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Social-environmental Entrepreneurs' Communicative Actions in Communication Networks

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SOCIAL-ENVIRONMENTAL ENTREPRENEURS' COMMUNICATIVE ACTIONS

IN COMMUNICATION NETWORKS

BY

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DISSERTATION

Submitted in Partial Fulfillment of the
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Dedication

For Macy and Davis, who make each day joyous for me.

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ABSTRACT

Entrepreneurs' communicative plans and actions serve to attract resources to their venture, positioning them for strategic gains. However, there is little understanding of how entrepreneurs perceive, value, navigate, and manage their participation in communication networks. This research finds that entrepreneurs strategically use communication networks to find and engage complementary resources, social support, and human and financial capital. Importantly, entrepreneurs facilitate the development of new networks, around innovative solutions and approaches to social problems.

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Chapter 1: Introduction

Several months ago, while waiting at a red traffic light, I sat behind a beat-up old Subaru station wagon that, typical to cars driven by aging hippies in Santa Fe, hosted myriad political bumper stickers. Among the many that reviled our former President ("Defoliate the Bushes", "Bush is a Liar"), was one that espoused a more hopeful worldview: "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has ~ Margaret Mead."

Ms. Mead, widely considered a leading cultural anthropologist of the 20th century, and highly regarded for her work in encouraging humankind to *choose* among its possible futures (Mead, 2001), believes that "cultural patterns of racism, warfare, and environmental exploitation were learned" (Institute for Intercultural Studies, 2010). Moreover, she believes that members of societies can work together to create new social structures, new social paradigms, in effect, to create social change.

As I sat behind that wagon I pondered the fact that from small groups of people meaningful social change *has* emerged. Often relatively under-resourced and without apparent political power or social consequence, these groups pursue making their vision a reality and somehow make social change happen in our complex society. "Social change" is popularly defined and understood to be the shifts in social structures, relations, and institutions, which result from social movements or radical events (http://en.wikipedia.org/wiki/Social_change). The academic literature defines social change similarly and Coleman (1990) writes of social change occurring as "social reality changes, through the invention of new forms of organization and the development of new processes" (p. 535). Notably, the altered social structure and relations that have resulted from

innovative ideas ranging from America's foundling democracy (Zinn, 2005) to women's rights (Zacharis, 1971) to the conservation movement (Fox, 1981) have consistently been instigated by small groups of committed people.

Of course, these small groups are not isolated and entirely without resources; they operate in a web of relationships. They are *networked*. And they are founded and led by intrepid *entrepreneurs*, individuals who pursue these opportunities to create change despite a lack of resources. Instead of pursuing financial gain, these *social entrepreneurs* pursue social change. These social entrepreneurs, while aiming for different outcomes than for-profit entrepreneurs, can be defined similarly to leaders of foundling for-profit ventures who similarly control few resources and strive to achieve outcomes despite this resource paucity (Byers, 2010; Shaw & Carter, 2007).

I wondered if they achieve their outcomes through communicating with established organizations and individuals who share their values and goals. I wondered if instigators of start-up social change organizations intentionally use their social networks as complements to the resources they control. Do they value networks, do they intentionally exchange and aggregate resources through networking? Do they build their credibility and visibility, pursue financial resources, and discover new knowledge or opportunities in their field through social networking activities? Do they plan for, aim for, and pursue outcomes through networking activities? I scribbled down a question that had begun to form in my mind: "How do social change entrepreneurs perceive and utilize their social networks to achieve goals?"

The car behind me honked. The light had turned green.

As I turned right on San Carlos Way, I recalled a conversation in which a friend (Ingram, 2009) who worked with small nonprofit organizations opined the unwillingness of local start-up social change groups to openly communicate, collaborate, and exchange resources with one another. This perspective seemed to contradict my fledgling notion that leaders of start-up social change ventures likely utilize connections-- social networks-- and communication strategies to achieve mission-related goals; I wondered what these entrepreneurs would say if asked about their social networking strategies?

Social networks are defined as social structures consisting of individuals or organizations (nodes) connected to and among one another with links (ties) stemming from common interests, relations, knowledge, or beliefs (Borgatti, Mehra, Brass, & Labianca, 2009; Freeman, 2004). More specifically, leading communication scholars Monge and Contractor (2001) write,

> Communication networks patterns of contact between communication partners that are created by transmitting and exchanging messages through time and space. These networks take many forms in contemporary organizations, including personal contact networks, flows of information within and between groups, strategic alliances between firms, and global network organizations, to name but a few (p. 440).

These communication networks likely offer social entrepreneurs access to the resources of others in their network. Do entrepreneurs realize this? Assuming they do, how do they manage their social networks? Do they intentionally utilize social networks to create resource exchanges with others? Do they attempt to achieve organizational goals through social networking (communication and interaction) strategies and tactics? If so, what strategic and tactical approaches do they plan (not plan), employ (not employ), and with what

frequency and effort level, and to what effect? What types of social networks do these social change entrepreneurs collaborate through, participate in, avoid, or remain excluded from? With whom do they network and through what means? What types of organizational or mission-related goals do they seek to accomplish through social networks? With a stack of questions I could not answer, I wondered who else had asked these questions and what they had discovered.

Communication Networks and New Venture Creation

Over the following months, I turned to the academic communication literature and extensive scholarly and popular literature on social networks. For several months, I searched the these bodies of literature, hoping to find answers to my questions about how social entrepreneurs building social change organizations perceive, manage, and utilize their social networks. I discovered that communication scholars wrestle with a range of theoretical questions including how information flows (Monge & Contractor, 2001), who has access to what type of information (Burt, 1992), and how people shape messages that then move through networks (Berger, 1997; Dillard, 1997). Relevant communication theories map and explicate information flows in formal versus emergent communication networks, explain how and why people set interaction goals and assemble communication action plans, and explore how people are constrained by their position in a network and by context, knowledge, and social status. Most of these theories assume that people operate with *bounded rationality* (Simon, 1976), making choices with the information and cognitive abilities they have. As such, their interactional behaviors, may be planned and intentional, yet still face boundaries and limits.

I read historical accounts of the development of social network theory and social network analysis (Borgatti et al., 2009; Freeman, 2004; Mitchell, 1974; Monge & Contractor, 2001) and I explored popular literature on social networks and power (Cross & Parker, 2004), the structure of social networks (Burt, 1985; Linton, 2004), and how structure shapes individuals' and organizational activities and, ultimately, social outcomes (Burt, 1992; Cattell, 2001; Davis & Aldrich, 2000). I learned that people are embedded in complex webs of relationships that influence, help, or hinder their role and movement in a given network (Bott, 1928; Granovetter, 1973; Lin & Vaughn, 1981). I read articles describing theories of motivation for participation and engagement in creating social change and discovered that some scholars believe that self-interest is a motivating factor while others claim that identity needs drive this type of activity (Friedman & McAdam, 1992; Logsdon, 1991; Stryker, Owens, & White, 2000).

I explored cognitive communication theories including John Greene's (1993) action assembly theory, Berger's (1997) works on planning strategic interaction, and Ajzen and Fishbein's (1980) theory of planned behavior. These communication scholars have explored how individuals shape and implement goal-oriented communication behaviors (see Dillard, 1997) and the effect knowledge, behavioral patterns, and expectations have on communication behaviors and outcomes. I reviewed research exploring how and why people pursue mutual interests and the collective benefits accrued to organizations through developing robust communication networks and knowledge management systems (Isaac, Erickson, Quashie-Sam, & Timmer, 2007; Monge & Contractor, 2002; Reagans & McEvily, 2003).

While this robust body of literature does not answer my research questions directly, it does inform us that new firms develop within the structure of existing social networks and that individual behavior (goal-oriented or not) within these networks is moderated, to an extent, by this structure. Research in the field of social network analysis continues to grow by leaps and bounds (Borgatti et al., 2009) and to find its inception, one must reach back into the conversations among the founding fathers of sociology including Marx, Comte, Weber, Durkheim, and Simmel. For a detailed account of this "pre-history" of social network studies, I recommend reading Linton C. Freeman's (2004) recent text, *The Development of Social Network Analysis: A Study in the Sociology of Science.* Freeman describes in detail the studies of the early 19th century in which the relationship of the individual to the whole (i.e. society) were explored. He credits the emergence of the field of sociometry, in which relationships are mapped through mathematical calculations, (usually considered the precursor to contemporary social network studies) to Jacob Moreno's 1934 paper entitled, *Who Shall Survive.* The study examines the contagion effect among runaway girls and is one of the very first to draw, or graph, the relationships between and among actors in a network.

Notably, Freeman (2004) writes that between 1940 and the early 1970's, the field of social network analysis lay relatively dormant (Chapters 5 through 8). Then, in 1973, Mark Granovetter published the remarkable article, *The Strength of Weak Ties,* in which he described the value of "weak ties" to other actors, or nodes in a network; it seems from that point the field of social network analysis has grown exponentially.

Studies measuring the effects of variables related to a node's position in a network proliferated. With the advent of personal computers and programs designed to assist with the mapping and visual representation of social networks, the emphasis has been, by and large,

on the structures of networks and the effects on nodes given their position in the structure (Freeman, 2004). Today's social network studies continue to be dominated by the mathematical and measurement approaches that assist in predicting and understanding the constraints actors cope with as units embedded in a network structure.

As the field of human communication network analysis has grown it has diversified and been adopted by scholars working in disciplines ranging from business strategy to health care to education (Monge & Contractor, 2003). Recognizing the role social networks play in firm development and success (Granovetter, 1985; Brass, Galaskiewicz, Greve, & Tsai, 2004), scholars have been studying business firms through the lens of social networks for over three decades. As interest in entrepreneurship has grown, so has the work of studying enterprise formation and social networks.

Beginning in the 1980's, scholars began to explore the impact social network structures have on new venture formation, inter-firm linkages, and entrepreneurs' success (Granovetter, 1985; Freeman, 1983; Aldrich, 1986). Beginning with Granovetter's compelling work (1985) identifying "the problem of embeddedness", defined as the economic opportunities and constraints afforded by an entrepreneur's position in a social network, the construct of embeddedness has become one of the most studied topics in the field (Eisenhardt, 1996; Hansen, 1995; Greve 2003). Research consistently shows a link between entrepreneurs' existing social networks and their ventures' eventual success -- or failure (Dubini, 1991; Eisenhardt, 1996; Hallen, 2008; Portes, 1996).

Many theorists link entrepreneurs' success to their *social capital*, broadly defined as the resources the entrepreneur can access through his or her social networks (Aldrich, 2005). Social capital has become one of the most widely explored concepts in social networking

literature (Lin, Cook, & Burt, 2005) and yet there persists a lack of research regarding entrepreneurs' intentional cultivation and use of social capital.

Further studies have explored how an entrepreneur's communication skills (Baron, 2000), personality traits (Baum, 1994), and social capital (Lin, 1999) influence entrepreneurial outcomes. Research examining the relationship between an entrepreneur's similarity to people who provide funding to new ventures, including venture capital and angel investors, have shown that homophily, defined as perceived similarity, with funders increases the likelihood of an entrepreneur receiving funding (McPherson, Smith-Lovin, & Cook, 2001; Hsu, 2007; Shane & Cable, 2002).

Recently, communication scholars have begun to query the role *agency*, defined as an individual's ability to exercise free choice or act on one's own will, plays in shaping entrepreneurs' social networking actions and behaviors (Ozcan & Eisenhardt, 2009; Hallen & Eisenhardt, 2008; Vissa, 2010). Ibarra, Kilduff, and Tsai (2005) identify the gap in academic literature exploring this topic when they write, "The role of individual action in the enactment of structures of constraint and opportunity has proved to be particularly elusive for network researchers" (p. 359). This recent area of research is important to this thesis as it considers how entrepreneurs set and pursue intentions and seek to solve the fundamental challenge of new ventures: a lack of resources from which *profits*, defined as social change *or* monetary gain, can be generated. In 2008, Hallen and Eisenhardt touched on the oft-overlooked topic of agency and entrepreneurship stating, "Although inter-organizational relationships are crucial for new organizations, the behavioral strategies that entrepreneurs actually use to form such relationships are relatively unexplored" (abstract).

Much of the academic literature touches on topics relevant to this research. From theories of planned and strategic interaction, to social network concepts including social capital and weak ties, the questions I seek to answer are not directly explored by these studies but are informed by them. Applying these studies to a specific context, and empirically exploring how entrepreneurs think about, manage, and engage their social networks, may lead to greater understanding of entrepreneurs' communicative actions in their pursuit of social change. The environmental movement and her communication networks provide an interesting arena for this study.

Definitions of Terms

This study uses several terms throughout the chapters that I will define for readers here. I am using the definitions provided by the online version of the Merriam-Webster dictionary, they are accessible at http://www.merriam-webster.com/dictionary. An *entrepreneur* is someone who organizes, manages, and assumes the risks of a business or enterprise. A *start-up* is a fledgling business enterprise. Similarly, a *venture* is an undertaking involving chance, risk, or danger, especially a speculative business enterprise. *Networking* is the exchange of information or services among individuals, groups, or institutions, specifically, the cultivation of productive relationships for employment or business. The *environmental movement* is the aggregate of people committed to the advocating for the preservation, restoration, or improvement of the natural environment. *Non-profit* organizations are not conducted or maintained for the purpose of making a profit.

The Environmental Movement as a Context for New Venture Creation

Previous decades have seen the rise of the environmental movement and today much of our national political discourse commonly engages environmental concerns including - but

unfortunately not limited to- global climate change, loss of biodiversity, and pollution of precious resources. Global warming, perhaps the most divisive of environmental issues, has grown more problematic in the eyes of the public. Despite recent declines in the public's "belief in global warming" (Krosnik & MacInnis, 2012), public opinion polls show a definitive upward trend in the public's awareness and concern about global warming over the past three decades (Nisbet & Myers, 2007; Krosnik & MacInnis, 2012). E\nvironmental issues are of growing concern today.

Yet historically, environmentalists and their value systems have more commonly been considered peripheral to the values and interests of mainstream society. Often considered "fringe" (Symanski, 1996), sometimes deemed "radical" (Scarce, 1990), occasionally labeled "criminal" (Leader & Probst, 2007), environmental and conservation entrepreneurs and leaders have been at the mercies of national attitudes and political winds since the inception of the environmental movement (Nash, 1990). Despite occupying this marginal social position, environmentalists have persisted and have succeeded in gaining widespread support for many of their beliefs, policies, and activities. Over the course of the past 40 years, the environmental movement has become a permanent fixture in our nation's political and social discourse.

Still, leaders within the environmental movement have had varying success in gaining media attention, improving local and regional resource management, and changing national, regional, and local political agendas; yet their work is consequential to the development and diffusion of improved practices of stewarding our dwindling natural resources. While ecological problems tend to be global in scale, thus requiring widely applied solutions, many innovative stewardship practices are birthed through localized or "start-up" approaches or

efforts. Further, these innovative conservation methods and activities are sometimes adopted by larger environmental organizations and spread across the spectrum of environmental organizations. Hence, filling the void of what we understand about the entrepreneurs who launch and build social-environmental change organizations may well lead to improved methods of support for those who are working to improve conservation management and policy.

Academic Frontiers

The answers I pursue in response to the core research questions of this research project will hopefully address three key gaps in the academic literature. First, communication scholarship has not yet explored the communication behaviors of entrepreneurs - much less social change entrepreneurs functioning within a specific context. Next, the entrepreneurship literature does not adequately explore the connection between entrepreneurs' perceptions and behaviors regarding social networks as a resource that can help them achieve strategic goals. Last, and most importantly, there is little understanding in general of how humans perceive, value, navigate, and manage their participation in communication networks. My goal with this study is straightforward: I intend to gain insight into the ways in which environmental leaders perceive and use social networks to achieve goals and strategic outcomes. Furthermore, I hope to generate a useful discussion in environmental circles regarding the prospective uses and potential pitfalls of social networking as a strategic approach. More specifically, I intend to discover insightful answers to the following questions:

RQ1: What attitudes and beliefs do social-environmental entrepreneurs report holding in regards to their position in, participation in, and potential success through human communication networks?

RQ2: What strategic advantages and/or outcomes do social-environmental entrepreneurs aim to achieve through participating in social networks?

RQ3: What communication behaviors and tools are used by social-environmental entrepreneurs to assess, cultivate, change, and nurture their individual and organization's position(s) and role(s) in social networks?

These questions have been shaped with cognitive and behavioral theories and models including goal theories (Dillard, 1997), planning and action theories (Berger, 1997; Greene, 1995), and the theory of planned behavior (Ajzen & Fishbein, 1980). While this study will not measure specific variables common to this arena of theories, which include attitudes, beliefs, norms, intentions, actual behaviors, these theories are useful in that they guide me as I seek to extend our understanding of the attitudes, beliefs, norms, intentions, and actual communication behaviors including, for example, message production processes, of entrepreneurs in regards to social networking. To date, despite widespread use of these theories in intercultural, health, and interpersonal communication, I can find no research reports that apply theories of communication and agency, planned communication behavior, interaction goal setting, and message production to the study of entrepreneurship.

In seeking answers to these questions I aim to contribute to the sizable gap in the communication literature surrounding entrepreneurship and social change. A search for the term "entrepreneurship" in any search term field on ComAbstracts Database (March 1, 2011) reaps just 21 search results; searching for entrepreneurship in the title search field reaps even

fewer: nine. The majority of these articles explore the intersection of mass media and the rise of interest in entrepreneurship (Boyle & Magor, 2008). Gill and Ganesh (2007) strike closer to the interests of this thesis in their exploration of self-conceptions, motivations, and resource constraint perceptions. A similar search on Communication and Mass Media Complete Database reveals only 33 articles with the term *entrepreneurship* in the title. Turning to academic databases more broadly focused on sociology and management, a wide range of articles can be located that address entrepreneurship yet few specifically explore how entrepreneurs perceive of and use communication toward strategic ends. None explore how entrepreneurs perceive of and utilize human communication networks toward strategic ends.

In addition to contributing to the field of human communication, I aim to augment broader entrepreneurship research efforts through addressing specific gaps identified by entrepreneurship scholars. These gaps center on questions of communication behaviors and entrepreneurs' information processing. In 2008, well-regarded entrepreneurship scholars Benjamin Hallen and Kathleen Eisenhardt point out that that while inter-organizational relationships are crucial for new ventures, little is known about the behavioral strategies employed by entrepreneurs seeking to construct or strengthen these relationships. Mitchell, Busenitz, Lant, McDougall, Morse, and Smith (2002) assert that, "research that contributes to a better understanding of information processing and entrepreneurial cognition has an important role to play in the development of the entrepreneurship literature" (p. 94). Lastly, responding to the critique by Monge and Contractor (2003) who claim there are few *theoretically grounded* studies within the social network realm, I intend to add to the work of

social network theory development through exploring a new theoretical dimension that involves entrepreneurs, communication agency, and network management strategies.

Much of the social network research in recent decades has been conducted in and on (perhaps even for) organizations and entrepreneurs whose primary goals are to create monetary gain (Aldrich, 1986; Bhave, 1994; Eisenhardt, 2008). Of course, for-profit entrepreneurs and organizations do effect changes in our social structure and paradigms, some more positive than others. And, in all likelihood, entrepreneurs in for-profit entities likely share some communication and networking strategies with entrepreneurs launching social change ventures. Yet, without conducting research within these start-up social change ventures it is hard to say *which* behaviors, tools, and strategies are common to both for-profit entrepreneurs and social change entrepreneurs. So, the question of if, why, and how *social change entrepreneurs* develop and implement strategic actions when utilizing their social networks remains unexplored.

Current scholarly research on environmental groups and activities revolves around the notion of collaboration and seeks to identify variables related to successful collaboration, effective collaboration processes, and resources and skills essential to successful collaboration (Goldman & Kahnweiler, 2000; Hood, Logsdon, & Kenner-Thompson, 1993; Leach & Pelkey, 2001; Snavely & Tracy, 2000). Little work has been done on the perspective environmental leaders hold regarding collaboration and communication networks (Gray, 2004; Hibbard & Madsen, 2003; Lange, 1990). Less, still, is known about the interplay of social networks and collaborative processes (Tindall, 2002).

Finally, the academic research has barely begun to explore the recent explosion of technological tools designed to facilitate communication and social networking; the impacts

Internet communication technologies have on the social networking activities and strategies of leaders and organizations are just beginning to be explored by academics (Zack & McKenney, 1995). From Twitter to FaceBook, MySpace to LinkedIn, these communication tools have impacted both the way we think about, talk about, and value social networking-- as well as the way we do it (Christ, 2005). The effects of these technological tools on small social change organizations are unknown and yet possibly meaningful.

Given the gaps in the academic literature regarding individual experiences in social networks, and my persistent curiosity regarding social change and communication, I have shaped this dissertation to facilitate exploration of some of these questions. My passion for environmental issues inspires me to apply my research to the conservation and natural resource management arena. I hope this work will assist the social change leaders tasked with the considerable challenges inherent to environmental social change. Armed with few utility resources, the environmental conservation field seems a perfect fit for this thesis.

I hope to support the success of practitioners who are working to create positive social change. Extending this call for research into the realm of communication studies, I aim to make a contribution to the academic knowledge surrounding entrepreneurs' attitudes, beliefs, and intentions regarding strategic communication and social networks. Given the current celebration of "social entrepreneurs" in nonprofit and charitable foundation circles, and considering the gravity of the work of social change entrepreneurs working in the environmental sector, I suspect this topic will be of interest to the practitioners creating and supporting social change. I hope I will contribute to our collective understanding of the communication processes is necessary to implement much-needed shifts in environmental

management policies and practices. Hopefully my discoveries will be of both interest and use to leaders of the organizations sparking social change.

The following thesis emerged from my fleeting encounter with Margaret Mead's quote about small groups who create big change. I hope the contribution this thesis will make to the study of human communication is not without insight and consequence; moreover I hope the findings of this research project will provide social change leaders with tools and learnings that can positively shape their participation I social networks and further enable their ability to achieve organizational goals. I invite you, the reader, to share my interest in understanding the ways in which social networks shape our work, our organizations, and our ability to make our communities healthier more vibrant places.

The following chapters are organized in the following manner: Chapter Two is the Literature Review in which I review research that informs this study, including the long-standing question of social structure versus agency in determining social outcomes, how people shape intentions and planned actions, the historical and current field of social network studies, communication networks and entrepreneurship, and social entrepreneurship.

In Chapter Three I situate this research study in the field of environmental communication as my research questions are singularly focused on the experiences of social-environmental entrepreneurs' perceptions and uses of communication networks as they pertain to their goals and objectives. To provide adequate context to the reader, I describe the current discourse and discontent that abounds regarding environmental issues in the southwestern United States. This description is intended to give the reader a "sense of place" for without that, the experiences, perceptions, plans, and actions of the social-environmental entrepreneurs this research is focused on is without color or texture.

In Chapter Four I describe the methods I used to explore answers to my research questions. I justify the use of qualitative methods as this study is primarily interested in the lived experiences of social environmental entrepreneurs. Furthermore, I discuss the specific method, semi-structured interviews, employing mostly open-ended questions, I used. I describe the participants I interviewed, my sampling procedures, the data analysis, and my role as a researcher.

Chapter Five is devoted to conveying the essence of the responses I received from interviewees. It is the chapter that provides data analysis and, hopefully sparks the imagination of readers, pulling them closer to the experiences, ideas, and stories of the entrepreneurs I interviewed. It is filled with quotes and organized principally around the three core research questions and emergent themes.

Chapter Six provides readers with a synthesis of the themes that I have identified as salient and weaves these together into a coherent form. My goal with Chapter Six is to provide readers a sense of how these new findings support, contradict, and extend extant research and literature. I conclude this chapter with my urging for communication scholars and entrepreneurship scholars to begin more actively borrowing from and contributing to the scholarship of one another's domains.

Chapter 2: Review of Literature

Scholars have long wrestled to identify, understand, and predict the functions, changes, abnormalities, and evolution of complex societies. These questions continue to intrigue social scientific scholars today, albeit within more contemporary contexts. The literature exploring the central questions of human communication, individual agency, social networks and social change converge in the field of entrepreneurship. Entrepreneurial endeavors are predicated on an individual's ability to recognize, value, and capture opportunities that occur within a human communication network. Yet, to date relatively little empirical research has been conducted examining the individual's experiences and actions within the setting of an established communication network. Abundant research shows that social networks, (this term is used interchangeably with the term *human communication networks;* see Contractor, Whitbred, Fonti, Steglich, & Su, 2005), play a role in defining the activities and outcomes of entrepreneurs. However, understanding exactly how individual entrepreneurs capture opportunities and create change through exercising agency within the structure of an established social system, is still something of a mystery.

In this literature review I first briefly discuss the historical social science context within which contemporary research concerning the agency/structure duality evolved. Next, I explore contemporary communication theories of agency including the theory of planned behavior, action assembly theory, theories of intention and the theory of planning strategic interaction. I relate these theories to entrepreneurship and then discuss how the entrepreneurial process is primarily a social and communicative process. As entrepreneurs are building enterprises in communication network contexts, I discuss research exploring entrepreneurs' access to opportunities and resources through social networks. Of particular

interest herein is the research regarding entrepreneurs' success or failure as it relates to their participation in social networks. I review the research exploring the communication behaviors and tools used by entrepreneurs in their pursuit of resources.

The final section of this literature review explores the growing field of social entrepreneurship and explores the known differences between social entrepreneurs and for-profit entrepreneurs. Primarily, I explore the differences in their goals and motivations and how these differences indicate that social change entrepreneurs' communication behaviors likely vary from those of for-profit entrepreneurs.

Social Structure versus Individual Agency as Social Determinants

A perennial question in the realm of communication and sociological research is that of the role of individual *agency* versus the role of the aggregate society's *structure* in shaping and influencing collective and individual experience and reality. In this thesis, I refer to agency in the manner described by Bandura (2001): "To be an agent is to intentionally make things happen by one's actions existence." S*tructure* refers to the established and patterned social relations that shape for example, social classes, high-school cliques, and entrepreneurship networks (Whiting, Burton, Romney, Moore, & White, 1967). Notably, in business and administration scholarship the term *agency* has a different meaning. In these works, the term usually refers to a person or a firm under contract with another firm to provide a service or specific function. For a full discussion on agency within these fields see Eisenhardt (1989) and Jensen and Meckling (1976).

Karl Marx's contention that, "The history of all hitherto existing society is the history of class struggles" (Marx & Engel, 1848, p. 8) places one's position in a social structure at the helm of an individual's experience and reality. Durkheim, sharing Marx's contention that

social structure and hierarchy are the primary determinants of human experience (Gane, 1988), is a proponent of the idea that social scholars should strive to understand society from a holistic viewpoint - as opposed to that of the individual's viewpoint. Importantly, Durkheim (1895) provides specific methodological approaches in his seminal work, *Rules of the Sociological Method* giving way to the formation of contemporary positivist methods.

Perhaps in response to the rise of positivist social science approaches, in 1890 Georg Simmel published *On the Epistemology of Social Science* in which he writes, "What is a society? What is an individual? How are reciprocal psychological effects of individuals upon each other possible?" (Frisby, 2002, p. 35). These questions, concerned with the intersection of individual agency, the opportunity to act, and eventual societal changes that occur, continue to intrigue communication scholars (Ajzen & Fishbein, 1980). James Coleman (1988) writes of the discourse stating,

> There are two broad intellectual streams in the description and explanation of social action. One...sees the actor as socialized and governed by social norms, rules, and obligations. The other...sees the actor as having goals independently arrived at, as acting independently, and as wholly self-interested (p. S95).

As with most opposing statements, it is likely the truth lies somewhere in the middle.

The previous century offered an explosion in the development of sociological approaches and by the middle of the last century scholars were commonly working to weave shades of functionalism, structuralism, interpretivism, and interactionism into a blended approach. Giddens' (1993) development of a theory of structuration, in which he strives to dissolve the differentiation between "the micro/macro analysis in the social sciences" (p. 3) has opened the door to those who seek to find balance between the interpretivist and

structuralist approaches. Giddens (1993) proposes that for social science scholars "to challenge the dualism of the individual and society [they must] insist that each should be deconstructed" (p. 5). Giddens places individual action into a "flow of action" and describes individual agency as both reconstituting the social structure and norms *and* distancing the individual from the structure's rules and norms in certain circumstances.

Recently, scholars have begun to apply Giddens' sociological theory of structuration to arenas of research in which empirical - over theoretical -- research has dominated; the field of entrepreneurship is one of these (Shane & Venkataraman, 2000). Employing structuration theory to gain insight as to entrepreneurial processes may help address what Shane and Venkataraman call a "hodgepodge of research" (p. 217) in reference to the theoretical aspects of entrepreneurship research.

Theories that explore action and agency (versus social structure) in shaping human experiences inform this dissertation more than those exploring social structure and related constraints and benefits. Interestingly, Habermas's theory of the Public Sphere (1962), in which he describes in great depth the evolution of society from being "representational" to being "*Öffentlichkei*", or dialogic in a public space, addresses a core question entrepreneurship grapples with: can individuals openly engage with one another (network) to create, exchange, and implement ideas considered important by those engaged in the dialogue? Habermas would likely be startled by the contemporary commercialization and corporate ownership of most forms of media. He opines the "disintegration of the electorate as a public" which, according to his analysis, occurs within the "framework of the manufactured public sphere" of mass media and advertising (p. 217), and which obfuscates authentic dialogue among the public, the result being that profit-oriented market forces

instead shape the conversations of the "public sphere". New Internet technologies allow vast and disparate networks of individuals to more freely exchange ideas and build forces for change. Perhaps these technologies will again give rise to a public sphere, free from commercial forces? Perhaps these technologies are affording entrepreneurs a reconstituted communication platform upon which emergent social networks will invite greater civic participation.

Habermas's leading theoretical text on the construct of the public sphere, *The structural transformation of the public sphere* (1962) is dominated by discussions that relate primarily to mass media forms and their influence on publics. This research is focused on the relationships that emerge between and among individuals. As such, Habermas's theory is thought-provoking but not overly useful to the current study.

The questions I am exploring specifically seek to understand the experiences of individuals in shaping and implementing communicative actions, through dialogue, or exchange, or network formation, or otherwise. Theories such as that of structuration provide a theoretical foundation to this study, offering a bridge between the schools of thought and indicating a possible path forward for those researchers seeking to accept structural constraints *and* understand the experiences of individuals functioning within these constraints.

Applying communication theories to the realm of entrepreneurship may bring greater understanding of individual entrepreneurs' perceptions, experiences, and behavioral patterns. Several communication theories related to planning and implementing behavior, goal attainment, and adapting behavior to achieve desired outcomes, lend themselves to the study of entrepreneurs' communication behaviors. These include: strategic interaction theory

(Berger, 2002), action assembly theory (Greene, 1993), communication accommodation theory (Giles, Mulac, Bradac, & Johnson, 1987), and the theory of planned behavior (Ajzen & Fishbein, 1980). Each offers a promising tool for understanding, explaining, and predicting the cognitive processes that shape entrepreneurs' goal-oriented communication behaviors.

Theories of planned or strategic communicative behavior. That human beings set goals is well known. Likewise, it known that humans conceive of and utilize communication as a means to achieve set goals. Several theories that explore individuals' goal setting and communicative processes serve the purpose of this thesis including, the theory of strategic interaction, action assembly theory, communication accommodation theory, and the theory of planned behavior. In particular, the theory of planned behavior provides a useful construct for interpreting and understanding entrepreneurs' beliefs about and uses of communication networks. First I will review the other cited theories as they, too, may help shape the findings of this research.

These theories are useful herein as existing research indicates that entrepreneurs who effectively utilize social networks may acquire necessary resources including knowledge, social support, financial support, and increased credibility (Brüderl & Preisendörfer, 1998; Greve & Salaff, 2003; Hallen & Eisenhardt, 2008). Of interest to me is how entrepreneurs perceive and set intentions and plans to effectively utilize social networks to acquire resources. The cognitive planning processes related to communication and entrepreneurship are little understood and Littlejohn (2002) informs communication scholars that while the study of planning is "a centerpiece of cognitive science...Linking cognitive planning with

communication behavior, has not received as much attention" (p. 102). We will review three relevant theories and consider how they may inform this thesis.

The theory of strategic interaction. A key theory related to communicative action, intention, and goal setting is Berger's (1997) theory of strategic interaction. In his text, *Planning Strategic Interaction,* Berger (1997) writes of goal-directed actions as a set of cognitive plans influenced by levels of motivations to achieve goals. He links the amount of knowledge one holds about a subject area or situation to the complexity of goals and plans developed. Furthermore, Berger discusses adjustments that people make when plans meet with disruptions or unexpected information. This theory, while never applied to the cognitive processes engaged by entrepreneurs, may inform this study as to how entrepreneurs set and pursue goals through planned communicative action. As an example, an environmental entrepreneur might know many of the staff at a local US Forest Service office and may develop complex plans to use these connections to influence a new timber management policy. If this policy is central to his organization's mission, he may pursue this complex goal with extreme motivation, thus adjusting his behaviors to reflect this determination and knowledge.

Action assembly theory. Action assembly theory is intended to link individuals' experiences with the cognitive processes that shape humans' *output representation* - defined as planned communicative behaviors. Recognizing that human communication is both pattered and novel, John Greene's (1984) theory posits that people make use of a store of memories, *procedural records,* that inform them as to which behaviors will likely reap which outcomes, i.e. *action-outcome contingencies*. He provides the following example: "If my goal is to create a favorable interpersonal impression, then procedural records representing

actions which have resulted in favorable impressions in the past should become more highly activated" (p. 292). Greene goes on to describe activating elements and addresses the strength of these elements and how different situations (contexts) would trigger the use of a particular communication behavior.

Action assembly theory explains how people utilize procedural records to inform their production of messages. Dillard and Solomon (2000) also write on the topic of message construction and describe the process of message production as composed of "four basic processes: (a) situation comprehension, (b) goal formation, (c) planning, and (d) the execution of behavior" (p. 167); action assembly theory addresses all four elements. While the theory has apparently not been widely applied in empirical studies (Booth-Butterfield, 1987) it may provide insight as to how entrepreneurs shape their intentions and communication behaviors based on previous experiences within social networks.

Communication accommodation theory. Communication accommodation theory posits that individuals adapt their communicative behavior to more closely reflect that of the person with whom they are communicating. This *convergence,* considered an effective communication skill, aids communicators in becoming more attractive and intelligible to others. The theory holds that people also diverge from another's communication style or behaviors, which is more likely to have a negative effect on the perception of the communicator. The various communication tactics people use to *converge/diverge* can be attributed to either internal or external causes and this attribution seems to influence the recipient's perception and judgment (positive versus negative) of the speaker. Convergence can lead to more favorable interactions and a stronger sense of bonding and shared identity among communicants. Likewise, divergence can create tension

and discord. Notably, both convergence and divergence, when extreme, inappropriate, or inauthentic, can cause communication discord.

The theory also illuminates communication processes and activities in situations in which a communicator's plans may be set aside as the communicator (in this case an entrepreneur) adapts to the other and his/her communication style or expectations in order to effectively achieve goals. As an example, at a luncheon an entrepreneur may plan on asking a friend that works at a philanthropic foundation to help her seek funding. But, when this friend tells the entrepreneur that she is going to lose her job, the entrepreneur will likely shift communication plans and instead of asking for help offer comfort and kind words. While the theory has not been applied to communication tactics of entrepreneurs, its use in intercultural and intergenerational communication studies (Giles, Coupland, Coupland, & Williams, 1992) indicate it may prove useful in identifying and assessing entrepreneurs' communication behaviors when engaging diverse constituents or weak ties in their network.

The above theories address the cognitive processes that shape human communication, if one assumes that people set and pursue goals, adapt to the context and cues from others, and shape messages best suited to goal achievement. These theories share several elements: they each build on the notion that experience informs current behavior, that people react to environmental cues, and that goals influence communication behaviors. Next I will consider the theory of planned behavior, which shares these elements, yet is more broadly applicable and far more widely used in empirical studies.

The theory of planned behavior. One of the most well-known and well-tested theories regarding planned behavior is the theory of planned behavior (TPB). In 2002, Ajzen writes of his well-known theory that it has "emerged as one of the most influential and

popular conceptual frameworks for the study of human action" (p. 665). According to the theory, human behavior is guided by three beliefs:

1. Behavioral beliefs, which are beliefs about the probable consequences of the behavior.

2. Normative beliefs, which are beliefs about what others expect one to do.

3. Control beliefs, which are beliefs about factors that may enhance or hinder one's performance of a certain behavior (Azjen, 2002; Azjen & Fishbein, 1980).

Building on earlier work that led to Ajzen and Fishbein (1980) to form the theory of reasoned action (TRA), Ajzen expounds on TRA with the theory of planned behavior in order to account for differences in the structural and resource constraints that impede an actor's intentions to act (Armitage & Conner, 2001). Adding the Perceived Behavioral Control (PBC) variable to explain some of the differences found in actors' readiness to act and their actual behaviors, the TPB attempts to account for variations among actors' behaviors when behavioral beliefs and perceived subjective norms are the same. The below graphic (Figure 1: Model of TPB) provides a simple representation of TPB; I have created it through combining several variations of graphical representations of the model.

TPB has proved useful in diverse studies and meta-analyses (Ajzen, 1991) attempting to understand actors' beliefs, attitudes, perceptions about norms, and abilities to control behavior (sometimes referred to as *volition*). The usefulness of TPB in explaining actions depends upon the behavior to be predicted as well as the situational conditions and attitudes and beliefs of the actor. In other words, each variable within TPB can be extracted and examined to find impacts on eventual intentions and behaviors. For example, Sparks, Hedderley, and Shepherd (1992) provide evidence that the strength of an actor's attitude

increases the likelihood of the actor taking action (or not), while Trafimow and Finlay (1996) find that the greater an actor's sociability, the greater the likelihood the actor will act. As Armitage and Conner (2001) state, "In general, individuals are more disposed to engage in behaviours that are believed to be achievable" (p. 472).

While studies exploring the validity of the theory of planned behavior are commonly found in the social sciences and public health fields (see Fisher, Fisher, & Rye, 1995; Schifter, & Ajzen, 1985), the theory has been less thoroughly applied to studies of entrepreneurs' behaviors (Baum, 1994; Krueger, Reilly, & Carsrud, 2000.) Yet, these numerous findings (Albarracin, Fishbein, Johnson, & Muellerleile, 2001), supporting the usefulness of the TPB in understanding and predicting an individual's proclivity to take action and an individual's actual behaviors, may prove useful in understanding and predicting entrepreneurs' communication behaviors.

TPB has gained wide recognition as a useful theory in examining communication behaviors; a search on Communication and Mass Media Complete Database for articles and conference papers with "theory of planned behavior" as a keyword finds 103 within the past five years. The originator of the theory, Ajzen (1991), writes of the relationship among communication, attitudes, beliefs, and social norms and acknowledges that persuasive communication messages can affect attitudes and social norms. Numerous studies have examined the usefulness of TPB in predicting communication behaviors (e.g., Wang, 2009; Welbourne & Booth-Butterfield, 2005; Brann & Sutton, 2009). Yet adding the term "entrepreneurship" to the Communication and Mass Media Complete Database search yields "zero results". While there are gaps in the communication literature exploring entrepreneurs'

attitudes, beliefs, intentions, and behaviors, the entrepreneurship literature has been applying intention, a key construct of TPB to understand entrepreneurs' behaviors for over a decade.

TPB is a useful and empirically valid theory in communication research. The theory recognizes that people's previously held attitudes and experiences shape intentions to act and behave. Additionally, entrepreneurship literature has employed TPB variables (normative beliefs and intention), and TPB has been widely tested in empirical studies.

I am relying more heavily on TPB than the other theories reviewed above as TPB is more widely applied in empirical studies, and offers more connections to entrepreneurship studies and research that seeks to understand entrepreneurs' intentions, and motivations. The variables included in TPB seem to apply to entrepreneurs' beliefs and behaviors and therefore may be especially useful to this project. For example, I am investigating entrepreneurs' attitudes toward communication networks. TPB directly addresses attitudes and how an individual's attitudes affect their following behavior.
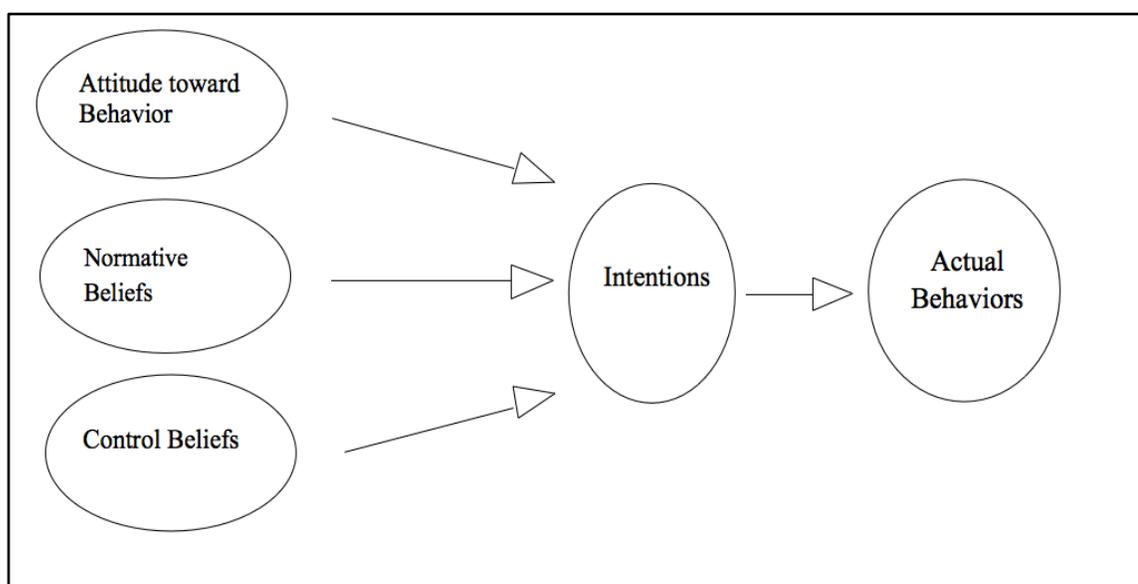
Figure 1: **A visual model of the elements of the Theory of Planned Behavior. Three belief structures influence the intentions set by a communicator and these lead to actual behaviors.**

TPB and entrepreneurship. Attempts to understand the effects of each variable of TPB provide insight as to the varying influence different variables exert under different conditions. The role of intentions has been well explored and considered as a mediating factor and studies show that intentions are indeed reliable predictors of actual behaviors (Armitage & Conner, 2001). Bagozzi, Baumgartner, and Yi (1989) argue they "feel that attitudes influence behavior either directly as a non-purposeful reaction or indirectly through intentions as a purposeful response" (p. 37). Their definition of *intention*, built from the Webster's New Collegiate Dictionary (1980, p. 586) hinges on the recurring terms used to define intention, including: deliberateness, calculation, willingness, and determination. In other words, intentions are the result of a deliberate and determined transformation of an attitude into plan of action.

It is not surprising then that the field of entrepreneurship has more actively explored *intentions* than other elements of the TPB as we pursue insight as to how entrepreneurial activities form and move forth. Entrepreneurship is an active endeavor requiring deliberateness and determination, to be sure. And while many people have notions of starting their own venture, few actually strike out on their own. Scholars have explored the role intentions play in shaping behaviors of entrepreneurs and Krueger, Reilly, and Carsrud (2000) write that "intentions have proven the best predictor of planned behavior" and compare Shapero's (1982) model of the entrepreneurial event (1982) and Ajzen's (1980) theory of planned behavior arguing that "intentions models offer an opportunity to increase our ability to explain— and predict—entrepreneurial activity" (p. 414). Building on the argument that Bagozzi et al. (1989) construct, Krueger et al. (2000) point out that starting a

new organization cannot be a reflexive reaction to stimuli but is, necessarily, a planned and deliberate process.

Recently, Zhao, Siebert, and Hills (2005) created a model of entrepreneurial self-efficacy that is intended to explain and predict the effects of self-efficacy (beliefs about one's own abilities) on entrepreneurial intentions. Additionally, this study takes into account a potential entrepreneur's risk tolerance, gender, and previous experience with enterprise creation.

The rather robust literature exploring entrepreneurs' intentions is important as it provides insight into the psychology and perceived social norms of the individuals who instigate social change through new venture formation. Moreover, understanding entrepreneurs' intentions helps to identify resulting communication and behavioral strategies. Bird (1988) suggests that as the ideas and intentions of entrepreneurs form the backbone of a new venture, understanding entrepreneurs' intentions provides insight as to the communication strategies entrepreneurs choose. Furthermore, Bird explicates a model for entrepreneurial intentions and identifies elements of the venture creation process that are impacted by intentions.

Theories of goal setting and planned communicative behavior, especially the theory of planned behavior, as well as related meta-studies and research articles, demonstrate the usefulness of TPB as a tool for understanding and predicting an individual's attitudes, perceptions, and beliefs and how these affect one's intentions to implement actual behaviors. While it has not been thoroughly applied to the field of entrepreneurship, it does inform this thesis in terms of understanding the individual's likelihood and ability to set entrepreneurial intentions and follow through with actual behaviors.

In particular, I aim to understand the beliefs and attitudes entrepreneurs hold in regards to creating and cultivating communication networks. TPB may explain why entrepreneurs hold positive or negative attitudes, what their experiences have been, and how they build intentions based on these experiences. Integrating this knowledge with an exploration of the research that studies entrepreneurship as a set of actions embedded in social structures is the next step in synthesizing the relevant literature.

Entrepreneurship as a Communicative Endeavor

While various definitions have been applied to the entrepreneurial process (Shane & Venkataraman, 2000), many scholars agree that *entrepreneurs* are people who pursue opportunities beyond the resources they currently control (Stevenson, 1985). This definition underpins the assumptions behind the research questions in this thesis, which explore communication behaviors that entrepreneurs employ in their pursuit of resources. Applying this definition to this discussion of entrepreneurship as a communicative process, I explore four areas of scholarship: the social role of entrepreneurs, communication skills of entrepreneurs, communication and opportunity recognition, and communication behaviors resulting (or not) in successful resource acquisition.

The social role of entrepreneurs. Entrepreneurship resides at the intersection of individual agency and social system evolution. Debunking the myth that entrepreneurs are solo actors begs the question, what is the social role and function of entrepreneurship? Etzioni (1987) writes, "The societal function of entrepreneurship is...to change existing obsolescent societal patterns (of relations, organization, modes of production) to render them more compatible with the changed environment" (p. 176). This sweeping statement places entrepreneurs central to disrupting social system stasis. While this proposed central role is

intriguing, perhaps more interesting is that Etzioni, among others, displaces the notion that entrepreneurs perform solo (Byers, Kist, & Sutton, 1999). Instead, these scholars argue that entrepreneurs engage others in a social exchange; it is through communication that entrepreneurs enact the entrepreneurial process.

Entrepreneurs simultaneously defy social-structural constraints while engaging dominant players in social structures. Entrepreneurs disrupt social systems to create new systems. Entrepreneurs diverge from common norms and construct new social norms. Byers, Kist, and Sutton (1999) write that entrepreneurs who achieve success are those who "can develop the right kinds of relationships with others" and advise scholars that "a more accurate picture of entrepreneurship emerges when it is viewed as a social rather than an individual activity" (p. 1-3). What are the special skills or characteristics that allow certain entrepreneurs to "develop the right kinds of relationships", the kinds that reap resources and, ultimately, success? This question dominated entrepreneurship research throughout the 1970's and early 1980's until empirical research collectively indicated that there were no predictors for entrepreneurial success - save effective communication skills.

Entrepreneurs enact social processes and engage in social systems to create change that leads to benefits - for themselves and for others. Recently, scholars have posited theories of entrepreneurship firmly within the realm of communication studies, identifying the central role community and social norms play in shaping entrepreneurial outcomes. Stevenson (2000) asserts that from studies conducted in over 40 countries over the last two decades several hypotheses emerge:

1. Entrepreneurship flourishes in communities where resources are mobile.

2. Entrepreneurship is greater when successful members of a community reinvest excess capital in the projects of other community members.

3. Entrepreneurship flourishes in communities in which success of other community members is celebrated rather than derided.

4. Entrepreneurship is greater in communities that see change as positive rather than negative (Stevenson, 2000).

Note that each of these is built around the role a community's shared interactions and beliefs play in shaping venture creation.

Additional studies of entrepreneurship have situated entrepreneurship in the communication research paradigm: Brüderl and Preisendörfer (1998) explore the relative success of entrepreneurs whose communication networks are broad and diverse as well as supportive, while Greve and Salaff (2003) identify communication patterns of entrepreneurs with colleagues, family, and friends, across phases of firm formation and development. This research project aims to discover how entrepreneurs think about and utilize their relationships and social connections; my research questions posit entrepreneurs within a social system, and explore how individual perceptions, intentions and activities shape their behaviors and outcomes. Moving away from the idea that some entrepreneurs hold special or rare qualities, this research explores how entrepreneurs function within their communities. This does not imply that entrepreneurial success calls for certain skills and abilities; several studies examine the effect entrepreneurs' communication skills have on new venture formation.

Communication skills and entrepreneurial success. While early studies of entrepreneurs attempted to identify personality traits, characteristics, and motivations that would indicate an individual's propensity toward new venture creation (Gartner, 1990), more

recently scholars have focused on specific skills that affect an entrepreneur's success (Clark, 2008). Unlike the unsuccessful attempts to correlate personality traits with the likelihood of becoming an entrepreneur (Hull, Bosley, & Udell, 1980; Burt, Jannotta, Mahoney, 1998) effective communication skills and levels of social capital seem to predictably indicate an entrepreneur's likelihood of success (Baron & Markman, 2000; Duchesneau, & Gartner, 1990; Brüderl and Preisendörfer 1998).

According to Baron and Markman (2000), these effective communication skills, which lead to social capital development, include social adaptability, social perception, and the ability to persuade and influence others. Baron and Markman point out that highly skilled communicators (i.e. those who can adapt to diverse social situations, perceive others' needs and concerns, and persuade others) are not only more likely to build successful alliances, they are also more likely to improve the communication amongst the entrepreneurial team.

Social adaptability and the ability to self-monitor (Kilduff & Day, 1994) have been shown to have a direct effect on one's successful promotion in a company, and across companies. Likewise, the ability to manage one's impression to match the expectations and communication styles of others, correlates with success in the workplace (Stevens & Kristof, 1995). And, finally, empirical studies examining the network approach to entrepreneurship, have supported the claim that the greater an entrepreneur's access to social support the more likely they are to succeed (Brüderl & Preisendörfer, 1998).

The communication behaviors instrumental to influencing other people have long been recognized as essential to the success of leaders and businesspeople (Cialdini, 1985). Cialdini (2001) notes that charisma and eloquence play a role in shaping one's ability to

influence but goes further and identifies six specific communication behaviors consistently demonstrated by people who successfully influence others. The six behaviors these people share are: they genuinely like the person they are influencing, they give what they wish to receive, they provide evidence that similar others have made the same choice, they extract voluntary, public commitments, they verbalize their authority and expertise, and they present their choice as being high in demand and low in availability.

While Cialdini does not write specifically of entrepreneurs, as entrepreneurship is "an activity that involves the discovery, creation and exploitation of opportunities aimed at the introduction of...new goods and services, new ways of organizing, or new processes" (Arenius & De Clercq, 2005, p.250; see also Shane & Venkataraman, 2000), we can assume that an entrepreneur's ability to influence others is key as entrepreneurs are in the business of changing others' behaviors. Whether they are encouraging people to adopt a new fashion trend, change their family planning methods, or support an environmental cause, entrepreneurs must communicate effectively to influence the choices others make.

Studying communication and entrepreneurship necessarily requires analysis from the social network perspective; regardless of a given individual's communicative competence, ability to influence others, or determination to succeed, communication networks are the context in which entrepreneurs are embedded. It is through and within these human communication networks that entrepreneurs are exposed to potential opportunities, pursue and aggregate resources, influence the behaviors of others and create social change. Integral to the studies on communication networks is the notion that the structure of a network determines the type, frequency, and efficiency of interactions available to network nodes. This informs us as to the limitations entrepreneurs must overcome as they seek to achieve

goals through activating communication networks as resources. This project explores how entrepreneurs perceive of and navigate these constraints. I now turn to the extensive literature surrounding the study of social networks and entrepreneurship.

Communication Networks and Entrepreneurship

The bulk of the literature exploring entrepreneurs as social beings enacting social processes follows the dominant themes in social network research (Freeman, 2004), and focus on modeling the social structure within which entrepreneurs operate. The research seeks to identify the network structure within which entrepreneurs are embedded and the resulting effects on the entrepreneurs' access to information, ability to recognize and exploit opportunities, and activities within the system's constraints (Bygrave, 1988; Granovetter, 1985; Hallen, 2008; Hsu, 2007). The literature reviewed above identifies how individuals' communication skills and networks influence their access to opportunities, resources, and influence. The following is a discussion of research that identifies how networks shape new venture formation.

Communication networks and opportunity recognition. Asserting that entrepreneurs are made aware of opportunities due to their position in a given communication system, Sarason, Dean, and Dillard (2006) write, "structuration theory suggests that social structures both constrain and enable entrepreneurs in the venturing processes of discovery, evaluation, and exploitation of opportunities" (p. 287). Furthermore, they squarely place the entrepreneurship process within the context of human communication systems: "The [opportunity] discovery process focuses on how meaning is created and communicated, indicating that the entrepreneur is not so much concerned with discovering an opportunity as with creating new interpretations of existing sets of relationships..." (p. 288).

Recognizing that opportunity recognition is a reflexive and on-going process of interpreting social relations and structures, structuration theory places entrepreneurs at the nexus of social structure shifts through their processes of recognizing and capturing opportunities through resource acquisition.

Communication and resource acquisition. Entrepreneurial activities engage resources and accrue relationships in such a way that social norms are disrupted and social change occurs. As defined above, entrepreneurship is the pursuit of opportunity without regard to resources currently under control. If we explicate this definition we see that entrepreneurship is a set of activities intended to gain access to resources necessary to mitigate the risks that endanger the likelihood of capturing an opportunity. The range of communicative activities individual entrepreneurs consider, plan, and implement through and within communication networks is what this research project is investigating. To contextualize these activities, I first explore the types of resources entrepreneurs pursue to mitigate risks.

What types of resources do entrepreneurs need? Entrepreneurial ventures, regardless of their participation in the social change or financial profit realm, are small and new, and thus face three kinds of resource deficiencies: human capital, financial capital, and social capital (Greve & Salaff, 2003). An entrepreneurial team (or individual) is limited by their previously gained skills, knowledge, and expertise (human capital). Without additional financing, start-up ventures are limited to their previously acquired set of knowledge and expertise and cannot obtain more human capital. For example, an entrepreneur may see an opportunity to influence legislation addressing statewide watershed management and yet not know how to write legislative policy that could be used in the final policy piece. Without

available finances, she would be unable to contract a skilled policy expert (i.e. a lobbyist or legal advisor) to help write this piece of legislation. Therefore, the human capital required for a new venture to succeed includes information, knowledge, skills, technical expertise, and labor.

While established organizations can rely on existing financial resources and assets to generate the financial resources necessary to acquiring more human capital, entrepreneurial ventures must raise this capital, and then build profit-generating revenue streams. Sources of financing for for-profit ventures include friends and family, credit cards, bank loans, and venture capital financing. Social not-for-profit entrepreneurs may also be able to raise start-up funds from friends and family. Otherwise, many social entrepreneurs turn to social investors, who expect social gains as returns on their investments, such as Social Venture Partners (see www.svp.org for more information) and philanthropic sources such as private and public foundations, wealthy individuals, and non-profit grant-makers. Notably, monetary resources are instrumental in securing human capital, technical, and raw materials resources but social capital cannot be bought. As Stevenson (1980) writes, "This [financial capital] is perhaps the least unique resource required to pursue opportunity. Intellectual capital, human capital, public capital in the form of infrastructure and social norms provide even more important resources to the entrepreneur" (p. 1).

Social capital serves to mitigate a unique risk that entrepreneurs face: a lack of credibility and legitimacy (Zott & Huy, 2007). Held within the bonds of social capital is trust, the glue of a social group (Coleman, 1988; Putnam, 1995). By virtue of being a new venture, the entrepreneurial venture is not trusted - nor can it refer to a track record of success, or a history of reliable performance. Overcoming this challenge can be achieved

through aligning oneself with established firms or brands, gaining referrals from credible firms or industry leaders, and adding team members whose existing social capital mitigates this risk. In their empirical investigation into the symbolic actions entrepreneurs use to achieve resources Zott and Huy (2007) define *legitimacy* as socially constructed and grounded in the perceptions others have of the individuals' entrepreneurial activities as being appropriate or proper. Furthermore, they write of the essentiality of gaining legitimacy when founding a new venture.

Similar to for-profit entrepreneurs, not-for-profit founders (I use this term interchangeably with *social entrepreneurs*) are tasked with nurturing and building their social capital in order to more effectively recruit board members, connect with funders, and partner with community organizations (King, 2004). King goes on to write that "these activities [networking] are time-consuming and demanding, and they require planning" (p. 472). Without adequate social capital, King states that the typical functions performed by non-profit leaders, including "community relations, fundraising, board development, vendor relations, strategic planning, advocacy, and employee relations -- require competencies in accessing, building, and employing social capital" (p. 472). Thus, the communication activities social change entrepreneurs employ may be used to cultivate, nurture, and improve upon one's social capital. Effectively using these behaviors to foster the acquisition of human capital, financial investment, and social capital, increases likelihood of the new venture's success.

Communication behaviors that facilitate resource acquisition. Some exploration of specific communication behaviors intended to capture resources has been carried out in the business venturing literature. Building from studies exploring

entrepreneurs' impression management (Gardner & Avolio, 1998) and symbolic actions (Aldrich & Fiol, 1994), Zott and Huy (2007) find that entrepreneurs using symbols to convey their (a) personal credibility (i.e. diplomas from highly regarded universities), their (b) organizational achievements (i.e. industry awards), and (c) the organization's procedural legitimacy (i.e. use of state-of-the-art technologies) are more likely to acquire necessary resources. Zott and Huy (2007) write that, "By enacting symbols effectively, entrepreneurs can shape a compelling symbolic universe that complements the initially weak and uncertain intrinsic quality of their ventures" (p. 48).

An additional communication strategy used by entrepreneurs to overcome resource deficiencies, as presented in the academic literature, is *resource co-optation*. In Starr and MacMillan's (1990) report, resource co-optation is defined as a process of absorbing or taking into one's own resource set resources belonging to another but now also available to the entrepreneur. The authors write that entrepreneurs utilize co-optation to secure resources including legitimacy and underutilized goods. In addition to "begging, borrowing, scavenging, and amplifying" (abstract) entrepreneurs take advantage of underutilized resources through generating social capital. These social capital building activities include problem-solving with others, creating and sharing knowledge with others, exchanging favors with others, and creating opportunities for other people to demonstrate their abilities and achievements.

Hallen and Eisenhardt (2008) identified communication strategies that help entrepreneurs build relationships to successfully secure professional investments. Through building network ties and generating information signals that reduce the uncertainty of the relationship, investors are more likely to invest in a new venture. Potential partners or

investors can utilize network ties to indirectly learn detailed information about the new venture from a trusted source. Like Zott and Huy (2007), Hallen and Eisenhardt (2008) explore the use of symbols, or "information signals" and interestingly, find that *catalyzing strategies,* or events that spark a shift in a dynamic, unlock the value of network ties and information signals.

These strategies can help entrepreneurs mitigate a primary barrier to extracting the value of partner relationships: the tendency of potential partners to *wait* to see what the risks of engaging the new venture may be. Hallen and Eisenhardt (2008) identify four catalyzing strategies: casual dating, amplifying information signals through timing around proofpoints, creating credible alternatives and thus scarcity, and vetting potential partners for validity of expressed interest. In sum, entrepreneurs who engage potential partners/investors before investment is actually needed, who seek investment at the time the venture achieves a market uncertainty reduction "proofpoint", who present credible alternatives to partnering with this partner, and who carefully examine the interest of the potential partner, are more likely to receive investment in their new venture.

In summary, scholarship has examined the entrepreneurial process and linked communication activities and strategies to different stages in the venture formation process. From opportunity recognition to resource acquisition, communication networks influence access to opportunities and resources and shape outcomes. The communication norms and social connections of a given community influence not just the evolution of entrepreneurial ventures but also the formation of an entrepreneurial culture in which individuals equipped with appropriate communication skills can successfully pursue and put to use resources to meet market opportunities. That social networks shape norms and vice-versa is not a new

observation, the study of social networks and social norms enjoys a lengthy and rich history in academic circles.

Communication Networks

The definitive origin of the term "social networks" is not agreed upon (Borgatti et al., 2009; Freeman, 2004; Mitchell, 1974) but a typical historical account of the development of the field includes mention of Moreno's 1934 study of a boarding school's runaway girls and their social connections. Moreno was not the first sociologist or anthropologist to examine and connect the social relations in a system (see Freeman, 2004, for a complete history of the development of the field of social network analysis) but his study had a marked effect on the research that followed (Borgatti et al., 2009). While in the 1940's and 1950's the use of mathematical models and investigations into network functionality were pursued, the field largely languished until the 1960's when anthropologists began applying network models to map and understand family ties, cultural norms, and the spread of new ideas and innovations (Bott, 1957; Rogers, 2003).

Contemporary social network studies are predominantly concerned with structural issues, as opposed to those related to the experiences and attitudes, behaviors, and outcomes of individuals embedded in networks. To consider the experiences of individuals, in this case, entrepreneurs, a brief discussion of the vast social network research is warranted. Following is a discussion and review of the primary concepts, terms, and studies that have shaped the field. I conclude this discussion of social networks with a brief discussion of entrepreneurial actions within networks, and the communicative actions that entrepreneurs may undertake to achieve desired outcomes.

Relevant terms and concepts. Today the field of social network analysis is populated by anthropologists, sociologists, psychologists, and communication scholars, all of whom use common terms to describe networks and networks functions including: *nodes, ties, centrality, closeness, density, range,* and *betweenness*. *Nodes* are the actors (organizations or individuals) in a network, while ties are the relationships between and among nodes. *Centrality* is a measure of how powerful a node is in a network as measured by its *betweenness*, *closeness*, and degree. A range of studies explores and explains the effects of these measurable variables (Freeman, 1977; Ibarra & Andrews, 1993). Several of these studies lend themselves to this thesis as they inform me about the type of activities entrepreneurs may set intentions to enact. Additionally, these studies inform us as to which communication processes individuals may enact in navigating communication networks for strategic purposes.

Constructs that contribute to and define the study of social networks include *embeddedness*, *structural holes, homophily,* and, perhaps most compellingly, *social capital*. Embeddedness refers to a node being lodged within a set of ties, structural holes are gaps in a network, voids between nodes, homophily refers to perceived sameness between nodes, and social capital is the resources accessible through one's social connections. Granovetter's landmark study, *Economic Action and Social Structure: The Problem of Embeddedness* (1985) takes a broad swath of sociological theory into account - not dissimilarly from Giddens' (1993) work in structuration theory-- as it addresses the economic limits actors in a network face due to the boundaries of the social structural in which they are embedded. Granovetter argues that sociologists are needed in the realm of economics as understanding the social relations that construct the marketplace has been overlooked.

The ties that bind. Social network research exploded in the 1970's with the publication of Mark Granovetter's (1973) article, *The Strength of Weak Ties* in which he outlines a series of definitions and sets a research agenda for measuring the strength/weakness of ties between nodes in a network. This engaging study presents visual diagrams, identifies weaknesses in diffusion studies, and summarizes with a compelling argument: "[Linking the] micro and macro [sociological] levels is thus no luxury but of central importance to the development of sociological theory" (p. 1378). Perhaps most enticing of all, Granovetter finds that *weak* ties, for example one's acquaintances but not close friends, once considered rather irrelevant by scholars (Wirth, 1938), are "indispensable to individuals' opportunities and to their integration into communities..." (p. 1378). This finding sparked a surge of research in the social network realm as scholars (Berkowitz, 1982; Burt, 1992; Wasserman & Faust, 1994) began to explore the effects and functions of the social structure in which an individual is embedded.

This research tends to divide into the same two "intellectual streams" Coleman (1988, p. S95) identified as characteristic of the theoretical perspectives of sociologists and economists: one stream (sociologists) emphasizes structural constraints while the other (economists) emphasizes individual agency. By a large margin, the majority of contemporary social network investigations found in the annals of communication research explore the structure of social networks (Borgatti et al., 2009; Freeman, 2004). Through using both simple and sophisticated Social Network Analysis (SNA) tools, communication scholars have developed a thorough understanding of structural elements and effects of social networks. The last 10 years have seen an explosion in the use of SNA software in communication studies investigating wide ranging topics ranging from the spread of

infectious diseases through communities to collaborative natural resource management approaches.

Structural holes. Burt's theory of structural holes (1992, 1998, 2001) identifies how disruptions occur in an otherwise static social structure; he argues that actors can fill gaps in networks and move into new positions in a network, which may have indications for how entrepreneurs may maneuver in a network. Burt (2001) writes of the value of brokering structural holes, defined as gaps in the linkages among actors in a network or between two disconnected networks, as held in the ability to broker resource flows and the resulting access to a greater diversity of information, knowledge, opportunities, and tangible goods. This increased access may also lead to innovation and greater ability to meet emerging market demands. As people tend to relate most with those whom they perceive to be similar to themselves (Rogers, 2002), those who connect disparate nodes can access a greater swath and diversity of resources.

Burt's (1985, 1987, 1992) extensive work in identifying effects of network structure on nodes' access to resources can be linked to studies of the theory of planned behavior, intention, and entrepreneurship as he examines the effects of *social contagion* (being influenced through social networks) versus *structural equivalence* in a doctor's adoption of a new medication. In this work, Burt (1987) defines structural equivalence as the "perception of the action proper for an occupant of their position" (p. 1287), which is strikingly similar to Ajzen and Fishbein's (1980) definition of social norms in TPB. As entrepreneurs likely notice and consider the behaviors of other entrepreneurs, structural equivalence and/or social contagion may influence their perceptions of and attitudes about communication behaviors appropriate to their role, position, or practices as entrepreneurs.

Social capital. Social capital, as a conceptual tool, was first described by James Coleman's 1988 article in which he posits social capital as a theoretical bridge between economic theories (related to agency) and exchange theories (related to social systems). Defined both as the glue that holds communication networks together and as the resources available through social relations, social capital is the counterpart to human capital. Human capital is the knowledge or information; social capital is the social system through which human capital can be put to work. Since its emergence in the academic literature the concept has been widely explored in the social science literature (Borgatti, Jones, & Everett, 1998; Florin, Lubatkin, & Schulze, 2003; Whitbred & Steglich, 2007). Findings consistently concur that the broader and more varied one's social ties and social capital, the greater one's chances of successfully competing (Aldrich & Zimmer, 1986; Burt, 1992; Lin, 1999).

Social capital theories are generally considered to fall into the realm of theories of self-interest (Monge & Contractor, 1998). The term social capital stems from the assumption (Lin et al., 2005) that actors in a network recognize, value, and can reasonably expect returns on their social investments in social networks. Thus, the *capital* -or upfront investment-they are investing will reap social rewards. And, significantly, the entrepreneurship literature does support the idea that entrepreneurs both cultivate and nurture their position in networks and indeed reap rewards for these efforts (Aldrich, 1986).

Homophily. However, Aldrich (2005) points out that not all entrepreneurs gain substantial benefits from their investments in social networks as most tend to gravitate toward others in their network who are similar (homophily), therefore missing out on a diversity of resources or opportunities. McPherson, Smith-Lovin and Cook (2001) write of the same limitations imposed by our human tendency to connect and form relationships more

readily with those who seem familiar or similar. Writing, "Homophily limits people's social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience" (p. 415) the authors pinpoint for us the reason why the concept of homophily may play a role in this research: do entrepreneurs intentionally seek out those who are perceived to be different - outside their circle - or do they overlook the resource benefits of connecting with those who are different from them?

Like the limits imposed by homophilous relations, social capital can serve to limit one's chances of success as one's social circle is equal to one's ability to access resources. Cattell (2001) writes about the relationship between poverty and social capital explaining that, "social capital is a useful heuristic tool in understanding the relationship between poverty, place of residence, and health and well-being" (p. 1514) and makes the point that people are embedded in social circles and this inclusion in certain circles ensures exclusion from other social circles, social resources. So we see that relationships serve to connect and support us but also to confine and constrain us. Entrepreneurs' chosen communication activities within this context may cultivate or delimit their chances for success.

Key terms in social network research include nodes, ties, embeddedness, homophily, centrality, in-betweenness, and more. These terms have proved useful in constructing my research questions and provide a common language with which to share and discuss research findings. For example, the position an entrepreneur believes she or he holds in a network refers to how central or between he or she is. While it is not my aim to measure or map networks, I will use this same terminology in this study.

Additionally, the dominant constructs reviewed above and including, social capital, embeddedness, homophily, and structural holes, provide a pathway to framing

communication behaviors within existing research paradigms. For example, entrepreneurs may disclose that they strive to meet politicians who they perceive to be outside their social network yet influential in their conservation efforts; this would indicate that filling structural holes is an action some entrepreneurs intentionally pursue. There is a wide range of communicative actions that entrepreneurs possibly undertake to achieve strategic outcomes; interpreting these through the lens of the established field of social network studies will make the findings of this report more useful to a broader audience.

To achieve strategic and tactical outcomes through networks, entrepreneurs must engage in activities that broaden and deepen their networks. Network broadening includes initiating new relationships while deepening includes strengthening existing ties. The specific network cultivation activities an entrepreneur might pursue include tie formation, tie management and strengthening, tie dissolution, moving to a more central or "betweenness place" in a network, or filling a structural hole. Regardless of these *moves* or the intended consequences, entrepreneurs are increasingly understood as social creatures who both construct and deconstruct social structures through their activities within and among networks.

Over the past three decades a wealth of literature has been generated through empirically and theoretically grounded studies that explore the social function of entrepreneurs, entrepreneurs' communication networks and how entrepreneurs' access to resources is facilitated by their inclusion in, or exclusion from, communication networks. This body of research informs this thesis as all entrepreneurs change social structures to some extent through building new organizing entities. Furthermore, all strive to overcome resource deficiencies in their pursuit of success.

Yet entrepreneurs who pursue goals unrelated to financial gain have been less studied. These so-called "social entrepreneurs" identify social change as the primary outcome they seek. The last element of this literature review explores the realm of social entrepreneurship and communication networks. A relatively new field of study, social entrepreneurs share many similarities with for-profit entrepreneurs: they overcome resource deficiency, they are embedded in networks, they use social capital to gain access to resources, and they are constrained by their position in networks. Less known are the differences that may exist between social and for-profit entrepreneurs in terms of how they perceive their networks and how they pursue resources through these networks.

Social Entrepreneurship: An Emerging Field

A recent article in *Harvard Business Review*, a leading journal and resource for business leaders and management scholars alike, confines founders' start-up activities to only two motivational imperatives: the desire to become wealthy or the desire to have control. The author, Noam Wasserman (2008), does not consider how motivational factors like passion for the environment or a drive to improve social outcomes may play a role in pushing individuals to found and build organizations. This is not to say that I assume social entrepreneurs are without less altruistic desires including power and money. However, if motivations serve as a catalyst for entrepreneurial behavior then consideration of motives is called for. Wasserman may intend in his article to fold social entrepreneurs into the batch when he mentions "heads of not-for-profit organizations" (p. 7); yet he only discusses their choices as they relate to money and power - not social outcomes.

I refer to Wasserman's article as an example of the theoretical mindset and empirical contexts that have dominated entrepreneurship scholarship until recently. Wasserman's

article explores how high-technology entrepreneurs interact with professional investors in their pursuit of wealth and power. It may be that entrepreneurs' actions do not vary regardless of motivation or context, yet the question of how motivations impact communication behaviors has not been addressed in the scholarship to date. Until recently, entrepreneurs who pursue outcomes other than monetary gain were scarcely mentioned in the literature.

Today, a growing body of work explores the experiences of entrepreneurs who pursue social good as their "profit" or gain. These social entrepreneurs may pursue diverse "profits" including changes to public policy, improvements in social equality, altered distribution of resources or benefits, and more. And, as Mair and Martí (2006) write, "Social entrepreneurship, as a practice and a field for scholarly investigation, provides a unique opportunity to challenge, question, and rethink concepts and assumptions from different fields of management and business research" (abstract). Mair and Martí posit social entrepreneurship as "differing from other forms of entrepreneurship" and offer their own definition of social entrepreneurship -- while recognizing that the field lacks a cohering definition. Building on the established definition of *entrepreneurship* in their work, and acknowledging the roots of social entrepreneurship as having formed in the broader field of entrepreneurship, Mair and Martí (2006) write that social entrepreneurship is "a process involving the innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs" (p. 37). Inherent in this definition is a hierarchy of motivations: catalyzing social change and addressing social needs are foremost in the entrepreneur's mind as gainful outcomes. You may notice, though, that social entrepreneurs,

like for-profit entrepreneurs, must engage innovation and a pursuit of resources to pursue an identified opportunity.

Norris Krueger (2005) writes that "Social entrepreneurship is booming-in both quantity and quality" (p. 3). Moreover, Krueger recognizes that the traditional line is blurring between for-profit and not-for-profit organizations (and entrepreneurship) as increasing numbers of organizations pursue improved financial valuation and profits through improved environmental and social management practices. This *triple bottom line approach*, defined as the pursuit and measurement of three bottom lines including (1) economic, (2) environmental, and (3) social benefits accrued to the company and stakeholders (Elkington, 2004), has gained in popularity among managers as many of the companies utilizing this strategic approach outperform companies not using a triple bottom line approach (Willard, 2002). Notice, however, that increased profit is still the leading motivator for these firms.

Social entrepreneurs and social movements. The study of social-environmental entrepreneurship is linked to the study of social movements as social-environmental entrepreneurs mobilize publics and utilize collective action as a resource to influence policy makers and business leaders (McAdam, Tarrow, & Tilly, 2001). Parsing through the broad and rich social movement literature one comes across the work of McCarthy and Zald (1977) in which, drawing upon political sociology and economic theory, they present the theoretical perspective of *resource mobilization*. Defining a social movement as "a set of opinions and beliefs in a population representing preferences for changing some elements of the social structure or reward distribution, or both, of a society (p. 153)" McCarthy and Zald place strategic and tactical actions as central to the decision making process of social change organizations.

Instead of arguing that social movements are formed of masses of discontent individuals, thus placing psychology as the organizing motivator, McCarthy and Zald (1977) argue that more rational motivations, including economic and political gain, may cohere publics and cause them to work collectively to alter the social structure. Differing from past theoretical approaches, they argue that actors or organizations in social movements may garner support from those who do not share its core values but who perceive benefits to supporting the movement. Furthermore, instead of solely perceiving the environment (social structure and norms) as a constraining factor, they point out that actors may utilize these structures and resources to cultivate collective action. Lastly, McCarthy and Zald place some emphasis on the tactical activities that social movement organizers face including mobilizing supporters and transforming publics into sympathizers. They fall short of identifying actual communication techniques with which social movement organizers achieve this.

James Kitts (2000) explores a range of studies linking social movements, resource mobilization, and social networks and the various theoretical perspectives presented in these studies. In this critical analysis, Kitts discusses the challenges related to measurement and interpretation of how actors in a network become involved in social movements. In an earlier paper Kitts (1999) characterizes the challenging scholarship of understanding social movements within a social network frame (and vice versa) as a "rocky courtship" (p. 551). Kitts works to build testable hypotheses that relate tie strength and number to engagement in movements. He also builds on the notion that there is a finite number of people (i.e. stakeholders) who can provide support to mobilize a social movement and that this creates a competitive marketplace in which social movement organizers and entrepreneurs must

compete for attention to engage stakeholders and publics. This implies that entrepreneurs should employ communication behaviors that allow them to "outcompete" others.

Pursuing answers to the question of stakeholder influence in networks, Prell, Hubacek, Quinn, and Reed (2008) claim that gleaning knowledge about stakeholder involvement in a network can indicate further stakeholder interests, connections, and roles. This analysis, they argue, can inform a *social learning process* and lead to improved ecosystem management principles. The suggestion that resource management practices are improved through social network analysis and management is found in Bodin, Crona, and Ernston's article (2005) exploring the impact of social network structure and the constraints and opportunities afforded by said structure. Identifying bonding (ties that create trust and closeness between ties) and bridging links (connections to nodes outside of the network) as essential ties for diversifying a given network's access to resources and capacity to absorb said resources, the authors agree with other scholars that "not all networks are created equal" without paying heed to the people who create the networks.

The literature that surrounds social movements, social networks, and natural resource management concur that information flows, stakeholder recruitment and mobilization, and identity needs converge to form the relationships that disrupt and recreate social structures. The role entrepreneurs play in cultivating social movements through communicative action is less well understood. Do they perceive their role in social networks as essential to resource mobilization? Do they employ specific behaviors in pursuit of resources? The environmental conservation arena is a dynamic space in which to explore these questions further.

Summary of Literature Review

This literature review has considered a diverse arena of scholarship that informs this thesis. Revisiting my research questions, we see that the first question centers on the attitudes and beliefs that individual entrepreneurs report in regards to social networks and their participation in these networks. Delineating the relevant social theories into two domains, the structural and the individual perspectives, we see my question falls squarely into the realm of theory, which places greater import on individuals' experiences. Acknowledging that network structure impedes and facilitates resource exchanges, it is the attitudes and experiences of individuals operating within these structures, of concern here. In searching the vast body of literature on entrepreneurship and communication networks, very little empirical research has explored the attitudes and beliefs held by entrepreneurs.

Moving next to the cognitive and emotional processes that individuals experience, we see that the second research question, regarding the strategic outcomes or advantages entrepreneurs intentionally pursue through networks, is informed by theories of strategic or planned communication. In particular, the theory of planned behavior offers a useful model for interpreting entrepreneurs' reported considerations of network participation, intentions and communicative actions. While the literature to date has not explored the networking intentions and actions of entrepreneurs, there is considerable research into general intention setting processes of entrepreneurs.

The next section reviews studies that place entrepreneurship in the social science research paradigm, considering entrepreneurs as social beings, enacting social processes through communicative acts. Recognizing that entrepreneurs operate within communication networks, we see that opportunities and essential resources come to entrepreneurs through

network connections. Furthermore, entrepreneurs' communication skills, symbols, and activities impact their chances of success. In questioning how entrepreneurs secure necessary resources we begin with the knowledge about the resources required for new venture creation. From human to financial to social capital, new ventures must beg, borrow, or bargain for essential resources in order to overcome the risks inherent to being "new".

Certain resource acquisition activities have been identified in the entrepreneurship literature and include resource co-optation, symbolic expression of ability and integrity, and use of social capital. Less is known about how entrepreneurs shape or initiate network connections to access resources, or their experiences in pursuing resources through networks. This review includes a discussion of the salient terms and concepts of the communication networks scholarship and identifies structural holes, homophily, weak and strong ties, and social capital as constructs that will likely emerge in my interviews with entrepreneurs.

Finally, I briefly addressed the emerging field of social entrepreneurship as a first step to providing context to the attitudes and experiences the entrepreneurs I will interview may experience. Recognizing that social entrepreneurs pursue social change as the primary outcome, with financial gain as a possible additional goal, social entrepreneurs are sufficiently different from for-profit entrepreneurs and warrant exploratory research to explore and identify their key experiences and attitudes in their quest for resources through their social connections. Next we will explore the specific context in which this study will take place: the environmental movement.

Chapter 3: The Environmental Movement as a Context for New Venture Creation

The modern environmental movement includes diverse stakeholders ranging from scientists to educators to activists to biologists to everyday citizens. Its roots are broader than they are deep; earliest recognizable "environmental activism" is found relatively recently in works of well-known conservation writers and thinkers such as Henry David Thoreau, and Aldo Leopold. Only in the past 40 years, however, has the environmental movement become a mainstay in American politics, economics, and social consciousness. The following introduction to the environmental movement reviews historical developments, diversity in the philosophies of environmental advocates and activists, current trends influencing environmental communication including collaboration and conflict resolution, and social-environmental entrepreneurs.

Historical Developments

Intrepid social environmental entrepreneurs have a long history of bringing social change to our nation's political and sentimental stance on the environment. In the late 1890's John Muir became the founding President of the Sierra Club and went on to be considered, "one of the patron saints of twentieth-century American environmental activity," (Holmes, 1999, p. 178). Muir's passion for the natural environment, his political activism, and his prolific and inspiring writings have influenced environmental activists' methods and messages for over a century (Ehrlich, 2000). Contemporary environmental entrepreneurs are often as outspoken and passionate as early environmental advocates; the philosophies, messages, and communication methods of today's environmental activists and entrepreneurs reflect the diversity in the movement that was born of its formative altercations.

During the same period in which John Muir was calling for the preservation of nature through total protection from use, leading conservationists were advocating for the development and full use of natural resources. Gifford Pinchot, our nation's first Chief of the US Forest service, formed the foundations of the modern conservation movement with his *conservation ethic* which defined conservation as "The first great fact about conservation is that it stands for development" (Pinchot, 1910 p. 42). The national debate that erupted in the 1910's between *preservationists* and *conservationists* over the proposed flooding of Yosemite Valley area's Hetch-Hetchy Valley (Oravec, 1984) became emblematic of the disagreement among environmental philosophies that continues to form the dominant positions found within the environmental movement today.

The conflict and inflammatory rhetoric of the Hetch-Hetchy debate captured media headlines across the nation (Oravec, 1984) and paved the way for decades of environmental issues to be commonly played out in courtroom battles, characterized by divisive media headlines (Vraneski & Richter, 2003). This conflict-ridden orientation to environmental issues and management came to a head in the late 1980's and early 1990's with the Spotted Owl controversy (Moore, 1993) which - according to media sound bytes - pitted "tree-huggers" against families and communities needing jobs in the logging industry. The core of this argument, that preservation and economic prosperity are necessarily mutually exclusive, has dominated much of the discourse and debate surrounding environmental issues (Lange, 1998). Citing the construction of "competing social realities (p. 145)" through rhetorical tactics as a cause of the irreconcilable conflict that pervades environmental issues (Moore, 1998), some scholars contend that partisan politics perpetuate environmental conflict and

lead to the formation of interest groups (Brogden & Greenberg, 2003) which recycles into more partisanship, creating a cycle of contention and disagreement.

Advocating a more radical approach to environmental advocacy and action than other existing organizations, Dave Foreman founded Earth First! in 1979 as a "response to a lethargic, compromising, and increasingly corporate environmental community" (http://www.earthfirst.org/about.htm). Earth First! was part of a sweeping movement in the 1980's and 1990's that pushed for radicalizing the action and discourse around environmental conservation issues (Lange, 1997). This conflict-ridden approach contributed to the increasing conflict between ranchers, loggers, conservationists, environmentalists, and policy makers that dominated western environmental issue throughout the last two decades of the past century.

A decade after Earth First! was formed, as ranching across the western United States continued to draw fire from environmental groups (Sheridan, 2001), the Malpai Group coalesced in southeastern Arizona where a small group of ranchers began working together to "reach out to our critics and find common ground" (http://www.malpaiborderlandsgroup.org/roots.asp). As stated on their website (2011), the Malpai coalition was formed with the idea that,

> Whatever it [the nascent organization] was should be driven by good science, should contain a strong conservation ethic, be economically feasible and be initiated and led by the private sector with the agencies coming in as our partners, rather than with us as their clients (http://www.malpaiborderlandsgroup.org/roots.asp).

Diversity in the Movement

Divergent --and often contradictory--responses to environmental issues have shaped the environmental/conservation discourse for over a century. It is important to recognize that groups and efforts within the environmental movement do not constitute a monoculture; there is great variety among these groups in regards to their philosophical beliefs, communication activities, and organizing strategies (Hendry, 2010; Lange, 1998). These differences influence the ways in which environmentalists shape messages, garner support, and mobilize resources (Moore, 1998). The range of attitudes and beliefs that drive environmental actors to act likely reflect the diversity of actions undertaken by said actors. In considering the communication activities that social-environmental entrepreneurs may employ in pursuit of resources, researchers may be well-advised to consider the philosophical stand-point of the entrepreneur in order to understand the communication activities available to, or chosen by, an entrepreneur.

Environmentalists differ in their perspectives on managing natural resources and the meaning or value of nature. Attitudes in the environmental arena range from sustainable development, to deep ecology, to conservationism. Communicative actions undertaken by environmentalists similarly range and may include community organizing to negative publicity campaigns to development of green products. The following review of the environmental arena introduces the reader to this diversity of perspectives and communicative approaches.

Environmental perspectives. Three main environmental perspectives, or philosophies, can be identified: preservationism, conservationism, and sustainable development. Each of these shares the notion that humans should act as stewards of the

natural environment, caring for the land and advocating for its well-being (Dalton, Reccia, & Rohrschneider, 2003; Kitts, 1999). Beyond these commonalities, the perspectives diverge.

Preservationists view nature as a place of wondrous beauty, and believe that nature holds value irrespective of human economic needs. John Muir's (1912) comment that "Everybody needs beauty as well as bread" (p. 256) typifies the standpoint of the preservationist movement. Calling for the setting aside of large tracts of land considered to be especially beautiful, preservationists today continue to advocate for the creation of designated wilderness areas, parks, and remote areas.

The conservationist movement emerged in part as a response to the preservationist philosophy, which seemed to exclude certain classes. The broader progressivism movement underway during the early 20th century enabled President Theodore Roosevelt to successfully pursue conservationism and apply an instrumentalist approach to environmental philosophy. Conservationism operates on the belief that nature is available, perhaps even intended, for human use. While reckless resource consumption is not encouraged, natural resources are put to use, meeting human needs.

Sustainable development emerged in the late 1980's as a response to growing concern regarding the likely environmental crisis that will ensue as emerging economies like China and India seek to raise their standard of living, thus requiring ever-greater need of natural resources, energy, and space. While emphasizing science, technology, and management practices, sustainable development originally placed the natural constraints of ecological systems at the center of the philosophy (Blundtland Report, 1989).

Additional environmental philosophies include *deep ecology* (Naess, 1972)*, ecofeminism* (Bullis, 1996)*, and *social ecology* (Bookchin, 1982)*. Each of these moves away

from a more anthropocentric position in which human needs or desires are central, and

assumes that radical shifts in our cultural and sociological structures must occur for

ecological systems to remain healthy.

Social ecology, in particular, seems at odds with our society's increasing trend to

embrace free market capitalism. One of the movement's founders, Murray Bookchin, writes,

> Unless we realize that the present market society, structured around the brutally
>
> competitive imperative of "grow or die," is a thoroughly impersonal, self-operating
>
> mechanism, we will falsely tend to blame other phenomena — technology as such or
>
> population growth as such — for environmental problems. We will ignore their root
>
> causes, such as trade for profit, industrial expansion, and the identification of progress
>
> with corporate self-interest. In short, we will tend to focus on the symptoms of a grim
>
> social pathology rather than on the pathology itself, and our efforts will be directed
>
> toward limited goals whose attainment is more cosmetic than curative (Bookchin,
>
> 2011).

Mr. Bookchin, who passed away in 2006, was a strident advocate for building a

deeply appreciative understanding and valuing of non-human life. He perceived market

forces to be a source of inequality and hierarchical thinking and action -- leading to

fundamentally unsustainable resource use patterns. Bookchin believed the domination of

humans over other humans to be reflected in humankind's approach to natural resource or

environmental management. Bookchin's views evolved and by 2005 he had crystalized his

thinking and called for a new paradigm to emerge, calling it the ecology of freedom.

Social ecology is notable in that it directly points to capitalistic forces as being central

to continuing environmental degradation. Bookchin writes of the perils of a social

organizing system (capitalism) that relies on its ability to "grow or die". He notes that capitalism will eventually be constrained by external forces, namely ecological carrying capacity (2005). These views place social ecologists at odds with current environmental trends of investing in private ventures intended to improve environmental management or resource use.

         From conflict to collaboration. Environmentalists, regardless of their perspective or philosophical standpoint, have "cut their teeth" in partisan politics and developed their professional networks and relations in a contentious, combative context (Brogden, 2003). To what extent differing philosophies will influence the networking actions undertaken by entrepreneurs is unknown.   For example, to avoid potential conflict will certain entrepreneurs avoid tie formation with those who seem to hold opposite views? Or, will individuals construct more dense (closely, tightly formed) networks to protect against opposing forces?

         Indeed, environmental conflict has been a focal point of much academic study. Yet, increasingly, individuals, groups, and communities are growing weary of the costly and lengthy dispute processes, and the lose/lose outcomes that often result. Environmental conflict resolution has emerged as growing field and has inspired lengthy texts and research papers calling for environmentalists to reframe conservation issues (Gray, 2004), to find the middle ground, to reach out to those who work the land and find ways to work together. The academic literature has begun highlighting ways communities can work collaboratively to simultaneously preserve resources and meet economic needs of communities (Dingwall, 2002).

Among the suggested methods for increased collaboration are use of neutral interveners or conflict resolution specialists (Dingwall, 2002), place-based collaboration (Hibbard & Madsen, 2003), and civic environmentalism (DeWitt, 1994). Dingwall (2002) likens the use of conflict resolution specialists to that of negotiators in hostage situations and points out that the success of this approach may hinge on the level of identity versus interests held by the negotiating parties. Furthermore, Dingwall (2002) states there has been an overemphasis on the process of conflict resolution, treating resolution of conflict "as a purely technical matter" (p. 321).

Place-based collaboration calls for locally-grounded conservation management programs and strategies that recognize the needs of communities and reflect an ecosystems approach to resource (human, ecological, cultural) management. Civic environmentalism urges a locally based collaborative movement to solve environmental issues - while not excluding federal regulation. (DeWitt, 1994). While there is increased recognition of the need for greater cooperation among constituents who share --however broadly--conservation goals, conflict frames continue to shape environmental issues.

A participant's willingness to participate in mediated processes to resolve environmental conflicts requires an individual or group be willing to engage, to some extent, in dialogue, and to listen to "the other" (Isaacs, 1999). Pinkley (1994) argues that this willingness may stem from one's individual orientation to emphasize relationship over tasks, emotions over intellect, and cooperation over winning. In today's hotly contested environmental arena, stakeholders and the media continue to pit economic interests (i.e. jobs) against conservation efforts and an entrepreneur's communication behaviors in this realm may emerge from his or her predisposition or willingness to engage with "the other".

Additionally, exerting varying facets of one's identity (Gray, 2004) may facilitate communication with a wider range of actors in a given network. Flexibility with one's identity and worldview may influence adaptability in conflict-ridden circles and may increase access to information, opportunities, and resources. Additionally, it may influence one's determination to meet an unmet need in the market - causing a passionate individual to set forth on forming an organization.

Social-environmental entrepreneurs. Being an entrepreneur is tough. Founding an environmental organization that strives to protect and advocate for natural resources and places is *really* tough. In 2000, only 2% of the nation's philanthropic dollars went to environmental and animal organizations, equaling approximately $85,000,000 (Giving USA 2009 Report). Yet, the scale and scope of environmental challenges are enormous. A search on Guidestar (April 26, 2011), a leading charity reporting website (www.guidestar.org), using the term "conservation organizations" results in 5,919 organizations in the western United States alone. Over 60% of these tax-exempt environmental organizations have budgets under $3.5million (Guidestar, 2010). The majority of nonprofit environmental organizations are small. Guidestar reviews only publicly available IRS documentation, including 990 forms, which give an organization's annual revenues, contact information, and mission and category of tax-exempt type and also industry or focal area. To be categorized as a "conservation" tax-exempt organization the nonprofit must be filed as working in one of the following domains: Environmental Quality, Protection, and Beautification, Environmental Education and Outdoor Survival Programs, or Natural Resource Conservation and Protection.

Data from Guidestar indicate that there are 196 conservation organizations in New Mexico. In reviewing these, I see that the majority are more than five years old. Additionally, initial conversations with social-environmental entrepreneurs (Bird, 2011; Mang, 2011; Oliver, 2011) indicate that much of the environmental start-up activity today in New Mexico is in the technology sector: solar panel development, recycling and *upcycling* (reusing materials with increased value add after recycling), and innovative energy solutions. I therefore needed to reach beyond New Mexico to find sufficient numbers of social-environmental entrepreneurs who fit my specific criteria.

As discussed here, a wide range of philosophies that influence communication behaviors and tactics characterizes the historical and contemporary context in which environmental entrepreneurs are building their ventures. These philosophical perspectives, from preservationism to sustainable development and ecofeminism, may shape networking attitudes and experiences, and likely influence communicative actions, like tie formation and network broadening. Exploring the environmental perspectives of entrepreneurs will be important to this thesis.

Chapter 4: Methods

There is a gap in our understanding of communication networks, communicative action and agency, and social entrepreneurship. This research project has sought to gain insight into the attitudes and beliefs held by social-environmental entrepreneurs in regards to their own participation in communication networks. Reacquainting the reader with my questions, they are:

RQ1: What attitudes and beliefs do social-environmental entrepreneurs report holding in regards to their position in, participation in, and potential success through human communication networks?

RQ2: What strategic advantages and/or outcomes do social-environmental entrepreneurs aim to achieve through participating in social networks?

RQ3: What communication behaviors and tools are used by social-environmental entrepreneurs to assess, cultivate, change, and nurture their individual and organization's position(s) and role(s) in social networks?

As I have sought to understand social-environmental entrepreneurs' communicative behaviors and actions through their own self-reflective lenses, qualitative methods were utilized in order to induce deeper understanding and insights and eventually shape a theoretical frame (Creswell, 2003; Keyton, 2001). More specifically, I used semi-structured interviews with mostly open-ended questions. Semi-structured interviews are considered "especially useful for understanding social movement mobilization" (Blee, & Taylor, 2002). Additional studies into social enterprise development (Spear, 2006) and environmental management (Bouton & Frederick, 2003; Brown, 2004) have identified semi-structured interviews as useful for gathering descriptive data that offers a rich set of data from which to

draw interpretations. This chapter describes the general and specific qualitative method, in-depth interviews used in this study, the rationale behind this choice, the interview protocol, sampling procedures, data collection and analysis methods, and my role as a researcher.

Justification of Use of Qualitative Methods

Qualitative research methods have become widely accepted as a legitimate set of tools and methods to understanding the *lived experiences* and *perceptions* of individuals and groups of people (Creswell, 2003). Noting primary characteristics of qualitative research, Creswell (2003) writes that qualitative research methods usually take place in the respondents' natural settings, rely on emergent rather than prefigured themes and topics, is fundamentally interpretive, and engages a holistic view of social phenomena. Furthermore, Creswell claims that the "more complex, interactive, and encompassing the narrative, the better the qualitative study" (p. 182). In qualitative research the role of the researcher is considered, acknowledged, and accepted as unavoidably value-laden and biased. Acknowledging this, qualitative researchers must apply complex reasoning and iterative, multi-faceted analytical processes "with a cycling back and forth from data collection and analysis to problem formulation and back" (Crewsell, 2003, p. 183) in order to identify valid and reliable findings.

A key goal of qualitative research is to bring forth the participants' voices, their own descriptions of their experiences, feelings, beliefs, and attitudes. This goal and perspective fit well with my first research question. The researcher's role is to organize and categorize these data elements into salient, emergent themes and then interpret these themes. Due to the subjective nature of the analysis, qualitative researchers must remain sensitive to selection and reactivity bias while analyzing the data. Selection bias occurs when certain data

elements stand out to the researcher - possibly due to her own personal experiences. Reactivity bias stems from the influence the researcher has on the setting, context, or interactions under study. To avoid these types of threats to the validity and reliability of the researcher's interpretations, researchers are advised to use audio and/or visual recordings, transcriptions of said recordings, careful listening for the participants' own interpretations, and if possible, verification of themes with the participants themselves (Keyton, 2001).

Use of semi-structured interviews. Specific methods used to gather data that provide holistic and complex data sets include narratives, participant observation, interviews, focus group interviews, and ethnography. This study used semi-structured interviews. This research project provided social-environmental entrepreneurs opportunities, through interviews, to express their own ideas, experiences, attitudes, and beliefs about communication networks. While other qualitative data collection methods, like participant observation, or ethnography, would provide complimentary data, the main goal was to gather, directly from the entrepreneurs, their experiences and reflections on these experiences, as agents of social change embedded in networks. Additionally, the goal of this project was not to understand the cultural context of one entrepreneurial organization - for which ethnography would be ideally suited - nor to gather data that does not reflect ascribed meaning - for which observations alone would have been useful.

Keyton (2001) writes of interviews as a "practical qualitative method for discovering how people think and feel about their communication practices" (p.294). Keyton additionally writes that interviews are useful to gain understanding of a communication process from the perspective of the participant. Creswell (2003) notes that interviews are particularly useful when the communication events occur over a long period of time,

rendering observation too difficult or costly. Finally, Seidman (2006) describes interviews as ideal for understanding the "the lived experience of other people and the meaning they make of that experience" (p. 9). As mentioned previously, several studies in the fields of entrepreneurship, social movements, and conservation communication, have used semi-structured interviews and found the method to be effective.

As my research questions address the strategic advantages and/or outcomes social-environmental entrepreneurs aim to achieve through participating in social networks, I have created a descriptive and contextually relevant data set that describes the entrepreneurs' attitudes, beliefs, and behaviors regarding communicative action in social networks. Again, semi-structured interviews have helped me elicit this information. In his thorough description of interviewing as a qualitative method, Irving Seidman (2006) describes the human experience as one we share through stories. He describes storytelling as a meaning-making process and insightfully points out that unlike subjects of research in other fields (i.e. cells, planets, or dolphins), human beings can *talk.* Using symbols - words and language - to express their experiences, humans can reflect upon, share, and analyze their own experiences. Directly asking entrepreneurs to describe, in their own words, the communication tools and behavioral tactics they use required more directed, specific questions about tools like attendance at conferences, using social media like Facebook, or communicating through group email lists.

Participants

This study's sample was bounded within the realm of emerging, or recently formed, environmental organizations, ventures, or firms whose leaders' stated missions and/or goals include influencing the management, use, or protection of natural resources, ecosystems, and

places. The research participants were, however, not the organizations themselves, but the individuals starting and building these organizations. Recognizing the diversity of participants who fit this criterion, I employed purposive sampling to amply sample for three diverse characteristics of entrepreneurs: non-profit, for-profit, environmental ethic. In others words, I aimed to build a sample of entrepreneurs that equally reflected non-profit, for profit, and a range of environmental ethics.

The difficulties in selecting interviewees to meet this ideal sample emerged as I tried to connect with "activist" environmentalists. While people from more market-oriented or collaboration-oriented environmental perspectives readily engaged with me via email or phone, activists returned neither my email introductions nor my phone messages about the project. It seems environmentalists who may be considered more fringe or oppositional are less willing to engage in discussions about their communication activities. As a result, only one entrepreneur I interviewed was a self-described activist.

As I sought to generally collect and understand information regarding the attitudes and behaviors of *typical* social-environmental entrepreneurs, as opposed to extreme environmental activists or profit-driven capitalists exploiting environmental markets, my sample of participants did, however, reflect typical cases of social-enviro-entrepreneurs.

Inclusion criteria. I conducted interviews with social-environmental entrepreneurs who met the following criteria:

1. He or she has been working to build the venture for no more than seven years.

2. The budget of their organization or venture is less than $5 million annually;

3. The stated mission or goal (in the organization's literature or materials) of the venture focuses on promoting, improving, or sustaining natural habitats,

conservation efforts, environmental policies, and ecological/natural environments and systems;

4. Any type of organizational forms including tax exempt, 501c3 and c4 organizations, B-corps, sole proprietors, corporations, or others, may be included in the selection of participants.

As described above, a key resource entrepreneurs must strive for is reputation and legitimacy. I excluded entrepreneurs whose ventures were more than seven years old as it is likely the venture is known in the environmental/conservation community and is no longer overcoming a lack of legitimacy or trustworthiness. In pursuit of information rich cases (Patton, 1990), I also aimed to interview entrepreneurs who had accumulated some experiences as entrepreneurs. Thus, I interviewed only two entrepreneurs with less than one year of experience building their current venture. The average age of the ventures discussed was three years. Additionally, organizations with annual operating budgets that exceeded $5 million were excluded as these larger organizations likely have more complex and different strategies for garnering resources and are not likely to use communication behaviors and tools similar to that of a financially strapped organization.

Entrepreneurs whose stated goals are primarily monetary gain, but whose organizations utilize environmental or "green" products or marketing strategies to achieve these gains were not included in the sample. Yet, entrepreneurs building ventures with a legal entity classified as "for-profit" were not excluded from the discussion of social-environmental entrepreneurs. Their choices regarding formation of a business entity (as a corporation, or B-corp, or 501c3) may or may not relate to their primary motivation for founding the venture. An example may help illustrate this point. If I were to ask a social-

environmental entrepreneur, who recently founded a Limited Liability Corporation (LLC) consulting firm providing ecological studies, "What is the primary reason you founded this venture?" the consultant may respond, "As a child I loved studying ecology and I want to help communities learn how to do it well. And, I also want to work for myself so I can do interesting projects." This example indicates that the entrepreneur places her passion for ecological systems at the center of her motivations and is using an LLC form to maximize her freedom to choose meaningful projects. Again, through purposive sampling, I identified and categorized interviewees along the lines of "for-profit" and "not-for-profit" so that differences between these groups may be identified if they exist.

Sampling procedures. To ascertain fit with the above identified criteria I built my sample through purposive sampling and snowball sampling. Purposive sampling is considered a useful form of sample construction when participants with specific characteristics are sought for qualitative interviewing (Seidman, 2006; Patton, 1990). Employing maximum variation sampling, as described by Patton (1990), I built a sample that was both diverse and reasonably small in size. In addition to sampling for not-for-profit/for-profit, and a range of environmental attitudes or perspectives, I sought participants whose basic demographic characteristics (sex, age, race) varied. However, I was able to interview only three entrepreneurs who directly told me they were not of European/Anglo descent. I was able to sample a diversity of enterprises in terms of rural, urban, environmental sector, and age of entrepreneur.

To compile the list of potential interviewees, I first built an email list of 112 contacts I already have relationships with and who may have connections to, or obviously have connections to, organizations and individuals working in the social-environmental sector. I

sent an introductory email to this list of contacts requesting help with my project. I received

approximately 30 offers to participate and/or suggested connections to environmental

entrepreneurs or organizations from this email "blast". However, only 12 or so fit the criteria

I had defined. I ended up conducting eight interviews with entrepreneurs from this first pass.

Next, I searched the websites of private philanthropic organizations such as the

William and Flora Hewlett Foundation that publish grant recipients on their websites. I also

emailed program directors of 12-15 private foundations with the same email text requesting

help with my project. I received only four responses and none offered help or suggested

contacts. Finally, I reached out with my email text to organizations like the PERC

Enviropreneur Program, the regional Nature Conservancy offices, and Wild Earth Guardians.

I gleaned two interviews through this method.

However, the majority of my interviews came together as a result of my husband

sending an email to his contact list of more than 4,000 business and personal colleagues and

friends. My husband used the same email text I had used in all previous emails but he did

state in his email subject line: "Request for personal favor". Seidman (2006) warns against

utilizing a third party to communicate with potential participants. He points out that a third

party, while possibly necessary to initiate communication with potential participants, is not

equipped to answer questions that naturally arise in these first communications, or to describe

the project in terms that meet the needs of the researcher and protect the integrity of the

process. As such, my husband immediately responded to each email with the following text:

"[Name], Thank you so much for the quick response! I really appreciate it. I have cc'd Alice

directly so that she can follow up as appropriate. My very best for a peaceful holiday season.

Thanks, Trevor". In this manner I was able to swiftly become the primary contact for each responder.

This email generated between 250-300 responses and within a week I was overwhelmed with potential interviewees. I selected interviewees based on information they provided in their response, information I could find on their website, or by directly asking through email response, to determine each potential interviewee's fit with my criteria. Next, I emailed to set up a time and date for an interview. I scheduled these on a "first come first serve" basis and within two weeks I had set up 20 more interviews entirely through email exchange. Some of these fell through due to scheduling conflicts and changes; in the end I completed 16 more interviews for a total of 26 entrepreneurs. To achieve sufficiency and saturation (Seidman, 2006) with this sample I completed a total of 32 interviews with 26 participants. Each interview lasted, on average, 50 minutes. I conducted follow-up interviews with six of the original 26 interviewees. These interviews lasted, on average, 18 minutes.

I had intended to utilize snowball sampling to help me identify information-rich cases (participants) and yield a greater diversity of participants. It was my intention to ask social-environmental entrepreneurs to refer me to "entrepreneurs who are doing similar work" or "other start-up environmental groups" and I did ask for interviewees to suggest other possible interviewees. However, this snowball sampling approach led to only one interview and was generally not helpful in finding additional interviewees.

After completing three initial interviews I reviewed the recordings and transcriptions and identified questions I had asked that seemed to elicit more verbose and insightful responses. For example, entrepreneurs seemed to open up and expound on the question of

"how do you hope people perceive you, or talk about you in terms of your social networking?" I also identified for myself what I had done well and what I had fumbled during these interviews. And, I searched for the appearance of initial themes.

After these initial reviewing and coding these three interviews, I recognized that the following themes seemed to occur in each interview: time is valuable and networking strategies have to address time scarcity, there are differences in rural versus urban networks, entrepreneurs recognize the value of communication networks and work to cultivate them. Over the course of the following interviews I gained more insight and many more themes.

I had hoped that I would be able to consider the data collection process complete when I began to recognize similar themes emerging in each interview. Indeed, by the final interview I was hearing very little new or even any radically different responses to my questions. The participants' responses had, as I had hoped, had become redundant.

The tables included provide readers a sense of the diversity of interviewees' sex, environmental sector, age range, and the age of their ventures. The table also shows the length of each interview. Table 1 lists all interviewees by assigned pseudonym, and provides further details. Table 2 details the age ranges of the interviewees, and shows the majority were between 45-54 years old. Table 3 shows that the median age of the interviewees' ventures is three years. Table 4 shows the diversity of environmental issues/sectors interviewees are working in.

Additionally, readers may be interested to know that 12 of the interviewees are founders of non-profit venture, 14 are founders of for-profit ventures. Finally, 12 of the interviewees are female, 14 are male.

Table 1: *List of Interviewees*

Pseudonym	Sex	Age Range	Age of Venture	Length of Interview
M Addy	Male	55-65	4 years	58:53
G Hrs	Male	45-54	3 years	1:26:31
A Dise	Female	25-34	3 years	50:44
A Kany	Female	45-54	7 years	47:22
E Ork	Male	35-44	2 years	49:28
C Ffe	Female	35-44	7 years	59:25
B Swan	Female	45-54	7 years	58:55
R Calier	Male	55-65	5 years	1:21:14
Y Tbar	Female	35-44	3 years	40:35
Mr. C	Male	55-65	3 months	54:30
Mr. R	Male	45-54	5 years	38:30
H Boch	Male	35-44	1 year	57:15
T Swell	Female	25-34	3 years	51:12
P Fman	Male	25-34	4 years	38:29
C Dail	Female	35-44	2 years	49:38
Major	Female	45-54	1 year	27:10
K Sack	Female	45-54	3 years	1:06:44
C Wips	Female	45-54	2 years	49:11
Jmy R	Male	35-44	3 years	58:40
J Krutch	Male	45-54	4 months	58:50
D MT	Male	25-34	3 years	47:39
Mr K	Male	65+	4 years	39:14
R Keet	Male	35-44	7 years	52:21
P O'R	Male	45-54	2 years	39:39
R Toprun	Female	45-54	7 years	47:58
JBlos	Female	35-44	2 years	33:40

Table 2: *Ages of Interviewees*

Age of Participants	Number of Participants in Age Range
25-34	4
35-44	7
45-54	10
55-64	3
65+	1

Table 3: *Number of Years Interviewees' Ventures Have Been in Operation*

Years	Number of Organizations in that Range
1 year or less	4
2-3 years	12
4-5 years	5
6-7 years	5

Table 4: *Sectors Represented by Interviewees*

Alternative energy	Enviro activism	Online green network	Forestry management
Organic products	Green directory	Reduce fuel use	Enviro media
Habitat restoration	Ocean conservation	Eco transportation	Enviro education
Reduce fuel use	Water conservation	Market-based eco-solutions	

Data Collection Procedures

As this study sought data from a sample of typical social-environmental entrepreneurs who fit the specified set of criteria detailed above, and as New Mexico was not likely to host a substantial quantity of entrepreneurs fitting this criteria, I decided to conduct telephone

interviews to alleviate travel costs. Today, qualitative research studies demonstrate that telephone interviews provide data that is equally reliable and valid when compared with data gathered through face-to-face interviews (Rohde, Lewinsohn, & Seeley, 1997; Sturges & Hanrahan, 2004). While telephone interviewing may present challenges in building a more intimate conversational environment, in which the participant may divulge a more authentic reflection of self, the telephone does not present significant ethical considerations unique from face-to-face interviewing (King & Horrocks, 2010).

Interviews were conducted by telephone with social-environmental entrepreneurs. The use of a semi-structured format allowed me to remain focused on the specific questions regarding participation in a social network while open-ended questions allowed for a wide range of responses, reflections, stories, and descriptions from the entrepreneurs. To ensure the collection of rich, accurate data I verified the authenticity of the identity of the participant; I established and verified expectations regarding duration and purpose of interview; and I requested each participant partake in the call in a private, comfortable setting. Additionally, I set up a 1-800 call number for each interview, I emailed each interviewee a reminder, and I used a telephone-based audio recording and transcription service.

After each interview I received a digital audio file with the full phone conversation by email link. I downloaded these MP3 files and saved them into a computer file. Then, I uploaded these onto the server of the transcription service. I received transcriptions within five days. I saved these as "Interview 1, 2," etc. and, after receiving eight transcriptions I again reviewed these for emergent themes and I began to develop my Code Book.

Data Collection Protocol

I used an Interview Guide (see Appendix A) for each interview. While I offered to provide a copy of this Guide to each interviewee, none of the interviewees requested a copy of the Guide. Each interview began with an auto-recorded question requesting callers to the supplied 1-800 number "press 1" to verify the participant agrees to be recorded. After entering the call, I introduced myself, made small talk for three or four minutes, and then stated, "I always like to ask folks if they have any questions about me, or my project..." Relatively few people did but in cases where people asked for further information I briefly shared my interests in environmental issues, my goal to finish my doctoral work by May, and my willingness to send the participant an outline of findings after I completed the study. Following this, I asked, "Do you have any more questions, or should we get started?" and then read a scripted statement ensuring confidentiality (see the Interview Guide).

Interview questions to address the research questions. Loosely following the guidelines set forth by Seidman (2006), I conducted in-depth interviews that encompassed three elements with each participant: background and context, current experiences, and reflections on the meaning of these experiences. The first task in each interview was to establish trust; to do this I focused on the entrepreneur's life experiences as related to being an entrepreneur and an environmentalist. According to Seidman (2006), the interviewer should understand "the participant's experience in context" (p. 17) and this was my goal. I began interviews with a question like, "So tell me how you ended up being an entrepreneur?" This initial part of the interview was not intended to elicit meaning ascribed by the participant, I avoided questions of "Why?" and instead asked for descriptions, stories, and basic information.

After gaining insight as to the context and historical elements of the entrepreneur's experiences, I focused on the details of the interviewees' current experiences as an entrepreneur embedded in communication networks. The majority of my questions were open-ended. For example, I asked, "Tell me about a time recently when your network helped you meet someone helpful for your business." After several minutes of engaging the interviewees, I began to ask more probing questions, I began to push for deeper reflection or insight. The final part of the interviews focused on what meaning the participants held in terms of his or her communication and networking intentions, actions, and behaviors.

I organized my interview questions around each of the research questions. For example, in regards to RQ1, I asked, "How did you become interested in the environment?" and followed by a probing question such as, "Who was important in engaging you in environmental issues?" as a means of understanding their environmental philosophy. I followed this question with a question like, "What formal groups are you a part of – like an association or a chamber of commerce?" and (probe) "Where do you see yourself in this circle or group?" Finally, I asked "How does this group help you achieve [that formerly mentioned] goal?" These questions helped me arrive at a question related to, "So, how would describe the role of social networks in building your business?" These questions, aimed at gaining insight into the attitudes and beliefs entrepreneurs hold in regards to communication networks, were somewhat helpful yet I would have ideally focused more on this particular question; it was much easier to gather descriptions of strategies and behaviors entrepreneurs use. RQ2 related questions also seemed to bring forward answers more readily.

RQ2 interview questions pursued responses offering descriptive insights entrepreneurs hold in terms of the strategic advantages and/or outcomes they aim to achieve through participating in social networks. Interview questions included, for example, "Tell me about an important project you are working on right now and how your network is playing a role in achieving this goal...tell me about a time recently when your network helped you take a step forward on this goal..." Entrepreneurs were easily able to tell stories about recent events in which their networks led them to resources or solutions.

RQ3 interview questions relate to the tools and behaviors the participants use to meet new people, stay in touch with colleagues, and participate in professional groups. Interview questions included, "How do you connect to new people?" I also asked, for example, "If there is someone influential who you believe could help your business, how would you meet them?" In terms of specific tools, I asked, "How do you manage all of your contacts?" I probed by suggesting specific in-person and e-communication as well as online tools like Facebook, Twitter, Foursquare, Constant Contact, etc. I also asked about offline tools like conferences, professional gatherings, and social gatherings where professional purposes can be pursued.

The interview questions I asked were designed to elicit descriptions of attitudes, beliefs, behaviors, and tools used by social environmental entrepreneurs. These questions ranged in their topics but tended to directly address the concepts (like attitudes and perceived position in networks) through asking the participants to reflect on personal experiences or thoughts about social networks and these networks facilitate or shape their engagement in environmental issues.

Data Analysis

The process of qualitative analysis transforms raw data (interview transcripts in this instance) into thematic trends and, finally, conceptual insights that explain or interpret communication phenomena. I have sought, using qualitative methods, to uncover repetitious acts, expressions, words, as well as consistencies among the data-- and sometimes intriguing and unexpected data-- that lead to particularly interesting insights. To guard against my own biases and my own voice overtaking the resulting analysis, I used a coding process and a continual comparison of one piece of data to another to ground my interpretations in the data presented.

Constant comparison. I used *constant comparison* to code, sort, and induce themes from my data. Constant comparison is often associated with grounded theory approaches (Saldaña, 2009; Corbin & Strauss, 2008). As I sought to identify the attitudes and beliefs about communication networks, I paid close attention to annotating and assigning codes that reflect attitudes, beliefs, and the meaning assigned to events or activities by participants themselves. Additionally, I paid close attention to the set intentions and communicative activities described by participants.

The constant comparison approach I used incorporated processes used by previous scholars (Kurasaki, 2000) to analyze data from open-ended interviews. The precise steps I used included:

1) collecting an initial data set of three interviews;

2) identifying text in these first three interviews that speaks to my research questions and hand-annotating these three transcriptions, including jotting down memos in the margins;

3) creating a list of all annotations present in these three data sets, sorted in a spreadsheet;

4) reviewing, annotating, and assigning codes in another eight interviews;

5) building 68 codes from this list of annotations;

6) using constant comparison to refine and aggregate these 68 codes and reduce redundancy in the Code List through combining like annotations; the result was a list of 28 Codes;

7) creating a code book listing the full spectrum of codes from the first three interviews;

8) collecting more data, coding according to code book, annotating text that does not fit existing codes;

9) after completing the final interviews, I sorted each quote that addressed a given code and then identified codes that had fewer than three entrepreneurs mentioning the topic/concept. For example, only two entrepreneur mentioned business planning while discussing networks; I deleted business planning as a code. In other instances I condensed codes that could fit into a broader code. In this manner, I came to identify the major themes that emerged multiple times across the data.

After fully coding and maintaining memos with each data set, I began the work of identifying the key emergent themes from the codes. To extract salient themes from the coded data, I first focused on codes that appeared in over half of the interviews. These themes included entrepreneurs as network creators, entrepreneurs' belief that networks are essential, and the observation that entrepreneurs hold positions in diverse networks. I also

included codes which were particularly intriguing, for example, I noted that one entrepreneur felt sad about his role as a bridge between two opposing groups.

Verification of themes. After completing a Code Book and identifying the prominent themes, I contacted six participants and asked them to do another interview by phone. During these interviews I probed on the key themes, like network creation, personal brand management, etc., to verify that their answers reflected the themes I had identified.

Role of the Researcher

My most enjoyable memories from childhood involve trees, plants, the outdoors. I consider myself an environmentalist and I have volunteered with non-profit organizations working in conservation and the environmental movement. Additionally, I have declined to join social networks, such as Greenpeace's International Board of Directors, and Earth First! because I perceived strong differences in our approaches to achieving social change. Yet, I feel strongly that all types of approaches of resistance, social change, and collaboration are necessary to engage stakeholders and address controversial issues. As someone who works to create change from within systems I tend to gravitate to people who share this perspective on how to be effective. And, in considering my colleagues and social networks, I see homophilous tendencies in whom I preference in my own work and networks.

I am also an entrepreneur, having founded two non-profit organizations. I believe strongly that entrepreneurship, the act of creating something from not much, is fundamental to generating social change and engaging stakeholders in innovative ways. Yet, I see that in environmental circles, and activist circles in general, social entrepreneurs tend to flock together with like birds. While the research is clear that building deep, broad, and diverse

social networks is key to the success of entrepreneurs, it seems antithetical to the standard operating procedures of social change activists.

In my own life and work I actively cultivate my professional and personal networks and I see the power of effective networking. So, I was biased in many ways as I entered this research project. I love the environment but shy away from oppositional approaches, I see the value of networking when many of my colleagues tend not to, and I hope this project will inspire and lead social change activists to broaden their array of communication tools such that they can more readily effectuate the social change I hope they can create.

Despite these biases, I fully recognize and own that my role in this study has been that of a graduate student completing a dissertation. And, my work would not have been useful to others if I had failed to remain open to hearing the voices of all types of environmental entrepreneurs, if I had failed to give their perspectives and attitudes equal space in my interpretation of the data I collected. I hope, and believe, that by closely following the data collection and analysis methods I described above, I was able to hold open the door for all possibilities to come forth from my interviews and that this report has generated an accurate interpretation of the experiences and activities of social environmental entrepreneurs.

Chapter 5: Analysis

This research project started with the intention of gaining insight as to the attitudes, beliefs, intentional actions, strategies, behaviors, and tools environmental entrepreneurs use when engaging in networks. The three core research questions I asked are:

RQ1: What attitudes and beliefs do social-environmental entrepreneurs report holding in regards to their position in, participation in, and potential success through human communication networks?

RQ2: What strategic advantages and/or outcomes do social-environmental entrepreneurs aim to achieve through participating in social networks?

RQ3: What communication behaviors and tools are used by social-environmental entrepreneurs to assess, cultivate, change, and nurture their individual and organization's position(s) and role(s) in social networks?

I spoke with 26 environmental entrepreneurs (listed in Table 1 and again in Table 5) and across the span of these interviews, themes emerged that offer answers, or at least insights, to my research questions.

Environmental entrepreneurs believe participation in communication networks is essential and this participation leads to essential resources, opportunities, and outcomes. They see themselves as often bridging diverse networks, and disrupting existing networks. Interviewees identified strategic advantages to be held through network participation including access to skills, mentors, complementary forces, and communication channels through which they can create mission-oriented impacts. Entrepreneurs are by-and-large confident networkers, actively seeking new connections and working to cultivate relationships. Entrepreneurs often cited the need to deliver value to their networks, and

believe value can be delivered through creating meaningful connections among network members, respecting people's time, and finding strategic alignment, among other activities.

Entrepreneurs I spoke with often see themselves as creating new networks, generating shifts in social alignment, and restructuring relations among network members. Their role in networks is that of both active participant and network shaper. Some entrepreneurs interviewed are using new technologies like Facebook, Twitter, and LinkedIn. However, many of the behaviors and strategies shared by entrepreneurs were presented as relational, not technological, in nature. Interestingly, entrepreneurs do seem to be using new technologies to organize and structure their networks, distribute messages in a more targeted and segmented fashion, and create walls between groups of people they stay in touch with, like, friends versus professional colleagues, versus acquaintances.

Entrepreneurs working on environmental issues are active and strategic networkers who hold strong ideas about how best to cultivate and create networks. They did not vary in their responses along the lines of for-profit versus not-for profit, male or female, or age or location, as far as I can determine. They did, however, vary in their ability to provide insightful descriptions or responses. Therefore, several entrepreneurs are quoted more often. C Dail, C Ffe, G Hrs, and B Swan were exceptionally thoughtful about network management and activities. Below is a complete list of the interviewees.

Following some observations I wish to share with readers is a comprehensive discussion that brings forth the voices of the people I interviewed and aligns their responses with my research questions. First, I will share a few of my own observations that do not necessarily directly inform the research questions but seem worthy of sharing.

Table 5 offers readers a quick reference for each interviewees' pseudonym, venture structure (for-profit or not-for-profit) and sector.

Table 5: *Interviewees' Venture Type and Sector*

Pseudonym	Venture Structure	Sector
M Addy	for-profit	Alternative energy
G Hrs	non-profit	Sustainable communities
A Dise	for-profit	Organic products
A Kany	for-profit	Habitat restoration
E Ork	for-profit	Reduce fuel use
C Ffe	for-profit	Online green network
B Swan	non-profit	Enviro education/activism
R Calier	non-profit	Enviro activism
Y Tbar	non-profit	Water conservation
Mr. C	for-profit	Reduce fuel use
Mr. R	for-profit	Eco transportation
H Boch	for-profit	Market-based eco-solutions
T Swell	non-profit	Green directory
P Fman	non-profit	Water conservation
C Dail	non-profit	Ocean conservation
Major	non-profit	Water conservation
K Sack	non-profit	Enviro education
C Wips	for-profit	Enviro media
Jmy R	for-profit	Enviro media
J Krutch	for-profit	Water conservation
D MT	non-profit	Market-based eco-solutions
Mr K	for-profit	Alternative energy
R Keet	for-profit	Market-based eco-solutions
P O'R	for-profit	Water conservation
R Toprun	non-profit	Enviro education

Pseudonym	Venture Structure	Sector
JBlos	non-profit	Sustainable communities

Observations

First, before offering the reader insight as to interviewees' responses, I would like to note several observations that cannot be reflected effectively by quoting interviewees. These include my observations about people's willingness to help me find and connect with entrepreneurs, an apparent rise in the number of for-profit environmental ventures, and an apparent stasis in the number of non-profit environmental organizations. Additionally, I discuss my observations about network diversity and the range of self-reflexivity I perceived among interviewees.

A willingness to help. By and large people were more than willing to help me by connecting me to entrepreneurs, by suggesting organizations, or by offering to be interviewed themselves. In fact, only one entrepreneur was challenging about scheduling or making time for me and in the end, I had so many offers from willing participants that I chose not to pursue that interview. The two exceptions to this rule that I observed came from trying to engage private foundations and activists. Private foundations were crisp in their generic replies, usually stating something to the effect of not knowing anyone who fit the profile of interviewee I required. People operating in the for-profit sector seemed by far the most responsive: I received hundreds of responses in one week to my email "blast" request to help me find entrepreneurs to interview. Most of these responses either offered suggestions, direct connections, introductions to entrepreneurs, or a personal note wishing me good luck.

New to the environmental movement. An observation that I did not notice while interviews were ongoing but did discover through transcript review was that the majority of people I interviewed were relatively - or totally - new to the environmental movement with the organization they founded in the past seven years. In fact, only three entrepreneurs have been engaged in environmental issues for more than 15 years.

However, it is worth noting that I did *not* observe a noticeable difference between for-profit and not-for-profit entrepreneurs. In fact, two entrepreneurs who seem most sophisticated in their networking activities and reflections are founders of not-for-profits. Additionally, I did not observe differences among behaviors or attitudes from one sector to another.

The rise of for-profit environmental ventures. Notably, 14 of the 26 entrepreneurs interviewed are building for-profit companies. Indeed, I had to begin excluding entrepreneurs working in the private sector and intentionally seek entrepreneurs building non-for-profit ventures. Additionally, while I was able to locate more than 12 not-for-profit ventures, none of the firms were younger than 10-15 years old. I observe and comment that the environmental not-for-profit sector has fewer environmental start-ups than the private sector.

Diverse networks is the norm. This research did not intend - nor attempt - to measure interviewees' networks in any way. However, some of my observations were tied to quantifiable characteristics of interviewees' networks. One of these items is the diversity of network nodes seemingly constituting entrepreneurs' networks.

Interviewees who self-described as generally engaged in network cultivation shared in common diverse networks that typically included, according to their responses,

connections with university staff and faculty, government officials, financiers, conservation groups, community nonprofits, and other entrepreneurs in the same and other fields. Interestingly, another connection that nearly every entrepreneur mentioned in some fashion was family. Some spoke of their family as connected to nodes that could further connect them to resources; some described their environmental philosophy as being tied to family experiences, while others actually work with family.

A range of self-reflexivity. I suspect more experienced researchers know this, but it came as a bit of surprise the range of self-reflexivity and ability to describe networking behaviors that I uncovered through my interviews. It may be, of course, that my questions more easily struck a chord with some interviewees and elicited a more dynamic response in some than in others. However, I can identify six interviews that were packed full of insight, specific details on behaviors and attitudes, and when compared to other interviews seemed to indicate that some entrepreneurs reflect more deeply, or perhaps, more easily grasp the nature of networks and their own participation in these.

The willingness of both participants and people who referred me to participants was evident in the number of responses to my call for assistance, and the number of interviews I was able to schedule and complete with relative ease. Many of these willing people are working in the for-profit environmental arena and it is noteworthy that the majority of my interviews were with for-profit environmental entrepreneurs. Most of the entrepreneurs I interviewed are relatively new to the environmental movement and their networks are diverse, reflecting their movement through and among networks. Finally, there was a range of self-reflexivity and I found that some of the entrepreneurs could readily describe in detail their attitudes, strategies, and behaviors, while others lacked responses to some of my

questions. Despite these differences, all of the entrepreneurs interviewed agreed that communication networks provide essential resources to fledgling ventures and have been essential to their success.

Research Question 1: The Importance of Networks

The first research question stated: What attitudes and beliefs do social-environmental entrepreneurs report holding in regards to their position in, participation in, and potential success through human communication networks? The responses entrepreneurs provided indicate that entrepreneurs do reflect on their participation in communication networks and do link their success to this participation. A key finding to RQ1 is that interviewees universally perceive the importance of participation in networks as essential to their success. Additionally, several entrepreneurs interviewed consider themselves closely tied to groups, and believe there are both benefits and constraints related to being closely tied to groups. Most interviewees discussed their position in networks as that of being between two or more networks, serving as "dual citizens".

As entrepreneurs tend to be dual citizens, and participate in diverse networks, they also commonly hold the attitude that networks should be inclusive; interviewees frequently linked their attitudes about network inclusivity to their motivation to build new networks. When networks do not seem to offer either the inclusivity or the resources they need, entrepreneurs willingly disrupt networks and see this as a role they can – sometimes *should* – fill.

Finally, interviewees were generally negative about participation in formal associations or conferences. Mentioning their disdain or belief that associations best serve larger companies, entrepreneurs tended to hold little regard for "industry associations" or

formal gatherings. However, they were clear about the overall value of social networks.

Table 6 is intended to provide readers a concise listing of the major themes offered in the

data for RQ1.

Table 6: *Data related to RQ1*

Heading	Sub-heading
It's all about who you know	
Close ties	
	Benefits
	Constraints
Network disrupter	
Dual citizenship	
The inclusiveness factor	
Openness and value liquidity	
Participation in formal associations and events	

It's all about who you know. Entrepreneurs readily expressed their attitudes about

the importance of networks, and in sum, all agree that participating in networks is essential.

Some entrepreneurs describe understanding this from an early age. For example, C Ffe

discussed understanding the importance of networks as she built an earlier venture that

required the support of her university professors. She went on to link her continued

successes directly to the networks she has built stating, "So, I totally understand the value of

a network, that knowing people is how I've gotten just about anything accomplished in life. .

. . I continued to find successes through successful networks that I kept. . . . So, it's all about

who you know." C Ffe's attitude about the importance of networks is not unique.

Other interviewees also expressed their belief in networks as essential to their ability to achieve success. Y Tbar shared how she views relationships and said, "Regardless of what field you're in or what you're doing, when it comes to professional relationships, that relationship one on one is everything." Placing more emphasis on the one on one relationship, Y Tbar explained that she works very hard to cultivate those interpersonal relationships.

R Keet similarly linked networks and relationships with his current business success, "That's probably one of the things that's made us most successful - well, I won't say the thing, but certainly one of them. And it comes from all different series of sometimes concentric circles." R Keet described those concentric circles as networks that he holds from graduate school, through family relations, and through organizations he partners with.

Entrepreneurs widely perceived and believed that networks are an essential part of their ability to successfully build their ventures. One interviewee, B Swan, summarizes this attitude when she commented that the one piece of advice she would give to a new entrepreneur is that networks are important and they should work to build networks as a part of being able to achieve their work. "What I would say to an entrepreneur is networks are really, really important for your work" (B Swan). The entrepreneurs I interviewed have strong attitudes about the importance of networks and they link participating in communication networks directly to their ability to be successful. This attitude suggests entrepreneurs actively participate in networks and strive to gain strategic advantage and outcomes from this participation. In addition to readily expressing the importance of network participation, entrepreneurs shared their attitudes about the benefits and constraints of network participation.

Close ties. Entrepreneurs participate in diverse networks yet several entrepreneurs shared their thoughts about being more closely tied to one or some of their networks, often these networks have been in place since youth. The academic literature refers to this idea of being tied closely to, or within, certain networks as *embeddedness* and often describes being embedded in a network as a limiting factor for network nodes (Granovetter, 1985). Yet, interviewees pointed out both benefits and constraints they perceived in regards to being closely tied to a network.

Benefits. M Addy, originally from a small town in Utah but now living in an urban area, described the value of being closely tied to the network of his hometown when he and his company launched a new project in that region. He shared that he was able to more easily communicate, build trust, and better describe the project in ways that would leave the locals with a positive sense of the project.

> Well, the team has sent me to Montel to do the preparatory work to get a project built next year and to avoid all problems if possible at the local level and build support for our project. And since my brother's the Chairman of the County Commission, but I grew up here, so I know everybody here. And so, that is why we're doing business here because it's the place that we have the most influence at the local level.
>
> And so, I came down here--for example, today, I met with the County Assessor, who's my age, and we went to high school together and his assistant, who's my cousin, and the building inspector, who's his best friend, and the County Assessor who's--or County Surveyor who's my cousin's best friend, I've talked to all of them today and had meetings with the Assessor and the Assistant Assessor and tried to get them to--we need help with our property taxes in the way that we pay them.

And so, I'm explaining things to them and we're coming up with strategies and ways to approach it. And they want to help because they want the project. And I'm just able to explain it in a way that makes sense to them and they can defend being in favor of it or--they are in favor of it because it makes sense to them.

And so, these local--I spent all day at the courthouse today talking to the right political people that can help us get our project done. And that's my number one network, really.

M Addy sees his participation in this network from his youth as a positive benefit to his current business and, instead of feeling constrained by this network, he sees that his participation in both rural and urban networks creates value for both networks.

Another entrepreneur, J Krutch, described that building his network came through tapping connections in his long-term network. He identified the existing trust among his core network as a facilitating factor and stated:

Since I've lived in Los Angeles all my life, I have probably have at least 20 plus friends who I've been with and been very close with since the seventh grade, if not earlier. The result is--and those people, then I become close with some of their people because there's true longevity and trust, right, because these are people--and so, I sort of build up my social network that way.

Seeing his embeddedness as connecting him to more people, more opportunities, J Krutch finds that his deep, long-term connections are a valuable business asset.

Similarly, Y Tbar, who has lived in the same community her whole life, commented, "I've lived here all my life, and so I realized I knew a lot of people kind of across a broad spectrum, both personally and professionally over the years. " She perceives that her long-

standing participation in networks has led to a diverse array of connections, which now serve to increase her access to opportunities and resources.

Being a member of a long-standing network can offer benefits to members in that the higher trust level can facilitate connecting to new network nodes. Interestingly, the above entrepreneurs hold ties to long-standing networks and build new connections with new networks, thus bringing the benefits of deep ties and greater trust from long-standing networks together with the new opportunities and developments of new networks. In addition to discussing the benefits of being closely tied to certain networks, interviewees also reflected on the constraints of being embedded in networks.

Constraints. Reflections on the constraints of network embeddedness were varied and outnumbered the comments regarding the benefits of being closely tied to a network. These constraints ranged from being excluded from some networks due to participation in others, to constraints on resource acquisition, to limitations to new ways of thinking and working.

R Calier described his frustration at being part of two disparate networks that are at odds, and thus being excluded from both:

> And what's happened to me right now in my activism is that when I try to participate
> in the activities of groups that are very influential and powerful like [name of
> organization], I'm looked at as the socialist, revolutionary, angry guy. And when I go
> and try to work with groups that are more grounded with--like the Earth Island
> Journal people or Earth First or Green Anarchy, etc.--I'm the guy who's coming from
> the green corporate side of things who works with companies like GE, etc. And no,

> neither groups now talk to each other. . . .And they have a hard time talking to me because they each see me as part of the other group.

While R Calier described being excluded from both networks due to association with the other, the description of benefits above identifies the value intermediaries play in connecting networks and building innovation and value, but within R Calier's experiences working with activist organizations, this value goes unrecognized or possibly disputed.

C Ffe recognized the constraints of an organization she works with due to their current status as a "fringe hippie group". Seeing they were not considered worthy of receiving large grants or attracting influential board members, she had identified that being embedded in the hippie-fringe realm was disabling.

> I mean, that was one of my biggest pushes was for them to expand their network, because when I got there, they were still very much looked at as kind of a little bit like a fringe hippie group. They were kind of caught in a place where people didn't believe them as viable for things like large donations and large corporate sponsorships, and they didn't quite--they had like a real branding overhaul that needed to happen.

C Ffe pinpointed resource constraints related to embeddedness and later told me of plans to disrupt the existing network through bringing new people into the network, and growing the board to include more diverse and influential people.

While entrepreneurs perceive both benefits and drawbacks to being closely tied to networks, they all also have diverse ties beyond their close networks. This allows them to deliver greater value to their venture and they employ strategies that help them shift out of networks that have become stagnant. Strategies of disrupting networks in order to create

network value reflects a broader theme I discovered which is that of entrepreneurs seeing themselves a network disrupters.

Network disrupter. Perhaps one of the most interesting set of responses came around entrepreneurs' perceptions related to their role as disrupters of social networks. Believing that innovation comes forward in networks, for themselves and others, through network disruption, entrepreneurs describe their work to dismantle or shift networks in order to infuse them with creativity and innovation, or build a strategic advantage for their firm.

Several entrepreneurs mentioned their work as network disrupters as a way they can create value both for their networks *and* for their ventures. H Boch offered his strategic approach to gaining market entry through disrupting the market. His venture's success relies on shifting the value chain exchanges between customers and fishermen:

> The interesting thing about the fisheries world is that they're not really regulated, and a lot of the power is held by the distributors. And that's really what we're trying to supplant is we're trying to dis-intermediate a lot of the really powerful distributors in the US. We take power out of the distribution system and hand it to the consumer and to the fishermen. I get excited when I think about that because that is a disruptive business model.

H Boch sees that by building new network connections between fishermen and consumers, he can shift the value chain and create a market opening for his venture.

Unlike H Boch, who operates a for-profit venture, B Swan manages a non-profit. Yet, B Swan similarly sees herself as shifting social networks in order to create movement toward environmental change.

A lot of the campaign work that I've done in the past has been about looking at what

needs to change in society and where is that magic spot that--where pressure needs to

be applied or something needs to be shifted to make change happen. . . . I'm always

looking for where the market opportunities are and how do you fill that niche.

B Swan sees that she can insert herself into networks and create shifts that allow her

market entry and eventually lead to the social change she pursues.

Mr. C expressed frustration with financiers who fail to recognize (or share his

opinion) that much innovation stems from network disruption and people newly engaging

with a problem. Reflecting on his own role as a network disrupter, Mr. C described in an

exasperated tone,

So, most of the innovation comes from people who are new in the field within five

years or so. Even Einstein was new in the field when he came up with the relativity

theories. . . . And so, anyway, some of the folks you deal with say, "No, no. You got

to get someone who's been in there for a long time." And I go, "Yeah, you won't get

the innovation." And I really view our company as growing on innovation.

His belief that innovation stems from networks involving new people with new

perspectives, led Mr. C to link network disruption with innovation, and innovation

with success.

Finally, T Swell, who co-founded a non-profit and is trying to gain customers and

provide value for small farmers, shared that they work to disrupt networks that exist between

customers, middlemen, and farmers. She described this strategy of network disruption as

leading to improved environmental outcomes that decrease energy needs and connect

communities to their food systems. "So, one of the things that we promote is urban farming,

because then you don't just eliminate the middle man. You eliminate the middle because you grow the food right in the community where it's gonna be eaten." Understanding her business's value to the network as stemming from the disruption it brings, T Swell sees that her work enables direct communication between people and leads to improved environmental outcomes.

Dual citizenship. In addition to perceiving themselves as network disrupters, several entrepreneurs identified their position as network connectors as key to their success. Describing herself as holding "dual citizenship," C Dail discussed her ability to go between two disparate networks as key to her success:

> I'd say that there are people in the non-profit world who are conservationist who would say I'm dancing with the devil because I'm helping industry**....**I will say I have dual citizenship, because in the world of fish, there's the business people, and then there's the NGOs. And there are very few people who can go between those two groups and be able to speak their language and earn credibility and understand the issues on both sides.

C Dail perceives her unique position between networks as bringing value to both networks but also as positioning her effectively to build a new venture that connects the networks.

C Dail shares with G Hrs this self-perception as holding a bridging position between networks. G Hrs described that he works to maintain effective communication with different groups and shared the following:

> Different groups--if you have group one and group two, group one may have more of an ethnic origin. So, their networking traits and networking communications, pathways and avenues and protocols may be different than a non-ethnic one, which

may be more formalized. So, you have to be able to go back between--back and forth

between the two of them here in order to be effective.

Seeing himself as a bridge and an effective communicator, G Hrs further discussed that his

work leads him to find new opportunities that he sees from his position as a bridge between

networks. Moving from his discussion about participating in different networks, G Hrs

continued and shared a belief that networks should be inclusive and open.

     The inclusiveness factor. One theme I did not expect or come across during my

review of the literature is that of exclusiveness and inclusiveness. Notably, several

entrepreneurs described their frustration with networks they had been a part of that excluded

them or failed to fully acknowledge their contributions because of demographic and business

characteristics. G Hrs, an African American, shared his reason for leaving a network he had

been engaged with for years, eventually leaving the industry altogether and founding a new

organization in the environmental sector. Describing the exclusion, he started the story with

the comment, "Well, see, I'm African American" and then moved on to share that for four

years he was affiliated with an organization that did not pay him recognition for his work.

> And I've been affiliated with some [industry organizations], but found them to be not
>
> as inclusive as I wanted them to be. I noticed even though I was doing all that work
>
> that my name was not included in the program brochure, not in year one, not in year
>
> two, not in year three, not in year four...the inclusiveness was left out...the
>
> inclusiveness factor was not there.

This sense of being excluded from full and equal participation in the network led G Hrs to

leave that network and form a new network. This sense of being excluded had led other

entrepreneurs to build new networks as well.

B Swan, a woman who works on environmental education and activism, described her experience as she became engaged in the environmental movement in the early 1990's: "I found that it was a very male--White male dominated movement and that the movement is very limited." This spurred B Swan to launch a new environmental activism venture designed for women and intended to shift the environmental movement's gender composition.

R Toprun, an indigenous woman who frequently engages people from communities of different ethnicities, cultures, and geographies, views being inclusive as a method to engage more creative input and information about creative traditions. She explained her process of gaining creative input from communities as one that also builds inclusive networks. "I am enlarging my network and the person who's sharing information is enlarging their network to include each other and to include their community's vision and for their community or ancestors to include me and the vision of the company." This approach of including more and more people is common among entrepreneurs.

Like R Toprun, C Ffe sees a strategic benefit to her venture through expanding her business networks to include organizations and businesses whose environmental values or actions may not closely match her own.

Now, we also had this--different than some, maybe for extreme organization like [name of organization], we like to believe that we had a more lenient view on the world when it came to some of the companies and businesses that were just getting started. We tried to be more inclusive. If somebody was showing a good effort gearing their products and services in a more environmentally friendly fashion, we wanted to encourage that, give them a place that they could come to and gain some

community and gain some customers and find success in it so that they would keep

doing it and keep growing.

Note that this more inclusive approach allows C Ffe to attract more diverse ventures to her

online network and, given her business model requires diverse and extensive listings (she

built an online green directory), this inclusive attitude leads to more connections, more

listings, and more customers.

While some entrepreneurs intentionally sought inclusivity and built networks on this

premise, others underwent opposite experiences when engaging with activist entrepreneurs.

R Calier described--with some sadness--the disconnect he had observed when groups who

did not already have a network connection tried to engage in his activist network. Discussing

experiences from years before, when he had built a social club for people of strong

environmental beliefs, he commented that,

And anybody that came there that wanted to get involved was pretty much rebuffed

and scared off because whether they're green or not makes no difference to these

people. [They think] "They're corporations and they're bad." So, it's very difficult to

create these types of interactions.

R Calier's sentiment of concern recognized that environmental groups that exclude

possible participants based on assumptions damage the movement and cause factions within

the movement to pit themselves against one another.

R Calier was not alone in his observation of the difficulties faced when trying to

include members from disparate groups; B Swan spoke of her network connections in the

environmental realm, sharing her observation that some environmentalists do not see points

of intersection among people with different approaches to solving environmental problems:

I cover a pretty full spectrum. So, I will work with like business organizations like

the Green Biz Network or Social Venture Network, clearly business related groups.

But, I'm also on the Board of Greenpeace. And a lot of people segment those. They

think that you've got to be on one end of the spectrum or the other. I don't see those

as mutually exclusive places to be.

B Swan's concerned attitude about environmentalists segmenting the movement has led her

to hold a more inclusive and holistic view of the environmental movement.

The importance or value of being inclusive seems to vary among types of networks;

perhaps being exclusive is more valued in activist networks, as suggested by the experiences

shared above. In sum, the inclusive attitude and network building approach several

entrepreneurs described influence their participation in networks, their motivations to form

new networks, and their strategic positioning within networks. The notion of inclusivity is

tied to the observation of some entrepreneurs that openness in networks is what creates what

I will term value liquidity in communication networks.

Openness and value liquidity. An interesting pattern emerged as I spoke with

entrepreneurs: we seem to hold in our society a preference for or habit of introducing

entrepreneurs to our own connections. This openness and sharing of network connections

lead entrepreneurs to new opportunities and resources. Entrepreneurs indicated that it was

very common for someone they recently met to introduce them to more people, leading to an

ever-growing network. This tendency to openly connect people to one's own network may

be unique to American social environments and merits further investigation.

Y Tbar's description of how her current business network came into being is not

dissimilar from other entrepreneurs' experiences:

And so, I started out with the people that I knew first and foremost. And what happened is that every time I met with somebody, they invariably had at least one if not several names of like, oh, I think you need to--you should talk to this person . . . . And so, they would help facilitate those introductions . . . . And so, that's really how it happened.

Y Tbar's ability to build her network easily was due in part to people readily offering new connections. Entrepreneurs indicate that this ease of moving into new networks facilitates their success.

Major shared her observation about openness and network value and linked an open attitude or "way of dealing with someone" to her ability to increase her network connections: "I think the thing is is if you're open and transparent and you're dealing with someone else who's open and transparent, I think the partnership just happens. People want to help." This attitude is common among the entrepreneurs I interviewed and belies their tendency to be willing to openly engage new networks.

By contrast, entrepreneurs who have experienced a lack of transparency in networks or among connections they have attempted to build relationships with, clearly see the limitations of engaging in networks with closed communication patterns. Working in a small town, E Ork disappointingly described his experiences when trying to exchange information and ideas with people in his industry. "What I see is that these other plumbers and electricians, they don't really get along with each other. Everybody's secretive about what they're doing...and it's just weird. In this part of the--in this industry, nobody wants to share information." E Ork indicated he thought this was due to the small town environment he lived in being more competitive and offering fewer customers to the market.

R Calier also perceived closed communication patterns within networks he was involved in and yet he expressed a different reason for these closed communication patterns, tying these behaviors and attitudes to the fears and suspicions his activist colleagues hold:

> I think maybe activists are a little bit proprietary with the way that they do--because they're always afraid that you might be working for the FBI or something. I mean, there's a lot of underlying paranoia that runs deep with a lot of these groups.

> This "paranoia" did seem to make itself apparent when I tried to connect to activists to ask them to consider participating in this research. Unfortunately, I was able to interview only one self-described activist despite emailing over 70 activist and/or resistance organizations.

The open nature of entrepreneurs' networks seems to indicate a fluidity of information and resources, which would allow for the discovery of new opportunities and the ability to capture these through resource acquisition. Thus, openness and value fluidity are likely characteristics that entrepreneurs seek in networks. In cases where networks do not provide open entry, ease of connecting to new nodes, or liquidity of value, resources remain within the control of established patterns and nodes and new ventures cannot gain a toehold toward sustained success.

Entrepreneurs' attitudes about the limited value of established networks tend to be generally negative. In particular, entrepreneurs expressed disdain or mistrust of organized conferences where the value of attending was usually perceived to be low.

Participation in formal associations and events. Formal associations and conferences, large organized gatherings of industry-involved people were generally not viewed as valuable networks or tools for building entrepreneurial ventures, according to the

interviewees' responses. While most people did attend these types of gatherings, the general attitude toward these events or groups was that they fail to provide useful, outcome-oriented, time-saving connections with customers or potential partners. In other words, despite aggregating many people involved in the environmental arena an entrepreneur operates in, these formalized associations or events did not facilitate meaningful connections. Of course, entrepreneurs did identify some benefits to participating in these gatherings, and these are described below. But first, I review the more negative perspectives on formal associations and gatherings.

J Krutch identified one possible source of disconnect between entrepreneurs and industry gatherings or associations when he pointed out that large conferences and associations are traditionally the domain of large and established businesses. He described the other attendees as not being overly concerned with making new, valuable connections but instead reconstituting existing communication patterns and relations.

> I'm not a huge proponent or fan of those things, to be honest with you. I think there's a lot of sort of boring chit-chats and--I don't know. I think trade organizations tend to be a lot of boondogglish [sp] stuff. And maybe it's because they tend to be driven a lot by much larger companies and not the entrepreneurs. And I find they spend a lot of time just sort of talking among themselves about stuff that I'm not particularly interested in.

These gatherings/associations are formed around the needs of large organizations whose resource needs and goals differ greatly from those of entrepreneurs. J Krutch suggests that his goals require that he connect with networks or network nodes whose goals align strategically with his.

P Fman indicates that attendees at these events fail to offer new value to his network, stating that instead of connecting him to new nodes of expertise that match his unique needs, they offer resources/connections that do not help him meet his goals. "The thing is, we are just way out there on so many levels in terms of what we're trying to do and the expertise we need. And we have to focus on what our goals are." P Fman seems to believe that people attending formal association events will fail to offer solutions that fit his business's unique needs.

Similarly, A Dise does not see how these gatherings or groups provide value to her business as she is in a unique market niche and the associations serving that broader market do not yet serve her needs: "Well, I've looked into some of them. Like, there are a lot of [related] associations. Frankly, I don't see the point for me. I'm serving a niche market, and I just get lost in their shuffle."

As with the attitudes on display above, A Dise doesn't see a potential benefit for her in these groups. However, entrepreneurs did identify several characteristics than can make formal associations more useful. For example, E Ork shared his belief that "If there was sort of a formal network that I associated myself with that was other entrepreneurs that were doing the same thing [that would be useful]. But, there's no group or anything like that." Additionally, when I probed E Ork for further discussion of what an industry conference would need to offer to be worth his time and money, he shared this story about an industry gathering he recently attended:

> I saw that as way worth it because even though it's a specific company sponsoring it--
> and they do want you to buy their product--but this one I went to was about the boiler
> room, which is--boiler room's a huge thing, and that's part of my job. And

understanding it and finding the different ways to skin the cat in the boiler room--
which ways are good, which ways are not good.

The last one, I learned something great that I would have never learned about
business, which is there are three things in the plumbing world that you need to pay
attention. You need to be able to sell the job and do the work and know your
numbers, know your books.

And if you can't do all three of those, you're kind of stuck. You could be the
best pipefitter, but if you can't communicate with the person you're trying to sell it to
and like make them feel all warm and cozy into writing you a $10,000 check or more,
then that doesn't do ya any good.

E Ork's perspective on what makes an industry gathering worth his resources is
similar to that of J Krutch who shared that he would consider attending a conference where
he could connect to resources, to venture capitalists or financiers. He shared this description:
"I would go to venture capitalist private equity types of situations where there could be an
acquisition or dollars or things that could very materially impact the company as well as
selling or partnership opportunities." So, while the general attitude towards formal industry
associations is less than positive, entrepreneurs do identify specific types of value that can be
had from attending these events, including technical skills or connections to financing.

A final type of formal association was identified as useful to entrepreneurs working in
environmental issues and those are gatherings or groups that are focused on emerging
markets in the sustainability/green economy. A Dise, for example, discovered a niche group
that aligned with her strategic goals and with whom she could exchange value. Interestingly,
the group she discovered is also a start-up venture.

There have been other opportunities that I've found somewhat recently. For example, there's a website called The Green Guide, and they're focused on sustainable activities. Well, I sell a product that sells into sustainable activities.

And so, that has been one little network where I joined, and they're really excited to have found a national provider able to sell bulk product. . . . So, they have actually recently invited me to be part of like an exhibiting tour, tradeshow tour. So, there are places like that where I guess you could say I kind of fit in. And the lady who started that is an entrepreneur who just really had a hard time finding ways of keeping her wedding sustainable. And so, she wrote a book, started a website, and now she's the biggest in the country.

A Dise identifies the founder of this network as an entrepreneur and indicates that entrepreneurs see more value in newly forming networks than in established networks.

Like A Dise, C Dail felt that certain conferences or gatherings could offer her business benefits; she placed the concept of a "psychographic screen" at the center of the conversation on how formal associations can build valuable networks for entrepreneurs. Referring to the brand of the event, which was designed to attract high-caliber thinkers and entrepreneurs, she shared the following description of the network she found at these events:

[That was] such a great psychographic screen for people. What you got was a bunch of people in the room who really believe that they could make a difference in the world. But, it was people who really were movers and shakers and had big ambitions and cared about their lives and drew some of their identity from their work in a way that they were incredibly passionate. So, you go to a conference where that's the

screen for the demographic, and it's like that's pretty awesome, just being around those people.

C Dail tied the caliber of the attendees to the brand of the event, and considered this an effective psychographic screen that dissuaded attendance by people who were not "movers and shakers".

In addition to identifying network characteristics that tended to indicate higher value, interviewees also described their own approaches to making use of conferences. B Swan described her approach to making conferences useful in this way:

> I do go--I try to go to a number of conferences a year that I think are focused on issues where I need to build those networks so that I can go out and meet people. But, I try to be really strategic about who it is that I want to meet so that it's not just random, because then--conferences cost time and money to go to and I'm not gonna do it unless I really see people there that I want to connect with.

B Swan, like other entrepreneurs, perceives potential value in attending conferences and expanding their networks and access to resources through these new linkages. However, B Swan shared the skeptical attitude about conferences and formal associations in general, with other interviewees, and to address these concerns had developed specific behaviors that increase the likelihood of gaining value through engaging in these formal associations.

Entrepreneurs are active participants in social networks and believe this participation is essential to their success. They discussed preferences for diverse, open, and inclusive networks, and perceive greater value can be gained from these networks than from formal, established "industry" organizations, which they sense are more closed and difficult to access. They do believe certain types of formal organizations can offer benefits, namely

entrepreneurial-oriented events and gatherings. Interviewees reflected on their role as dual citizens, and as people who sometimes disrupt networks. They see this as a positive role and believe serving as a connector is beneficial to their organizations. Finally, entrepreneurs reflected on the limitations and benefits of being closely tied to certain networks, like those from childhood or college. In general, the positive attitudes about being closely tied to certain groups seem to outweigh the negative. However, entrepreneurs tend not to be included in only one group, but instead participate in varied groups and believe themselves to be effectively building toward their desired outcomes through engaging in networks in this manner.

Research Question 2: Opportunities, Resources, and Outcomes

The second research question I addressed is as follows: RQ2: What strategic advantages and/or outcomes do social-environmental entrepreneurs aim to achieve through participating in social networks? Entrepreneurs shared a wide range of advantages they seek to capture through network participation: discovery of new opportunities, greater access to resources such as human and financial capital, skill development, information, feedback, and mentoring. Additionally, entrepreneurs described the outcomes they strive to gain through networks and these outcomes reflected the missions or goals of the ventures. Ranging from environmental education outcomes to reductions in energy consumption and improved management of natural resources, entrepreneurs utilize their networks to gain resources, capture opportunities, and achieve greater impact on their business and society's environmental practices. To assist the reader in absorbing the data, I include Table 7, providing an outline of the data below.

Table 7: *Data related to RQ2*

Heading	Sub-heading
Discovering opportunities	
Resources	
	Complementary forces
	Skill development
	Information and feedback
	Business guidance and mentoring
	Financial resources
Outcomes	
	Shifts in education system
	Changes in environmental practices of communities
	Changing the buying behavior of consumers
	Spread the impact

Discovering opportunities. Entrepreneurs are in the business of building new solutions, products, and processes that meet unmet needs. In other words, entrepreneurs discover opportunities and then capture resources toward meeting these opportunities. Entrepreneurs see gaps in the marketplace and put forth a new or an improved - or seemingly new or improved - solution to a customer's problem. And, entrepreneurs use networks as hunting grounds for new opportunities.

A key strategic outcome entrepreneurs pursue through participating in social networks is opportunity discovery. This experience is aptly described by Mr. R who described how he moved into the emerging sector he is currently operating in. Sharing his

observations of the auto industry, Mr. R reflected, "I felt a gap between what the industry was providing and what--our environment and what customers wanted became wider and wider apart." This observation led to Mr. R founding Colorado's first eco-automotive maintenance shop, which he has since expanded four-fold.

B Swan also identified an entry point into the environmental movement through joining the movement in the early 1990's and seeing that women were largely not in leadership positions. Understanding that, "if women don't see other women in leadership positions, they don't feel like they belong to that movement and they don't engage", B Swan then set out to build a new environmental organization that would place women in leadership positions. Her organization offered innovative processes and, as she had, "found that women on the whole preferred a more collaborative process...whereas men tend to look at it more narrowly", B Swan created a collaborative organization that defined environmental problems in a more holistic fashion. She closed the commentary by saying, "I guess if you were talk about it in marketing, in business marketing terms, I'm always looking for where the market opportunities are and how do you fill that niche." B Swan held an advantage in the environmental movement through building a venture that included women as leaders, and she formed a network around this venture.

As a young performer, R Toprun surveyed the landscape of performance companies and observed,

> Nobody in this country was creating work in this [environmental] genre at the time in a way that I felt was fully inclusive of cultural ethical values. . . . So, because I had these strong values and visions, I ended up having to create a company myself.

Discovering the opportunity to build a new performance company, R Toprun founded a troupe that incorporates environmental values; today the organization is nationally known and their performances demonstrate the environmental messages, cultural and ethical values, and values of R Toprun's indigenous heritage.

Entrepreneurs use social networks as arenas in which they can discover gaps in services or products and then, seeing the opportunity to create a new venture, they quickly move forward and begin to aggregate resources needed to build into this new opportunity. By pulling together financial and human capital resources, entrepreneurs seek to gain an advantage as they outcompete others in the realm of the opportunity they pursue.

Resources. In the literature review, I provided a detailed discussion of the types of resources entrepreneurs need in order to launch their new venture. These resources fall into three broad categories: human capital, financial capital, and social capital. Not surprisingly, entrepreneurs pursue resources in these three categories and readily identify actions they undertake to secure these resources. Specifically, entrepreneurs seek to complement their own skill sets through building teams. Technical skills, abilities, and knowledge are categorized as human capital and are a necessary resource for any organization. Interviewees commonly shared their pursuit of human capital resources through network development. These activities often led to partnerships, co-founders, and the addition of other "complementary forces".

Complementary forces. M Addy described himself as lacking the communication skills to sell the new business venture to investors, and disclosed that his network lacked connections to a sophisticated set of people and financial resources. M Addy perceived himself as "more like the guy you would send out to fight the battle in the field",

and thus pursued a partner who could complement these skills. Describing his selection of a business partner, M Addy told me:

> And that's why I picked him to go into business with is because that was a weakness of mine -- being able to go to people and get money from them. And a strength of mine is working hard and figuring out very complex problems and stick with it and make things work, creative ideas and so forth.
>
>   And he saw strengths in me that he didn't have, and we just figured we were good complementary forces. That's one of the reasons [partner's name] wanted to be partners with me is because he knew that these projects would be in rural communities and he knew I was a rural community kind of guy. And he's a city guy. This self-reflexivity allowed M Addy to identify resources he lacked and would need to build the venture and it helped him seek a partner who would mutually benefit from their professional relationship.

Along these same lines, H Boch discussed his alliance with his partner and pointed out that recognizing their complementary skills and networks was a strong factor in their decision to partner. "[My partner] has been in the sustainable fishing consulting world for ten years . . . . So, --between my relationships on the financing and foundation side and his relationships on the fishing side, that's really why we decided to partner together." The partnership has brought together complementary skill sets and disparate communication networks from their respective fields of expertise.

Other entrepreneurs described the team they had built as an additional array of resources and skill sets necessary to building the venture. Describing that in his experience, "Nobody's gonna invest in a great concept with a substandard team, no one", Mr. R adds,

"You need the team to pull it together, period. I'm not everything that our business needs." This attitude about needing to build a well-rounded team of people was mirrored by D MT's comment, "I think helping build a team is one of the most essential things" and his further description of a failed business he had founded years prior. He shared his belief, "I think our chances of success would have been greater" and linked this to not having other kinds of people on his team.

T Swell pinpointed a benefit of partnering with someone whose interests in learning new communication skills are different from her own when she replied to my question regarding how she uses Facebook or Twitter to build networks. A self-described introvert, T Swell prefers to let her business partner learn new social networking technologies so she can focus on farming.

> Well, I mean, [laughing] I don't want to cop out on your question, but like I don't really care about that, only because I've got [my partner] and he cares about it . . . It's kind of something that I don't really want to learn about. But, I'm really glad that he's there to do that, because otherwise, I mean, if it was just me, this whole thing would not have happened. None of it would have happened.

Pursuing a more well-rounded team through partnering with a complementary force is one outcome entrepreneurs seek to achieve through their networking activities. In sum, entrepreneurs utilize their networks to find and pull in complementary forces, build teams, and engage service providers who can lend specific skills. However, entrepreneurs do not always pass on the opportunity to build their own skill set; entrepreneurs often reach out to their network to learn new skills or build their ability to solve business problems.

Skill development. Entrepreneurs build into new opportunities through gathering complementary forces and through building their own skills and abilities. As they seek to broaden and deepen their skill sets, entrepreneurs engage their networks, make new connections, and further their reach and bonds with networks of different talents and skills.

E Ork described the regional network meetings he attends as offering him basic help on technical problems like bookkeeping and accounting: "They basically helped me on the groundwork of how I want to set up my books and what to really think about doing the taxes and all that stuff." This is an essential set of basic knowledge and skills that flow to E Ork through participating in this regional network. A Kany described her recent skill acquisition in social networking technologies as coming from a colleague who gave her a "shot in the arm" when he said to her, "Look, I spend half an hour a day, I do this, I do that, I do the other." She added, "I actually learned more about Facebook from him than from anybody else."

This approach to learning new skills through network connections is important to entrepreneurs who need to be effective in multiple areas of the business or organization. For example, entrepreneurs need to be able to handle bookkeeping, marketing, and donor development simultaneously. In established organizations individuals are tasked with distinct and often narrow sets of tasks and responsibilities. Entrepreneurs must constantly evolve their skills to cover the various functions of an organization in which human capital resources are scarce.

C Dail, always strategic in her network management, told me she actively works to identify individuals with skill sets she may need at some point. "So, I'm always looking for the right skill sets to bring into this network of people that I need to hire for these

philanthropically supported projects." Maintaining a resource map of sorts allows C Dail to efficiently tap into resources/skills as opportunities arise. Entrepreneurs rely on networks to provide both complementary skills and also to help them build their own skill sets. They also utilize networks as forums for exploring ideas and gathering feedback and information.

Information and feedback. Entrepreneurs interviewed frequently cited using networks as sounding boards for their ideas, strategies, and plans. D MT described his current efforts to launch a new venture and his pursuit of feedback through networks: "And they have an Academy of Judges that gives feedback on your business plan. And so, I'm sort of using that network to see how far I can go in the competition as well as get some useful feedback." This approach to gathering input from networks allows entrepreneurs to improve upon their strategies and fine-tune their plans and intentions.

Communicating with a broad range of people who hold diverse positions in her market and industry helped Y Tbar gauge the level of interest in the organization she was considering building. "I ended up talking to a broad spectrum of people and [it] just unfolded really naturally. And to me, that was a confirmation that I was doing what I was supposed to be doing because they reflected interest." This feedback is important as entrepreneurs are both pioneering a new solution or approach *and* working without the benefit of an organization that can collect market intelligence or input from various divisions in the business.

Entrepreneurs engage in networks to strategically reduce risk through bouncing their ideas and plans off of other people in the network and other entrepreneurs. They use networks to build understanding of their market, and to gauge interest in their solution, product, or service. They also use networks to gain guidance and mentoring.

Business guidance and mentoring. In addition to using communication networks to find partners with complementary skills sets, build teams with well-rounded abilities, and build personal skills and knowledge, entrepreneurs discussed gathering human capital through reaching out to their networks and asking for business mentoring and guidance. Mr. R referred to his mentor and described him as guiding him through the investment process. "[He] taught me what venture capital is, kind of held my hand as to what sort of ecosystem I needed to build --and then what ecosystem I needed to develop around investment and venture capital." This support and expertise combine to offer entrepreneurs the confidence and decision-making ability essential to success.

M Addy shared that one of their company's key advisors "actually changed the fate of our company because he put in $.5 million last year. But his guidance has been worth more than the money he put in." M Addy's recognition of the value of guidance reflects what many entrepreneurs perceive as valuable as they recognize their lack of skills and knowledge.

Younger entrepreneurs lean on mentors they came to know through their work as a college or graduate student. A Dise mentioned that a key advisor for her has been a university professor who continues to provide her with guidance and input as she builds her business. "And he's taken an interest in--he really wants to help entrepreneurs grow their businesses. And so, he's always directing me in one place or another or referring me." This support and direction giving can help entrepreneurs as they work to solve problems without the benefit of a full-fledged team or organization.

The human capital resources entrepreneurs tap into through their communication networks range from complementary skill sets to information to guidance and mentoring. Networks provide a sort of ecosystem of resources that entrepreneurs can absorb through

their participation. The strategic advantages entrepreneurs gain include improved decision making, specific tools or solutions for technical issues like bookkeeping or online communication, and increased confidence in solving problems and gaining ground in pursuit of an opportunity. Additionally, and not to be overlooked, interviewees indicated that the social support provided by mentors is important to their ability to take leaps forward with their ventures.

Financial resources. Entrepreneurs can gain a lot of ground through aggregating human capital and technical skills but at some point they also need to raise financial capital in order to scale the business or organization. Social networks play an instrumental role in this - entrepreneurs seem to instinctively turn to their networks to find investors, grantmakers, and loans. Several entrepreneurs referred to their own network as being connected to financial resources while others described their partner's network as having connections to these resources.

M Addy shared that after he and his partner had finished their business plan they decided to raise investment money to start the venture. He said of his partner, "And he had a friend from high school that managed money for a lady in Florida that was a billionaire. And they put in the first $500,000." This connection allowed the partners to invest in building a team that helped further build communication on behalf of the firm.

P Fman similarly turned to his social networks to find investors who, predictably, introduced him to more potential investors: "So, basically, got those through personal connections and -- eventually, we got some investors, and those investors introduced us to more people that they thought would be important for us and other investors." P Fman's experiences with investors remind of us of the earlier finding that people seem to naturally

introduce entrepreneurs to a next set of connections. As entrepreneurs move through networks they pull together human capital and financial capital. And they place these resources behind strategies they hope will reap positive outcomes for their organizations.

In sum, entrepreneurs seek to gain market advantage -- and social change -- through tapping into their networks' resources and extending their connections in new networks. They discover opportunities, develop human capital resources including teams and skills, attract financial capital, and generally aim to outcompete others who may be pursuing the same opportunities. All this they do in pursuit of specific outcomes, which range from financial returns to social change.

Outcomes. In each interview, entrepreneurs were able to identify their social change goals. These goals included changing environmental practices of businesses and buying behaviors of consumers, educating the public about environmental issues, and empowering environmental activists or change makers. Others also indicated that success also meant financial success, i.e. selling the company or "taking it public" (M Addy). Regardless of the stated goal, interviewees were universally able to identify outcomes they are working toward and link these outcomes to their use of communication networks.

Outcomes interviewees described included permeating the education system with more ecologically oriented curriculum and thinking, changing the resource management practices of communities, informing consumers about their purchases and opportunities to buy "greener" products, building the capacity of environmental activists, and spreading the impact and the messages of the work the entrepreneurs are implementing.

Shifts in the education system. B Swan readily pinpointed the goals she pursues through her organization as centered on gaining ground in the education system in the United States.

> We measure our success by their [schools'] ability to be able to get those programs established and by reaching out to other universities to get them to teach courses in biomimicry. So, we're sort of measuring how many universities are actually teaching biomimicry.
>
> With our youth program, we are looking at--we develop curricula for teachers to use, and we also have an online training course for teachers. So, we're sort of measuring how many teachers are taking that course and how many states we're getting the certification accepted in.

With this measurable goal in hand, B Swan participates in networks of educators and higher education officials who make decisions about curriculum and pedagogy that affect her ability to achieve her goals.

Changes in environmental practices of communities. Living in the arid Southwestern United States, Y Tbar founded a nonprofit whose aim is to reduce communities' use of water through education, technology adoption and diffusion, and working with businesses to help them reduce their water needs. She described her organization's goals this way:

> It's a non-profit focused on the issues of the water crisis within [name of state] and the technologies of that and helping communities. So, those are sort of the three major components. And we support implementing water conservation and water reclamation technologies for communities in the state.

Through engaging in networks of small business leaders, policy leaders, and technologists, Y Tbar is able to make changes in the resource use patterns of communities.

Changing the buying behaviors of consumers. C Ffe founded an online green directory intended to make it easier for consumers to find green products and make buying decisions that would benefit the natural environment.

> The overall mission was to try to help people live their environmentally conscious lives more easily by helping them identify and find the products and the companies that they could purchase from or be serviced by that were of environmentally sound and conscious coming from--so, try to be that trusted resource to help guide people in living an environmentally conscious lifestyle.

The mission and goals of the organization were pursued wholly through networking and building connections with diverse types of businesses bringing together a wide range of products and services for the online listing.

Spread the impact. In several interviews an outcome that was expressly desired was reaching more people through networks, increasing the number of people engaged in environmental work and solutions. G Hrs offered an impassioned description of this work of "spreading the impact":

> Well, expansion of the passion, expansion of the passion, being able to expand the passion model. And the passion model for me again is around good engineering, it's around environmental impacts, it's around social justice, it's around economic development . . . . This is all about sustaining communities, i.e., making our communities better places to live, work, play cleaner, greener and improve the quality of life.

G Hrs mentioned the word "impact" 28 times during our interview and placed great emphasis on his goal of reaching more people. R Toprun shared a similar goal: "I made a choice to create this with groups in order to be more impactful so that it can reverberate even further."

This missionary zeal was a common theme among entrepreneurs I interviewed but was not mentioned by all. The outcomes entrepreneurs stated seeking to achieve through their networks also included building capacity in activist organizations, decreasing resource use, increasing discussion of ecological principles in curriculum, and improving options for consumers seeking to buy green products. All entrepreneurs linked, either directly or indirectly, their participation in communication networks to their ability to achieve their outcomes and goals, indicating that networks are interpreted as communication and organizing media.

Summary

The second research question I addressed is as follows: RQ2: What strategic advantages and/or outcomes do social-environmental entrepreneurs aim to achieve through participating in social networks? Entrepreneurs are rather savvy regarding the possible strategic benefits that are to be had through networking and maintaining existing relationships with colleagues and making new ones. Entrepreneurs shared that complementary forces were a key resource and the finding people through networks, whose skills complement their own, is a clear advantage. In addition to discovering people whose skills are complementary, entrepreneurs seek to build their own skill sets through their networks. They seek information, feedback, and ideas through their network connections. And, finally, they benefit from connections to mentors who participate in their networks and connect them to financial resources and industry expertise.

In addition to the resources entrepreneurs seek and acquire through communication networks, entrepreneurs also pursue outcomes through networks. Examples given by interviewees included spreading the impact, and achieving changes in the education system. Some build networks to gather consumers around innovative environmental products, others utilize networks to bridge a gap in the value chain serving customers and shift consumer behavior. The outcomes environmental entrepreneurs pursue through networks are aligned with their mission, or their environmental philosophy, and reflect their attitudes about the importance of networks and the importance of their environmental goals.

Research Question 3: Communication Behaviors and Tools

The last research question I have sought to address with this project is as follows RQ3: What communication behaviors and tools are used by social-environmental entrepreneurs to assess, cultivate, change, and nurture their individual and organization's position(s) and role(s) in social networks?

Entrepreneurs I spoke with actively utilize networking to identify opportunities and resources that will help them achieve their goals. They employ a range of tools, behaviors, strategies, and communication techniques and readily identify these. This conscientious attention to networking behaviors and best practices demonstrates entrepreneurs' commitment to building networks. The behaviors entrepreneurs shared include assessing their network through gauging its growth and identifying gaps, cultivating their networks through being persistent and contributing value back into the networks they participate in, and creating new networks to meet new opportunities. Additionally, entrepreneurs discussed their use of technologies that help them organize and expand their networks. The following discussion is presented in what may seem a linear path toward network development, but

entrepreneurs did not indicate this linear path; I am simply organizing the data this way.

Table 8: *Data related to RQ3*

Heading	Sub-heading
Assessing networks	
Connecting to new people	
	Be a pitbull
	This gumshoe thing
	Just ask for an introduction
Deliver value to networks	
	Reciprocate
	Be an excellent matchmaker
	Respect other's time
	Find strategic alignment
	Cross pollinate
Be attractive	
Create new networks	
	Build a coalition of the willing
	If it doesn't exist, build it
Carefully manage personal brand	
Managing time	
Maintaining relationships	
The impacts of technological tools	

Assessing networks. This research seeks to identify behaviors that help entrepreneurs assess their networks. Three entrepreneurs directly addressed this question with assessment strategies that include counting the number of new contacts, noting follow-up activities and the status of the connection, and prioritizing certain people within the growing network.

J Krutch offered this account of how he tracks his relationships within his business networks:

> I always--I mean, I'm pretty--I sort of have a very what I guess would be embarrassingly old school way I do things. But, I put everybody's--I put their names down on note cards. I mean, I'll send them a--I mean, I always send an email to somebody to--a follow up email. And then, I put them on note cards and put a little comment by them, and then my note card stack gets larger.
>
> And once a day or every three days, I will go through my note cards and just say, oh yeah, I've got him and here's the status of that, and here's the status of that. I realize it's really old fashioned. But, I'm very tactile as a person, so I like to write things - just how I am. And so, that's how I keep sort of track of people.

J Krutch sounded apologetic with this description of his follow-up behaviors; in fact several entrepreneurs seemed to fault themselves for not using a more sophisticated assessment and tracking method. Mr. C described his simple technique stating, "I sort of rate [my network] by how fast the stack of business cards grow on my desk" and went on to share that he was "averaging about a half an inch per month".

Y Tbar uses a slightly more sophisticated method for organizing her herself and described her system for organizing connection priorities when she laughingly recalled this strategy from her first year in operation:

> I made lists, and I had--taped to the walls of this office, I had this big piece of the paper and people that I need to go talk to. And I would just put them up there. And I would prioritize in my own mind about who I needed to talk to first, right, like who was sort of in terms of hierarchy, like the next month, I really--I need to contact first, and then--and it's an ongoing list. And now, I call it something. It's been given a name. It's called the Superstars List. And now, it's in an Excel spreadsheet, so it's a little more formalized.

Y Tbar has advanced her use of technology, however, like others, she does not use overly complicated software or management strategies to assess or organize her networks.

Several interviewees did mention the number of Facebook "friends" or LinkedIn "connections" but the data do not indicate that entrepreneurs are using these more technologically advanced tools to *assess* their networks. This may indicate there is no need to use more advanced technologies, or it may suggest that the current tools available do not offer significant advantages over basic tools like pen and paper for managing networks. Network assessment, it seems, is still an organically occurring activity that may or may not play a meaningful role in entrepreneurs' network building activities.

Connecting to new people. Entrepreneurs described in detail the various behaviors and tools they use to connect to new people. Starting with a determined and confident approach, entrepreneurs reported being "pitbulls" in pursuit of new connections, asking for introductions, working as "gumshoes" to discover new connections, and actively building

new relationships through setting up meetings and following through to solidify a new

relationship.

   Be a pitbull. Entrepreneurs are, by and large, a confident group, believing they

can connect to resources and opportunities through building and participating in networks.

Several interviewees described their determination to build their networks and Mr. R

summed up his persistent approach by stating,

   Get out there, don't be afraid of failure . . . . You have to be a pit bull. You take the

   cinderblock that hits you in the head and laugh it off and go do it again and be such a

   believer and do not take your eye off the ball.

Mr. R went on to describe how he sets up meeting with people he has not yet met and does

not have a formal introduction to.

   Most of my meetings, I walk right up to the office without an appointment. I say,

   hey, this is R, I'm here to see Bill . . . . I've got a project that's born out of Boulder, if

   he doesn't have time now, I'm gonna need to schedule a time with him.

   Given the rising success of Mr. R's venture, it seems persistent and bold behaviors

   may reap network rewards.

   Mr. R is not alone in his willingness to cold call a new contact. Major proclaimed: "I

do everything possible to find them. I'll sleep outside their doors. And I'm not kidding."

Finally, J Krutch offered a similar perspective on pursuing new network connections and

being persistent despite not being called back. J Krutch explained that when he is

communicating with a new contact and they are not responding, "I pursue it pretty

significantly because I think people tend to be very busy, and the fact that you may not be

getting their mind time doesn't mean that they're not interested." J Krutch held that he would persist until the contact responded.

Several interviewees expressed their bold and determined approach to building new network connections and remarked on their willingness to do whatever it takes to meet someone they believe will add value to their network. Additionally, entrepreneurs shared their investigative activities as they seek out additional network connections.

This gumshoe thing. As entrepreneurs work to aggregate resources through new connections they can meet, they search for people in databases, online, and through other contacts. This activity is described by C Dail who describes her investigative behaviors as follows: "But, for me, there's also been this just gumshoe thing of trying to add two or three people a month to my rolodex that are in the space..." C Dail's approach is mirrored by Y Tbar who also spoke of her actions in seeking out and connecting with people who could help her build her organization: "I looked for people, I called them up, I met with them..." Seeking new connections to add to a network requires searching for people, reaching out, and then setting a meeting. Most interviewees described some form of directly reaching out to new connections and requesting a meeting at which they could share information about their work. They often find new people through existing connections.

Just ask for an introduction. Asked how they meet people who fall outside of their network, either discovered through a mutual connection or research, entrepreneurs consistently replied that they ask for introductions through people they know. P Fman told me a story about wanting to connect with someone famous in the microfinance world and described step by step how he went from discovering there was a connection through his advisor to setting up a phone call:

And so, I just asked--my investor said, 'hey, this guy would be super relevant for me, do you think you could introduce me', and he said 'yeah', and he sent me an email. And then, I followed up with the famous guy and I sent him an email and said basically --just praised him and build up his sort of ego and then said, it'd really help if I could talk to you, and you've worked with my investor, and so I'd really love to get your perspective on how to build a good working relationship with that person. And then, I set up a call with them.

P Fman was prepared for the introduction with both a means for engaging the famous entrepreneur (praising his ego) and with an "ask" for a phone meeting. He finished the story by saying that the famous man is now one of his advisors.

The phrase, "six degrees of separation," was mentioned by four interviewees and refers to the idea that each person on earth is connected to every other person on through friends, with only six nodes standing between each human. Apparently, this idea has influenced entrepreneurs' perceptions about being connected to people they do not yet know. B Swan pointed out that the "six degrees of separation" rule guides her networking activities and she directly asks people to connect her from one node to the next: "I'm a believer in the six degrees of separation, you can get to anybody you really need to if you really want to-- you've just got to figure out who else knows them that can give you that introduction." When I asked her how direct she would be in asking her connection to introduce her to this next node she firmly stated, "I would be really direct about it." Entrepreneurs both perceive they can reach new people through their existing connections and they directly ask for introductions.

Entrepreneurs are persistent in their pursuit of new connections that may bring value to their organization. They investigate and seek out new connections, they ask existing connections to introduce them, and they persist until they have a chance to tell the new connection about their venture. Additionally, they come into a new relationship prepared to create value and ready with communication tools, like praise, that allow them to more effectively cultivate the new relationship. This conscientious attention to delivering value to other nodes on their networks is perhaps most readily seen in their efforts to reciprocate assistance and kindness.

Deliver value to networks. The entrepreneurs I interviewed are, as a group, thoughtful network actors. They reflect upon their roles and positions in networks, perceive themselves as network disrupters, and intentionally work to create and deliver value to others I their networks. Also, and importantly, interviewees described their conscientious attention to adding value to networks they participate in. They described respecting other people's time and finding strategic alignment among connections they make. They discussed making meaningful--and eventually fruitful--connections among people through introducing people who offer relevant value or dynamism through cross-pollination. Finally, they seek to attract others to their network and do this through playing in attractive market spaces, offering new and exciting products and services, and being attractive to others from a resource or brand standpoint. Perhaps one of the most effective ways this is accomplished is through reciprocity.

Reciprocate. In each interview, the act of giving back, and providing value back into the network was raised as an essential behavior for network building and relational

development. Entrepreneurs readily identified reciprocity as key for making valuable contributions to their networks.

A consummate networker, whose business was linking people to one another, C Ffe described her intentions to reciprocate:

> For every one person that helps me, I need to help five more, and I feel like that'll keep me in some sort of good flushed karmic position if I ever get in a real bind, I really will have lots to come back to me. For those who just take and take and take, it's a sure fire way to lose--like I was saying before, like five gives for every one take. And it's one of the best ways to build your network up is to give of yourself as much as you possibly can, and then you'll build up a network around you that inevitably, you'll be able to tap into when you need it.

Notably, C Ffe points out that being altruistic is not the motive behind her reciprocity but instead points to giving of herself as a sort of insurance against future problems when she might need a connection who can solve a problem for her. Others shared this strategic method of adding value to the network, as well. For example, A Kany shared that she helps people whose mission she supports but also with whom she can find mutual benefit: "We do things for them. So, it's a kind of quid pro quo. They know about us, they can promote us. We help them because we care about what they do."

The entrepreneurs did not always state needing a benefit to result from reciprocal acts, M Addy described his behavior as part of the network system in which the norm is to return a favor. He pointed out that he was willing to help others who have helped him and said, "And I also assume, if they help me, I ought to help them, and that usually works out, as well" describing the trust he places in the network's reciprocity.

E Ork, relatively new to the work of building a business, and who perceives he has less of a valuable contribution to make to the network nevertheless expressed a desire to do so in the future, going so far as to describe reciprocity as a core business function:

> But, honestly, I'm probably not putting as much into it as I'm getting out of it. But, I have a feeling that, eventually, it will turn around and there might be somebody who-- that I can help more or--and a lot of it I think is people helping each other by sharing their mistakes because--I think that's what business is about.

Entrepreneurs may place higher value on reciprocity due to their reliance on networks for resources. Regardless, time and again, the role of reciprocity was raised by entrepreneurs and most readily described behaviors they employ to give back to their networks.

Be an excellent matchmaker. In addition to delivering value through reciprocating, interviewees believe that meaningful participation in networks requires thoughtful, value-adding activities on their part. This finding was somewhat surprising to me as the academic literature tends to emphasize the resources entrepreneurs gain from their networks. However, it makes sense that environmental entrepreneurs understand networks as ecosystems that require inputs in exchange for outputs. Additionally, entrepreneurs were able to identify behaviors that create value for network participants - and behaviors that do not. C Dail encapsulated her perspective regarding the best way to create value between network connections this way:

> I'm an excellent matchmaker in that I understand how pieces and ideas and people come together . . . . I'm incredibly precise and tactical about the way I connect people. And so, because of that, I make fewer connections between my networks, but the connections that I make are always consistently fruitful for both sides.

This thoughtful approach to connecting people reflects C Dail's goal of bringing value to the network through creating efficiency in connections and fruitful outcomes "for both sides".

C Dail was perhaps the most explicit about her value-added behaviors but others also perceived the importance of being a useful element of their networks. For example, R Keet stated, "And so, it just became crystal clear to me at that point that--very important to be part of a network, first of all, and then be a useful part of it, I guess." R Keet's emphasis on being useful to his network is similar to R Toprun's sense that she is obligated to provide information to others in her network that they can use toward their work. R Toprun shared this when she said, "And by network, it's sort of like, okay, for this information to be shared, you need to participate and become a part of something rather than just coming in, taking something and going somewhere else with it."

Entrepreneurs defined ways in which they contribute value to a network, and identified that connecting people who were likely to find mutual benefit is an effective matchmaking approach. This attitude about striving for mutual benefit and contributing value to a network through making relevant and useful connections, reflects the widely shared concern for effective use of one's time as well as others' time.

Respect others' time. In building value among and with their network connections, entrepreneurs recognized that part of the value to be created was the "return" on investment of time. C Ffe described her approach in this way: "[I] try to be respectful of people's time, never wasting people's time with whatever it is I'm calling upon them to do with or--with or for me."   Similarly, B Swan shared, "I don't want to waste other people's time, I want to be really clear about what my intentions are and say I need to meet this person because of X,Y and Z, can you help me get there." The concern for effective use of one's

time and the aversion to wasting others' time, was apparent in several interviews. Therefore, making new introductions or tapping into the network's resources is widely regarded as something that should be done in an efficient manner. This may reflect a Euro-centric approach to network management and merits further investigation with diverse entrepreneurs.

Find strategic alignment. Several entrepreneurs mentioned finding strategic alignment among nodes in a network as important. One of the most descriptive entrepreneurs I interviewed was able to identify the value of building strategic alignment for her organization and another she aimed to partner with. She sought this alignment and framed her discussion with them in such a way as to convey the alignment. C Dail told the following story:

> They don't do much fiscal sponsorship. They only do it with organizations that they
> think they have a strategic alignment with...So, I approached them and wound up
> persuading them to sponsor me. So--and now, basically, I have this tie to them and
> this strategic relationship where they're also interested because it helps them to raise a
> donor advised fund with a new theme and being able to figure out who can be their
> link to the oceans world to be able to build a constituency behind that.

C Dail framed the relationship as mutually beneficial and was able to highlight this strategic alignment in her partnership discussions.

C Dail was not alone in identifying the need to identify and highlight mutual benefit when connecting her organization to another. Interestingly, B Swan also indicated that, as organizations have limited capacity to partner and absorb new network connections, she aims to build value for a potential partner in this way,

I would want people to feel like there's something in it for them, too, that they would-

-that I'm not just taking from them, taking their time or taking their valuable

connection resources, but that there's something in it for them, as well, that by them

being connected to me, I will reciprocate when they need me to reciprocate.

C Dail perceives that communicating these intentions to create value for potential partner

organizations plays a key role in fostering new relationships.

In sharing his reflections on why partners may be motivated to find strategic

alignment, one entrepreneur touched on his belief that in the environmental or community

development space, organizations may share a more altruistic sense of why they should

partner while still holding important the goal of both parties receiving value from the

relationship. H Boch described this in the following manner:

We've talked to the [name of organization] guys and they say, well, we love what you

guys are doing, and we say, well, we love what you guys are doing, how can we work

together. And I think when you get to the point where you're trying to a solve a

problem that is for the good of the community and building good communities in

coastal areas and trying to maintain some fishing, I think everybody just says, well,

how do we solve this together, and if we can make a little money in the process, great.

So, we see that entrepreneurs actively build value with and among connections in their

networks. They pay attention to the organizational needs of potential partners and frame

their value-add in terms that aim to satisfy the other's needs and constraints.

Cross pollinate. An interesting approach to creating value in networks is noted by

C Dail when she described her industry as "insular" and claimed that her unique ability to

"cross pollinate" means she can bring value to the network in a meaningful manner- and in a

manner that others in the network can not deliver. C Dail described cross-pollination as activities that transfer ideas from one group to another, thus sparking creativity and innovation. "There's not a lot of people who've been in other conservation areas, let alone other social entrepreneurship arenas...being able to cross pollinate and bringing people who have other expertise has been super helpful." Entrepreneurs, who seem to frequently reside between disparate networks, are in a unique position to "cross-pollinate".

Major also sensed that her diverse network connections helped her to create meaningful cross-pollinating connections among her networks when she described her connections and network as varied both by industry and geography:

> I'm sort of in film. I'm definitely involved in art, performance, music. I'm involved in human rights. I used to live in San Francisco. I have a network of technologists and people there. I lived in Southeast Asia and Australia, so I have kind of a world network of individuals in various places, people who work in the UN, people who work for governments, policymakers.

Major is uniquely positioned to connect artists, policy makers, and activists across international boundaries and cultures.

Entrepreneurs actively seek to create value in their networks through serving as excellent matchmakers, efficiently connecting people who can create mutually beneficial partnerships, or discover innovative solutions, or find new business models or partners through cross pollination and relationship building across disparate networks. These strategies, combined with efforts to *attract* new connections, make entrepreneurs highly effective networkers.

Be attractive. One of the most interesting strategies entrepreneurs use to cultivate their networks is through becoming attractive to other nodes/connections. Several entrepreneurs volunteered their actions in this realm, describing how they use the newness or interesting aspects of their business to attract partners and media, or how they shape relationships in such a way as to attract capital or partners.

Mr. R summed up his efforts to attract new connections concisely: "First of all, you've got to play in a space that's attractive, that people can relate to." Recognizing that certain market arenas are more attractive to investors and media, Mr. R intentionally highlights his business as new and interesting as part of his effort to attract people to him. This strategy runs parallel to that employed by A Kany, who described how they maintain their attractiveness to the media: "We get --we still get coverage. People find the concept new, exciting, different because it's natural, it's low impact, intriguing. So, it's still new enough to be intriguing and to be newsworthy."

C Dail detailed how she operates in order to strategically attract capital to the ocean conservation space:

> I've seen different fields figure out how to bring more--attract more capital. So, it's been done before. It's not rocket science. A lot of it has to do with how you arrange and prequalify deal flow, think about how you connect people, making--reaching out to the right markets.

C Dail's description of strategic activities designed to attract capital run parallel to H Boch's discussion of attracting partners (restaurants) to participate in their distribution network. "So now, the restaurants are starting to get on board because Rich –and these other restaurants—[are] seeing the network value." The behaviors that attract others to join an entrepreneur's

network include playing in an attractive market space, strategically arranging relationships and market connections, and demonstrating the network's value to potential network participants.

The notion of attracting nodes or connections was not one I expected to discover but more than a few interviewees identify "being attractive" as a key strategic component of their network building activities. This helps them create new networks and is an efficient mechanism for expanding their connections.

Create new networks. Across sectors, and apparent in a majority of my interviews, is the important role entrepreneurs play in creating new networks and reshaping social structures. We have seen that entrepreneurs utilize their existing network connections to identify networks gaps and market opportunities, we have reviewed the types of resources entrepreneurs use while seeking outcomes or goals. Next I review a leading strategy entrepreneurs employ while building their venture: the formation of new network. Entrepreneurs create new networks through coalescing people who are already interested in the work, and through acting on new opportunities by building a new network.

Build a coalition of the willing. Entrepreneurs are not lonesome creatures, as we have seen. They regularly pursue entrée into new networks and they engage with networks consistently. They also engage, it seems, with a wider range of networks. Additionally, they seek alliances with other groups or individuals with whom they share strategic goals. H Boch aptly described his efforts to build a new network as building a "coalition of the willing".

I'd say what I would look for is the groups of fishermen that are more ahead of the
curve, the groups of fishermen, distributors and processors that are ahead of the curve
on regulation.

And so, that would give me a good group of people to approach about our
[company name] idea because they are already out front as what we call the coalition
of the willing . . . . And if those groups that are doing--fishing responsibly, those
groups would be the guys I would try to find out who they are, find out what they're
doing and then try to build customer relationships and professional relationships with
them.

H Boch identified that he could capture people who are already involved in the industry and
reorganize them around his approach. He targets people who are predisposed, "willing" to
see the value of the new network he is building.

Like H Boch, C Ffe sought to find a community steeped with likeminded people so
she would achieve more success: "There was something that told me I needed to go surround
myself with likeminded individuals and be more in a community hub of environmental
thinkers in order to get this idea like off the ground." C Ffe moved from one state to another
to locate herself within an environment rich with likeminded individuals, in order to build a
network that would support her entrepreneurial venture.

Similarly, Y Tbar built into new networks of likeminded people: "I did seek out and I
read up on people who seemed to mirror what I thought about water, but on a national scale."
Located in a relatively isolated urban community, Y Tbar needed to go beyond her home
community to find likeminded people. One result of her networking activities is that she now

serves as a central gathering node for water conservation leaders statewide, as she alone connects people to outside resources.

In sum, entrepreneurs may start out as individuals seeking to meet a new opportunity but quickly move to coalesce new nodes and resources around their venture, thus shifting networks away from established communication channels and patterns. These new networks form around the entrepreneur and shift the structure of networks. It would be interesting to map the shifting of networks over time, as new ventures form in industries.

If it doesn't exist, build it. Recalling that entrepreneurs see opportunities and then aggregate resources toward these opportunities, network creation starts with entrepreneurs recognizing that the network they need does not exist. Several entrepreneurs readily, and specifically, identified network creation as a core activity. In discussing the need to build a network to meet the needs of the emerging alternative energy marketplace, G Hrs shared the following:

> I think I create networks more. I more or less am known for creating networks. I helped to create the Georgia Energy Industrial Construction Consortium--GEICC, they call it, Georgia Energy Industrial Construction Consortium. Here, there was again a need to develop workforce, workforce into the energy field. And so, some of that included, at least initially, getting lower income folks into that workforce pipeline.

G Hrs described the need to build this network in order to create a channel for people seeking to enter the energy workforce. Without this network, G Hrs perceived he would not be able to reach his goals.

C Ffe shared a similar experience when she recognized that her region lacked a gathering forum for young female entrepreneurs:

> I really wanted to see more young female entrepreneurs emerge, at least [in] my little community here. And so, I gathered all the really cool female entrepreneurs in town that I know of, I pulled them all together in this room and ended up having this like way bigger event than I thought. We filled out the 150-person room that we were anticipating.

C Ffe works to create networks that bring together people who otherwise would not be able to connect.

P O'R added to these stories his experience in starting a water conservation working group where previously there had not been one: "I cofounded a group called Aquipreneurs, and we call ourselves the social knowledge network in water." Based in the Bay Area of California, P O'R and his partner noticed there was no gathering place for people working on water issues. The theme continues with B Swan's reflection on her experience mentioned above in which she built a solution to engage women more in the environmental movement:

> I decided to sort of respond to the findings that I found is that women really didn't feel like they had a voice in the environmental movement, so I started Women's Voices for the Earth in 1995--well, actually 1994 is when it really first started, got active in 1995.

This network laid the foundation for B Swan to build another network around the principles of biomimicry years later.

The shifts in network structure and linkages are noteworthy; successful ventures that persist over several years likely have sustained impacts on the restructuring of social

networks.   Entrepreneurs see opportunities to meet needs with a new or innovative solution and gather resources toward their desired outcomes. In their pursuit of resources, creativity, and implementation, they attract people to their network, they reorganize how people engage with one another, and they connect disparate networks that previously did not share a mutual outcome or goal.

Carefully manage personal brand. In addition to creating networks through attracting people and resources, and delivering value to networks they participate in, entrepreneurs carefully manage their personal brand. The concept of a personal brand was first raised in the academic literature in the 1990's (Shepherd, 2005) and has since permeated the business world to the extent that this is a phrase several entrepreneurs readily used. I did not originally intend to ask entrepreneurs to describe their actions around personal brand management, but this theme emerged early on and several entrepreneurs commented that this question was intriguing to them. The salient themes that emerged were dominated by entrepreneurs' concern for being viewed or believed to be "authentic", "genuine", and "sincere". In sum, entrepreneurs were concerned that their actions align with their personal brand.

R Keet summarized this sentiment when he shared this brand goal: "The goal has always been to be authentic. I don't want to be the guy who's just schmoozing to schmooze. I always hope people saw me as useful, authentic, enjoyable to be with." With this comment we see that R Keet again shares his aim to be "useful", but then couples this with his goal to be authentic. D MT mirrored this statement with his own, "I would say people think that I'm a pretty genuine person. I wouldn't think that people describe me as the stereotypical networker." indicating that he believes that some people are cast in a negative light of being a

"networker". This aversion to being considered a schmoozer, someone who is not genuinely interested in the other, was raised by several other entrepreneurs as well.

In her characteristically direct style, C Ffe asserted: "I try to be real frank and not just blow smoke up people's asses telling them things that they want to hear knowing I can't follow through on it." This concern for being able to follow through implies that entrepreneurs see a risk in making promises they cannot deliver on. And, building from the concern for authenticity, several entrepreneurs referred to the need to "do what you say you're going to do". For example, throughout our conversation, G Hrs connected his approach to brand management with his commitment to "walk the talk". To illustrate this point he shared the following story:

> Somehow, I've earned a brand of being genuine, I've earned the brand of being committed and seeing thing through and getting the work done, also earned the brand of walking the talk and being sincere about this work. Folks know me for taking public transportation around here and the fact that I live in a place called Atlantic Station here and this it's a sustainable community and that I take public transportation to all the meetings and encourage others to take public transportation, that sort of thing. So, that helps with the brand, as well.
>
> And, yes, folks have patted me on the back for achieving around that model, and they expect me to achieve, as well. They don't expect me to fail. So, they give me opportunities, and then I try my best to succeed at them. So, I'm constantly looking to maintain that brand.

G Hrs's concern for alignment between brand and action was a common theme among entrepreneurs.

As trust is an essential tool for entrepreneurs as they may lack a long-term reputation or the full array of resources an established organization brings, entrepreneurs pay careful attention to their personal brand and are careful to follow through on their promises, and align their actions with their words.

Personal brand management behaviors included joining groups or brands that align with the themes of following through and being sincere, and avoiding groups that do not. Major pointed out that she is aligned with organizations that are "doing solutions-based things, not just talking about the problem, but actually doing something about the problem..." While Major described seeking out groups that reinforce her brand, Jmy R mentioned that he had been "a member of Audubon, but...they sent me so much plastic crap and stamps and stickers and just so much garbage, and so I pulled that." He went on to warn about the dangers he perceived to being associated with certain brands that may contradict the brand he strives to embody. In discussing an online conservation community he was previously a member of, he stated: "And so, I've just unsubscribed from the feeds, and I don't take part any more. There's brand control. Like, I don't want to be associated with certain things."

Perhaps the drive to maintain brand integrity is fueled by the perception that "the guilty by association factor is incredibly real" (C Ffe) and that entrepreneurs rely heavily on relationships to attract resources and meet the demands of their fledgling organizations.

C Ffe stays away from groups she perceives to possibly not be "on the up and up ethically or morally...I didn't want to be guilty by association with them." She also avoids groups whose seem to be "powered by a lot of talk and not a lot of action, unproductivity is a real turnoff for me."

The theme of carefully managing one's personal brand emerged in the first few interviews I conducted and so I continued to query entrepreneurs about their personal brand management strategies. These questions often elicited impassioned descriptions of groups that had been avoided, or communication behaviors entrepreneurs believe to be important to building their networks. The challenges of following through on promises are highlighted by the universal perception that time is scarce and choices have to be made carefully in order to judiciously manage one's time.

Managing time. Nearly every interviewee shared of his or her own accord the challenges faced in keeping up with all the work they are trying to do. This was not a question I asked, nor did I need to. Everyone brought up their concerns with the lack of time they have to do all they are trying to do. When asked "Would you call back someone you have not met?" The answer usually referenced time constraints and weighing how likely this new connection was to deliver value.

H Boch summed up the stress and workload overload aptly with this statement: "I'm sort of drinking from a fire hose now" illustrating his feeling of being overwhelmed by the amount of work coming his way. Many mentioned how time constraints affected their ability to create networks and maintain communication with connections. C Ffe felt the overwhelming workload physically and commented that as her venture grew she left behind networks or connections that she wanted to maintain connections with, yet, "It was that like I just physically didn't have the bandwidth or the capacity to leverage all of those networks simultaneously." These constraints on her ability to create new connections and maintain relationships was shared by A Dise who lamented her inability to stay in touch with people: "I would say that the one thing that I wish I could do is stay in touch with people a little

more. I didn't have really a lot of time to spend with others, talking, learning about what they're doing." The time constraints combined with a sense of obligation to follow through on promises influence the choices entrepreneurs make when building networks.

B Swan identified a method for making choices about allocating her precious time and, when asked about her willingness to talk to people who had been referred to her she said,

> I have to be selective in where I can use my energy. . . .If a complete stranger calls me up, I will ask the question is this gonna help [our organization] in some way? Is there gonna be a mutual exchange of energy and information? Then, I can afford to spend energy on it.

Across the board, interviewees shared their frustration and concern about managing their time in ways that allow for them to maintain relationships and add value to their networks.

To address these challenges several entrepreneurs have hired staff to manage online company communications or media communications. But this option is only available once a company has secured enough resources. Mr. C described hiring a person dedicated entirely to communications: "And our third person or fourth person that we brought onto the company was--their whole job was to just deal with e-mails and phone calls." The time constraints entrepreneurs face in managing their networks stand in opposition to their desire to maintain greater contact with their colleagues, friends, and partners.

Maintaining relationships. In addition to the myriad behaviors listed above, entrepreneurs gave advice or shared reflections on communication activities that support network development and cultivation. Among these activities are keeping in touch with people who are familiar with the business, following up with new connections, deepening the

connection after meeting someone who potentially offers value to the venture, and expressing appreciation of people's time and interest in the venture.

C Ffe described the importance she places on maintaining communication with people in order to support the relationship, "And keeping in touch with people is incredibly important, checking in when you don't necessarily need something, just finding out if everybody's doing okay..." Similarly recognizing the importance of consistently staying in touch with people, P Fman makes a concerted effort to stay in touch with his chosen mentors and advisors: "So, I'd say one thing that I do to build my network is I have a list of advisors, maybe 100 or 200 people who I send emails to once or twice a year and just give them an update on the company." These behaviors allow entrepreneurs to keep in touch and maintain contact with people who may be resources for their ventures.

Interviewees also mentioned the importance of building familiarity with new connections through following up. B Swan shared this advice: "It's always good...when you circle back when you've met somebody, to be able to follow up with them afterwards with an email or something where you acknowledge that you met that person and that you appreciated their time." She went on to describe her dismay upon finding out her business partner had met a famous and influential CEO who expressed interest in their business – but had never followed up! She exclaimed, "You didn't follow up immediately and deepen that connection? And to me was--that's where you've lost the value." B Swan's sense that the potential value of a connection is unlocked through deepening the relationship leads her to focus on building relationships with new connections through following up and staying in touch, often using online tools like Twitter and Facebook.

A final area of reflection on best practices in network building centered on expressing appreciation of the time and energy people have contributed to the venture. G Hrs described a cross-country trip he had recently taken to demonstrate to a group gathering in Silicon Valley that he deeply appreciated their support: "So, I wanted to take the trip over there to make sure that, one, that they understand we're serious, and two, we appreciate their kind gestures of invitation and trying to promote us." G Hrs flew across the country to express his appreciation of a supporter and several other entrepreneurs also identified behaviors that help to express appreciation.

Entrepreneurs create networks through seeing network gaps and filling these gaps with value, through attracting people and resources to coalesce around their new venture, through intentionally adding value to their networks, and through careful management of their personal brand so as to increase trust. Balancing the demands on their time with their strong desire to stay connected and show appreciation to their network make for challenging choices and strategic navigation through and among networks. Entrepreneurs who succeed in building strong and engaged networks develop communication strategies that simultaneously engage people and allow for time to manage their team, direct internal operations, and deliver value to customers. Increasingly, online tools facilitate communication among entrepreneurial networks.

The impacts of technological tools. One finding from this research is that social networking technologies like Twitter or Facebook have become synonymous with the word "social network". Several potential interviewees responded to my email request with a willingness to participate but lamented, "sorry, I just don't use Facebook" or similar sentiments. Surely there will continue to be an explosion of scientific studies examining the

uses and effects of social networking tools like Twitter and Facebook over the coming years. While this research does not thoroughly explore these issues, several behavioral changes are occurring in entrepreneurs' communication patterns as a result of these technological tools.

One of the changes is the diffusion of new communication technologies brought forth by technologically adept entrepreneurs who are pushing organizations they work with to adopt these new technologies. Early adopters like C Ffe have "had to flat out demand, 'like it's time to establish the Facebook page and get the social networking thing up and running' because they were a little reluctant to that." C Ffe and other entrepreneurs have readily adopted these new technologies and see the benefits they offer in terms of time savings and marketing.

Another change these technologies bring relate to how entrepreneurs do "that gumshoe thing" to find people. We saw above the investigative work entrepreneurs do to discover new connections and the Internet offers a wealth of possible connections. A Dise cited using a tool named Jigsaw.com to identify new nodes she could add to her network: "Yeah, it's really, really useful, because sometimes, just finding like a buyer's name is impossible and you can't get through the gatekeepers and you're stuck." A Dise went on to describe a recent experience in which she was able to find a specialized manufacturer:

I was researching online corrugated manufacturers and could not find anything. So, I logged into Twitter, and I posted, hey, does anybody know a corrugated box manufacturer in Ecuador. And lo and behold, I got this reply Tweet from the Corrugated Association of America. So, yeah, [that] probably saved me hours and hours and hours and a lot of headaches trying to find that source.

The global reach of Twitter allowed A Dise to easily connect to a unique and difficult to find resource with relative ease and in little time.

B Swan mentioned using the Internet similarly when she described how she finds new people she wants to connect to, "I used to do that all by phone, by reading about people and figuring out who else they knew and who did I know that they knew that could give me that introduction...with the internet, that's so much easier." The Internet offers a more time efficient method for discovering new people while also making it easier to find very specific types of people or resources.

E Ork, like others, mentioned that Facebook alleviates some of the stress around having enough time to keep up with friends, "I have a Facebook page and I keep track of my friends there and I sort of network socially" but then was quick to point out the following: "But, I see that somewhat separate from my professional social networking". Several entrepreneurs shared this reflection, that networks can be held separate from one another in the online realm. Entrepreneurs are using technologies to structure their networks and maintain separate communications and messages from one network to another. Social media tools like LinkedIn and Facebook allow for structuring of networks in ways that were never before available. B Swan, who perhaps offered the most thoughtful array of segregation strategies, commented:

> I'm probably a little looser with LinkedIn because it's more of a professional network
> and I don't post anything personal on there. It's really just 'here's my work'. I don't
> post my thoughts on there, I don't share photographs, personal photographs on there.
> So, that for me is just simply a professional network.

B Swan recognized that the use of new technologies allowed her to segment her network connections and delineate her interactions into personal versus professional communication.

B Swan was not alone in her careful management of communication with different networks. C Ffe more explicitly pointed to a strategy of using technologies to shape her networks and then put forward different messages to different networks.

> I--when it comes to--I think I have very much of like a divide and like I--I'm--I like to say I'm pretty well organized with who I talk to in what area. So, I'm not talking to the same people on Facebook that I'm talking to on Linked In that I'm talking to on Twitter. They're like three very distinct audiences that I'm addressing, that in different--even more so with like the blog for the company and stuff.

> And so, I manage them based on like the need to know basis of who I'm talking to and about what. And I'm pretty careful with what messages I'm sending out through which channels. And so, I think--it's more in hindsight now that I see how much I segregated it.

C Ffe suggests she does not necessarily intend to segregate her networks but she recognizes that through her communication patterns, this segregation occurs.

R Keet builds on this theme of using technology to segment and organize networks and describes how he uses a spreadsheet to organize people into groups and then communicate with his network based on priorities: "We also do then have a spreadsheet, which is used really to prioritize. It's segmented a whole bunch of different ways. Right now, I'm using it mostly for fundraising purposes." As mentioned above, the technologies used by entrepreneurs are not overly sophisticated, or even necessarily different from technologies used by non-entrepreneurs.

One technology that nearly all interviewees mentioned using and appreciating is LinkedIn. While other technologies received varying reviews of value and usefulness, LinkedIn seemed to consistently be mentioned as "one of the things I like to use". Jmy R described by far the most sophisticated use of LinkedIn relaying that he was "a member of, gees, I don't know, ten different LinkedIn discussion groups." LinkedIn increasingly offers more tools for sorting and assessing one's networks; perhaps assessment activities will increase as entrepreneurs utilize the expanding functions of LinkedIn,

Finally, entrepreneurs mentioned that social media can generate business leads. Yet, Jmy R also was the only entrepreneur who shared that he had *closed* business deals through social media.

> I am a member of multiple Facebook groups that are specific to natural history and science filmmakers. And I do get a lot of work there. Yeah, in fact, I just did a transaction with NASA. I sold a bunch of footage to NASA at Goddard Base Flight Center. And the whole thing was done through Facebook.

Jmy R lives in a rural community and offers a unique service; it may be that social media offer entrepreneurs in far flung places opportunities to close deals while those living in densely populated areas are still accustomed to meeting face to face. This too, is likely to change as technologies make sorting and selecting resources held within networks easier and more efficient, thus allowing people to target specific services and products, regardless of location.

Interviewees described an array of behaviors they employ in order to cultivate and create networks, shift their role and position, and manage their networks effectively. Entrepreneurs assess their networks and identify gaps or underdeveloped areas of certain

types of contacts. They maintain lists and sort through these to see if their networks are growing. They seek out new connections through investigating and tracking people of potential value, and they work with some determination to meet these new connections by asking existing connections to make introductions.

Entrepreneurs utilize networks to gain resources but they also strongly believe that they need to add value to networks through a range of behaviors or activities. These behaviors include reciprocating and giving back to others in their networks, being respectful of people's time, making relevant and useful introductions among network connections, and finding strategic alignment between these connections. Many times the introductions entrepreneurs make between nodes in a network are intended to connect disparate members who may share an unexpected value exchange. This cross pollination may be one aspect of entrepreneurial networking behavior not found in other populations.

When entrepreneurs do not feel included in a network or do not see the value of a given network, they are prone to creating new networks. This places entrepreneurs at the center of emerging networks and indicate the influence their behavior has on shifts in network structures. In creating and maintaining relationships entrepreneurs are careful to manage their personal brand, aligning their actions with their words and stated commitments. They work to maintain relations with people in these networks through staying in touch, deepening their connections, and holding and expressing an authentic interest in the other person.

These myriad behaviors are actuated through the use of innovative technology and technologies that have existed for centuries. Several entrepreneurs confessed to using simple tools like paper and pencil to map out their connections and list people they know or aim to

know. Others keep piles of business cards on their desk and review them periodically.

Several entrepreneurs like using face-to-face communication to create connections and build

bonds. Everyone, of course, used email (recall that is how I met these interviewees), and

telephones.

The allure of dynamic new online technologies is not as strong as one might think,

according to responses from interviewees. While all entrepreneurs shared a basic awareness

of new technologies like Facebook, Twitter, and LinkedIn, there was diversity in the use and

perceived value of these tools. LinkedIn seemed to be the most widely used tool, which is

notable as LinkedIn is designed to create and maintain networks in a business or professional

arena. Interestingly, new technologies are enabling entrepreneurs to sort and maintain

separate their circles of connections. These activities are matched with message

differentiation and attention to communicating with different groups in different ways. New

technologies may offer more sophisticated communication methods for people seeking to

send one message to one to group and another message to a different group.

Summary

The reader likely recalls the original research questions; in sum I sought to gain

insight as to social-environmental entrepreneurs' attitudes and beliefs regarding their

participation in human communication networks, the strategic advantages and/or outcomes

they pursue through communication networks, and the communication behaviors and tools

they use to shape their networks. This chapter has offered readers an in-depth analysis of the

responses interviewees provided in response to questions I asked during interviews.

Interviewees widely shared the belief that active participation in communication networks is

essential to their success. They hold positive attitudes about the potential to gain value

through network participation and they perceive differing value-add from differing types of networks. Generally speaking, entrepreneurs hold a preference for inclusive and open networks, which allow value to flow more fluidly across nodes. They tend to position themselves as connectors across diverse networks and see the value of this position.

Entrepreneurs are opportunity-seekers and identified network participation as one arena in which they can find new opportunities or gaps in value chains. They also find resources through network participation and they build their own skill sets and abilities. They garner feedback, information, and mentoring from networks. Finally, they gain access to influential, wealthy, and highly expert people who can help them build their ventures.

Through actively participating in networks entrepreneurs gain skills and resources and then begin to put these to work toward achieving their outcomes. Engaged in the environmental arena, the entrepreneurs with whom I spoke are pursuing social change in the ways people engage and use natural resources, how we educate our youth about the environment, and the consumer choices available and made in markets. Entrepreneurs see networks as communication channels through which they can access people who can help spread their message and begin to shift behaviors in our society.

The behaviors and tools entrepreneurs use to engage in and maintain their networks include assertively connecting to new people through their networks, building deeper relationships and providing more valuable inputs to and among nodes, creating new networks when existing networks fail to meet their needs. They perceive opportunities to build networks as a strategic move in shaping their influence on environmental issues. Lastly, they use mundane tools like pencil and paper and innovative new technologies like LinkedIn to maintain relationship, sort people into categories, and send and receive messages. In sum,

entrepreneurs are conscientious and avid networkers who understand the importance of

communication networks and whose behaviors seem differentiated from those of non-

entrepreneurs.

Chapter 6: Discussion

This research has sought to gain insight as to the attitudes, beliefs, goals, actions, behaviors, and tools social-environmental entrepreneurs hold and use in regards to human communication networks. To date, the academic research has not directly addressed the question of entrepreneurs' attitudes and actions through the lens of entrepreneurs themselves. My interviews with entrepreneurs provide some insight as to the attitudes and actions environmental entrepreneurs hold and take, the resources they pursue through communication networks, and the outcomes that result from their communicative actions.

This discussion weaves the major themes and findings of this qualitative, exploratory research into a coherent story about social-environmental entrepreneurs and communication networks, and places this story within the larger context of human communication, entrepreneurship, and social network studies. I provide some suggestions for theoretical directions scholars may want to pursue based on this work, as well as more pragmatic suggestions for operating environmental entrepreneurs. Recall that one of my main goals was to create useful findings for entrepreneurs, in hopes that these findings will improve their work and enable them to make greater impact. I end by urging other researchers, who share my passion for entrepreneurship and environmental issues, to take up the work of understanding social-environmental entrepreneurship and how we can support the important work these entrepreneurs are pursuing.

Discussion of Research Questions

A wide range of theories and academic writings has informed this research project. This discussion is organized around each of the three original research questions. I link my findings with several theories and studies present in the extant literature and note

consistencies between my findings and these published studies. Additionally, I note areas where my research extends our knowledge regarding entrepreneurs' attitudes and behaviors in communication networks.

Research question 1. The first research question asked was:

What attitudes and beliefs do social-environmental entrepreneurs report holding in regards to their position in, participation in, and potential success through human communication networks?

Entrepreneurs consider social networks to be important to their success, hold positive attitudes toward active participation in communication networks, prefer inclusive networks, and see themselves as "dual citizens", participating and connecting diverse networks. They are generally skeptical about the value of formal industry networks and events. First, let's consider their positive attitude toward communication networks.

Entrepreneurs hold positive attitudes toward networking and see themselves as successful networkers who can achieve resources and outcomes through their communicative actions in networks. These positive attitudes shape their intentions to meet new people, maintain relationships, and achieve goals through networking.

This finding is consistent with the theoretical framing of this study indicating that people are more likely to undertake certain communication behaviors when they hold a positive attitude toward the behavior due to previous experiences (Greene, 1984), or believe they can achieve their goals through this behavior (Ajzen, 1991; Armitage, Connor, 2001). Such theories as Ajzen's (1991) theory of planned behavior (TPB), Greene's (1984) action assembly theory, and Berger's (1997) theory of strategic interaction provide a general frame for explaining how positive attitudes toward networking lead to active networking behavior.

Interestingly, entrepreneurs widely believe they will be successful in their networking activities. Greene's action assembly theory (1984) describes how people's past experiences (procedural records) shape their attitudes toward current communication exchanges. Entrepreneurs recall positive past experiences in which they gained benefits through successful networking; thee experiences and actions likely shape their current attitudes. Berger's theory of strategic interaction did not serve to inform this project greatly as I do not measure the depth or extent of entrepreneurs' knowledge and experiences with networking.

Ajzen's (1991) theory highlights the importance of perceived behavioral control; this study shows that entrepreneurs generally believe they will be successful in their networking activities and will reap benefits through their actions; their perceived behavioral control may be higher than that of non-entrepreneurs. Their beliefs shape their positive attitudes, which in turn build their intentions to act.

In addition to perceiving they have high levels of control over outcomes, entrepreneurs also described shifting their behaviors once they realized - or were told - they were "entrepreneurs". This suggests that entrepreneurs hold normative beliefs, (normative beliefs are beliefs people hold regarding what others expect them to do in a role or situation), about what kinds of communicative behaviors they should undertake, as entrepreneurs. The definition of entrepreneur holds an associated set of expected behaviors and entrepreneurs alluded to these behaviors as they spoke of themselves "as entrepreneurs". Given the alignment between my findings and the theory of planned behavior's variables, TPB has proven useful in this study, as in many other empirical studies (Ajzen, 1991; Sparks, Hedderley, & Shepherd, 1992; Trafimow & Finlay, 1996).

To my knowledge, the existing academic literature does not fully address several findings related to RQ1. Therefore, this research serves to extend what we know in relation to certain areas of communication and entrepreneurship research. These areas include entrepreneurs' preferences for inclusive networks, entrepreneurs' beliefs that they often serve as a bridge between disparate networks, and entrepreneurs' positive attitudes toward close ties with some of their networks.

Entrepreneurs prefer inclusive and open networks, tending to steer clear of many more formal, established networking events and groups. As formal associations tend to reconstitute existing relationships among established businesses, their value, in the eyes of entrepreneurs, is diminished. Entrepreneurs prefer entrepreneurial networks as these open networks offer entrepreneurs access to resources. The intercultural communication literature does address issues of inclusivity within the frame of intercultural communication (Bennett, 1993). However, the intercultural literature does not address entrepreneurship and inclusivity. Furthermore, the entrepreneurship literature has not considered how entrepreneurs' preference for inclusive networks may affect the venture development process.

While some scholars (Rowley & Moldoveanu, 2003) have considered the effect of goals or interests as compared to identity on stakeholder actions, the communication literature has not considered the effect goals or interests may have on communication behaviors aimed at inclusivity. Entrepreneurs often maintain ties with colleagues from a previous era, and they move on to also build ties with new circles, new networks. This role as dual citizens allows entrepreneurs to find opportunities previously overlooked. Additionally, holding this position is powerful, as previously noted by Burt (1985, 1992) in his study of structural holes. Entrepreneurs also perceive the power of this position as

strategically beneficial and strive to maintain relationships with people across the span of their experiences and endeavors, avoiding the limitations imposed by monoculture networks or embeddedness (Granovetter, 1973). Scholars have begun to address the role communication skills play in entrepreneurial success (Baron & Markman, 2000; Duchesneau, & Gartner, 1990; Brüderl and Preisendörfer 1998). However, this study's findings suggest that entrepreneurs who are effective communicators across networks may be more successful.

Entrepreneurs build and hold ties across a range of networks. They maintain both weak ties and close ties and entrepreneurs perceive benefits of both weak and close ties. Notably, entrepreneurs are not embedded in one network, they are often *both* embedded in one network *and* connected to myriad more networks. This finding suggests that embeddedness, when coupled with additional ties to diverse networks, may benefit entrepreneurs.

The findings from RQ1 aligned with existing literature and theories and also provided further knowledge regarding existing literature and theories. The theory of planned behavior (Ajzen , 1991) and the theory of structural holes (Burt, 1985, 1992), are both clearly supported by this study. The theory of embeddedness (Granovetter, 1973) and the related concepts of close ties, are extended, as are studies related to communication, entrepreneurship, and inclusivity.

Research question 2. The second research question of this project stated,

What strategic advantages and/or outcomes do social-environmental entrepreneurs

aim to achieve through participating in social networks?

My question homed in on the resources entrepreneurs pursue through human communication networks as a means to gain strategic advantage. These resources include human capital, financial capital, social support, information and feedback, and mentoring.

The findings of this research are consistent with existing entrepreneurship literature that discusses the types of resources entrepreneurs need and pursue: human capital, financial capital, and social capital (Coleman, 1988; Greve & Salaff, 2003; Putnam, 1995). This research finds that entrepreneurs see networks as resource-rich arenas in which they can discover opportunities and connect to resources. From human capital to financial capital to legitimacy, entrepreneurs gain much of what they need through networks (Davidsson & Honig, 2003; Stevenson, 1980).

An additional resource entrepreneurs gain through networks is social support. Cohen, Underwood, and Gottlieb (2000) offer a comprehensive discussion of social support and, in sum, define it as the social (non-professional) resources individuals perceive they can access, or the social groups they belong to which help shape their behavior. While interviewees did not directly address the topic of "social support", several people discussed building circles of willing and aligned comrades with whom they could share their work, ideas, and challenges. The literature discusses the higher success rates of entrepreneurs who have ample social support (Brüderl & Preisendörfer, 1998; Greve & Salaff, 2003). This ability, to bolster both skills and social support, requires strong communication skills and self-awareness.

The construct of social capital has permeated the entrepreneurship and sociological literature during recent years (Coleman, 1988; Putnam, 1995; Zott & Huy, 2007). Social capital is built from the bonds of trust created among people in social networks. Interviewees placed great emphasis on building trust with others through being authentic, genuine, and

reliable. They described "walking the talk" and steering clear of networks or groups that do

not align with their beliefs or environmental philosophies. This finding suggests that

entrepreneurs understand the relationship between trust and social capital. Additionally, it

lends credence to previous research indicating that social capital is stronger in more

homogenous groups (Knack & Keefer, 1997).

In addition to positive experiences and attitudes entrepreneurs reported in regards to

social capital, entrepreneurs also described avoiding communication with some connections

whose reputation or philosophy may be at odds with the reputation they seek to maintain in

their networks. This finding extends the social capital literature (Putnam, 1995) as it

indicates that some communicative actions relating to social capital hold a defensive posture

and suggests that social capital management requires defensive communicative actions.

Another area in which this research extends what we know about communication and

entrepreneurship is that of entrepreneurs' pursuit of business partners through

communication networks. More entrepreneurs interviewed have partners than not. Their

ventures were formed with partners and they see their partners as integral to their success.

Partnerships require effective communication and recognition of one's limitations.

Entrepreneurs see these limitations in themselves from a communication skills standpoint to

a social capital and human resources standpoint. The communication between founding

partners of an entrepreneurial venture is little explored in the extant literature (Ruef, Aldrich,

& Carter, 2003); however, understanding how partnerships are formed, what makes for

effective partnering, and whether or not entrepreneurs are more successful when paired with

a partner, may inform environmental entrepreneurs' approaches to entrepreneurship.

In sum, entrepreneurs' communicative plans and actions serve to attract resources to their venture, positioning them for strategic gains. Through communication networks entrepreneurs find complementary resources, social support, and human and financial capital. They build social capital and create alignment with established ventures. This research additionally discovered that relationships with founding partners are critical to entrepreneurs as these relationships complement their communication skills and expand their communication networks.

Research question 3. My final research question is as follows:

What communication behaviors and tools are used by social-environmental

entrepreneurs to assess, cultivate, change, and nurture their individual and

organization's position(s) and role(s) in social networks?

Entrepreneurs employ a variety of behaviors to shape and develop their networks including: skilled communication, reciprocity, genuine caring, delivering value to others in networks, consistency between talk and actions, and forming new networks. Additionally, entrepreneurs are adopting new technologies that assist their communication strategies.

Many of the findings to this question support existing entrepreneurship and communication literature: entrepreneurs use a range of communication skills to form new ties and deepen connections (Cialdini, 1985; Giles, Mulac, Bradac, & Johnson, 1987; Sutton, 1991), entrepreneurs seek to create legitimacy through ties (Hallen & Eisenhardt, 2008), and entrepreneurs readily reciprocate value (Cialdini, 1985). In addition to supporting extant literature, this research extends what we know about entrepreneurs' behaviors in networks and suggests new findings regarding their actions to create new networks, deliberately contribute value to others in their networks, and manage their personal brand.

Effective communication skills are essential to entrepreneurial success. People who adapt to others' communication styles, who genuinely like others, and who give what they wish to receive, are more likely to achieve success (Sutton, 1991). Entrepreneurs I interviewed adapt their communication styles to match that of people they are engaging. This finding supports communication accommodation theory (Giles et al., 1987) which posits that people work to match their communication style to that of the recipient; this *convergence* of styles creates a more positive impact on the recipient as the communicator is more intelligible and more attractive to the recipient. Stevens and Kristof (1995) also find that communicators who match the expectations and communication styles of others are more successful in the workplace. This skill also helps entrepreneurs move gracefully between networks, serving as dual citizens residing in structural holes, which we have seen is a core strategic advantage entrepreneurs pursue.

The literature identifies the risk entrepreneurs face in being an unknown entity, without a track record of venture success (Zott & Huy, 2007). This lack of legitimacy can be addressed through symbolic actions that indicate an entrepreneur's likelihood of succeeding. Entrepreneurs interviewed discussed their alignment with established organizations and experts, their use of connections to introduce them to another person, and their use of speaking events and other showcasing events where they can build their credibility. These actions support findings of existing research on entrepreneurs' use of symbolic actions and social capital to gain access to resources (Hallen & Eisenhardt, 2008; Zott & Huy, 2007).

Entrepreneurs are conscientious about their acts of reciprocity and identify giving back to their networks as a key behavior that promises future return on investment as well as increased social capital and trust in the short term. Cialdini (1985) describes reciprocity as

giving what one wishes to receive and interviewees frequently described giving back as a type of insurance against future resource deficits. This suggests that entrepreneurs hold fairly long timeframes when planning communication strategies. They take into account how their actions today will benefit or fail them in the future. However, entrepreneurs also pointed out that not every act of giving is intended as a quid pro quo, sometimes they do things for others because they want to express their genuine caring for that person.

Entrepreneurs described their efforts to convey to others their genuine caring for that person, beyond their usefulness to their organization or work. They mentioned time and again that being genuine, or authentic, is elemental to their networking strategy. This authentic caring for others is one of the skills Cialdini (1985) specifies as key to successful communication. Starr and MacMillan (1990) also describe holding a genuine liking of the other person, building trust, and creating friendship as key communication skills for entrepreneurs.

Symbolic actions are used by entrepreneurs to convey their personal credibility (Zott & Huy (2007), and manage their impressions on others (Gardner & Avolio, 1998). Interviewees described choosing their associations carefully to convey consistency in their philosophy and symbolically represent their authenticity. Additionally, actions like speaking at conferences, and being introduced through known quantities were mentioned by interviewees. Managing one's personal brand carefully is essential to entrepreneurs (Shepherd, 2005); their personal credibility and legitimacy is the basis upon which others may choose to work alongside or not. This finding is not yet well-explored in the literature.

In addition to finding that entrepreneurs carefully manage their personal brands, this research discovered that entrepreneurs conscientiously create value for others. Entrepreneurs

identified several ways in which they participate as valuable members in their networks, including being respectful of others' time, making relevant and useful connections among members, and introducing innovation through cross-pollination. These behaviors create new value and stimulate network development and activity (Burt, 1997). The role that entrepreneurs play, as network disrupters, combines with their role as network stimulators. They perceive new matches among nodes that may be valuable, connect people, releasing previously contained value.

Entrepreneurs time and again told me they had built a new network through reorganizing communication patterns, siphoning away resources and nodes from existing networks, engaging new nodes, and offering an improved organizing principle to participants. Structuration theory (Giddens, 1993) explores the role individuals play in shaping social structure while explaining that, in turn, social structure shapes individual agency and actions. Previous research (Shane & Venkataraman, 2002) has shown the theory of structuration to be especially well-suited to studying how entrepreneurs engage in, shape, and shift social structures. Much of the research to date, however, has been theoretical. This research provides empirical data showing that entrepreneurs intentionally insert themselves into a flow of action or structure, seeking to disrupt the existing structure --or even build a new social structure.

Entrepreneurs and their actions do contribute to the theory of structuration and provide a relevant and rich arena in which to study how individuals' actions, formed of their intentions and goals, merge into an existing structure and shift the development, shape, and patterns of the structure. Entrepreneurs' communicative actions, according to the interviews I conducted, are intended to insert them into existing networks and alter the shape of the

network through connecting disconnected nodes. Additionally, their communication often create new networks, intentionally and unintentionally.

For all their sophisticated networking activities, entrepreneurs do not seem to employ complex methods when assessing their networks. Given the rigorous mapping that academics and scholars undertake to understand networks and communication patterns, it would seem the people they study would also apply sophisticated tools. The one new technology used ubiquitously by entrepreneurs, according to this research, is LinkedIn. LinkedIn can provide insight as to who knows whom. This technology may help entrepreneurs in their investigative work as they seek out new connections that may bring value to their venture.

Entrepreneurs interviewed are not adopting new technologies at a rampant rate. They are using technologies commonly used by non-entrepreneurs, including email, Facebook, and Twitter. Furthermore, according to this research, there is no consensus on the usefulness of online tools. One interesting behavior did come forward in relation to new online technologies: entrepreneurs are using these technologies to sort and keep separate groups or networks. They are using different technologies to communicate with different groups and are sending distinct messages to these differing groups. Large organizations have always been able to segment their messaging and broadcast different messages to different audiences. Until recently smaller ventures did not have this option on a large scale, their limited resources would not permit this sophisticated approach (see Day, 2011). Online technologies have resolved this communication challenge. As entrepreneurs shape, reorganize, and expand networks, this new communication behavior may have broader overall implications for the evolution of networks.

In sum, RQ3 centered on the behaviors and tools entrepreneurs use to build and extend their social networks. The literature is not as deep in this topic as one might expect; several of my findings seem to invite further exploration. Entrepreneurs engage in reciprocal actions, giving as much or more than what they take, providing genuine care for others, and generating social capital through these behaviors. They establish new connections through established or known quantities, and they pursue resources through varied communicative actions. These behaviors are fairly well explored and described in the entrepreneurship literature. Adding to what we already know, I have discovered that entrepreneurs also use surprisingly simple technologies to assess their networks, are determined investigators who seek out people who can add value to their venture and then directly approach these people. Entrepreneurs are careful to be valuable contributors to their networks, providing connections with meaningful introductions, bringing in new ideas from other domains, and respecting the precious time of other busy people. Entrepreneurs interviewed are using online technologies to organize and sort their networks and then send different messages to these separate networks. All told, entrepreneurs are sophisticated in their approaches and communicative behaviors yet use commonplace technologies to engage and manage their networks.

Summary

Entrepreneurs navigate the spaces between established social structures and social innovation. They utilize communication networks to discover opportunities, garner resources, and build toward their outcomes. Entrepreneurs tend to be effective networkers, whose positive past experiences shape their current favorable attitudes about meeting new connections, seeking new resources, and contributing value to their networks. They rely on past experiences to inform their communicative actions, whether seeking to make their

network more inclusive, or strengthen existing ties with long-standing relations. They prefer to engage in open, entrepreneurial networks and doubt the value of formal, industry-oriented networks.

This avoidance of formal associations relates to their need to aggregate resources; networks whose communication patterns and relations are long-established tend to be more closed, harder to permeate; their resources are locked in. Entrepreneurs need liquidity of value in networks for them to be useful. When networks are more inclusive and open, entrepreneurs can find gaps and opportunities, discover unmet needs, and apply innovative solutions. They can connect to the skills, investment, mentorship, and support they need to scale and more successfully meet this new opportunity. They attract these resources through using their skillful communication behaviors. From giving back and helping others, to genuinely caring for people in their midst, entrepreneurs build social capital and open doors. They seek out specific people, and are blunt and direct about their needs and their value contribution. Most of all, they work to create value for others.

The most interesting findings of this research centers on the work entrepreneurs do to shift the gravitational center of networks or create entirely new networks. Entrepreneurs are bold in their communicative actions, building new networks does not daunt them. Given that entrepreneurs are in the business of building something from (nearly) nothing, this comes as no surprise. However, when we take into account that entrepreneurs prefer inclusive networks and shape the networks they build, we can start to consider why entrepreneurial cultures embrace innovation more readily, why some communities adopt new technologies more easily, and why some organizations fail to change their ways. We begin to form an understanding of entrepreneurs as catalyzing change agents whose communicative actions

cause foundational shifts in social structures, sparking and nurturing shifts in resource flows, communication patterns, and social outcomes.

Implications

This study's findings have implications for theoretical scholars and environmental entrepreneurship practitioners. The interviews I held indicate that the environmental movement is shifting from its historical orientation; many of today's environmentalist are likely to be for-profit entrepreneurs, driven by an opportunity mind-set and an inclusive networking approach. The change in *who* comprises the environmental movement is reflected by the changes in *how* the movement communicates and *why* participants are engaged in environmental issues. These changes open an array of research avenues and practical implications.

In the 1990's "environmentalists" were pitted against "red-necks" and placed within a media-driven context of "jobs versus the environment". The spotted owl controversy cast a long shadow from the northwest across every local environmental initiative in the west. Conflict, it seemed, was the only frame for environmental issues.

Today, the frame has shifted. Instead of conflict and "jobs versus the environment", the environmental field is increasingly- according to this research- dominated by the theme of opportunity and mutual benefit from an economic *and* an environmental standpoint. Many of today's environmental leaders are focused on finding gaps in existing systems that offer opportunities for financial *and* social gains. Today's environmental entrepreneurs are building multiple-bottom-line ventures that gauge success based on both environmental *and* economic outcomes. Today's environmental entrepreneur is just as likely the founder of a *for-profit* organization as a not-for profit organization.

In addition to finding shifts in the environmental field's philosophical foundations, I found that most of the people I interviewed were new to the environmental arena. Today, a wider range of people is working in environmental issues than two decades ago. This range now includes people who are for-profit operators building investment firms focused on environmental services and products to technologists building high-speed elevated railways.

These newcomers do not fit into the conflict frame (Gray, 2004). Their foundational belief system is that of opportunity and possibility. Their perspective is formed by their belief that more jobs can come from environmental ventures, indeed, that a successful economic future for our society is closely tied to environmental conservation and sound resource use patterns. This is a radical, and exciting shift from the days of "jobs versus the environment"! Additionally, their attitudes and beliefs about networks seem different from those I observed in environmental work in years past. As a student at Prescott College, attending Earth First! meetings and studying ecology and natural history, I perceived a certain level of secrecy and exclusivity; only true-believers were welcome in the environmental movement, it seemed. Today's "environmentalist" is likely to hold different attitudes and beliefs about communication networks than those of years past, casting a wider net to capture more customers, more followers, more people willing to change their mindset toward environmental-protection.

Theoretical implications. These changes in the constitution of the environmental movement's participants, attitudes, and communicative actions suggest that new theoretical approaches are called for. The nascent social entrepreneurship field (Mair, & Noboa, 2003; Mair, & Martí, 2006) incorporates environmental entrepreneurship; however, the field of study has not yet taken into account the historical foundations of the environmental

movement, namely conflict, ideology, and oppositional approaches to creating social change. The research questions, studies, and theories scholars apply to understanding social movements and the environmental movement, in particular, may need to change.

For example, scholars of social entrepreneurship could explore the role social entrepreneurs play in shaping transitions in social movements' priorities, practices and participants (see Morris, & McClurg, 1992). Specifically, how do social entrepreneurs influence communication norms, and behaviors of others, and how do their attitudes toward inclusivity expand, dilute, or shift a movement? Also, theories of resistance and social change movements could be expanded to consider how resistance may give way to market-oriented approaches in capitalist societies. Theories related to environmental communication may need to adopt a more interest and outcomes oriented perspective (Rowley, & Moldoveanu, 2003) to explain current environmental movement trends and communication tactics.

Entrepreneurs are forces for social change; gifted *social-environmental* entrepreneurs have the capacity to generate substantial shifts in societal behavior, leading to positive outcomes for natural communities and ecosystems. As social entrepreneurs now dominate the environmental movement, understanding social entrepreneurs' communication skills, plans, and actions becomes important to both scholars and practitioners. Moreover, an interdisciplinary approach to the study of social movements, in which entrepreneurship, communication, networking, and resource attraction, are interwoven may lead to a more meaningful explanation of how social entrepreneurship leads to positive changes in environmental management.

Finally, this research suggests there are several implications for communication scholars whose approach may be considered critical in nature. Entrepreneurs, being social change catalysts, and preferring inclusive and open networks, set the direction of social structures and shape the communication patterns of these networks. This approach may offset the tendency of networks to become more closed and exclusive over time (Granovetter, 1973, Burt, 2005). Entrepreneurs may help to remove social barriers and equalize power structures over time, creating openings for new networks entrants. Consider the shift in power and wealth from the East Coast to the West Coast in recent decades. Visiting Seattle or the San Francisco Bay Area one can't help but see that entrepreneurs Steve Jobs and Bill Gates have created new social orders in which Indian and Chinese, Middle Eastern, and Latin American technologists are equal players in high tech companies, earning high wages and serving as leaders in the community. Embracing entrepreneurs as change agents and identifying their potential for positive social change in social systems offers critical scholars a new arena of inquiry.

Practical implications. Entrepreneurship education has, to date, largely overlooked communication skills as a key curricular element. A quick review of higher education programs teaching entrepreneurship shows that marketing, finance, operations, and team building are constants in entrepreneurship curriculum. However, discussions about communication skills, strategies, and tactics, are non-existent. Educators may be unaware of the essential role these communication assets play in entrepreneurs' abilities to garner resources. It seems we expect entrepreneurs to be able to cross that resource divide and we provide them technical skills that serve them only once they are on the other side. As such, I recommend that entrepreneurship educators consider building in communication modules to

their curriculum, providing entrepreneurs with insight and guidance on best practices and areas of concern that will serve entrepreneurs as they strike out on their resource-hunting endeavors.

The key communication skills entrepreneurs can consider developing or improving upon include:

- Be genuine and authentic, direct and transparent in your communication;

- Be consistent in your words and actions – walk the talk;

- Demonstrate your appreciation of others;

- Reciprocate and give more than you receive;

- Express your sincere care for other people, outside of their role as a business partner or colleague;

- Understand the needs of others and find and convey strategic alignment opportunities;

Communication tactics that can help garner resources include:

- Use symbols to communicate your legitimacy and trustworthiness;

- Deliver different messages to different audiences;

- Target specific types of resources (expert skills, connections to finance) and ask for introductions;

- Follow up with new connections and find ways to deepen or strengthen the connection;

- Co-opt the resources for others in ways that are mutually beneficial.

Last, and perhaps most of all, consistently provide value to your networks through respecting

other people's time, making relevant and meaningful introductions, bringing innovation into

the mix.

The theory development, research, and practice of entrepreneurship may benefit from

this project in that it has uncovered under explored areas of knowledge. The communication

skills and behaviors of entrepreneurs are closely tied to their ability to overcome their core

challenge: resource acquisition. These skills are not thoroughly considered in the

communication literature to date. Also, the entrepreneurship literature overlooks the role of

communication skills and behaviors as influential factors in entrepreneurial success and

styles. Finally, the teaching and practice of entrepreneurship has not incorporated the

knowledge presented herein, yet may substantially benefit from pivoting away from a focus

on technical skills, and incorporating a more communication and social networking

perspective.

Limitations, Future Directions, and Conclusions

This study falls short of offering precise and perfect answers, and provokes many

more questions than it considers. It indicates several areas that scholars may be interested to

pursue and identifies existing research as a starting point for new theoretical developments.

This section first discusses the limitations of this study; then it considers future directions and

conclusions.

Limitations. This study has three primary limitations. First, I was unable to

interview environmentalists with a resistance or activist mindset. While I did have a balance

of for-profit and not-for-profit entrepreneurs, this study would have been richer if there were

a greater comparison between opportunity-oriented entrepreneurs and resistance-oriented

entrepreneurs. I suspect this would also have allowed me to explore evolving

communication patterns that indicate or support my belief that the environmental movement

is undergoing significant shifts. I also suspect that resistance-frame-minded entrepreneurs

are more secretive and closed with their communication, which likely impacts their ability to

attract certain types of resources.

Second, I did not interview entrepreneurs who had failed in their ventures, or who had

been operating their ventures for a longer period of time. This additional diversity would

have given me greater understanding of the differences between successful and failed

entrepreneurs in terms of communication attitudes and actions. Additionally, I believe

entrepreneurs who have been operating their venture for longer than seven years may offer

greater insight about the changes that networks undergo as ventures grow and expand.

Third, my personal belief that entrepreneurs bring a valuable perspective and

approach to problem solving, likely limited my ability to perceive and document

communication approaches that are dysfunctional or debilitating. In general, my discussion

and findings of entrepreneurs' communication, attitudes, and behaviors may be more positive

than those of a researcher with less bias.

Future directions. My interviews with entrepreneurs provide insight as to the

attitudes and actions environmental entrepreneurs hold and take, to an extent. Yet much

work is still needed to understand how entrepreneurs may be different from and similar to

other people from a communication standpoint. How do entrepreneurs vary from non-

entrepreneurs in networks, do entrepreneurs focus on or utilize certain types of messages than

non-entrepreneurs? Do certain communicate skills indicate a greater likelihood of success?

Many questions in this arena have yet to be formulated, much less studied.

Further probing of established theories and their associated components and variables, such as perceived behavioral control and the theory of planned behavior, or procedural records and action assembly theory could be directly applied to entrepreneurs and this may open avenues of further understanding and insight.

Applying the theory of planned behavior (Ajzen, 1991) more acutely to entrepreneurs' communication behaviors may prove useful in understanding their beliefs, attitudes, intentions, and actions. In particular, this study suggests that exploring and measuring entrepreneurs' perceived behavioral control beliefs might provide a measure of prediction of both entrepreneurs' actions and their likelihood of success in building new networking activities.

For example, a researcher could adapt an existing measure of PBC (see Ajzen, 2012) and, using quantitative methods, survey entrepreneurs to measure their PBC attitudes and identify their ideal outcomes (success measures) for their ventures. After a set period of time, 24 months, for example, the researcher could follow up with another questionnaire to measure outcomes and PBC for each entrepreneur. This study would be enriched by interviews that discover actual communication activities employed by each entrepreneur.

In addition to these findings, this project has stumbled upon the intriguing notion that entrepreneurs simultaneously work to expand and make more inclusive their communication networks while carefully sifting out nodes whose associations, reputations, actions, or beliefs may compromise their own social capital. Further exploration of the theory of social capital and entrepreneurs' defensive actions may lead to gained knowledge. The value contribution activities entrepreneurs undertake seem tied to social capital and further study of these

activities may inform our understanding of how entrepreneurs contribute to social capital in communication networks.

Entrepreneurs, due to their need to aggregate resources and their orientation toward opportunities, may be substantially different from non-entrepreneurs in their communicative attitudes and beliefs, intentions and actions. This research suggests that these differences are likely great enough as to cause communication discord between entrepreneurs and non-entrepreneurs. While we tend to laud entrepreneurs' bold and innovative actions, we overlook how their attitudes and actions may contribute to misunderstanding, tension, or conflict in networks. Understanding the potential differences in communication attitudes and actions between entrepreneurs and non-entrepreneurs may prove useful in organizations or networks seeking to incorporate entrepreneurial thinking into established social structures.

This research has *not* found that social not-for-profit entrepreneurs differ from profit-oriented entrepreneurs in any obvious manner, in terms of communication attitudes or actions in networks. Notably, this research did not attempt to measure attitudes or actions in specific domains. As such, the question of how different the communication behaviors and attitudes of social versus for-profit entrepreneurs are, remains an open one. While social entrepreneurship is currently an area of great interest, and holds promise to spark positive social change in environmental practices, understanding the differences between these entrepreneurs continues to be an important area of research.

Social-environmental entrepreneurs' shared preference for inclusive networks is noteworthy as they are reshaping the environmental movement. Exclusivity has always been a criticism of the movement; this new breed of environmental leader may shift this reality - or perception--or both. This finding may indicate an area of investigation that could lead to

greater understanding of the development--or lack thereof - of entrepreneurial regions. For

example, in regions or communities where long-standing social structures abide,

entrepreneurs will find it difficult to permeate the social fabric and may become discouraged,

moving onto to more inclusive or open communities. This relates to entrepreneurs' attitudes

about being closely tied to certain nodes, or clusters of nodes, within their communication

networks.

Those of us who have been working on environmental issues for many years may be

skeptical of these new entrepreneurial, opportunity-oriented approaches and wonder what

effect they will have on long-held conservation and/or preservation goals. Social ecologists,

in particular, may be concerned about the impacts a shift such as the one I seem to have

discovered, away from a conservation/preservation orientation to a more market/capitalistic

orientation, may hold. As our social patterns seem increasingly tied to capitalism and its

organizing functions and patterns, our environmental challenges will likely reflect the values

and priorities of a capitalistic system. This study indicates that the preferred solutions to

environmental challenges are increasingly reflective of a capitalistic system. The resulting

impacts of a rise in the formation of multiple bottom line environmental ventures, built on a

capitalism platform, are yet unknown. An important area of research may be gauging

outcomes and sustained positive or negative results from stem from multiple-bottom-line

approaches.

A final area that offers promise in the research and practice of entrepreneurship is that

of studying and explicating the functions, benefits, drawbacks, and communication patterns

of entrepreneurial partners. The role of partners is clearly substantial, yet relatively little

research has explored how partners may provide greater social support, complementary

networks, resources and skills. Research in this area may provide insight as to how entrepreneurs can work with another to suffer the challenges and share the joys of building a new business or organization.

Conclusions. This study has been interesting for me; hopefully it has provided readers with new insights and ideas as well. Entrepreneurship and communication are intertwined as entrepreneurship is a communicative endeavor. While the academic research has not yet woven these two streams of inquiry, interdisciplinary scholars will hopefully take up the challenge to explore communication theories within the domain of entrepreneurship, and entrepreneurship scholars will hopefully more fully apply communication theories to the study of entrepreneurial actions and outcomes.

Most of all, I hope this research will inspire environmental entrepreneurs to learn from the voices, talents, and outcomes showcased in this research. My interviews allowed me proximity to people whose vision for social change is compelling, and whose actions suggest this change is possible. Environmental problems continue to escalate, social change is slow to happen, and environmental leadership from government and large corporate entities has been dismal, at best. According to this research, environmental entrepreneurs offer a great asset as we aim for substantial shifts in the way we manage and care for our natural resources.

References

Adler, P. S., & Kwon, S. (2002). Review of the literature on social capital. *Academy of Management Review, 27*, 17.

Ahuja, G. (2000). The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages. *Strategic Management Journal, 21*(3), 317.

Ahuja, G. (2000). Collaboration networks, structural holes, and innovation: A longitudinal study. *Administrative Science Quarterly, 45*(3), 425.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckman (Eds.), *Action-control: From cognition to behavior*. Heidelberg, Germany: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179–211.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*(4), 665.

Ajzen, I. (2012). *TPB Questionnaire Construction: Constructing a theory of planned behavior questionnaire*. Available online at http://people.umass.edu/aizen/pdf/tpb.measurement.pdf.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior: Attitudes, intentions, and perceived behavioral control*. Englewood Cliffs, NJ: Prentice Hall.

Albarracin, D., Fishbein, M., Johnson, B. T., Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin, 127*(1), 142-161.

Aldrich, H. E., Elam, A., & Reese, P. R. (1996). Strong ties, weak ties and strangers: Do

    women business owners differ from men in their use of networking to obtain

    assistance? In S. Birley, & I. MacMillan (Eds.), *Entrepreneurship in a Global*

    Context. London: Rutledge.

Aldrich, H., Reese, P. R., & Dubini, P. (1990). *The go-between: Brokers' roles in*

    entrepreneurial networks. Paper presented at Babson College Entrepreneurship

    Conference.

Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through social networks: The art and

    science of entrepreneurship. In D. Sexton, & R. Smilor (Eds.), *Papers presented at*

    state of the art in entrepreneurship research conference.

Almack, J.C. (1922). The influence of intelligence on the selection of associates. *School and*

    Society (16), 529.

Armitage, C. J., Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-

    analytic review. *British Journal of Social Psychology, 40*, 471.

Bagozzi, R., Baumgartner, H., Yi, Y. (1989). An investigation into the role of intentions as

    mediators of the attitude-behavior relationship. *Journal of Economic Psychology, 10*,

    35.

Barnes, J. A. (1954). Class and committees in a Norwegian island parish. *Human Relations,*

    7, 39.

Barnes, J.A., Harary, F. (1983). Graph theory in network analysis. *Social Networks (5)*, 235.

Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can

    enhance entrepreneurs' success. *Academy of Management Executive, 14*(1).

Baum, J. R. (1994). *The relation of traits, competencies, vision, motivation, and strategy to venture growth* (Unpublished doctoral dissertation). University of Maryland, College Park.

Beckert, J. (1999). Agency, entrepreneurs, and institutional change: The role of strategic choice and institutionalized practices in organizations. *Organizational Studies, 20*(5), 777.

Bennett, M. J., (1993). Towards a developmental model of intercultural sensitivity. In Michael Paige, R. (Ed.), *Education for the intercultural experience*. Yarmouth, ME: Intercultural Press.

Berger, C. R. (1997). *Planning strategic interaction: Attaining goals through communicative action.* New Jersey: Lawrence Earlbaum Associates.

Berger, C. R. (2000). Goal detection and efficiency: Neglected aspects of message production. *Communication Theory, 10*(2), 156.

Bhave, M. P. (1994). A process model of entrepreneurial venture creation. *Journal of Business Venturing, 9*(3), 223.

Bird, B. J. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review, 13*(3), 442.

Birley, S. (1985). The role of networks in the entrepreneurial process. *Journal of Business Venturing, 1*, 107.

Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.

Blee, K. M., Taylor, V. (2002). Semi-structured interviewing in social movement research. In Klandermans, B., & Staggenborg, S. (Eds.), *Methods of Social Movement Research.* Minnesota: University of Minnesota Press.

Bodin, O., Crona, B., & Ernston, H. (2006). Social networks in natural resource management: What is there to learn from a structural perspective. *Ecology and Society, 11*(2).

Bookchin, M. (1982). *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy.* Oakland, California: AK Press.

Bookchin, M. (2005). *The Ecology of Freedom: The Emergence And Dissolution Of Hierarchy.* AK Press: Oakland, CA.

Bookchin, M. (2011). From the website *Climate and Capitalism: Ecosocialism or Barbarism: There is No Third Way.* http://climateandcapitalism.com/ Accessed May 11, 2012. The article posted on the website was originally published in 1993 in Zimmerman, M (Ed). *Environmental Philosophy: From Animal Rights to Radical Ecology*. Prentice Hall: New Jersey.

Booth-Butterfield, S. (1987). Action assembly theory and communication apprehension: A psycho-physiological study. *Human Communication Research, 13*(3), 386.

Borgatti, S.P., Jones, C. & Everett, M.G. (1998). Network measures of social capital. *Connections, 21*(2), 36.

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca. G. (2009). Network analysis in the social sciences. *Science, 323*, 892.

Bornstein, D. (1998). Changing the world on a shoestring. *The Atlantic.*

Bott, E. (1971). Reconsiderations. In E. Bott (Ed.), *Family and social network: Roles, norms and external relationships in ordinary urban families* (2nd ed.,). London: Tavistock.

Bott, H. (1928). Observation of play activities in a nursery school. *Genetic Psychology Monographs*, *4*,44.

Bouton, S. N., & Frederick, P. C. (2003). Stakeholders' Perceptions of a Wading Bird Colony as a Community Resource in the Brazilian Pantanal. *Conservation Biology, 17*(1), 297.

Boyle, R., & Magor, M. (2008). A nation of entrepreneurs? Television, social change and the rise of the entrepreneur. *International Journal of Media and Cultural Politics, 4*(2), 125-144.

Brann, M., & Sutton, M. L. (2009). The theory of planned behavior and college students' willing ness to talk about smoking- related behaviors. *Communication Research Reports, 26*(3), 198. DOI: 10.1080/08824090903074399.

Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47*, 795.

Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader member exchange. *Leadership Quarterly, 11*, 227.

Brüderl and Preisendörfer, P. (1998). Network support and the success of newly founded businesses. *Small Business Economics, 10*(3), 213.

Brüderl, J., & Schussler, R. (1990). Organizational mortality: The liabilities of newness and adolescence. *Administrative Science Quarterly, 35*, 530.

Bruno, A. V., & Tyebjee, T. T. (1985). The entrepreneur's search for capital. *Journal of Business Venturing, 1*, 67.

Bullis, C. (1996). Retalking environmental discourses from a feminist perspective: The radical potential of ecofeminism. In Cantrill, J., & Oravec, C. L. (Eds.), *The symbolic*

earth: Discourse and our creation of the environment. Kentucky: University Press of
Kentucky.

Burt, R. S. (1985). *Toward a structural theory of action: Network models of social structure,
perception and action*. New York: Academic.

Burt, R. S. (1987). Social contagion and innovation: Cohesion versus structural equivalence.
American Journal of Sociology, 92, 1287.

Burt, R. S. (1992). *Structural holes: The social structure of competition*. Cambridge:
Harvard University Press.

Burt, R. S., Jannotta, J.E., & Mahoney, J. T. (1998). Personality correlates of structural
holes. *Social Networks, 20*, 63-87.

Burt, R. S. (2001). Chapter 2: Structural holes versus network closure as social capital. In
Lin, N., Cook, K., & Burt, R.S. (Eds.), *Social capital: Theory and research* (2nd
ed.,). New Jersey: Transaction Publishers.

Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly,
42*(2), 339-365.

Burt, R. S. (2005). *Brokerage and closure: An introduction to social capital.* New York:
Oxford University Press.

Byers, T., Dorf, R., & Nelson, A. (2010). Introduction. In T. Byers, R. Dorf & A. Nelson
(Eds.), *Technology ventures: From idea to enterprise* (3rd ed.) McGraw-Hill.

Byers, T., Kist, H., & Sutton, R. I. (1999). Characteristics of the entrepreneur: Social
creatures, not solo heroes. In Dorf, R. C. (Ed.), *The Technology Management
Handbook*. Florida: CRC Press.

Bygrave, W. D. (1988). The structure of the investment networks of venture capital firms. *Journal of Business Venturing, 3,* 137.

Casciaro, T., & Piskorski, M. J. (2005). Power imbalance, mutual dependence, and constraint absorption: A closer look at resource dependence theory. *Administrative Science Quarterly, 50*, 167.

Cattell, V. (2001). Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science and Medicine, 52*, 1501.

Christ, P. (2005). Internet technologies and trends transforming public relations. *Journal of Website Promotion, 1*(4), 3.

Chung, S., Singh, H., & Lee, K. (2000). Complementarity, status, similarity, and social capital as drivers of alliance formation. *Strategic Management Journal, 21*, 1.

Cialdini, R. B. (1985). Persuasion principles. *Public Relations Journal*, 12-16.

Clark, C. (2008). The impact of entrepreneurs' oral 'pitch' presentation skills on business angels' initial screening investment decisions. *Venture Capital, (10)*3, 257-279.

Cohen, B. (2006). Sustainable valley entrepreneurial ecosystems. *Business Strategy and the Environment, 15*(1), 1.

Cohen, S., Underwood, L., & Gottlieb, B. (Eds.), (2000). *Social support measurement and intervention: A guide for health and social scientists.* New York, NY: Oxford University Press.

Coleman, J. S. (1986). Social theory, social research, and a theory of action. *American Journal of Sociology, 91*, 1309.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(Supplement), S95.

Coleman, J.S. (1990). *Foundations of social theory*. Cambridge: Belknap.

Collins, R. (1981). On the micro-foundations of macro-sociology. *American Journal of Sociology, 86*, 984.

Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology, 28*(15), 1429.

Contractor, N., Whitbred, R., Fonti, F., Steglich, & C., Su, C. (2005). Conference Papers -- International Communication Association, Annual Meeting, New York, NY.

Cook, K. S., Emerson, R. M., & Gillmore, M. R. (1983). The distribution of power in exchange networks: Theory and experimental results. *American Journal of Sociology, 89*(2), 275.

Cox, E. (2006). *The emergence of inter-organizational networks*. Unpublished manuscript.

Cross, R., & Parker, A. (2004). *The Hidden Power of Social Networks*. Cambridge: Harvard Business School Publishing.

Dalton, R. J., Reccia, S., & Rohrschneider, R. (2003). The environmental movement and the modes of political action. *Comparative Political Studies*, *36*, 743.

Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing (18)*3, 301-331.

Davis, A. B., & Aldrich, H. E. (2000). *The organizational advantage? Social capital, gender, and small business owners' access to resources.* Unpublished manuscript.

Day, G. (2011). Closing the Marketing Capabilities Gap. *Journal Of Marketing, 75*(4), 183-195.

Dean, T. J., & McMullen, J. S. (2005). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing, 22*(1), 50.

Dees, G. (1998). *The meaning of social entrepreneurship.* Unpublished manuscript.

DeWitt, J., F. Kettl, D. F., Dyer, B., & Lovan, W. R. (1994). What will new governance mean for the federal government? *Public Administration Review*, 54*(2),* 170.

Diani, M. (2009). Introduction: Social movements, contentious actions, and social networks: "From metaphors to substance?" In Diani, M. & McAdam, D. (Eds.), *Social Movements and Networks: Relational Approaches to Collective Action*. Oxford, England: Oxford University Press.

Dillard, J. P., & Solomon, D. H. (2000) Conceptualizing context in message-production research. *Communication Theory, 10*(2), 167.

Dubini, P., & Aldrich, H. E. (1991). Personal and extended networks are central to the entrepreneurial process. *American Sociological Review, 6*, 305.

Duchesneau, D. A., & Gartner, W. B. (1990). A profile of new venture success and failure in an emerging industry. *Journal of Business Venturing*, (5)5, 297.

Eckhardt, J. T., & Shane, S. A. (2003). Opportunities and entrepreneurship. *Journal of Management, 29*(3), 333.

Ehrlich, G. (2000). *John Muir: Nature's visionary*. Washington DC: National Geographic Society.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*, 532.

Eisenhardt, K. M. (1989). Agency Theory: An assessment and review. *Academy of Management Review, 14*, 57.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal, 50*(1), 25.

Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organizational Science, 7*(2), 136.

Elkington, J. (2004). Chapter 1. In Henriques, A., & Richardson, J. (Eds.), *The triple bottom line: Does it all add up?* London: Earthscan Books.

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*, 335.

Emirbayer, M., & Goodwin, J. (1994). Network analysis, culture, and the problem of agency. *American Journal of Sociology, 99*(6), 1411.

Etzioni, A. (1986). Entrepreneurship, adaptation and legitimation. *Journal of Economic Behavior and Organization, 8*, 175.

Etzioni, A. (1986). Rationality is anti-entropic. *Journal of Economic Psychology, 7*, 17.

Feld, S. (1981). The focused organization of organizational ties. *American Journal of Sociology, 86*, 1015.

Fisher, W. A., Fisher, J. D., & Rye, B. J. (1995). Understanding and promoting AIDS-preventive behavior: Insights from the theory of reasoned action. *Health Psychology, 14,* 255-264.

Flanagin, A. J., Stohl, C., & Bimber, B. (2006). Modeling the structure of collective action. *Communication Monographs, 73*(1).

Florin, J., Lubatkin, M., & Schulze, W. (2003). A social capital model of high-growth ventures. *The Academy of Management Journal, 46*(3), 374-384.

Forbis, R. (2009). "Drill, Baby, Drill: An Analysis of How Energy Development Displaced Ranching's Dominance of the BLM's Land-Use Subgovernment". Paper presented at the annual meeting of the WPSA Annual Meeting, Ideas, Interests and Institutions, Vancouver, BC Canada. Accessed 1/28/2011 from http://www.allacademic.com/meta/p316811_index.html.

Fox, S. (1981) *John Muir and his legacy: The American Conservation Movement,* (1st ed). New York City: Little Brown & Co.

Freeman, J., Carroll, G. R., & Hannan, M. T. (1983). The liability of newness: Age dependence in organizational death rates. *American Sociological Review, 48*, 692.

Freeman, L. C., (1977). A set of measures of centrality based on betweenness. *Sociometry, 40*(1), 35.

Freeman, L.C. (1996). Some antecedents of social network analysis. *Connections, 19(1),* 39.

Freeman, L. C. (2004). *The development of social network analysis: A study in the sociology of science*. Vancouver: Empirical Press.

Friedman, D., & McAdam, D. (1992). Collective identity and activism: Networks, choices, and the life of a social movement. In A. D. Morris, & C. M. McClurg (Eds.), *Frontiers in social movement theory*. New Haven: Yale University Press.

Firsby, D. (2002). *Georg Simmel* (2nd ed.). London: Routledge.

Gane, M. (1998). *On Durkheim's Rules of Sociological Method.* New York: Routledge.

Gargiulo, M., & Benassi, M. (2000). Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital. *Organization Science, 11*, 183.

Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing,* 5, 15-28.

Giddens, A. (1993). *New rules of sociological method.* Stanford, CA: Stanford University Press.

Giles, H., Mulac, J., Bradac, J., & Johnson, P. (1987). *Speech accommodation theory: In the first decade and beyond.* In M. McLaughlin (Ed.), *Communication year book 10* (pp. 13-48). Beverly Hills, CA: Sage.

Gill, R., & Ganesh, S. (2007). Empowerment, constraint, and the entrepreneurial self: A study of white women entrepreneurs. *Journal of Applied Communication Research, 35*(3), 268-293.

Giving USA 2009 Report (2009). Accessed 1/17/2011. Available at http://www.nps.gov/partnerships/fundraising_individuals_statistics.html.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology, 91*, 481.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360.

Gray, B. (2004). Strong opposition: Frame-based resistance to collaboration. *Journal of Community and Applied Social Psychology, (14),* 166.

Greene, J. O. (1984). A cognitive approach to human communication: An action assembly theory. *Communication Monographs, (51)*4, 289.

Greene, J. O. (2008) Action assembly theory. Griffin, E., *A First Look at Communication Theory,* (1st ed). Columbus: McGraw-Hill.

Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice,* (Fall), 1.

Gulati, R. (1985). Social structure and alliance formation patterns: A longitudinal analysis *Administrative Science Quarterly, 40*, 619.

Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal, 21*(3), 203.

Haber, M. G., Cohen, J. L., Lucas, T., & Baltes, B. B. (2007). The relationship between self-reported received and perceived social support: A meta-analytic review. *American Journal of Community Psychology▪ 39(1-2▪*), 133-144.

Habermas, J. (1962). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society.* Cambridge: The MIT Press.

Hallen, B. L. (2008). The causes and consequences of the initial network positions of new organization: From whom do entrepreneurs receive investments. *Administrative Science Quarterly, 53*, 685.

Hallen, B. L., & Eisenhardt, K. M. (2008). Catalyzing strategies: How entrepreneurs accelerate inter-organizational relationship formation to secure professional investments. Available at SSRN: http://ssrn.com/abstract=1372328: Social Science Research Network.

Hansen, E., & Wortman, M. (1989). Entrepreneurial networks: The organization in vitro. *49th Academy of Management Proceedings*, Washington DC.

Hansen, E. L. (1995). Entrepreneurial network and new organization growth. *Entrepreneurship: Theory and Practice, 19*(4), 7.

Hebert, R. F., & Link, A. N. (1989). In search of the meaning of entrepreneurship. *Small Business Economics, 1*, 39.

Hendry, J. (2010). *Communication and the Natural World*. State College: Strata Publishing.

Hibbard, M., & Madsen, J. (2002). Environmental resistance to place-based collaboration in the U.S. West. *Society and Natural Resources, 16*(8)*,* 703-718.

Hibbert, S. A., & Hogg, G. (2002). Consumer response to social entrepreneurship: The case of the big issue in Scotland. *International Journal of Nonprofit and Voluntary Sector Marketing, 7*(3), 288.

Holmes, S. J. (1999). *The young John Muir: An environmental biography.* Madison: The University of Wisconsin Press.

Hubbard, R.M. (1929). A method of studying spontaneous group formation. In Thomas, D.S. (Ed.), Techniques for studying social behavior. *Child Development Monographs*.

Hull, D. L., Bosley, J., & Udell, G. (1980). Renewing the hunt for the heffalump: Identifying potential entrepreneurs by personality characteristics. *Journal of Small Business Management, 80*(18), 11-18.

Hsu, D. (2007). Experienced entrepreneurial founders, organizational capital, and venture capital funding. *Research Policy, 36, 722*.

Ibarra, H. & Andrews, S. B. (1993). Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. *Administrative Science Quarterly, 38*(2), 277.

Ibarra, H. Kilduff, M., Tsai, W. (2005). Zooming in and out: Connecting individuals and collectivities at the frontier. *Organization Science*, *16*(4), 359.

Institute for Intercultural Studies website (2010). Accessed at

    http://www.interculturalstudies.org

Isaac, M. E., Erickson, B. H., Quashie-Sam, S. J., & Timmer, V. R. (2007). Transfer of

    knowledge on agroforestry management practices: The structure of farmer advice

    networks. *Ecology and Society, 11*(2).

Isikoff, M., Yarett, I., & Philips, M. (2010). Spill, baby, spill. *Newsweek, May 10, 2010*.

Jarillo, J. C. (1988). On strategic networks. *Strategic Management Journal, 9*, 31.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency

    costs and ownership structure. *Journal of Financial Economics, 3*(4), 305.

Johanisson, B., (1989). Community entrepreneurs: networking for local development.

    Entrepreneurship and Regional Development, 3-19.

Kent, M. L., & Taylor, M. (1998). Building dialogic relationships through the world wide

    web. *Public Relations Review, 24*(3), 321.

Kilduff, M., & Day, D. V. (1994). Do chameleons get ahead? The effects of self-monitoring

    on managerial careers. *Academy of Management Journal*, 37(4), 1047.

King, N. K. (2004). Social capital and nonprofit leaders. *Nonprofit Management and*

    Leadership, 14(4), 471.

Kitts, J. A. (1999). Not in our backyard: Solidarity, social networks, and the ecology of

    environmental mobilization. *Sociological Inquiry, 69*(4), 551.

Kitts, J. A. (2000). Mobilizing in black boxes: Social networks and social movement

    organizations. *Mobilization: An International Journal*, 5(2), 241-257.

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-

    country investigation. *The Quarterly Journal of Economics 112*(4), 1251-1288.

Knoke, D. (1990). Networks of political action: Toward theory construction. *Social Forces, 68*, 1041.

Krosnik, J.A., MacInnis, B., (2012). Trends in American public opinion on global warming policies between 2010 and 2012. Accessed April 10, 2012 at http://woods.stanford.edu/docs/surveys/GW-Policy-Trend-2010-2012-1.pdf

Krueger, N. F. (2005). Sustainable entrepreneurship: Broadening the definition of "opportunity". *Best of Conference Paper: USASBE Conference.*

Krueger, N. F., Reilly, M. D., & Carsrud, A. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing, 15*, 411.

Kurasaki, K. S. (2000). Intercoder reliability for validating conclusions drawn from open-ended interview data. *Field Methods* (12), p. 179.

Lange, J. I. (1990). Refusal to compromise! The case of Earth First! *Western Journal of Speech Communication 54*, 473.

Larson, A. (1992). Network dyads in entrepreneurial settings: A study of the governance of exchange relationships. *Administrative Science Quarterly, 37*(1).

Larson, J. A., & Starr, A. (1993). A network model of organization formation. *Entrepreneurship: Theory and Practice, 17.*

Larson, A.L. (2000). Sustainable innovation through an entrepreneurship lens. *Business Strategy and the Environment*, *9*, 304-17.

Laumann, E. O., & Pappi, F. U. (1976). *Networks of collective action: A perspective on community influence systems*. New York: Academic.

Lazarsfeld, P. F., & Merton, R. K. (1954). Friendship as a social process: A substantive and methodological analysis. In M. Berger (Ed.), *Freedom and control in modern society*. New York: Van Nostrand.

Leader, S., & Probst, P. (2007). *The Earth Liberation Front and environmental terrorism.* Published online by http://wwwask-force.org. Accessed on 1/12/2011 at http://www.ask-force.org/web/Discourse/Leader-Earth-Liberation-Front-.pdf

Lin, N., Cook, K., & Burt, R.S. (2001). *Social capital: theory and research.* New Brunswick, New Jersey: Transaction Publishers.

Lin, N. (1999). Building a network theory of social capital. *Connections, 22*(1), 28.

Lin, N. (1999). Social networks and status attainment. *Annual Review of Sociology, 25*, 467.

Lin, N., & Vaughn, J. C. (1981). Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociology Review, 46*, 393.

MacKay, L., Scheerer, A., & Takada, T. (2005). Entrepreneurs as change agents to move communities towards sustainability. Thesis submitted for completion of Masters of Strategic Leadership, Blekinge Institute of Technology, Karlskrona, Sweden.

Mair, J., & Noboa, E. (2003). *Working paper: Social entrepreneurship: How intentions to create a social enterprise get formed*. IESE Working Paper No. D/521. Available at SSRN: http://ssrn.com/abstract=462283 or http://dx.doi.org/10.2139/ssrn.462283

Mair, J., Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business 41*, 36–44.

Marsden, P. V. (1987). Core discussion networks of Americans. *American Sociology Review, 52*, 122.

Marx, K. & Engels, F. (1848). Communist Manifesto.   Accessed January 17, 2011 at UNM

    Zimmerman Library electronic resource:

    http://site.ebrary.com/lib/unma/docDetail.action?docID=10015107

McAdam, D. (1986). Recruitment to high-risk activism: The case of freedom summer.

    American Journal of Sociology, 92, 64.

McAdam, D., & Paulsen, R. (1993). Specifying the relationship between social ties and

    activism. *American Journal of Sociology, 99*, 640.

McAdam, D., Tarrow, S., & Tilly, C. (2001). Dynamics of contention. Cambridge:

    Cambridge University Press.

McCarthy, J. D., & Zald, M. N. (1977). Resource mobilization and social movements: A

    partial theory. *American Journal of Sociology, 82*(6), 1212.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in

    social networks. *Annual Review of Sociology, 27*, 415.

Mitchell, J. C. (1974). Social networks. *Annual Review of Anthropology, 3*, 279.

Monge, P. R., & Contractor, N. (2001). Emergence of communication networks. In Jablin,

    F. M., & Putnam, L. (Eds.), *The New Handbook of Organizational Communication:*

    Advances in Theory, Research, and Methods. Thousand Oaks: Sage Publications.

Monge, P. R., & Contractor, N. (2002). Managing knowledge networks. *Management*

    Communication Quarterly, 16, 249.

Monge, P. R., & Contractor, N. (2003). Theories of communication networks. Oxford:

    Oxford University Press.

Moore, M.P. (1993). Constructing irreconcilable conflict: The function of synecdoche in the

    spotted owl controversy. *Communication Monographs, (60)3*, 258.

Moreno, J.L. (1934). *Who Shall Survive?* Washington DC: Nervous and Mental Disease Publishing Company.

Morris, A. D. & McClurg C. M., Eds. (1992). *Frontiers in social movement theory.* New Haven: Yale University Press.

Mort, G. S., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualisation. *International Journal of Nonprofit and Voluntary Sector Marketing, 8*(1), 76.

Muir, J. (1912). *The Yosemite: A National Treasure.* New York: The Century Co.

Nash, R.F. (1990). *American Environmentalism: Readings in conservation history.* New York: McGraw-Hill Publishing Company.

Nisbet, M. C., Myers, T. (2007). The Polls—Trends: Twenty years of public opinion about global warming. *Public Opinion Quarterly, 71*(3).

Oliver, P. (1993). Formal models of collective action. *Annual Review of Sociology, 19*, 271.

Ozcan, P., & Eisenhardt, K. M. (2009). Origin of portfolios: Entrepreneurial firms and strategic action. *Academy of Management Journal, 52*(2).

Passy, F. (2009). Social Networks Matter. But How? In Diani, M., & McAdam, D. (Eds.), *Social Movements and Networks*. New York: Oxford University Press.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective.* Stanford: Stanford University Press.

Pinchot, Gifford (1910). *The Fight for Conservation.* New York: Doubleday.

Portes, A. (1999). Social capital: Its origins and the application in modern sociology. *Annual Review of Sociology, 61*(2), 219.

Portes, A., & Landolt, P. (1996). The downside of social capital. *American Prospect, 94*(26), 18.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy, 6*, 34.

Putnam, R., (1993). The Prosperous Community-Social Capital and Public Life. *American Prospect, 13*, 35-42.

Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly, 48*, 240.

Reynolds, P. D. (1991). Sociology and entrepreneurship: Concepts and contributions. *Entrepreneurship: Theory and Practice, 16*(2), 47.

Rogers, E. (2003). *Diffusion of innovations* (5th ed.). Detroit: Free Press.

Rogers, E., & Kincaid, D. L. (1980). *Communication networks: Toward A new paradigm for research*. Detroit: Free Press.

Rowley, T.I, & Moldoveanu, M., (2003). When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *Academy of Management Review, 28*(2), 204-219.

Ruef, M., Aldrich, H. E., & Carter, N.M., (2003). The structure of founding teams: homophily, strong ties, and isolation among U.S. entrepreneurs. *American Sociological Review, 68*(2), 195-222.

Sarason, Y., Dean, T., & Dillard, J.F. (2006). Entrepreneurship as the nexus of individual and opportunity: A structuration view. *The Journal of Business Venturing, 21*(3), 286.

Saxton, G. D., & Benson, M. A. (2005). Social capital and the growth of the nonprofit sector. *Social Science Quarterly, 86*(1), 16.

Scarce, R. (1990). *Eco-warriors: Understanding the radical environmental movement.* Walnut Creek: Left Coast Press.

Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology, 49*(3), 843.

Schneider, M., Teske, P., Roch, C., & Marschall, C. (1997). Networks to nowhere: Segregation and stratification in networks of information about schools. *American Political Science Review, 41*, 1201.

Schumpeter, J. (1911; 1934). *The Theory of Economic Development.* Cambridge: Harvard University Press.

Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science, 48*(3), 364.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review 25*, 217– 226.

Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. In *Encyclopedia of entrepreneurship*, 72-90.

Shaw, E., & Carter, S. (2007). Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. *Journal of Small Business and Enterprise Development, 14*(3), 418.

Simms, S. V. K., & Robinson, J. (2005). Activist or entrepreneurs? An identity-based model of social entrepreneurship. Paper submitted to the USASBE.

Spear, R. (2006). Social entrepreneurship: a different model? *International Journal of Social Economics, 33*(5/6), 399.

Starr, J. A., & MacMillan, I. C. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal, 11*, 79.

Stevens, C. K., & Kristof, A.L. (1995). Making the right impressions: A field study of applicant impression management during job interviews. *Journal of Applied Psychology, (80)*5, 587.

Stevenson, H. (1985). The heart of entrepreneurship. *Harvard Business Review*, March-April, 85-94.

Stevenson, H. (2000). Why entrepreneurship has won! *Coleman White Paper USASBE Plenary Address*. Cambridge: Harvard University Graduate School of Business Administration.

Stevenson, W. B., & Greenberg, D. (2000). Agency and social networks: Strategies of action in a social structure of position, opposition, and opportunity. *Administrative Science Quarterly, 45*(4), 651.

Stryker, S., Owens, T. J., & White, R. W. (Eds.). (2000). *Self, identity, and social movements*. Minneapolis: University of Minneapolis Press.

Symanski, R. (1996). Dances with horses: Lessons from the environmental fringe. *Conservation Biology, 10*(3), 708.

Tilly, C. (1994). Social movements as historically specific clusters of political performances. *Berkeley Journal of Sociology, 38*(1), 30.

Tindall, D. B. (2002). Social networks, identification, and participation, in an environmental movement: Low-medium cost activism within the British Columbian wilderness preservation movement. *Canadian Review of Sociology, (39)4*.

Thompson, J., Geoff Alvy, G., & Lees, A. (2000). Social entrepreneurship: A new look at the people and the potential. *Management Decision, 38*(5), 328.

Tindall, D. B. (2002). Social networks, identification and participation in an environmental movement: Low-medium cost activism within the british columbia wilderness preservation movement. *Canadian Review of Sociology, 39*(4), 413-452.

Trusov, M., Bodapati, A. V., & Bucklin, R. E. (2010). Determining influential users in internet social networks. *Journal of Marketing Research, 47*(4), 643.

Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly, 42*(1), 35.

Vissa, B. (INSEAD Working Paper No. 2010/24/EFE/ICE). *Agency in action: Entrepreneurs' networking style and initiation of economic exchange.* Unpublished manuscript.

Walker, G., Kogut, B., & Shan, W. (1997). Social capital, structural holes, and the formation of an industry network. *Organization Science, 8*(2), 109.

Wallace, S. L. (1999). Social entrepreneurship: The role of social purpose enterprises in facilitating community economic development. *Journal of Development Entrepreneurship, 4*(2), 153.

Wang, X. (2009). Integrating the theory of planned behavior and attitude functions: Implications for health campaign design. *Health Communication*, *24*(5), 426.

Wasserman, N. (2008). The founder's dilemma. *Harvard Business Review.* February.

Water, R. D., Burnett, E., Lamm, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How non-profit organizations are using Facebook. *Public Relations Review, 35*, 102.

Welbourne, J., & Booth-Butterfield, S. (2005). Using the theory of planned behavior and a stage model of persuasion to evaluate a safety message for firefighters. *Health Communication*, *18*(2), 141.

Whitbred, R. C., & Steglich, C. (2007). Competitive advantage and beneficial cooperation: A longitudinal investigation of the emergence of social capital in a communication network. *Annual Meeting of the International Communication Association.*

Whiting, J.W.M., Burton, M.C., Romney, A.K., Moore, C.C., & White, D.R. (1967). A reanalysis of Murdoch's model for social structure based on optimal scaling. *Ethnology, 6,* 109.

Whitten, N., & Wolfe, A. (1974). Network analysis. In J. Honigmann (Ed.), *Handbook of social and cultural anthropology*. Chicago: Rand McNally.

Wicks, J. (2009) Local Living Economies: The New Movement for Responsible Business. http://www.ballenetwork.org/

Wikipedia (2010) http://en.wikipedia.org/wiki/Social_change

Wilken, P. H. (1979). *Entrepreneurship: A comparative and historical study*. New Jersey: Norwood.

Willard, B. (2002). The Sustainability Advantage. British Columbia: New Society Publishers.

Wirth, L., (1938). Urbanism as a way of life. *American Journal of Sociology, 44.*

Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society, 27*, 151.

Yale Center for Environmental Law and Policy (2007). American Opinions on Global

    Warming: A Yale University / Gallup / ClearVision Institute Poll. Accessed

    1/18/2011 at http://environment.yale.edu/news/5305.

Zacharis, J. C. (1971). Emmeline Pankhurst: An English Suffragette influences America.

    Communication Monographs, 3.

Zack, M. H., & McKenney, J. L. (1995). Social context and interaction in on-going

    computer- supported management groups. *Organizational Science, 6*, 394.

Zhao, H., Seibert, & S. E., Hills, G. E. (2005). The mediating role of self-efficacy in the

    development of entrepreneurial intentions. *Journal of Applied Psychology (90)*6,

    1265.

Zinn, (2005). *A people's history of the United States*. 5th ed. New York: HarperCollins.

Zott, C., & Huy, Q. (2007). Symbolic emphasizing: How entrepreneurs use symbolism to

    acquire resources. *Administrative Science Quarterly (45),* 494-522.

Appendices

Appendix A: Interview Guide

How did I find/get introduced to this entrepreneur?

Initial Call   Date   Time

      Read Statement of Purpose   YES   NO

      Read My Background   YES   NO

      Asked for age/mission/goals of organization   YES   NO

      Agrees to participate?   YES   NO

Scheduled Follow-up freeconference.com Call

      _____

Email Correspondence Notes

Sending Written Consent Form (email or snail mail)   YES   NO

SENT FORM?   YES   NO

Sent Instructions for Calls?   YES   NO

Received Signed Consent Form?   YES   NO

First Call   Date   Time

      Any questions regarding the purpose of the study?   YES   NO

      Any questions regarding my background?   YES   NO

      Share the procedures of the interviews...   YES   NO

1) What is the mission or goal of the organization/firm/business?

      Probe: Tell me about what you do (programs, services, or products) and how you do

it?

2) How did you become interested in the environment?

        Probe: Describe your philosophy about environmentalism and how you enact this

        philosophy in your company?

3) Tell me about how you came to be an entrepreneur.

Probe: Who influenced your decision to start your own organization/firm/business?

Probe: What groups were/are you a part of that influenced your path toward being an

entrepreneur?

4) Describe informal professional circles or groups you are involved with or a part of.

        Probe: Include as many circles or groups as you can think of - they may overlap or

not.

(Picking 1 or 2 groups)

        Probe: Where do you see yourself in (Group 1)?

        Probe: Describe yourself in relation to other people in this circle of people.

        Probe: Where do you see yourself in (Group 2)?

        Probe: Describe yourself in relation to other people in this circle of people.

5) Tell me about formal environmental, conservation, or social change groups or

organizations you currently or previously belong to. Examples could be the Sierra Club or a

student enviro club)

        Probe: Do you have a specific role in this group?

        Probe: Where do you see yourself in this network?

        Probe: What types of activities do you do do in this network? Share info, social, get

        grants together?

6) Tell me about a group or network you do NOT belong to-but that you would like to belong to.

Probe: Tell me about this circle and how people become a part of it?

Probe: What would it offer you if you were a part of it?

Probe: If you were part of this circle what could you achieve? What kinds of opportunities would you have access to?

7) Tell me about how being a part of these groups helps you build your organization?

Probe: Tell me about a time you achieved an important goal/outcome (program related or otherwise) because you used your connections.

Probe: Describe two or three people (individuals or organizations) who have helped you build your organization?

8) Tell me about a strategic goal you are working on now that requires you to use your connections (refer to above mentioned circles or groups).

Probe: Tell me how your connections are assisting you in this work.

Probe: How did you gain this help - did you ask or is it reciprocal?

Probe: What would your network look like if it were more useful to you for this work?

9) Tell me about a strategic goal you are working on that does NOT require you to use your connections (refer to above mentioned circles or groups).

10) Tell me about a time you used social connections to

Probe: Get a grant/land a client/make a sale

Probe: Meet a person who could help you achieve a goal

11) How do you connect with people doing work that may be important to your work?

Probe: Do you find new people and meet them? How does this happen?

Probe: Do you stay connected to people you've met?

Probe: When do you see these people? How do you stay connected to these people?

12) Since you launched the organization have you participated in professional gatherings or conferences?

Probe: Describe your participation.

Probe: What affect has this had on who you know and do work with?

13) What type of technologies do you use to meet new people or stay in touch with colleagues?

Probe: How do you use the following:

Facebook

Twitter

Foursquare

email newsletters

Probe: How does your website connect you to other people?

14) What benefits have you seen from using these tools in terms of your work?

Probe: Do you come across more opportunities or information?

Probe: Do you meet more people who will likely become useful in your work?

Appendix B: Email Text to Potential Participants

Dear (name),

I hope this note finds you well. I am emailing to ask for your assistance as I work to complete my doctoral thesis with the University of New Mexico. My research includes conducting interviews with social entrepreneurs building organizations, firms, or businesses in the environmental field. My core research question is: "How do environmental entrepreneurs think about and use social networks to do their work and achieve success for their start-up organization?"

To complete my research I need to interview about 20 entrepreneurs and I am asking for your assistance as someone who can possibly connect me to folks who may be willing to do one or two interviews with me by telephone. All data and findings will be anonymous and the University of New Mexico has approved this project's methods. The telephone calls will be recorded and transcribed so that I can go over the conversation after the call and gain a better understanding.

To fit my research criteria, I am seeking entrepreneurs who:
* founded their firm or organization less than 7 years ago
* are not-for-profit or for-profit but are mission-driven and working in the environment or conservation fields
* live and work primarily in the USA or Canada
* would likely feel comfortable talking to a researcher about their social networks, building partnerships, creating ties with others, and so forth.

Thank you for your help.

Sincerely, Alice

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