Profitability of a firm is based on being able to sell goods or services for a price higher than the cost of purchasing or producing the goods or services combined with all the transaction costs associated with doing business. Jay Barney has developed a simple but powerful model that describes the forces that firms utilize to create and maintain profitability (Barney 1991). The model shows the interrelationship between firm resources and competitive advantage. Firm resources are the stock of tangible and intangible assets and capabilities controlled by the firm (Teng and Cummings 2002, p.82). Competitive advantage is the implementation of these assets and capabilities in a manner that is superior to the manner used by competitors (Barney 1991, p.102).

Michael Porter identified two generic strategies by which a firm could create and sustain competitive advantage (Bachmann 2002). One of these strategies focuses on a low-cost orientation that reduces all the costs, including transaction costs, associated with producing goods or services (Porter 1985, pp.62-63). This is a powerful strategy for the production of goods or services that are commodities, but difficult to create for new or unique products or services. New products or services commonly have expensive information distribution costs such as advertising and promotion embedded in the product. These costs often preclude a low-cost strategy. The other strategy focuses on the creation of unique customer value through differentiation of the product or service as highly valuable in the marketplace (Porter 1985, p.150). All of the entrepreneurs who

participated in this study participated in the formation of an ongoing business venture. We can thus state the relationship between the entrepreneurs of this study and the economic activity they have engaged in along a continuum based on the generic strategy the entrepreneurs have used to employ the resources of their firms towards competitive advantage. This relationship can be simply stated as Proposition 6:

PROPOSITION 6:

Entrepreneurs are engaged in economic activity.

The 64 ventures started by the entrepreneurs of this study were examined to determine which of these generic strategies had been employed in each. While there is a continuum between the deployments of these two strategies, it was not difficult for the researcher to determine which of the two generic strategies each of the ventures most closely resembled. The results of this examination are presented in Appendix VII. These results show the majority (36) of these ventures employed a low-cost strategy for creating competitive advantage, while a lesser number (28) attempted to create high customer value through a strategy that differentiated their product in the marketplace.

Proposed Definition

Propositions 1 through 6 have presented a unique insight into entrepreneurship. This study started with the premise that entrepreneurship is the activity that entrepreneurs engage in (Preliminary Definition). Oral narrative was determined to be a medium that entrepreneurs use to exchange important information (Proposition 1). Examination of these oral narratives revealed a common underlying structure or genre that could be used in the development of a narrative theory of entrepreneurship (Proposition 2). This underlying structure suggested that entrepreneurs act primarily in the pursuit of self-

identification (Proposition 3). As one of the participants in this study, Ron Morgan said, “I think that, in the end, you need to be driven...if you're driven by money...I think that's dangerous. I think you have to be driven by that's what you want to do” (Morgan and McKenzie 2002, 47:32-47:46). The manner in which entrepreneurs resolved conflicts between their self-identity and their social identity in moments referred to as turning points suggested that entrepreneurs could be defined as social individuals (Propositions 4 & 5). Further, entrepreneurs transact on a level sophisticated enough to be called economic activity (Proposition 6). These seven propositions can be summarized into a new definition of entrepreneurship:

DEFINITION:

Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity.

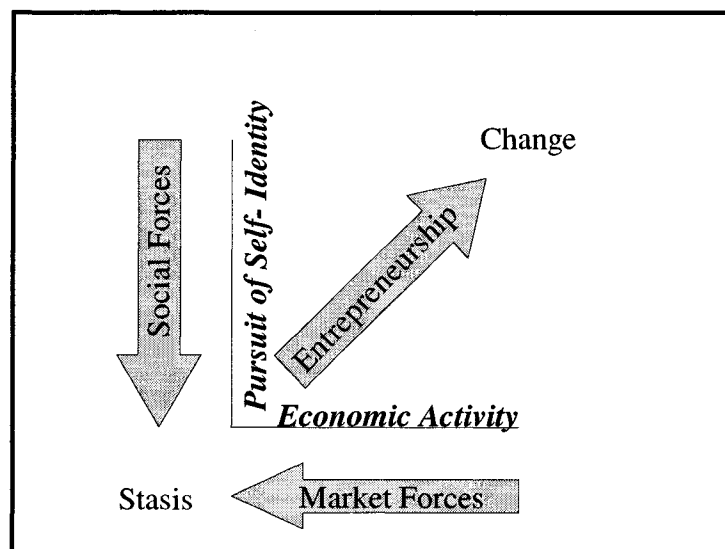
Model Development

The definition shows entrepreneurship to be an activity operating along two dimensions: the pursuit of self-identity and economic activity. Restraining forces bound each of these dimensions. Social forces restrain the pursuit of self-identity. The body of what Geertz refers to as cultural systems moves the individual towards conformity with the group that shares these systems (Geertz 1973, pp.98-99). Market forces restrain profitable economic activity. Buyers and suppliers attempt to use their bargaining power to erode the low-cost producer's strategic advantage. Similarly, new entrants to the industry offer substitutes in an attempt to reduce the differentiator's strategic advantage. These forces tend to move all products towards commodities. The direction of both market forces and social forces is towards stasis: conformity in social terms and market equilibrium in economic terms. Entrepreneurship, in its broadest sense, is the vector of

pursuit of self-identity and economic activity, moving in the direction away from stasis and towards change. The two dimensions of entrepreneurship and the forces acting in tension have been mapped in Figure 7. The dimensions, pursuit of self-identity and economic activity, should properly be viewed as continuously variable. There is a continuum of pursuit of self-identity strategies between the well metaphor and the mirror metaphor. There are also an infinite number of strategic variations possible between the extremes of low-cost production strategy and differentiation strategy. However, for the sake of simplicity in demonstration, these dimensions have been considered to be dichotomous, showing only representations of the extreme positions.

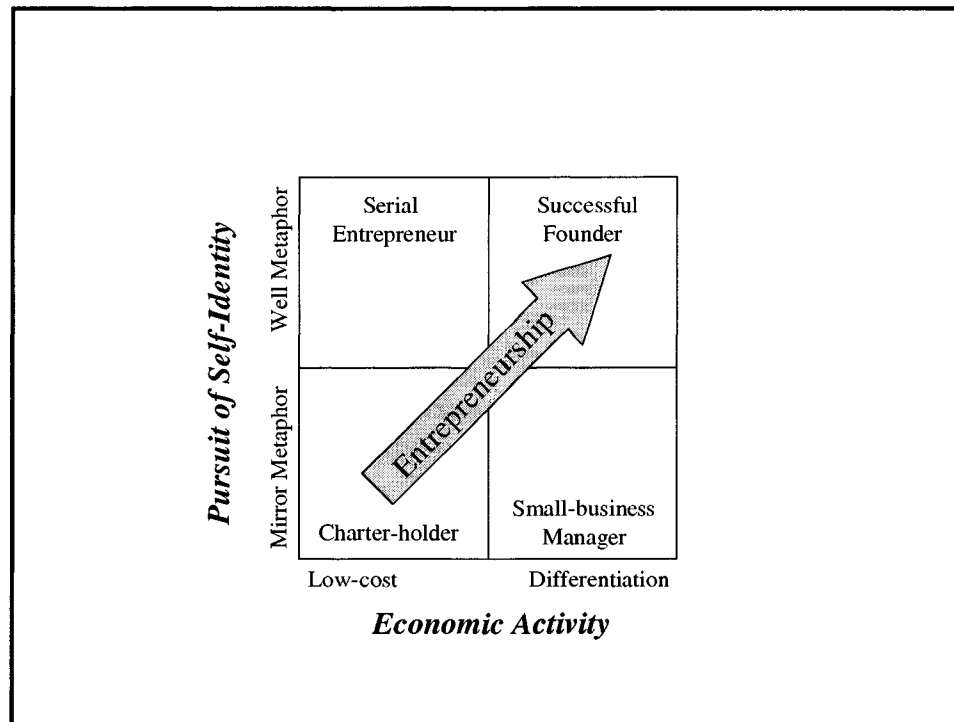
Figure 7

Social and Economic Dimensions of Entrepreneurship



When these positions are mapped along the two dimensions of entrepreneurship, four unique roles of entrepreneurship emerge: the roles of successful founder, charterholder, manager and serial entrepreneur. These positions are shown in Figure 8.

Figure 8
Identification of Entrepreneurial Roles



The position of well metaphor of self-identity pursuit mapped against differentiation strategy (top right corner in matrix of Figure 8) marks the role of successful founder. Successful founders have succeeded in making a distinctive statement of their self-identity to society through the medium of a unique and valuable venture. A good example of this is Nathan Rothman's creation of the Valiant Yacht Corporation. Rothman's strategy, to build a high quality, expensive boat, was clearly a differentiation strategy. Rothman was making a unique statement of his self-identity in starting the venture. He had just left a very fast paced life in Manhattan and was in the process of re-creating himself as a member of the new cruising world when he founded Valiant Yacht Corporation. The company was very successful and Rothman continued as

CEO for ten years, when he sold the business to Uniflite.

The position of well metaphor of self-identity pursuit mapped against a low-cost strategy (top left corner in matrix of Figure 8) marks the role of serial entrepreneur. The entrepreneur may or may not have founded a successful venture, but he or she has not made a unique statement of his or her self-identity. This makes the role highly unstable. Strategically, the venture requires constant vigil to maintain itself against rivals who have allocated their resources to better advantage. The venture must also be vigilant against powerful customers or suppliers using their power to erode the venture's profitability. Since the entrepreneur's self identity is independent of the venture, it is likely that he or she will seek some new opportunity when the going gets tough. Terry Farmer provides a good example of a serial entrepreneur. All of his ventures, the Doret Hotel, Farmer Construction, Stay and Save and Blue Ridge Inns have followed a low-cost or commodity-based competitive strategy. His background in construction and his business education taught him the importance of efficient operations management. Farmer runs very tight operations in all of his motels and shares the savings with his customers in the form of low prices. However, Farmer is not passionate about his businesses, referring to them as properties. As he said in his life story:

I guess that's what you would call an entrepreneur. There's always, not that drive, but the allure to do something else, to get something going and fine-tuning it and then expanding. So we're always interested in doing that.
(Farmer and McKenzie 2002, 24:00–24:21)

The role of serial entrepreneur does not imply failure. Farmer has been very successful as a businessman. However, as he explained in his narrative, Farmer is constantly attracted to new ventures. He has sold the Doret Motel and his interest in Farmer

Construction

The position of mirror metaphor of self-identity pursuit mapped against differentiation strategy (bottom right corner in matrix of Figure 8) marks the role of small-business manager. Managers have started highly differentiated ventures and been able to see their identities mirrored in those ventures. Cathie Walker's Center for the Easily Amused is a good example of an entrepreneur taking on a manager role. At the time of its founding, Easily Amused was a highly differentiated product in the marketplace. Although Cathie's identity was bound up in her career as a University of Victoria secretary at the time she built the business, she soon found a new self-identity mirrored in the venture. The result was a venture so stable that it survived being shut down by its owners, Vivendi, who decided to move their corporate resources out of Internet advertising ventures. Cathie tried to purchase Easily Amused from Vivendi. When this offer failed, she kept the concept of Easily Amused alive in her new web business Silly Girl. Cathie described her feelings about the necessity to see yourself mirrored in your venture this way:

I think that being an entrepreneur is basically following your dreams and passions and not letting anything get in your way. The business students I've seen at Royal Roads who are working on projects that have nothing to do with their core being are not going to do well. It would be like me going out and selling insurance or something like that. I would totally suck at it. So it's a matter of finding what you're passionate about and even if there's some way that you can incorporate who you are into what you are doing, you are going to have a reason to get up in the morning. (Walker and McKenzie 2002, 32:58–33:34)

The failure of Easily Amused reflects how quickly a differentiation strategy can collapse under pressure from suppliers and buyers when faced with competition. Internet advertising rates dropped by 60% in just one three month period, the last quarter of 2000

(Bayan 2001). This collapse of revenue was the reason behind Vivendi's decision to fold Easily Amused.

The position of mirror metaphor of self-identity pursuit mapped against low-cost strategy (bottom left corner in matrix of Figure 8) marks the role of charter-holder. The entrepreneur's commitment to seeing his or her identity as a mirror of their society makes it very difficult for this venture to deploy its resources in a way that is different from the norm. Thus any commodity-based strategy is likely to not have a sustainable competitive advantage. Dan Newell's unsuccessful attempt at founding Tangis provides an example of this role. It was obvious throughout his interview that Dan's self-image was a reflection of the values he held at Microsoft. He described his time at Microsoft this way:

And what I really enjoyed about the company, you know I mean there were just a number of things. The first five years were just insanely fun. Microsoft was private for three years while I was working there, from -83 to -86. And then it wasn't really worth much for a while, and so only the people who were attracted there were attracted by the environment and the work. (Newell and McKenzie 2002, 07:17-07:46)

Dan attempted to create, in Tangis, an efficient product development company similar to Microsoft. One could speculate that what he was really looking for was a charter from Microsoft to do another development project. However, the combination of difficulty in actually developing resources into an efficient operating mode, coupled with Dan's lack of commitment to the identity of the company, led to the demise of Tangis.

It is important to remember that this model is not static. Both dimensions of entrepreneurship are subject to change over time. Within the model, entrepreneurship is defined as any movement outward from the origin. Thus, a young person applying for a

job as a banker could be seen as a form of entrepreneurship. However, the time that he or she spends in the role of banker would be seen as static and thus non-entrepreneurial.

Preliminary Testing of Definition and Model

The definition of entrepreneurship developed in this study was tested against the 64 ventures that were formed by the entrepreneurs interviewed. Each venture was ranked on a dichotomous scale according to the manner in which self-identity was pursued and the strategy employed in the economic activity. A subjective description of the outcome was generated, and this outcome was compared to the model's predicted outcome. The results of the test of data fit to predicted entrepreneurial roles are presented in Appendix VIII.

The 17 men who participated in this study reported creating a total of 45 ventures, an average of 2.6 ventures per man. The eight women who participated in this study formed a total of 19 ventures, an average of 2.4 ventures per woman. A summary of the test of data fit to predicted entrepreneurial roles was categorized by gender. The outcomes of nine ventures were not known. The roles predicted for the other 55 ventures all coincided with the determined roles, showing an adjusted fit rate for the model of 100%. The determined roles of each of the 55 ventures were broken down by gender. A summary of entrepreneurial roles by gender is presented in Table 8.

Table 8
Summary of Entrepreneurial Roles by Gender

Role	Total	Male	Female
Successful founder	29.1%	31.6%	23.5%
Serial entrepreneur	36.4%	39.5%	29.4%
Small-business manager	16.4%	13.2%	23.5%
Charter-holder	18.2%	15.8%	23.5%
Total	100%	100%	100%

Table 8 shows that male entrepreneurs are more likely to achieve the role of successful founders and serial entrepreneurs than female entrepreneurs. Female entrepreneurs are more likely to achieve the role of managers or charter-holders than men. While these findings must be viewed with caution given the small number of cases reported in this study, they are consistent with the results of previous studies. A study by Sheppard (Sheppard 1992) has broadly characterized the decision-making of women managers and professionals as having a strong relational component suggesting a general trend towards the well metaphor of self-identity. A study conducted by Carter, Williams and Reynolds (Carter, Williams et al. 1997) found women entrepreneurs tended to utilize broad generalist strategies. The combination of these two findings suggests that female entrepreneurs are likely to take on the roles of manager or charter-holder in the model presented in this study.

Summary

This chapter has analyzed the data collected during fieldwork in a search for the basis of a new theory of entrepreneurship. This analysis has resulted in the substantive finding that entrepreneurs do use oral narrative to exchange important information. The

structure of the oral narratives of the entrepreneurs who participated in this study has proven to be useful in the creation of a definition and model of entrepreneurship.

The entrepreneurs who participated in this study described 58 instances of their use of oral narrative. Both the text of narratives and the performance of narratives were used to exchange important information. The most common occurrence noted (19) was the use of oral narrative for organizing. In this context, entrepreneurs used oral narrative to relate best practices, to document organizational structure, to learn about business practices in a family setting, to articulate the entrepreneur's vision, to describe a business model and to explain complex relationships within an organization. The female entrepreneurs of this study were seen to use oral narrative more frequently (40%) for organizing than their male counterparts (29%). The next most common occurrence (16) was the use of oral narrative as a method of identifying and communicating opportunities. Entrepreneurs were found to use the text of oral narratives to uncover opportunities in complex situations. They were found to use the performance of oral narratives as a dialogue with others in the synthesis of components of complex ventures. It appeared that entrepreneurs used oral narrative in the creation of opportunity recognition expertise. The male entrepreneurs of this study were seen to have used oral narrative more frequently (32%) for the identification and communication of ideas than the female entrepreneurs (20%). The entrepreneurs who participated in this study mentioned 12 instances of using oral narrative as a sales tool. Media scholars have identified oral narrative as a rich informational medium, which can be used to convey difficult messages such as trust and quality assurance. The female entrepreneurs of this study were seen to use oral narrative more frequently (25%) in sales than did the male entrepreneurs (18%).

Entrepreneurs in this study also referenced oral narrative eight times as a tool used for financing their ventures and three times as a form of socializing. Financing uses included both the acquisition of resources for the venture and ascertaining the correct timing for the end of the venture. It is speculated that further investigation of the use of oral narrative by entrepreneurs might provide evidence that could be used to differentiate entrepreneurs from non-entrepreneurs.

The definition and model developed in this study models entrepreneurship as a force of change with two dimensions: the pursuit of self-identity and economic activity. The study began with the premise that entrepreneurship is the activity of entrepreneurs (Preliminary Definition). All of the oral narratives collected in this research were found to share the common underlying structure or genre (Proposition 1), which closely resembled the picaresque. The picaresque genre describes the odyssey of a rogue and reflects this character's attempts to integrate his or her inwardness with an active career in the social and economic environment, suggesting that entrepreneurs act primarily in the pursuit of self-identity (Propositions 2 & 3). The manner in which entrepreneurs resolved conflicts between their self-identity and their social identity in moments referred to as turning points suggested that entrepreneurs could be defined as social individuals (Propositions 4 & 5). Further, entrepreneurs transact on a level sophisticated enough to be called economic activity (Proposition 6). The definition of entrepreneurship resulting from this theory has been stated as:

Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity.

The theory implies four entrepreneurial roles: successful founder, serial entrepreneur,

small-business manager and charter-holder. Preliminary testing of the model has shown that model successfully predicted all of the entrepreneurial roles associated with the 55 ventures described by the 25 entrepreneurs who participated in this study.

CHAPTER VII

DISCUSSION AND IMPLICATIONS

“There is another peculiar satisfaction in really hearing someone: It is like listening to the music of the spheres, because beyond the immediate message of the person, no matter what that might be, there is the universal.”

Carl Rogers (Rogers 1995, p.8)

This research project developed out of my interest in teaching entrepreneurship after a 26-year career as a serial entrepreneur. I had entered the practice of entrepreneurship, in 1971, as a life-decision. My wife, Molly and I could not find suitable employment, so we started our own business, which led to another, etc. Yet, as I began the process of developing curricula for teaching entrepreneurship, I discovered the academic world viewed entrepreneurship primarily as an economic or business phenomenon rather than as a phenomenon of individual action. Gartner has tacitly stated this position, “I think the study of the entrepreneur is actually one step removed from the primary phenomenon of entrepreneurship - the creation of organizations” (Gartner, Carland et al. 1988, p.21). Gartner’s statement reflects a focus, prevalent in entrepreneurship research, which objectifies business practice and delegates to the periphery the subjective qualities of individual behavior.

The Introduction chapter of this study recorded the debate between the two definitions of entrepreneurship currently vying for dominance in the field. The first, stated as “Entrepreneurship is the pursuit of opportunity beyond the resources you currently control” (Stevenson 1983; Stevenson and Gumpert 1985; Stevenson 2000) was

developed by the researchers at Harvard Business School as a common platform around which to focus research efforts. The second, stated as “Entrepreneurship as a scholarly field seeks to understand how opportunities to bring into existence ‘future’ goods and services are discovered, created and exploited, by whom and with what consequences” (Venkataraman 1997) was developed as a definition of the boundaries of the domain of entrepreneurship. Both the Stevenson and the Venkataraman definitions share a reification of the concept of opportunity and a distancing of the actions of individuals.

The Literature Review chapter of this study summarized the historical development of the field of entrepreneurship. This showed entrepreneurship research began as a description of a field of practice, which was only identifiable when economic processes were separated from the fabric of social life. When economic processes were modeled at a high level of aggregation, the effects of individuals in society were nullified and the entrepreneurial function disappeared. Thus, there was no need for the description of the entrepreneurial role in Laissez-faire Capitalism or in General Economic Theory. However, as soon as economic processes were modeled at a level where individuals’ action is taken into account, the entrepreneurial function re-appeared. The Austrian view, that economic action is the outcome of individual behaviors, was opposed by the Walrasian view that markets acted at a level independent of the behaviors of the individual participants in the marketplace. These two viewpoints were argued both verbally and in practice in the Socialist Calculation Debate. The shift, in the 1990s, of the Soviet Union and China away from socialist planning towards market economies has provided evidence supporting the validity of the Austrian view in the Socialist Calculation debate. This argument suggests that understanding the role of the

entrepreneur, as an individual, is important to economic theorizing. Hébert and Link have said:

If the entrepreneur is a major force of change in the economic realm, if he is unique in the gifts he brings to the exercise of his peculiar function, if he deals in the unknowable consequences of his present and past actions, then as economists we should question the dominant mode of analysis that recognizes none of these attributes. (Hébert and Link 1982, p.6)

The Epistemology chapter of this study provided a framework for questioning the dominant mode of analysis used in entrepreneurship research. The chapter built a model in which scientific inquiry and humanistic inquiry are differentiated by the manner in which each deals with skepticism. In this model, scientific inquiry attempts to refute skepticism through adoption of an objective worldview of justified true belief while humanistic inquiry accepts skepticism through adoption of a subjective worldview of socially constructed knowledge. Entrepreneurship research within both the discipline of economics and the discipline of business management research has exhibited an overwhelming preference towards scientific inquiry. However, a few scholars have suggested that entrepreneurship research might be better served by humanistic inquiry (Low and MacMillan 1988; Aldrich and Baker 1997). Chris Steyaert and René Bouwen have made the claim that entrepreneurship research is implicitly narrative in its approach (Steyaert and Bouwen 1997, p.60), citing the extensive use of narrative at workshops and conferences on entrepreneurship. This chapter modeled a middle ground path between scientific and humanistic inquiry through the use of interpretation. In this model, interpretation contextualizes skepticism through repeated cycles of inquiry. The first cycle of inquiry in this study began with my interest in the study of entrepreneurship precipitating a detailed search of the academic literature. The second interpretive cycle

of this study began when the results of the first cycle did not appear to reconcile with my experiences in the field. This led to a third interpretive cycle, which inquired into the nature of understanding. The adoption of an interpretive model of inquiry led to a new field of investigation.

The Methodology and Fieldwork chapters of this study have described the collection of 22 hours of recorded interviews with 25 self-identified entrepreneurs which formed the basis for the next interpretive cycle of this inquiry. These recordings took place in the spring of 2002 in British Columbia and Washington State. The interviews were unstructured narratives of the life stories of the eight female and 17 male entrepreneurs who agreed to participate in this study. Reliability of data was ensured through attention to the quality of recording and reproduction of the interviews. Comparing the data to Gartner's eight entrepreneurial archetypes (Gartner 1982) tested validity to ensure that theoretical saturation had been achieved. The oral histories collected in this study revealed thick description of the memoirists' understanding of their entrepreneurial experiences.

The Analysis of Data chapter of this study continued this interpretive cycle by analyzing the life stories of the 25 entrepreneurs in this study. This analysis found evidence to support the claim that entrepreneurs use oral narrative to exchange important information. The entrepreneurs who participated in this study used oral narrative to organize, to identify and develop opportunities, to make sales, and to finance their ventures. Oral narrative was seen to be an intertwined construct of text and performance that had the ability to explain situational knowledge, to synthesize complex information

and to involve the listener in the exchange of information. It appeared that one of the most important pieces of information exchanged in oral narrative was information about the entrepreneurs themselves. An examination of the structure of the life stories of the 25 entrepreneurs of this study revealed a common genre. Abstraction from this finding allowed the development of a new definition of entrepreneurship: "Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity".

This definition models entrepreneurship as a force of change with two dimensions. These dimensions are a personal dimension (pursuit of self-identity) and a business dimension (economic activity). The model implies four entrepreneurial roles, which have been identified as successful founder, serial entrepreneur, small-business manager and charter-holder.

Discussion

The final cycle of interpretation in this study consists of the meta-narrative contained in this dissertation and the ways in which the readers receive the information contained in this narrative. It is my hope that this study will contribute to the literature of entrepreneurship research in two significant ways. First, the study has provided an example of the usefulness of a new approach to inquiry into the phenomenon of entrepreneurship. While previous entrepreneurship researchers have called for the use of ethnography in general (Stewart 1991) and interpretation in particular (Steyaert and Bouwen 1997), very few field studies have been done to prove the value of these forms

of research. This study has shown this form of inquiry offers important new insights into the nature of entrepreneurship. Second, interpretation of the structure or genre of the oral narratives collected in this study has uncovered a new and useful definition of entrepreneurship. This definition provides a common ground for research that was previously described as "...a hodgepodge of research" (Shane and Venkataraman 2000, p.217).

Entrepreneurs' Use of Oral Narrative

This study has found evidence of entrepreneurs' use of oral narrative to exchange important information. The most common references to the use of oral narrative by the entrepreneurs of this study were its use as a tool for organizing. William Gartner and Candida Brush surveyed the entrepreneurship research literature and categorized entrepreneurship into three cycles of organizing activity: emergence, newness and transformation (Gartner and Brush 1999, p.24). While Gartner and Brush's survey provided a framework for integrating previous conflicts and differences among entrepreneurship research findings, it did not make any suggestions as to how entrepreneurs go about these types of organizing. This dissertation offers the insight that research into the use of oral narrative by entrepreneurship researchers might provide an answer to this important question.

The oral histories collected in this research provided evidence of entrepreneurs using oral narrative for identifying and communicating opportunities. Shane has noted that research has not adequately explained how entrepreneurs discover opportunities (Shane 2000, p.448). The traits literature has suggested some reasons for why

entrepreneurs discover opportunities: a high need for achievement (McClelland 1961), a willingness to bear risk (Brockhaus and Horowitz 1986) or prior success in discovering opportunities (Krueger and Dickson 1993). Austrian economists have suggested a reason for the existence of opportunities, positing that opportunities exist because individuals in the marketplace are alert to dissimilarities of information (Menger 1871; Kirzner 1997). This study suggests that oral narrative might be one of the ways that entrepreneurs discover opportunities. Shane's study pointed out, "cognitive limits and the specialization of knowledge preclude entrepreneurs from identifying the complete set of entrepreneurial opportunities in a given technology" (Shane 2000, p.465). This dissertation has provided examples of how entrepreneurs have used oral narrative to share and expand their identification of opportunities. Rorty has described the difficulty explaining what a complex tool might be useful for. He suggested that a new vocabulary must be created in order to adequately describe the function (Rorty 1989, p.55). It is reasonable to conceive of oral narrative as one of the ways that this new vocabulary is created.

In stories of making sales and of financing ventures, the entrepreneurs of this study have provided examples of the use of oral narrative that parallel Rorty's concept of new vocabulary construction. Nathan Rothman's reorganization of the supply and demand equilibrium for the not-yet-built Valiant 40 provided an example of the use of oral narrative to construct a new vocabulary. In this case, the story was the acceptance of a new boat by the leading sailors of the Pacific Northwest and the vocabulary was a set of terms like performance cruiser and fast passage-maker.

The evidence of entrepreneurs using oral narrative to exchange important information presented in this study is preliminary in nature. Further research into the use of oral narrative by entrepreneurs will be required to substantiate understanding of the links between oral narrative and the creative processes of organizing, opportunity identification, sales and financing. Albert Rothenberg has suggested that narrative can be a useful tool in uncovering the process of creativity (Rothenberg 1979). This dissertation has contributed an example of the type of findings that might flow from further investigation of how entrepreneurs use oral narrative to exchange important information.

A New Definition and Model of Entrepreneurship

This study has made a significant contribution to the entrepreneurship literature by interpreting a new definition and model of entrepreneurship from oral histories of entrepreneurs. This definition is “Entrepreneurship describes the economic activity undertaken by social individuals in their pursuit of self-identity”. The definition provides a common motive for behavior that is seen as entrepreneurial. In doing so, the definition re-focuses the attention of researchers on the human side of business and economic processes. The definition of entrepreneurship developed in this study posits that personal engagement in the form of the pursuit of self-identity differentiates entrepreneurship from other forms of economic activity. The definition also brings together a multitude of disparate views of what may or may not be entrepreneurship. The definition and model presented in this study offer an end to what Parmodita Sharma has described as “joint custody of the coveted e-terms – entrepreneur and entrepreneurship” (Sharma 1998, p1).

This study offers a new approach to the way management researchers have looked

at entrepreneurial outcomes. The assumption that entrepreneurship, identified as the “creation of organizations” (Gartner, Carland et al. 1988), was a single and identifiable phenomenon led management researchers to speculate about the factors that influenced the performance of these new organizations. The New Venture Performance (NVP) stream of research used a functional approach to identify strategy, organizational structure and industry structure as determinants of venture success (Biggadike 1976; Sandberg 1984; McDougall and Robinson 1987; Herron 1990; Kunkel 1991; Chrisman, Bauerschmidt et al. 1998). However, concise definition of the construct of performance has been a serious challenge to researchers in the NVP stream. This study identifies four groupings of outcomes resulting from entrepreneurship, thus showing that new venture performance consists of several heterogeneous constructs. This finding should assist the NVP stream of research in formulating new measurements for the multi-faceted construct of new venture performance.

The definition of entrepreneurship proposed by this research project also has interesting implications in the study of philanthropy. Many forms of philanthropy can be seen as economic activity undertaken by social individuals in their pursuit of self-identity. The only difference between philanthropy and what we traditionally refer to as entrepreneurship is the direction of the flow of funds. Entrepreneurship assumes a flow of funds into the entrepreneurial organization; while philanthropy assumes a flow of funds outward. Ralph Turner has found that the students and adults that he studied used altruism most frequently as a medium for self-discovery (Turner 1975). This finding would suggest that personal philanthropy is a form of entrepreneurship according to the definition proposed in this study. Corporate Charitable Involvement (CCI) may or may

not be deemed to be philanthropy. The literature of CCI suggests four possible motivations: strategic, political, managerial utility and altruistic (Campbell, Moore et al. 2002, pp.30-31 for a summary of the literature). In a survey of 300 community hardware stores, Reginald Litz and Alice Stewart found evidence that family-owned businesses had greater levels of participation in philanthropic and service activity than non-family-owned businesses (Litz and Stewart 2000). This dissertation supports the differentiation between CCI and personal philanthropy. Further study into the relationship between philanthropy and entrepreneurship could shed important new insight into motivations for and patterns of philanthropy.

Limitations of the Study

This dissertation set out to gain understanding of entrepreneurship from an investigation of the tacit knowledge of working entrepreneurs evidenced in their oral recounting of their life stories. Interpretation of the oral histories of 25 self-identified entrepreneurs has led to the development of a new definition and model of entrepreneurship and insight into the ways that entrepreneurs use oral narrative to exchange important information. However, the generalizability of this interpretation may be limited by geography or by socio-economic environment or by gender.

The entrepreneurs who took part in this study all resided in the northwest portion of Washington State or the southwest portion of British Columbia. This particular geographic area was selected for this research because the business culture was relatively homogenous in spite of national boundaries. The area is credited with having a culture that revolves around quality-of-life and a willingness to explore new ideas (Garreau

1981). It is possible that the culture of the area defines either the content or the application of oral narratives in a way that culture would define narrative in other geographical settings. However, since only nine of the 25 entrepreneurs were originally from this area, there is some assurance that the effect of geography is likely to be minimal.

The entrepreneurs who participated in this study came from a relatively homogenous socio-economic environment. The economic environment described in this study is a free market economy with relatively unfettered social mobility. As a result, the findings of this study should not be generalized to feudal, tribal or to centrally planned socio-economic states. Crump has noted that there appears to be a range of monetary phenomena (Crump 1981, p.278) and that the form of these phenomena have a wide range of social, cultural and economic functions embedded in them (Crump 1981, p.296). Karl Polanyi has claimed that a free market for labor is a necessary condition for the development of economic transactions (Polanyi 1944, pp.163-164). Without a free market for labour, individuals cannot choose to define their identity through economic activity.

This study has not looked into differences which gender might play in the use of oral narratives by entrepreneurs. There appeared to be minor differences between the way male and the way female entrepreneurs used oral narrative to exchange important information. The narratives of both male and female entrepreneurs appear to have identical underlying structures or genres. Nevertheless, it is possible that there could be significant differences between male and female forms of narrative. Previous studies

have shown significant differences between males and females in the content of their narratives (Stephenson, Wolfe et al. 1999) and in the strategies they employ in starting new ventures (Carter, Williams et al. 1997). Further research into this important question is advised.

Implications for Research

This study has three implications for research. First, the definition and model of entrepreneurship developed in this study provides a means of integrating what were previously seen as four disparate forms of entrepreneurship: successful foundings, serial entrepreneurship, small-business management and charter-holder activities. Second, the study develops a clear distinction between new product development and entrepreneurship. Third, the study offers a cogent reason to revisit the traits or psychological stream of entrepreneurship research.

Entrepreneurship research has been widely criticized for its lack of a common definition (Churchill and Lewis 1986; Low and MacMillan 1988; Gartner 1990; Bull and Willard 1993; Sharma 1998, to name a few; Nodoushani and Nodoushani 1999; Shane and Venkataraman 2000; Bruyat and Julien 2001). Scholars have likened research in a field without a common definition to the Hindu fable: “The Blind Men and the Elephant” (Brazeal and Herbert 1999; Gartner 2001) where six blind men form very different concepts of the nature of the animal based on the part they were touching. This study has uncovered a new definition of entrepreneurship that offers to unite many of the different parts of the entrepreneurship elephant that scholars in the field have been reporting. The proposed definition offers an explanation for entrepreneurship within organizations and

for franchising as forms of charter-holding, for small business management, for serial entrepreneurship and for successful foundings. Integration of the field of entrepreneurship through a common definition allows clear boundaries to be formed; demarcating what is not entrepreneurship as well as what is entrepreneurship.

One of the most important boundaries surrounding the phenomenon of entrepreneurship is the one that separates innovation or new product development from entrepreneurship. Confusion between the phenomenon of innovation and the phenomenon of entrepreneurship is rooted in a common misinterpretation of the meaning of Schumpeter's new combinations by a number of management scholars (Kanter 1983; Hills and LaForge 1992; Hornaday 1992). In defining new combinations as a mechanism for economic development, Schumpeter is specific in stating that these new combinations can be carried out by new firms or by "the same people who control the productive or commercial process which is to be displaced by the new" (Schumpeter 1934, p.66). The definition of entrepreneurship offered in this study shows that innovation may be embraced within the entrepreneurs' strategy for economic action, but is not a necessary pre-condition for entrepreneurial behavior. Empirical evidence bears out this position. Bhide's survey of 100 founders of companies that appeared on the 1989 "Inc. 500" list revealed that only six claimed to have started with a unique product or service (Bhide 2000, p.32). This dissertation has made a contribution to the entrepreneurship literature by making the boundary between innovation research and entrepreneurship research clearer.

This study also contributes to the entrepreneurship literature by providing a

reason to re-open the psychological stream of study. Prior research in this field sought to predict entrepreneurial behavior. However, this endeavor was hampered by the lack of a concise definition of who was and who was not an entrepreneur. For example, Brockhaus administered the Wallach and Kogan choice dilemmas questionnaire (Wallach and Kogan 1959; Wallach and Kogan 1961) to entrepreneurs and managers (differentiated by whether they owned the venture or not) and found there was no apparent difference in their risk-taking propensity (Brockhaus 1980, pp.516-517). The findings of this dissertation would suggest that Brockhaus' study was flawed by the definition he used. The definition of entrepreneurship developed in this study would suggest that all the participants of Brockhaus's study were entrepreneurs. A re-visiting of the traits research in entrepreneurship might provide valuable normative guidelines for the search for self-identity and the relationship between this search and social values.

Implications for Practice

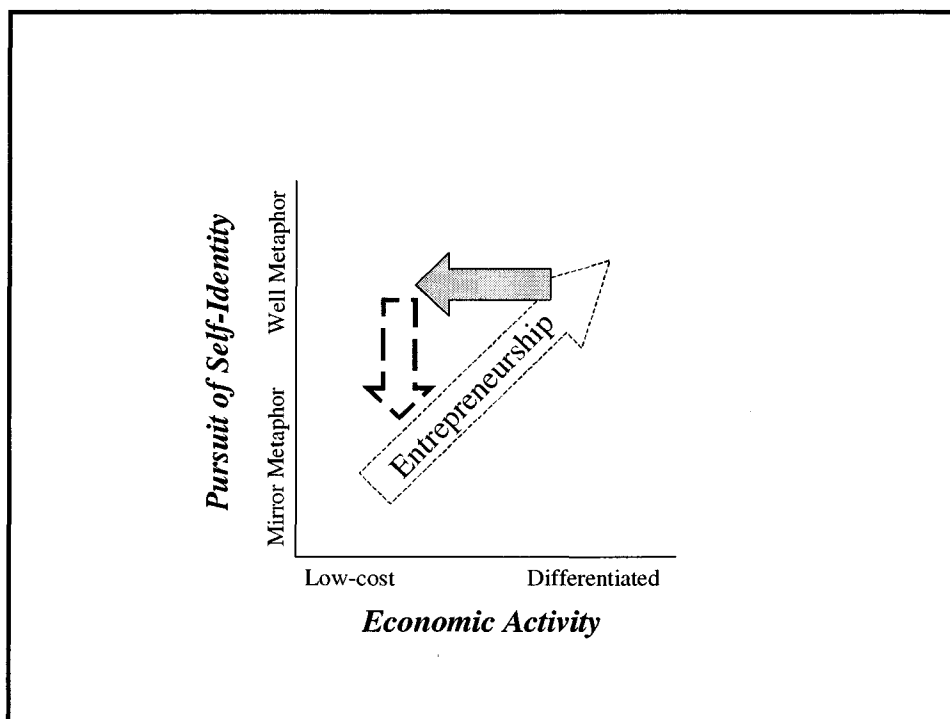
The definition and model of entrepreneurship described in this dissertation offers practical diagnostic tools to entrepreneurship practitioners. The model outlines four different forms of entrepreneurship and offers guidelines for the personal and economic requirements of each. Previous research has tended to offer a one-size-fits-all approach to normative guidance, treating all entrepreneurs as if they should be striving towards high growth ventures (Westhead and Wright 1998, p.199). This research offers a principled explanation for differences in the support requirements of the successful founder, serial entrepreneur, small-business manager and charter holder; an explanation which is likely to prove valuable for bankers, venture capitalists and support agencies.

The model of entrepreneurship developed in this study offers practical advice for entrepreneurs dealing with changing circumstances over time. Prescriptive advice covering two types of change affecting the working entrepreneur can be explained by this model: (1) the effect of market change on the entrepreneur's self-identity, (2) the effect of change in the entrepreneur's self-identity on the venture.

The effect of market change on the entrepreneur's self-identity is modeled in Figure 9. Over time, all differentiation strategies break down under the pressure of buyer and supplier bargaining powers and new entrants into the marketplace (Porter 1980, pp.7-29). This breakdown requires ventures to shift towards a low-cost strategy. Figure 9 clearly shows the demand this places on the entrepreneur.

Figure 9

Effect of Market Change on Entrepreneur's Self-identity



The successful founder is faced with the choice of (1) finding a new way of differentiating his or her product from the new competition (i.e. reversing the market force), (2) shifting the focus of his or her self-identity from the well metaphor to the mirror metaphor (shown as a dotted arrow in the figure) or (3) becoming a serial entrepreneur. Market conditions often preclude the first choice. If the entrepreneur attempts the second choice, the sum of the force of market change (shown in Figure 9 as a solid arrow) and the force of changing criteria for self-identity (shown in Figure 9 as a dashed arrow) are in a direction opposite to entrepreneurship. This often leaves the third choice as the most attractive. The reluctance or inability of entrepreneurs to subsume their self-identity to that of the organization has been well known to venture capitalists and investors. Thomas Hellmann and Manju Puri reported that more than half the Silicon Valley start-ups they surveyed between 1996 and 1997 replaced the venture's founders with a new CEO (Hellmann and Puri 2001, p.15). A tendency has been found for smaller firms to replace the founder less frequently than larger firms (Willard, Krueger et al. 1992). However, Warren Boeker and Rushi Karichalil point out that no specific motivation has been uncovered which causes founders to leave the firms they helped to start (Boeker and Karichalil 2002, p.825). The definition and model of entrepreneurship developed in this study may offer practitioners of entrepreneurship an explanation of the difficult choices that may cause entrepreneurs to leave the ventures that they founded.

The effect of change in an entrepreneur's self-identity on the venture has been modeled in Figure 10. In this situation, we have a person who has been given a charter to initiate change. This would be the situation of an employee, charged with starting a new initiative in an organization, or a franchise holder. Should the individual discover

himself or herself through this activity, we see a shift from self-identity as a mirror of the organization to self-identity as described by the well metaphor. This shift (shown in Figure 10 as a solid arrow) requires the individual to discover a way of differentiating his or her economic activity in the marketplace in order to become a successful founder (shown in Figure 10 as a dashed arrow).

Figure 10

Effect of Self-Identity Change on the Venture

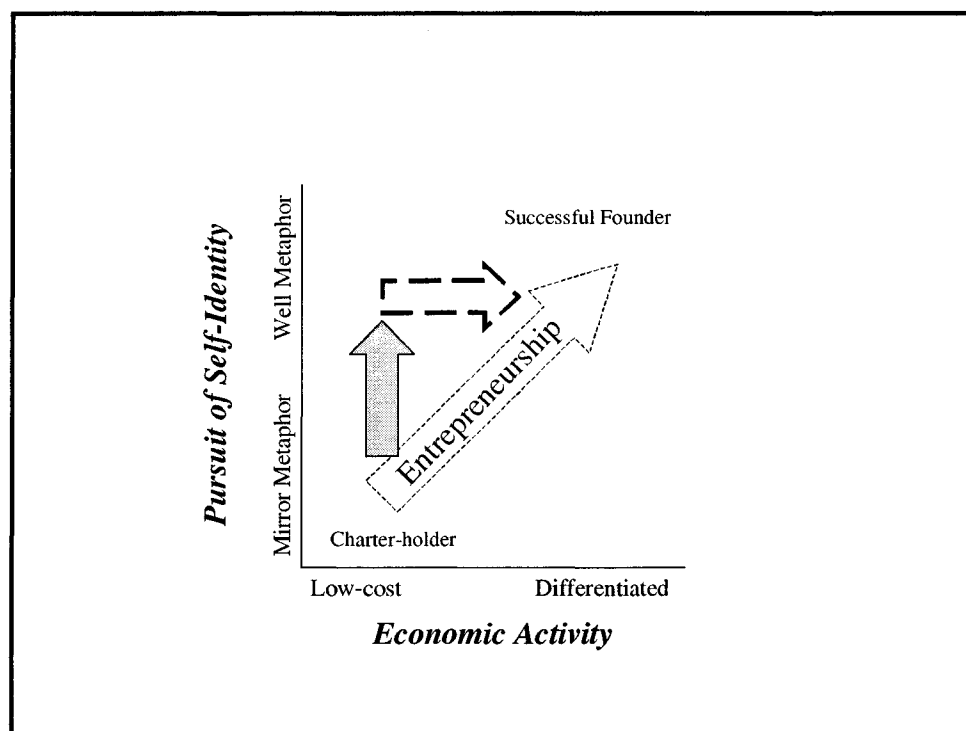


Figure 10 offers practical advice for employees who determine a better way of doing things to become successful founders of their own ventures.

Implications for Teaching

Porter and McKibbon's review of management education suggested that the trend

towards increasing entrepreneurship requires "...a more integrated, cross-functional approach" (Porter and McKibbin 1988, p.322). An important implication of this research study is the suggestion that entrepreneurship curricula should integrate learning about the process and social consequences of pursuit of self-identity. The definition of entrepreneurship developed in this study posits that training into the source and nature of self-identity as well as mastery of business practices should be mandatory components of a successful curriculum.

Closing

It is fitting to end this dissertation with the last story I collected. Molly and I were sitting in the main cabin of Dorothy with the man who was responsible for her creation. There was enough wind, so that the cabin rocked ever so slightly. Our empty coffee cups sat on the table and in the background of the recording you can hear the flickering of the fireplace. Nathan Rothman was telling us the story about the time he went sailing with Buckminster Fuller:

So we go out sailing...we're in the bay...whatever. And he's got like four people and there's myself and this guy who made the introductions and I think one of my dealers. So there's a bunch of people on the boat...six or seven people on the boat, which is a lot a lot you know. So and I'm thinking to myself, I just want to get Bucky alone for a few minutes by myself. So he goes, he starts to go down below to take a look or whatever. And I put myself right in the companionway, and he gets down below and he's holding on and he's alone. And I say "Mr. Fuller." And he says, "No, call me Bucky." "Bucky, I've got two minutes with you, I've read your books, you're a great guy." And I said, "Give me the words of wisdom." He says "What?" I said, "Give me the words of wisdom. Man you're 88 years old, I'm 33 years old. You've got to know a lot more than I know...tell me...you know." And he says, "You know we came out of San Francisco Yacht Club and as we were sailing out, you put the sails up and we were sailing out...there goes a 727 overhead. I was born in 1896 and when I was a little kid they told me that man would never fly. Out of the

question...forget it...it's not going to happen...been trying for a hundred years. Don't believe that you can't do whatever you want to do. Don't believe when people tell you that you can't do anything. You can do whatever you want to do. It's just a matter of getting out there and making it happen." And so those were his words of wisdom, and then we sailed for the rest of the afternoon and it was great. (Rothman and McKenzie 2002, 86:55-88:37)

And I said to Nathan Rothman, "What a wonderful story! Thank you very much."

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APPENDIX I

PARTICIPANT CONSENT FORM

UNIVERSITY OF VICTORIA
OFFICE OF THE VICE-PRESIDENT, RESEARCH
HUMAN RESEARCH ETHICS COMMITTEE

*Participant Consent Form***Understanding Entrepreneurship**

You are being invited to participate in a study entitled Understanding Entrepreneurship that is being conducted by Brian McKenzie. Brian McKenzie is an interdisciplinary Doctoral student in the Faculty of Graduate Studies at the University of Victoria and you may contact him if you have further questions by phoning 250-656-7822 or by e-mail: bmac@uvic.ca.

As a Graduate student, I am required to conduct this research as part of the requirements for a Doctor of Philosophy degree. It is being conducted under the supervision of Dr. Peter Stephenson. You may contact my supervisor at 250-721-7351.

The purpose of this research project is to increase our understanding of the process of entrepreneurship through the collection and analysis of oral histories of self-identified entrepreneurs. The study proposes to investigate two specific research questions:

1. Do entrepreneurs use oral narrative to exchange important information?
2. Do the oral histories of entrepreneurs contain common features from which one could induce a 'native' theory of entrepreneurship?

Research of this type is important because, no collection of oral histories of entrepreneurs is known to be available to researchers at this time. It is hoped this research project will contribute to the field of entrepreneurship research by adding veracity to the current diverse fact gathering through analysis of the voice of the practicing entrepreneur. The collection of oral histories of entrepreneurs is intended to become an ongoing source of information for entrepreneurship researchers.

You are being asked to participate in this study because you have been identified as an entrepreneur through published description, receipt of nomination/award for entrepreneurial achievement or credible third party reference.

If you agree to voluntarily participate in this research, your participation will include being asked to tell your life history.

The potential benefits of your participation in this research include having your life story recorded and receiving a copy of this recording. Society will benefit from this unique collection of oral histories, since oral history collections have become an important source of historical and cultural data. It is expected that this particular collection of oral histories will contribute significantly to the knowledge of entrepreneurial decision-making and communication.

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be destroyed.

This research may lead to a commercial product or service. The nature of this commercial use is publication of the study, which may include publication of part of the recording of your entire interview. I will hold copyright for the recording and will retain the rights to publish the recording for the first time, to reproduce the recording in any material form, to rent it out, and to authorize any such acts. You will have the right to use the recording for your own purposes. Any royalties received from a particular interview will be split equally between the principal researcher and the interviewee in accordance with the Canadian Copyright Act.

Since you are being asked to record your oral history, any quotations or your remarks will be attributed to you, and no effort will be made to protect your anonymity in this study. The oral history that you are being asked to provide will be a public document. You will be given a copy of the interview for review. Any material, which you deem might be harmful, will be deleted from the original recording, and a revised recording will be made. Otherwise, no attempt will be made to provide confidentiality of the information that you have recorded.

The data collected in this study is intended to form the basis for a public collection of oral histories. It is likely that these oral histories may be used in subsequent research. When this particular research project is complete, the recordings will be donated to a suitable recording library.

I am anticipating that the results of this study will be shared with others through the presentation of my Doctoral Dissertation, and presentation at scholarly meetings. It is also possible that the results may be published in articles or books.

In addition to being able to contact the researcher and the supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at the University of Victoria (250-472-4362).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researcher.

Name of Participant

Signature

Date

A copy of this consent will be left with you, and a copy will be taken by the researcher

APPENDIX II

RECORDING CATALOG

Field	Identifier	Field	Identifier
1	Blank	2	Blank
3	Blank	4	Primary Subject
5	Memoirist	6	Interviewer
7	Restrictions	8	Memoirist Birth Date
9	Memoirist Deceased Date	10	Recording Date
11	Per Start	12	Per End
13	Special Date	14	References
15	Keywords	16	Identification Number
17	Recording Location	18	Memoirist Address 1
19	Memoirist Address 2	20	Memoirist City
21	Memoirist Prov/State	22	Memoirist Country
23	Memoirist Postal Code	24	Memoirist Home Phone
25	Memoirist Fax	26	Memoirist Mobile Phone
27	Memoirist Office Phone	28	Memoirist E-mail
29	Original Recording	30	Master Original
31	Complimentary Copy	32	Working copy
33	Other Copy 1	34	Other Copy 2
35	Other Copy 3	36	Other Copy 4

APPENDIX III

SYNOPSIS OF ENTREPRENEURS' USE OF NARRATIVE

Participant	#	Use of Narrative	Classification	Reference
Dodie Eastaugh	1	Describing the discovery of an opportunity to improve an existing industry	opportunity identification	19:24 – 22:04
	2	As a way of organizing	organizing	23:42 – 24:55
	3	As a way of sharing best practices amongst staff	organizing	33:06 – 34:25
Terry Farmer	4	As a way to determine locations for motel development	opportunity identification	12:34 – 13:24
Dave Feinleib	5	As a way of making money through the sale of an autobiography	sales	00:00 – 00:00
	6	Writing reviews of computer programs and games	opportunity identification	08:34 - 09:12
Sean Fillion	7	Determination of store lay-out and fixtures	organizing	18:50 – 19:37
Pat Hackett	8	To identify creative processes	opportunity identification	13:50 - 14:09
	9	As a way of doing data flow analysis	organizing	10:39 - 10:55
Diane Haelsig	10	As a way of gaining a broad overview of a companies position in the economy.	opportunity identification	13:30 - 13:54
Marilyn Holt	11	As a way of determining who is an entrepreneur and who is not	opportunity identification	21:23 -21:51
Jeannette Hughes	12	As a foundation of discussion in a support group	organizing	17:30 – 18:16
	13	As documentation of organizations	organizing	20:00 – 21:30
	14	As a way of making money through creative writing	sales	24:09 – 24:59
Tom Keffer	15	In a corporate history to build corporate culture	organizing	14:44 - 15:30
	16	As a presentation of the company to investors during the pre-IPO road show	finance	24:48 - 25:30
	17	To understand the interconnectedness of the functional areas of an organization	organizing	39:55 - 40:53
Stacy Kuiack	18	Learning business practices in a family setting	organizing	07:33 – 08:32
	19	Describing a new opportunity	opportunity identification	12:42 – 14:08
Luke Melchior	20	As a way of articulating an entrepreneur's vision	organizing	16:06 – 16:10
	21	As a social activity	social	30:50 – 30:57
Tony Melli	22	As a way of projecting the future of software development projects	organizing	29:48 – 28:34
	23	Articulating miss the boat risk	opportunity identification	37:34 – 38:57
Stan Miritello	24	Tracking personal relationships	social	40:58 - 41:31
Ron Morgan	25	Discovering new opportunities	opportunity identification	12:47 - 15:13
	26	As a way of describing a weird and eclectic background	social	49:58 - 50:15
	27	In mediation	organizing	40:00 - 40:07
Dan Newell	28	As a way of posing important questions	opportunity identification	37:14 - 38:20
Peter Newman	29	Explaining complex supply chain management systems	organizing	22:16 – 27:22

Participant	#	Use of Narrative	Classification	Reference
	30	Discovering new opportunities	opportunity identification	39:05 - 39:47
	31	To contextualize risk	finance	40:45 - 43:00
	32	To win customer support to make sales	sales	48:00 - 50:47
Sorin Pop	33	To explain a complex business model	organizing	13:51 - 20:14
	34	To articulate an entrepreneur's vision	organizing	24:25 - 38:09
Nathan Rothman	35	To develop a new product	opportunity identification	19:19 - 21:35
	36	Finding funding partners for a new venture	finance	22:28 - 23:02
	37	To pre-sell product	sales	23:53 - 25:14
	38	To get feedback on an idea	opportunity identification	25:33 - 26:24
	39	Convincing suppliers to do business with you	finance	28:48 - 30:21
	40	Marketing a new product	sales	34:59 - 36:40
	41	Discovering new opportunities	opportunity identification	52:18 - 58:01
	42	To decide when its time to fold a company	finance	70:06 - 75:20
Chris Stephens	43	To explain difficult financing options	finance	15:46 - 17:16
	44	To explain venture capital financing	finance	29:42 - 35:32
	45	To explain HR issues	organizing	66:39 - 68:16
	46	To decide when it is time to fold a company	finance	74:06 - 76:17
Roger Van Dyken	47	Describing a business model	organizing	17:13 - 17:42
	48	As a book to explain a new recreational idea to potential clients	sales	34:28 - 35:05
Tim Vasko	49	Describing the discovery of an opportunity to improve an existing industry	opportunity identification	7:00 - 9:08
	50	Video taped stories and sent to potential investors to raise money	sales	22:44 - 23:16
Shirley Vickers	51	Public relations	sales	39:05 - 42:07
	52	Understanding complex partnership relations	organizing	42:12 - 43:52
	53	Writing proposals for oil-drilling operations	sales	44:46 - 45:43
Steven Villegas	54	To create a legend to assist in marketing a unique product.	sales	07:39 - 08:21
Cathie Walker	55	Developing interesting web-site themes	organizing	12:38 - 12:55
	56	Learning new programming techniques	opportunity identification	38:48 - 39:11
Lisa Wellman	57	Writing stories for use in public relations	sales	10:17 - 12:50
	58	Making keynote speeches as an inexpensive form of marketing	sales	14:40 - 14:56

APPENDIX IV

PARTICIPANTS' PUBLICATIONS

Participant	Publications
Dodie Eastaugh Dave Feinleib	Eastaugh, D. (1996). <u>Commonwealth Games Guide</u> , Victoria BC, Commonwealth Games Society, Feinleib, David (1999). <u>The Inside Story of Interactive TV and Microsoft Webtv for Window</u> . San Francisco, CA, Morgan Kaufmann Publishers
Marilyn Holt	Holt, Marilyn, Birmele, Ricardo (1989). <u>Ventura: The Complete Reference</u> . New York, NY, Osborne McGraw-Hill Editor of Northwest Venture Forum Newsletter: <u>Venturer</u> (1985 – 2000)
Jeannette Hughes	McNamara, Jeannette B. (1986). <u>Wilderness Dream</u> . Victoria, BC, Braemer Books Limited McNamara, Jeannette B. (197?). <u>History of Meals on Wheels in B.C.</u> McNamara, Jeannette B. (197?). <u>Homemakers Service in British Columbia</u> . McNamara, Jeannette B. (1980). <u>Closer to Home</u> . Victoria, BC, Ministry of Health, Province of B.C.
Tom Keffer	Keffer, T., Martinson, D. G., Corliss, B. H. (1988). <u>The position of the Gulf Stream during Quaternary glaciations</u> . Science 241: 440-442. Keffer, Thomas (1988). <u>Oceanography: the potential of vorticity</u> . Nature. 334: 105-106 Keffer, T., Holloway, G. (1988). <u>Estimating Southern Ocean eddy flux of heat and salt from satellite altimetry</u> . Nature 332: 624-626. . Corliss, Bruce H., Martinson, Douglas G., Keffer, Thomas (1986). <u>Late Quaternary deep-ocean circulation</u> . Geological Society of America Bulletin. 97: 1106-1121 Corliss, Bruce H., Martinson, Douglas G., Keffer, Thomas (1986). <u>Late Quaternary deep-ocean circulation</u> . Geological Society of America Bulletin 97: 1106-1121 Holland, W. R., Keffer, T., Rhines, P. B. (1984). <u>Dynamics of the oceanic general circulation: the potential vorticity field</u> . Nature 308: 698 - 705.
Nathan Rothman Roger Van Dyken	Rothman, Nathan 1998. <u>Building in Asia offers challenges to U.S. companies</u> Seattle WA, Daily Journal of Commerce May 5, 1998 Van Dyken, Roger & Marlene (2002). <u>San Juan Sailing Cruising Guide</u> . Bellingham, WA, Self-published Van Dyken, Roger (1997.) <u>Barging in Europe</u> . Richboro, PA, Cedarbrook Press

APPENDIX V

PARTICIPANT NARRATIVE PLOT SUMMARIES

Participant	Narrative Summary
Dodie Eastaugh	Dodie was born in New York, raised in Connecticut and moved to London where she was married to “a Scotsman” for 18 years. She moved to Canada and married her boyfriend from her teenage years. She worked in a private school, then for a government-run home support agency. When the Commonwealth Games came to Victoria, she signed up as a volunteer. This turned into a full time job for four years. At the end of the Commonwealth Games, she tried working for an orthodontist, but did not like it. She decided to start a business, signed up for a course in starting a business and opens Nightingale Home Support Services Ltd.
Terry Farmer	Terry was born and raised in Victoria. He took a Commerce degree at UBC then went to Montreal to work for Royal Trust. He returned to Victoria, and started a company, which built houses. Terry, his brother and his cousin purchased his father’s construction company. After doing a “turn-key” project building the Chateau Victoria, Terry decided to get into the hotel business. He purchased and renovated the Doret Motel. He then built the first “Stay and Save” Motel in Victoria. He and his partners then built similar units in Kamloops, Kelowna, Prince George and Vancouver.
Dave Feinleib	Dave was born in Boston, and raised by his Mother after his parents divorced. A boyfriend of his mothers introduced him to computers in 1986, and he began to write software and reviews of games for a computer magazine. He got a job as a programmer at age 12, and was recruited by Microsoft at age 14. He did an undergraduate degree at Cornell, spending summers working for Microsoft. Upon graduation in 1996, he went to work for Microsoft full time. In 2000, he left Microsoft to start OnDevice. The company was sold in 2001, and Dave immediately began work on a new company Conserra.
Sean Fillion	Sean finished high school in a suburb of Calgary and worked for a short time with Safeway and Telus. He did not like working for a corporation, and decided to sell t-shirts with a friend, Dave. They rented a kiosk in Calgary’s Au Claire market, but they were told to leave because their name: “Suicide Designs” was considered to be too controversial. They rented a house, and tried to sell from it, but had no luck. A friend introduced them to the property manager at Au Clair market and they agreed to move into a vacant storefront. They learned about trade credit and build an extensive inventory of fashionable clothing. They moved to a larger store, and business boomed. The business expanded to three stores.

Participant	Narrative Summary
Pat Hackett	Pat worked as a theatre electrician in college. From this he went to work in test and measurement within a number of semi-conductor firms. At Intel he developed a number of patented processes and software. He worked in a partnership to develop a compact robot. He took a severance package from Fujitsu and has used the money to spend time developing a new process for building wooden kayaks.
Diane Haelsig	Diane was born in a small town in Washington State. After high school, she moved to Seattle to study for one year at the University of Washington. She dropped out to get married, and supported her family by becoming a programmer at the Physics Institute of U of W. She moved to the Faculty of Medicine at U of W, then to Computer Center Corporation of Bellevue, AeroJet Corporation in Tacoma and to Exxon Nuclear. She went back to school in her late 30s and graduated a year before her oldest daughter. She got a consulting job creating a database system for a sales training company through her marketing instructor. She over-ran the budget for this programming, and decided to market the software in an attempt to recoup the cost of her time. This led to the start of Peopleware: a company that sells software to manage conferences, corporate meetings and education programs.
Marilyn Holt	Marilyn was born in Tacoma, and grew up on a small dairy farm with her parents, who are semi-retired. She did an undergraduate degree in English and History and earned her teachers certificate. However, she could not find full-time employment as a teacher. She undertook a Masters degree, and supported herself doing technical writing. Upon graduation, she discovered that she was earning more working four months a year at technical writing than her friends were making in a whole year. Her technical writing led to writing business plans, and from that a business developed doing small business management consulting. She got a real estate license and a number of securities licenses and developed a business finding venture capital for start-ups.
Jeannette Hughes	Jeannette was raised in Chemainus B.C. She married and moved to McCreary Manitoba, where she worked as a nurse. In 1970, she and her husband returned to B.C., settling in Sidney. Jeannette discovered that she had Multiple Sclerosis. She and her husband built a house, and Jeannette worked as a bookkeeper and set up the first MS support group in B.C. The poor quality of home support she received led to her getting involved in advocacy work. She took a number of courses at UVic to prepare herself for the work force. Summer work programs involved her in policy planning with the Ministry of Health and a study titled: "Closer to Home". When she lost her job and suffered a relapse, she decided that she has to leave her husband. Friends helped her move into an apartment. Jeannette re-married, and her new husband won a new home. They moved

Participant	Narrative Summary
Tom Keffer	<p>into the house and Jeannette got involved in a number of gardening projects, wrote a book, and worked for a publisher in Victoria. This led to a career in public speaking and teaching. She and her husband moved to Sidney, where Jeannette was elected to the city council. She continues to work as an advocate for the disabled.</p> <p>Tom was raised in Pittsburgh, in what he described as an intellectual household. He got a job laying out printed circuit boards at the age of 15. Tom did an undergraduate degree in Biology and Physics at Cornell. He says he took two years out to travel and “smoke a lot of dope” before doing his PhD at Oregon State University. He got a post-doctoral fellowship at Woods Hole Oceanographic Institute, and spent five years there. He then joined the faculty at the University of Washington. He left U of W to start Rogue Wave software in 1989. He served as the company’s CEO and then Chairman of the Board as the company grew to \$55 million in sales as a public company.</p>
Stacy Kuiack	<p>Stacy grew up in Victoria, the son of an electrical contractor. He talks about learning about mortgage rates when he was 10. He moved into the office of his father’s company at the age of 18. They were asked to install a Vigil system in a care facility in Victoria. Stacy traveled to Australia to meet the developers of the system. He developed Vigil Health Management through a reverse take-over of the Australian company. The firm developed a new platform of the software.</p>
Luke Melchior	<p>When Luke was five years old, he discovered that he had cerebral palsy that left him a quadriplegic. He finished school at a “normal school” due to his mother’s care. He lived in a group home for five years before deciding that he wanted to live on his own. In 1995, he attended Camosun College, receiving a Certificate in Business Management. With two other Camosun graduates, he started an internet retail business: Adventuregear. His community service work has led to establishment of a business (SquarePost Consulting) providing management consulting to disabled entrepreneurs.</p>
Tony Melli	<p>Tony grew up in Toronto and took a Computer Science degree at the University of Toronto. He worked in a number of ventures, which his older brother started. He began consulting with Ontario Hydro, and this relationship developed into a position with the small applications department. Tony left that job, and developed a company with his brother. The sale of that company led to Tony and his wife deciding to move to Victoria. He developed a consulting company in Victoria that did a series of contracts with the Ministry of Forests Protection Branch. This work led to the development of software which tracks vehicles. Tony and two other programmers developed a company to exploit this software. The firm evolves into Bfound and is sold to SignalSoft Corp.</p>

Participant	Narrative Summary
Stan Miritello	<p>Born to a poor family of Italian immigrants, Stan joined the US Coast Guard at the age of 15. He served in the US Navy during World War II and was part of the invasion of Okinawa. After the war, he took a few business courses then got a job in sales with the American Tobacco Company. He then moved to a company that sold plywood. He was a very successful salesman during the 1960s, but suffered from intermittent depressions. When the company wanted to move Stan to Michigan, he quit and bought a gas station in Florida. He did not enjoy that, so he got a job selling condominiums. His wife divorced him, and he moved to Wisconsin to take a job selling hardware. He moved to Seattle and developed a business selling specialty advertising.</p>
Ron Morgan	<p>Ron grew up with a twin brother in Denver. His brother was involved in a serious car accident in his freshman year of college and moves to Australia. Ron finished his undergraduate degree in business visits his brother and marries an Australian lady. He did a law degree in Georgetown while working in the US Senate and then moved with his wife to Australia. A year later, they moved to Centralia WA where Ron took a job as a lawyer and became a municipal judge. When his daughter died, he decided to give up law, and took a job with the Alsop brothers developing their electronics division. He left Alsop to develop a business manufacturing and selling a texture gun. After 10 years, he split up with his partners and developed an invention of his brother-in-laws: the Thumbnail® (a picture framing joint device). Ron rented the rights to the product to Nielson and Bainbridge. He attempted a number of other products: a cargo liner for Jeep Cherokees, a windsurfing supply company and a champagne opener. None of these products were successful. He became the Director of Properties at the Port of Bellingham, but disliked the bureaucracy and so left to build a product called the "Quietsaw" for picture framing. The product failed and Ron was forced to sell his home to avoid bankruptcy. A friend suggested that he become a mediator. Ron re-wrote the bar examination and hung out his shingle as a mediator in Bellingham.</p>
Dan Newell	<p>Dan traveled extensively as the child of an Air Force colonel. He completed an engineering degree at Stanford in 1982, and took a job at Microsoft. He worked in the C-Compiler Group, and then moved into the CD ROM division. A re-organization of this group left him reporting to a manager he did not respect, so he left the company in 1990 with several million dollars. After two years of travel and working on projects, he re-joined Microsoft and became the lead architect of the Advanced Technology Group. A merger of two divisions left him again reporting to the manager he did not respect, so he left a second time. Dan went through a divorce, and again</p>

Participant	Narrative Summary
Peter Newman	<p>traveled, living in France for a while and working on films in the Seattle area. In 1996, Dan formed a software company, Tangis Corporation to create “wearable computers”. He runs the company until 2002 when he closed the company taking a loss of \$7 million. After completing an apprenticeship in machining in Wales, Peter went to work for a gear manufacturer plant. He then took a job as general manager of a start-up. When a customer came to him with an order for a precision fit piece, Peter took the contract on his own and purchases machinery to produce the parts. He called this company P&C Engineering and moved into a number of custom products. In 1979, the economy in Britain slumped and Peter moved his new bride and two young daughters to Canada: settling in Prince George, B.C. He worked as the manager of the night shift of QM Industries building sawmill equipment. He moved to PG Fabricators because they offered him more money and a day shift job. The General Manager of this company and Peter decided to start a rival firm: Versatile Manufacturing. A couple of years later, Peter bought out his partner. He got involved in a number of other manufacturing companies, and became president of the Chamber of Commerce. In 1989, he purchased Weirs Beach Resort in Metchosin and moved to Victoria. He started a plastics company in 1994, and retired from all these ventures in 1999. In 2000, Peter took a job as General Manager of Maximum Separation Systems to learn more about the dental supply industry.</p>
Sorin Pop	<p>Sorin was born and raised in Romania, but decided, at the age of 17, that he was not going to live in a communist country. He first went to Egypt, and then to Victoria, arriving in 1993 as a graduate student under full scholarship. He graduated with a Masters degree in engineering in 1996, and took a job as a consultant. He enrolled in the Youth Environmental Entrepreneurship Program at the University of Victoria, then took a job in sales at Parametric Technologies working out of Vancouver. He was laid off in 2001, and is currently attempting to develop a software program, which will provide a paperless office at the time of the interview.</p>
Nathan Rothman	<p>Nathan’s mother died three days after he was born. He lived by himself from the time he was 13, because his father worked all the time. He attended college in Chicago, and started a hippie-clothing store during his last two years of college. He developed the store into a chain of four stores and a manufacturing plant before selling to a conglomerate. He moved to New York City and opened a restaurant in Soho. In 1971, he sold the restaurant and moved to Seattle to work as Jay Benford’s business manager. He developed the concept for a fiberglass cruising boat with Bob Perry and raised the money to begin production. However, the oil crisis of 1971 led to a shortage of fiberglass resin. Nathan arranged to have Uniflite</p>

Participant	Narrative Summary
	<p>build the Valiant boats under contract. Valiant attempted a hostile take-over in 1980, and he takes on partners who then sell out to Valiant. Nathan took a job with a firm setting out to build yachts in Shanghai. He discovered that it is very difficult to get the Chinese workers to build yachts, and developed a trading company China Interface instead. Nathan arranged to purchase a bankrupt ductile iron plant from Canada and deliver it to China. This led to a number of factory deliveries to China and then to south East Asia. He purchased a low cost housing fabrication plant and begins to sell units in Thailand and Malaysia as Trade Interface, but the recession of the late 1990s bankrupted this company. He started another company Getco with the intention of trading equipment and technology.</p>
Chris Stephens	<p>As a computer hobbyist in the early 1980s, Chris's husband, Fred, developed a number of terminal emulator programs. When the company he worked for, Computerland, went into bankruptcy, Fred and Chris bought the intellectual property rights to the programs that he had developed. They created a company named Crystal Point Software, distributing "PC Term" software, which they operated out of their home. When they went to their first trade show in New York, all of their equipment was stolen, leaving them with nothing. Chris is able to get their insurance company to pay for part of the equipment and the company is able to scrape by. In 1989, Tandem contracts Crystal Point to develop a new OS2 emulator. It takes longer to produce this software than expected, and they need to borrow \$150,000 from Tandem in order to finish the software. The program was a success, and they were able to pay back the loan out of the royalties. Over time, they build brand awareness for "Crystal Point". When the time came to re-write the software for the new 32-bit technology, they are able to do it on their own. The new software was huge success and the company moved to \$5 million in annual sales. However, by 1998, terminal emulator software had become a commodity product. Their managers and consultants tell Chris and Fred that they should fold the company, but they are not prepared to do it. Instead, they enter into a number of agreements that enable them to create a new product "Outside View", which converts legacy screens to graphical user interface. However, they ran short of money and were badly impacted by the market decline in the fall of 2001. Sales have begun to grow as this interview was made.</p>
Roger Van Dyken	<p>Roger was born the grandson of Calvinist immigrants to the US. He grew up in a farming community in California and went to Dort College in Iowa City, to do a degree in teaching. He became an intelligence officer in the Air Force during the Vietnam War. He married Marlene, and the couple purchased a small farm in Linden WA., where they raise 'beefalo'. Roger worked as a teacher, and</p>

Participant	Narrative Summary
Tim Vasko	<p>then joined a campaign to allow private schools to receive state funding. This was not successful, but led Roger to serve three terms in the state legislature. One day, he took his staff out for a sail during the private school campaign and thought that sailboat rentals might make an interesting business. He put his name in for office space in the new Port of Bellingham marina. In 1982, he was offered space and starts San Juan Sailing, a sailing school, charter-holder business and brokerage. In 1996, Roger took a year off to take his family barging through Europe. This led to the publication of a book and the development of a business (Barging in Europe). In 2000, he purchased a powerboat charter-holder business and is currently developing San Juan Yachting.</p> <p>Tim grew up in Denver, CO, and went to the University of Colorado. His first business was as a freelance re-modeler started after being laid off from his job. As a junior in college, he founded a t-shirt business "Sporteze", which supported him through his last two years of college. After graduating from university, Tim took time to tour Europe and kicked around the east coast of the US. He returned to Denver and got into selling insurance. This developed into becoming a mutual fund dealer/broker, and the beginning of an investment bank: "Vasko Investment Products". He learned how to develop oil and gas syndications as tax shelters. This led to developing a series of real estate syndications. The savings and loan crash of 1987 led Tim into doing real estate work-outs. When this market dried up, he moved into work-outs of operating companies. He purchased a tow-truck manufacturer and realized that he needs more business training. He enrolled in the MBA program of the University of Colorado, studying part time. A lawyer suggested that Tim look at a small electronics firm. He purchased this firm which contracted manufacturing of power supplies from China. Tim used the company as a shell to for the development of a printing conglomerate. The strategy was not successful, and Tim lost the firm and most of his savings. He and his wife moved to Oregon and then divorced. Tim moved, with his two children, to Victoria; emigrating as an entrepreneurship instructor at the University of Victoria. He left this position after two years and created an internet company: "Convergent Network Media".</p>
Shirley Vickers	<p>Shirley grew up on a farm in Alberta. When she graduated from high school, she went to Edmonton to go to business college. She got a job as a secretary at the University of Alberta hospital, but hated being "cooped up". She discovered that respiratory technicians moved around a lot, and so took training to become on. She was recruited to Victoria and was part of the start-up of the respiratory program at Victoria General. After raising a family and divorcing, Shirley got a job with a "home-care" firm. The owner</p>

Participant	Narrative Summary
Steven Villegas	<p>suggested that she would be good in sales, and soon she was promoted to the position of manager of the Vancouver Island division. Her success on Vancouver Island led the company to transfer her to Vancouver to turn around that area. When she succeeded in turning the Vancouver area around, she was asked to step aside so that a major shareholder can be given the management position. Shirley quit the company to begin a consulting firm. In her late 40s she got her MBA and began working at VIATEC.</p> <p>Steven grew up in Seattle. He attended community college for a year and then spent twelve years looking for what it was that he was supposed to do. He returned to Seattle, and got a job painting so he could make enough money to buy a bus. He ruined his favorite pair of pants, and so cut them up to make a kilt. Steven hurt himself on the job, and started making kilts while on disability insurance. He took the kilts to the Fremont market and was surprised to discover their popularity. His sister joined him and they formed Utilikilt® in 2001.</p>
Cathie Walker	<p>Cathie was raised in Victoria. She married right out of high school, and got a secretarial job at the University of Victoria. She spent her evenings and weekends involved in handicrafts, selling these in local stores. In 1994, she discovered the internet, bought a book on HTML, and taught herself how to create web pages. Cathie created the “Center of the Easily Amused”, which was picked up as one of Netscape’s top 10 sites. The site became so popular that the heavy use brought down the Islandnet server. She continued to work at UVic while managing the site until 1996, when she got an offer from Uproar to buy the site from her. Cathie became the Executive Producer of “Amused.com”, working of her home in Victoria. Uproar is sold to Vivendi Universal who eventually shut the site down even though it was logging over one million hits per day. Cathie tried to save the Center for the Easily Amused, but was not successful. She developed “sillygirl.com” in 2001.</p>
Lisa Wellman	<p>Lisa dropped out of college to get married and raise a family. However, when her children reached their teens, she felt that she was not making good use of her brain. She completed her degree in psychology and then got a job working for Allstate Insurance as an IBM programmer. She moved from Allstate to the technical training group of Adobe. When she lost power in the company to the new Director of Sales, she moved to Cupertino to work for Apple as VP in charge of graphics worldwide. In 1998, she left Apple and moved to Seattle to become the CEO of DeepCanyon, a start-up of Hewlett-Packard. The company was folded in 2001 and Lisa took a job re-starting Campus CE.</p>

APPENDIX VI

PARTICIPANTS' DESCRIPTIONS OF TURNING POINTS

Participant	Event	Reference
Dodie Eastaugh	“We met in London, I was 18, and he was 21 and it was love at first sight and all that and we knew each other for a few years and then he came to Canada to find his fame and fortune. And, I ended up marrying a Scotsman (nervous laugh), had two lovely children, but it didn't work out. We lost contact with John completely for over 10 years, and he was godfather to my younger child.”	01:40-02:02
Dave Feinleib	“Well, lets see, when I was twelve, you know we were, we were pretty short on money. Not that we weren't, we were very comfortable, but it was hard to make ends meet. So, coincidentally I met through my mom a guy named Paul, who introduced me to computers. And one of the challenges at that time was how were we going to kind of make ends meet and pay for things for school and pay the rent and then all this stuff. And so computers turned out to be a good way to solve that problem, you know, of keeping life running as we knew it at the time.”	02:38-03:30
Sean Fillion	“If it didn't make it Mom and I and Nick and Erica were looking at going on the street because we were all so screwed. Out of all of us, Erica wasn't working, I had the shop and Mom went bankrupt. Nick was the only one working. And that month that we started doing better, they were going to foreclose the house. So, you know it was just will, pure will. Because I could easily went and worked for somebody else, and whatever else but I didn't see it that way. I didn't see it that way. I think that if you are going to work for yourself, be willing to go to the street. That's why I always said to Scott, if you want to do this with me, man, you have to be willing to go to the street. And I was, I was damned close. I would have had my TV and I would have been living in my grandma's basement. At least I knew I was never really going to go to the street, but the whole idea and that mindset was always with me that today I'll still have that mindset. If I had to start over, I would start at the street. I always have me. If you believe in yourself then you have every asset that you need right there.”	21:23-22:27
Diane Haelsing	“I made a horrid mistake. I chose a company that... with a really charismatic leader, but his programmers weren't very good and the product...he gave me a price to do it in,	20:58-22:27

Participant	Event	Reference
	<p>he was over budget, he was over time, and the product was just a mess. Finally, we took it away from them and I hired a really outstanding...It was done in Foxpro and I hired an outstanding Foxpro programmer who is still with the company today. Over time, she corrected the problems with it and has managed to turn it into a very good product. But, I think that's probably the biggest mistake I made. in all the years. It just...and partially it was because we, you know, were scraping to make ends meet and so I kind of went with the low cost bidder. As it turned out, I didn't have to because I pre-sold the new product to existing customers and raised a half a million dollars. So I wouldn't have had to. But you know you make these calls as you go along and some you do right and some you do wrong. And that one I did wrong. But fortunately it wasn't a fatal error. Darned near was though."</p>	
Marilyn Holt	<p>"And then in the nineties, well eighties and nineties, my husband and I were also trying to have kids. And that just... I would not make any long-term commitments. And so that slowed things down and then the nineties I think we decided that it really wasn't going to happen and we, I, made some decisions to change how I was doing things and that was I think, where I date being more entrepreneurial from."</p>	20:24-21:05
Jeannette Hughes	<p>"So when I left my home in Deep Cove in my Mustang with my scooter (laughs) I first, as I mentioned just stayed for the summer with different places and then in September I decided that I was going to move into an apartment. And so I looked for an apartment by myself. I actually asked some social workers to help me when I was in Queenswood for a few days and I decided that I had to change direction in my life, I asked for help and these two social workers came and visited me and they said you know... I said 'I need to find a way to re-establish myself in the community.' And their only suggestion was about putting me in a group home with young handicapped adults. I said: 'Why would I want to do that?' I said: 'I need to find a way to survive in the community on my own.' Well they didn't really have any suggestions. Like they couldn't look outside the box."</p>	34:58- 36:04
Tom Keffer	<p>"I took a job at the University of Washington, which was kind of the opposite situation, I really enjoyed living in the Northwest again, but UW was this vast, sprawling, Orwellian bureaucracy full of petty politics. I had one</p>	10:06-11:20

Participant	Event	Reference
	<p>incident where I was on graduate students committee. I found that this person had plagiarized a part of their thesis. I was the one who discovered it. And although the Dean supported me in the subsequent battles, I was amazed to see that I was being put on the defensive. They were going 'Well it was just small...three of four pages out of her thesis that was word for word plagiarized but oh she meant to quote it and it should have been under quotations.' And you know you don't quote three or four pages so after that, I just realized that this was devolved to this kind of and in addition to petty bureaucratic squabbles it... it... the PhD if it meant anything elsewhere, it sure didn't mean anything at all there. So I decided that I had to get out of there. So that was 1989 after four, almost five years there."</p>	
Stacy Kuiack	<p>"That's where the entrepreneurial history came from. So the good side was I was exposed to a whole bunch of different business issues at a really early age from a whole bunch of different angles. Mostly it was trial by fire. We made a lot of really, really, really bad mistakes. Had three mortgages on the house. I remember being ten years old in 1981 and knowing what mortgage rates were because it was a topic of discussion because there was three of them on the house when it was going when we were in a big recession here in B.C."</p>	04:14-04:39
Luke Melchior	<p>"I lived at home until 1990 and I graduated from high school. And so my mom looked after me and did all my personal care. I had no van, you know, if I had to get around, I had to get lugged into the car and pushed around in the manual wheelchair. So I was completely you know not independent, couldn't move independently. So that's why, other than school, I didn't really have any outlet to you know for the community. Then in 1990, I moved to a group home at the Queen Alexander Hospital, on their property. And that was better because I had, there were caregivers there, I wasn't relying on one person to do all my care. I had, you know, people that were paid to help. And so I didn't feel so guilty having you know that burden on my mom. And they had a vehicle, and so it was a step up, but it was still...it still wasn't good enough. Because there's, you know eight people. Eight people live there, so often we had to do things as a group. And it was very hard so if you needed a ride somewhere it was really hard if it wasn't everyone going. And so that made it a challenge, and going to the University at that point I found</p>	31:50-33:20

Participant	Event	Reference
Tony Melli	<p>a bit of a challenge. So in 1995 I was able to move out on my own.”</p> <p>“And we moved out here. So we had...it was, you know coming out...start anew. I had nothing when we came out here. So I brought my computer, I drove across Canada with a couple of friends who wanted to see Canada and said, ‘Well here's a good opportunity to drive across Canada.’ So we came out here. I stayed in the basement...It was not even a suite...It was a semi-renovated basement apartment that a friend had. And I stayed there for a month until I found a house to rent and just started to knock on some doors of some contacts I had made coming over here through my friend who was in the computer field. And he was working at the government at the time. Actually, no he was working at an Apple dealer at the time. So he had a couple of companies. And I ended up working with the company that did consulting in the apple field, and I had nothing; no experience in the Apple field at all. Didn't want it. But they ended up putting me in touch with one contract that they had, it was the Ministry of Forests Protection Branch.”</p>	22:46-23:47
Stan Miritello	<p>“One night we were below decks, because I didn't have to man a gun. And the whole group had gone on patrols and my one friends group took the dead bodies, like they had six or seven dead bodies in his boat all night. It was raining. The bombardment on shore, you couldn't do anything. And that night we were sitting down there, and I don't know if the guys were smoking or what. And they knew that the Kamikazes were coming. But what they did instead of in daylight they would climb high and come down, but at night they would fly off the water. So there we were, they came in from the stern two of them I don't know if they were twin-engine bombers. And you could hear the high-pitched roar of those engines and right though the steel hull. We were below decks...I mean they couldn't have missed us by more than a few feet. One came grrrrrrrr and then the other one and it was sort of frightening. No one said a word. We just looked at each other, and when it was over we just got up and we walked away. The whole compartment was filled with smoke from the smoke screen And that was a real scary night and I realized how close we came.”</p>	18:19-19:34
Ron Morgan	<p>“I basically took a \$4000 bath, three years of my life, sold our dream home on Lake Watcom for like \$1.1 million, made about \$350,000 which paid off what I had lost...”</p>	34:18-34:38

Participant	Event	Reference
Dan Newell	“So once our group was re-orged and dismembered, I think all but one of the team left Microsoft, which was too bad. And I was also at this point having my...being in the throes of a divorce My wife had decided that she had been doing a lot of things because she was supposed to...you know...choice of career, college, and me too. I was one of the supposed to's and she realized ‘Hey, wait a minute’. So that was unfortunate. So at that point I had left Microsoft for the final time.”	31:06-31:45
Peter Newman	“We formed this company. Anyways, I went back to Britain and I got my entry permit. As an entrepreneur, I was allowed into Canada, within...well I think that was...I'm just trying to think now. That was March. I think it was June I got the OK I could come to Canada. I flew out again on my own in July and bought a house in Prince George. And we arrived in September on the Labour Day weekend. My wife, one daughter was 15 months old and one was three months old. And with all our worldly possessions in 10 suitcases. So from March of '80 until September of '80 we were done, sold off everything in Britain and were here.”	14:39-15:20
Sorin Pop	“At age seventeen, I moved here from Romania. At age seventeen, I was obviously still there and it was under a communist regime and it was a time when I decided that I don't want to live my life in that manner. So I made a choice to find a way to get into the west world. So anyways fast-forward a few years, I finished graduate university in Romania and became an engineer. I had an opportunity to start a PhD there. Worked as faculty, did it for about a year. Got another opportunity to work in Egypt for a joint venture with an Italian company, which I took right away because it was actually a way out of Romania, I guess. So I was looking for a way out. And in the meantime I was applying to different universities in countries like the US, Canada, Australia, UK, wherever English was spoken. So I got admitted to the University of Victoria full scholarship, which was the determining factor of why I came to Victoria. Essentially it was an act of faith or whatever. So again the first years were really determined by my decision to emigrate from Romania.”	04:50-06:07
Nathan Rothman	“My dad was a small merchant in New York in the textile business in Lower Manhattan. Unfortunately my mother passed away three days after I was born. So I was raised without a mother. I had two older sisters and lived in Brooklyn in New York until I was about nine or 10 years	01:06–01:57

Participant	Event	Reference
Chris Stephens	<p>old. And then we move to the Bronx till the time I was about 13 or 14. I kind of lived by myself. My dad was a workaholic and while it was a small business, it was him and one or two other guys occasionally, It was a hand-to-mouth kind of business and by the time I was 13 or 14 my sisters had gone off and gone to college and moved out. And so I lived with my dad, but I kind of lived alone because he would work from 8 in the morning and come home at 10 or 11 at night.”</p> <p>“And I looked down and realized that I had left my purse and briefcase at the ticket counter. And we literally left New York with nothing, nothing...nothing. Nothing.</p> <p>And that was our first trade show. And we got home we were panicked, because that was Fred’s work machine and it was everything. Plus now we had to pay back. The rental company was trying to tell us that we owed them. We had to get a system for our friend. We had to figure out how to get another card (to replace one borrowed from a government agency). And we had no money, zero. We were almost in foreclosure with our house.”</p>	26:20-27:09
Roger Van Dyken	<p>“There were some tenuous moments in the early, early years, where I regularly paid more to the bank than to my wife to buy groceries. But there were times when I did not know if I would be in existence in a month, and whether we would change from home owners to home renters.”</p>	25:07–25.37
Tim Vasko	<p>“It took me 15 years to build a company up to \$30 million or \$25 million or whatever it was and four days for it to crumble. And...uh...I moved to start again, and decided I would go into business again and I moved to Portland Oregon and did a consulting business and so forth; came up with this concept called Convergent Media Network, and I thought this was where the internet was going to go and this is what’s going to happen there; but I really didn’t have any energy to do anything to be honest...and in...This may be more than you want to know about my personal life. On Thanksgiving in November my wife told me that she wanted me to leave and I found myself out without a family; without a business and the only thing that happened was that Christmas I got my kids and they have lived with me ever since.”</p>	38:23–39:33
Shirley Vickers	<p>“I came back for a couple of months and I just hated it. So I just...I can’t believe I did it...but I...one day I came and I took all my staff out for lunch and bought them everything I’d told them we couldn’t afford. I went out and bought it all and faxed my resignation to the head office and walked</p>	34:57-36:26

Participant	Event	Reference
	<p>out the door. (laughs) I can't believe I did that. I just never do something like that, anyways. But I'd also negotiated, at that time, this really, really important meeting for them with the government, because I was well connected in the political arena. And I was supposed to broker this meeting for them and I thought I'm not doing this. And that 's why I did that on that day. I said 'I'm not doing this for them.' And I just felt really betrayed because I had loved this company. I had loved what I had done. Like I felt really bought into it. So anyways the day after I left, the President flew pout and took me out for lunch and he said, 'oh I knew you were unhappy, I knew I should have come to see you.' I said, 'Yea, Wade, I told you if I'm not having fun, I'm leaving.' I said 'Its not fun anymore so I have to leave.' So I just didn't know what I was going to do, but I left.</p>	
Steven Villegas	<p>"I went to this...you could say it was a seminar for...a motivational seminar. Most of the people who were at the motivational seminar were people who were locked down in a nice safe secure job and wanted to get on the other side of the fence. I was already on the other side of the fence and wanted to get back. But somehow I got to make that work. Even though I was contrary to all of those people. I was very impressive to them cause I had been living such a carefree life...existence. I had left everything that they were behind and I couldn't do the bus thing without them. And that is what I had done: I had isolated myself off into an elitist type of environment myself, being king and god and I was going to get it all done myself. It is impossible."</p>	05:57–06:48
Cathie Walker	<p>"And then everything fell apart. Uproar, my parent company, was sold to Vivendi Universal, who own half the planet. And they decided, in their infinite wisdom, that even though Amused was serving a million ads a day, that we were not a part of their future vision. So they said that they were going to shut down the website and we were given our notice. This was last May. So after hiding under the covers for a couple of days and falling apart, I realized that I'm not going down without a fight. It's like 'No we have not broken up until I say that we have broken up'".</p>	14:32–15:05
Lisa Wellman	<p>"The corporation made a decision to role up the position so that the VP of Sales would be the VP of Sales and Marketing. And this was a gentleman with whom I did not have a great deal of affinity, nor he me. And so, he</p>	13:56–15:14

Participant	Event	Reference
	<p>made it very clear that ‘I cannot fire you, I would if I could, but they like you upstairs, and I can’t fire you but I’m not going to invest in marketing. We are going to make a total sales focus and so I suggest the most effective thing you could do,’ he said to me, ‘is to kind of get out on the road and just represent our company.’ And I took that opportunity and so, over the next six months, I was making keynote speeches around the country, around the world actually on behalf of our company. You know, since you don’t have marketing dollars, the one thing you do have is your personality and your ability to get up in front of an audience and excite them about your product. As a result of the exposure that I got, six months after this happened, I got a call from Apple saying that we are looking for somebody to head up commercial publishing in the United States and everywhere we go there you are; so would you be interested in coming to Apple, and so they recruited me.”</p>	

APPENDIX VII

GENERIC STRATEGIES EMPLOYED BY ENTREPRENEURS IN THIS STUDY

Entrepreneur	Venture	Strategy Employed
Dodie Eastaugh	Nightingale Home Support	differentiation
Terry Farmer	Doret Hotel	low-cost
Terry Farmer	Farmer Construction	low-cost
Terry Farmer	Stay and Save	low-cost
Terry Farmer	Blue Ridge	low-cost
Dave Feinleib	OnDevice	low-cost
Sean Fillion	Echohouse	low-cost
Pat Hackett	Engineered Wooden Kayaks	low-cost
Diane Haelsig	Peopleware	differentiation
Marilyn Holt	Holt Capital	differentiation
Jeannette Hughes	Husband's Business	low-cost
Jeannette Hughes	MS Support Group	low-cost
Jeannette Hughes	Freelance Author	low-cost
Jeannette Hughes	Project Intercede	low-cost
Tom Keffer	Rogue Wave Software	differentiation
Stacy Kuiack	Vigil Health Management	differentiation
Luke Melchior	Adventuregear	low-cost
Luke Melchior	SquarePost Consulting	low-cost
Tony Melli	Ontario Hydro	low-cost
Tony Melli	Brother's company	low-cost
Tony Melli	Beacon Hill	differentiation
Stan Miritello	American Tobacco salesman	low-cost
Stan Miritello	Gas Station	low-cost
Stan Miritello	Specialty Advertising Sales	differentiation
Ron Morgan	Alsop division manager	differentiation
Ron Morgan	Thumbnail®	differentiation
Ron Morgan	Cargo Jacket	low-cost
Ron Morgan	Port of Bellingham director	differentiation
Ron Morgan	CKM Mediation	differentiation
Dan Newell	Tangis	low-cost
Peter Newman	P&C Engineering	low-cost
Peter Newman	Versatile Manufacturing	low-cost
Peter Newman	Chariot Manufacturing	low-cost
Peter Newman	Weirs Beach Resort	low-cost
Peter Newman	Progressive Plastics	differentiation
Peter Newman	Maximum Separation	differentiation

Sorin Pop	Melioro Systems	low-cost
Nathan Rothman	Clothing Store	differentiation
Nathan Rothman	Spring Street Bar	low-cost
Nathan Rothman	Valiant Yachts	differentiation
Nathan Rothman	China Interface	low-cost
Nathan Rothman	Trade Interface	differentiation
Nathan Rothman	Low-cost Housing Venture	low-cost
Nathan Rothman	Getco	differentiation
Chris Stephens	Crystal Point Software	differentiation
Roger Van Dyken	San Juan Sailing	differentiation
Roger Van Dyken	Canal Barge venture	low-cost
Tim Vasko	Sporteze	differentiation
Tim Vasko	Vasko Investment Products	differentiation
Tim Vasko	VIP Global Capital	differentiation
Tim Vasko	Powerline	low-cost
Tim Vasko	Convergent Network Media	low-cost
Shirley Vickers	Home Care Supply manager	low-cost
Shirley Vickers	PR Consultant	low-cost
Shirley Vickers	VIATeC consultant	differentiation
Shirley Vickers	Drilling Company	low-cost
Shirley Vickers	Water/Gas Drilling Company	differentiation
Steven Villegas	Utilikilt®	differentiation
Cathie Walker	Centre for the Easily Amused	differentiation
Cathie Walker	Silly Girl	low-cost
Lisa Wellman	PR Director	differentiation
Lisa Wellman	Apple VP	differentiation
Lisa Wellman	Deep Canyon	low-cost
Lisa Wellman	Campus CE	low-cost

APPENDIX VIII

TEST OF DATA FIT TO PREDICTED ENTREPRENEURIAL ROLES

Entrepreneur	Venture	PSI Scale	EA Scale	Entrepreneur's Role	Prediction
Dodie Eastaugh	Nightingale Home Support	M	D	manager	manager
Terry Farmer	Doret Hotel	W	LC	serial entrepreneur	serial entrepreneur
Terry Farmer	Farmer Construction	W	LC	serial entrepreneur	serial entrepreneur
Terry Farmer	Stay and Save	W	LC	serial entrepreneur	serial entrepreneur
Terry Farmer	Blue Ridge	W	LC	serial entrepreneur	serial entrepreneur
Dave Feinleib	OnDevice	W	LC	serial entrepreneur	serial entrepreneur
Sean Fillion	Echohouse	W	LC	serial entrepreneur	serial entrepreneur
Pat Hackett	Engineered Wooden Kayaks	M	LC	unknown	charter-holder
Diane Haelsig	Peopleware	W	D	successful founder	successful founder
Marilyn Holt	Holt Capital	W	D	successful founder	successful founder
Jeannette Hughes	Husband's Business	M	LC	charter-holder	charter-holder
Jeannette Hughes	MS Support Group	W	LC	serial entrepreneur	serial entrepreneur
Jeannette Hughes	Freelance Author	W	LC	serial entrepreneur	serial entrepreneur
Jeannette Hughes	Project Intercede	W	LC	serial entrepreneur	serial entrepreneur
Tom Keffer	Rogue Wave Software	W	D	successful founder	successful founder
Stacy Kuiack	Vigil Health Management	W	D	successful founder	successful founder
Luke Melchior	Adventuregear	W	LC	serial entrepreneur	serial entrepreneur
Luke Melchior	SquarePost Consulting	W	LC	serial entrepreneur	serial entrepreneur
Tony Melli	Ontario Hydro	W	LC	serial entrepreneur	serial entrepreneur
Tony Melli	Brother's company	M	LC	charter-holder	charter-holder
Tony Melli	Beacon Hill	W	D	successful founder	successful founder
Stan Miritello	American Tobacco salesman	W	LC	serial entrepreneur	serial entrepreneur
Stan Miritello	Gas Station	M	LC	charter-holder	charter-holder
Stan Miritello	Specialty Advertising Sales	M	D	manager	manager
Ron Morgan	Alsop division manager	M	D	manager	manager
Ron Morgan	Thumbnail®	W	D	successful founder	successful founder
Ron Morgan	Cargo Jacket	W	LC	serial entrepreneur	serial entrepreneur
Ron Morgan	Port of Bellingham director	M	D	manager	manager
Ron Morgan	CKM Mediation	W	D	successful founder	successful founder
Dan Newell	Tangis	M	LC	charter-holder	charter-holder
Peter Newman	P&C Engineering	M	D	serial entrepreneur	serial entrepreneur
Peter Newman	Versatile Manufacturing	W	D	serial entrepreneur	serial entrepreneur
Peter Newman	Chariot Manufacturing	M	LC	charter-holder	charter-holder
Peter Newman	Weirs Beach Resort	M	LC	unknown	charter-holder
Peter Newman	Progressive Plastics	M	D	manager	manager
Peter Newman	Maximum Separation	M	D	manager	manager

Sorin Pop	Melioro Systems	M	LC	unknown	charter-holder
Nathan Rothman	Clothing Store	W	D	successful founder	successful founder
Nathan Rothman	Spring Street Bar	W	LC	serial entrepreneur	serial entrepreneur
Nathan Rothman	Valiant Yachts	W	D	successful founder	successful founder
Nathan Rothman	China Interface	M	LC	charter-holder	charter-holder
Nathan Rothman	Trade Interface	W	D	successful founder	successful founder
Nathan Rothman	Low-cost Housing Venture	W	LC	serial entrepreneur	serial entrepreneur
Nathan Rothman	Getco	M	D	unknown	manager
Chris Stephens	Crystal Point Software	W	D	successful founder	successful founder
Roger Van Dyken	San Juan Sailing	W	D	successful founder	successful founder
Roger Van Dyken	Canal Barge venture	W	LC	unknown	serial entrepreneur
Tim Vasko	Sporteze	M	D	serial entrepreneur	serial entrepreneur
Tim Vasko	Vasko Investment Products	W	D	successful founder	successful founder
Tim Vasko	VIP Global Capital	W	D	successful founder	successful founder
Tim Vasko	Powerline	M	LC	charter-holder	charter-holder
Tim Vasko	Convergent Network Media	M	LC	unknown	charter-holder
Shirley Vickers	Home Care Supply manager	W	LC	serial entrepreneur	serial entrepreneur
Shirley Vickers	PR consultant	W	LC	serial entrepreneur	serial entrepreneur
Shirley Vickers	VIATeC consultant	M	D	manager	manager
Shirley Vickers	Drilling Company	M	LC	charter-holder	charter-holder
Shirley Vickers	Water/Gas Drilling Company	M	D	unknown	manager
Steven Villegas	Utilikilt®	M	D	unknown	manager
Cathie Walker	Centre for the Easily Amused	M	D	manager	manager
Cathie Walker	Silly Girl	M	LC	charter-holder	charter-holder
Lisa Wellman	PR Director	M	D	manager	manager
Lisa Wellman	Apple VP	W	D	successful founder	successful founder
Lisa Wellman	Deep Canyon	M	LC	charter-holder	charter-holder
Lisa Wellman	Campus CE	M	LC	unknown	charter-holder