

DO THE STORIES THEY TELL GET THEM THE MONEY THEY NEED? THE ROLE OF ENTREPRENEURIAL NARRATIVES IN RESOURCE ACQUISITION

MARTIN L. MARTENS
Concordia University

JENNIFER E. JENNINGS
P. DEVEREAUX JENNINGS
University of Alberta

Adopting a narrative approach to resource acquisition research, we examine the effects of storytelling on a firm's ability to secure capital. We argue that narratives help leverage resources by conveying a comprehensible identity for an entrepreneurial firm, elaborating the logic behind proposed means of exploiting opportunities and embedding entrepreneurial endeavors within broader discourses. Qualitative analyses of all 1996–2000 initial public offering prospectuses in three high-tech industries reveal how identity constructions, story elaboration, and contextual embedding are invoked within narratives. Our quantitative findings show how these aspects of an entrepreneurial narrative impact resource acquisition net of previously emphasized factors.

Although the “linguistic turn” may have taken longer to reach the entrepreneurship literature than other areas of organizational research (Hjorth & Steyaert, 2004: 3), there is increasing recognition that storytelling is an essential component of an entrepreneur's toolkit. Successful entrepreneurs often possess reputations as effective “*raconteurs*” (Smith & Anderson, 2004: 126), with some of the most successful themselves professing that “every entrepreneur is a great storyteller” (Roddick, 2000: 40). Accordingly, a growing number of researchers have called attention to the role that stories play in the entrepreneurial process—particularly for the critical yet challenging task of attracting resources from external sources (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; O'Connor, 2004; Porac, Mishina, & Pollock, 2002).

As of yet, however, very little empirical research

exists on the relationship between entrepreneurial storytelling and external resource acquisition. One important exception is O'Connor's (2004) pioneering work, which documented how the founders of a new venture deliberately and successively reshaped their company story to enhance the likelihood of securing investment capital. Although offering a provocative behind-the-scenes glimpse into the story-crafting process, her single-case design limits the conclusions that can be drawn about the *effects* of storytelling on resource acquisition in entrepreneurial firms. As a result, it is not known whether the stories that entrepreneurs tell help them garner the resources they need to pursue identified entrepreneurial opportunities.

To our knowledge, this paper offers the first systematic, large-sample test of the overarching claim that effective storytelling can facilitate external resource acquisition. Integrating theory and research on the resource acquisition process with work by narrative scholars, we develop and test three arguments about how narratives (stories) help entrepreneurs attract capital. Our first argument is that stories help potential resource providers comprehend an entrepreneurial firm's identity by packaging factual information about the firm's stock of tangible and intangible capital into a simpler, more coherent and meaningful whole. The second is that stories help prospective investors understand the nature and potential value of a firm's proposed means of exploiting entrepreneurial opportunities by elab-

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orating the reasoning behind its intended strategic initiatives. The third is that stories help generate interest and commitment among potential resource providers by connecting to broader contextual narratives in such a way that the proposed endeavor appears original and distinctive—yet not so far-fetched that its soundness is questionable. Combined, these arguments suggest that effective storytelling not only reduces the perceived uncertainty and risk associated with the exploitation of entrepreneurial opportunities (cf. Cohen & Dean, 2005; Pollock & Rindova, 2003; Shane, 2003; Stuart, Hoang, & Hybels, 1999), but also motivates and mobilizes potential resource providers into committing capital to an entrepreneurial enterprise.

We use a mixed-methodology design to explore these arguments, combining qualitative and quantitative techniques in our approach (Lee, 1999: 14). Our sample for both types of analyses consisted of all semiconductor ($n = 53$), biotechnology ($n = 56$), and Internet content provider ($n = 59$) firms that issued initial public offerings (IPOs) on one of the major U.S. stock exchanges from 1996 to 2000. We considered IPO firms to be a valuable initial focus for research on the relationship between entrepreneurial storytelling and resource acquisition for two reasons. First, the written prospectus that each firm must file contains required sections that not only facilitate risk assessments (Bhabra & Pettway, 2003; MacCrimmon & Martens, 2001) but also allow for systematic and comparative textual analysis. Second, although IPOs may be issued for reasons other than resource acquisition, those that are successful nevertheless infuse firms with large amounts of externally provided capital. As such, the issuance of an IPO represents a significant milestone in the life of an entrepreneurial venture (Shane, 2003: 6).

THE USE OF ENTREPRENEURIAL NARRATIVES IN RESOURCE ACQUISITION: THEORY, QUALITATIVE FINDINGS, AND EMERGENT HYPOTHESES

Resource acquisition features prominently in the entrepreneurship literature. Regardless of whether entrepreneurship itself is conceptualized as the discovery and exploitation of opportunities, or as the creation of a new venture, the process of acquiring resources such as financial, physical, human, and intangible capital from others is commonly acknowledged to be a vital entrepreneurial task (Shane, 2003; Starr & MacMillan, 1990). Obtaining adequate capital not only enables an entrepreneurial firm to pursue identified opportunities, but also facilitates its ability to survive, grow, and generate

profits (Brush, Greene, & Hart, 2001; Shane, 2003). Building a resource base, however, is widely recognized as a complex and challenging undertaking—perhaps even “the greatest challenge faced by entrepreneurs” (Brush et al., 2001: 71). The challenge stems from information asymmetry and from uncertainty about the value of entrepreneurial opportunities and a firm’s ability to exploit them. That is, resource providers tend to possess less information than entrepreneurs about certain opportunities and their proposed means of exploiting these opportunities; moreover, the value of those opportunities is largely unknown prior to their exploitation (Shane, 2003: 165–166; see also Stuart et al., 1999).

To date, much resource acquisition research has focused on two means by which entrepreneurs attempt to cope with the above-noted challenges: relying on social ties and signaling quality. The social tie approach emphasizes the facilitative role played by an entrepreneur’s direct or indirect connections to potential capital providers (e.g., Hall & Hofer, 1993; Steier & Greenwood, 1995, 2000). This approach has been criticized, however, for failing to satisfactorily explain either the processes by which entrepreneurs leverage their existing relationships to secure additional capital (Baron & Markman, 2003; Starr & MacMillan, 1990) or the ability of many entrepreneurs without prior connections to prospective investors to acquire external resources (Shane, 2003; see also Bhidé, 2000). The quality signaling approach emphasizes the facilitative role played by signals of an entrepreneurial firm’s quality, such as its “track record,” top management team characteristics, certifications and endorsements, and affiliations with high-status third parties (e.g., Shane & Cable, 2002; Shane & Stuart, 2002; Stuart et al., 1999). This approach too has been criticized for not yet providing a full understanding of the mechanisms by which these indicators of a firm’s existing capital stock are leveraged to attract additional, externally provided resources (Lounsbury & Glynn, 2001).

One way of addressing these shortcomings is to focus instead on the *behaviors* that entrepreneurs engage in when attempting to convince resource providers to commit capital to their endeavors (Shane, 2003). Although some scholars have called attention to the use of impression management and influence strategies more generally (e.g., Baron & Markman, 2000; 2003; Brush et al., 2001; Starr & MacMillan, 1990), others have called attention to the roles played by language, communication, and storytelling more specifically (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; O’Connor, 2004; Porac et al., 2002). Stories, or narratives, are temporally se-

quenced accounts of interrelated events or actions undertaken by characters (Barry & Elmes, 1997; Czarniawska, 1998; Gabriel, 2004). Entrepreneurial narratives are the stories that are told about entrepreneurs and/or their firms.

Like stories more generally, entrepreneurial narratives can be shared through a variety of modes, chiefly the oral and the written (Alvesson & Kärreman, 2000; Barry & Elmes, 1997; Grant, Hardy, Oswick, & Putnam, 2004). One example of the oral mode is the extemporaneous stories, or “small narratives” (Hjorth & Steyaert, 2004: 4), that entrepreneurs share in their everyday conversations with employees, customers, and suppliers. Another example is the more scripted narratives told within formal presentations to such audiences as bankers,

venture capitalists, and media representatives. Examples of the written mode include the story segments, or “minimal narratives” (Czarniawska, 1998: 17), that appear on promotional materials such as company brochures, Web sites, and product packages, as well as the fuller narratives that appear in documents such as annual reports, business plans, and IPO prospectuses.

Table 1 illustrates the use of the narrative form within the IPO prospectuses analyzed for this study. According to Fiol (1989), narratives contain three essential elements: a narrative subject, an object or ultimate goal that the subject is in search of, and a set of forces that enable or impede the subject from attaining the desired object or goal. According to other organizational narrativists, stories also pos-

TABLE 1
Use of the Narrative Form in IPO Prospectuses: Illustrative Text Segments^a

Narrative Component and Placement	Semiconductor Firm	Biotech Firm	Internet Firm
<i>Narrative subject</i> Appearing within the overview of the business section	We are a leading provider of epitaxial equipment and related components used to produce compound semiconductors. . . . For 14 years, we have offered products and services designed to cost-effectively meet the increasingly demanding production requirements of the global high-performance communications infrastructure.	We are a drug discovery company that has developed and integrated a set of proprietary technologies. . . . We are using our technologies both to assist collaborators in discovering drug candidates and to discover and develop our own drug candidates, which we currently intend to license at the pre-clinical or early clinical stage.	We operate urbancool.com, an online network targeted to the urban consumer that provides a forum for communications, information and electronic commerce. Our online network, which has been operational since January 1999, consists of 15 channels with original content organized by subject matter.
<i>End goal</i> Appearing within the summary of objectives	Our goal is to become the leading supplier of integrated equipment and related process solutions to compound semiconductor manufacturers.	Our objective is to be an industry leader in the discovery and optimization of new drug candidates.	Our objective is to establish our online network as a leading online destination for the urban consumer.
<i>Enabling forces</i> Appearing within the discussion of intended strategic actions	We have established close working relationships with leading compound semiconductor manufacturers. We intend to enhance those relationships by opening a Process Integration Centre (PIC) in 2001. . . . We have a history of innovations . . . [and] will continue to invest in research and development. . . . We also intend to expand our intellectual property portfolio by pursuing internal development, joint ventures and acquisitions.	We intend to continue to pursue technological innovation. . . . We intend to continue to patent or otherwise protect our technological innovations. . . . We also intend to expand our libraries of drug compounds. . . . Our strategy is to license internally developed drug candidates. . . . We intend to continue to enter into collaborative R&D agreements with leading companies.	We believe creating brand recognition will be critical. . . . We intend to differentiate our business . . . through our focus on America's inner city residents and our use of NetStand kiosks and CyberCenters. . . . We intend to use a portion of the net proceeds of this offering to place PC-based NetStand kiosks in at least 500 locations in urban markets. . . . We intend to open a model CyberCenter . . . in Harlem, New York.

^a Sources are the IPO prospectuses for Applied Epi. Inc., 3-Dimensional Pharmaceuticals, and Urban Cool Network Inc., respectively.

sess an implicit or explicit temporal sequencing that provides a sense of plot (Barry & Elmes, 1997; Czarniawska, 1998; Gabriel, 2004). These fundamental aspects of the narrative form were easily discernable within the business section of each prospectus. As illustrated in Table 1, each contained a clearly identified subject (e.g., “We are a leading provider of epitaxial equipment and related components”), an explicitly stated goal (e.g., “Our objective is to be an industry leader in the discovery and optimization of new drug candidates”), and a set of specific enabling forces (e.g., “We believe creating brand recognition will be critical”). Moreover, each contained an implicit temporal sequence. The semiconductor excerpts, for example, described what a firm had done in the past (“For 14 years, we have offered products and services. . .”), what it was in the present (“We are [now] a leading provider of epitaxial equipment. . .”), and what it would be in the future (“Our goal is to become *the* leading supplier. . .”; emphasis added).

Organizational narrativists believe that stories are a fundamental, preferred, and particularly effective means of communicating, “sense-making,” and “sense-giving” (e.g., Boje, 1991; Weick, 1995). Building on this premise, we suggest that storytelling helps entrepreneurs *leverage their existing resource endowments* so as to secure additional investment capital. We propose three ways in which entrepreneurial narratives can act as resource levers: (1) by conveying a comprehensible identity for an entrepreneurial firm, (2) by elaborating the logic behind proposed means of exploiting opportunities, and (3) by embedding entrepreneurial endeavors in broader contextual discourses. We develop each of these arguments below, providing rich illustrative data from the qualitative component of our analysis.

Conveying Comprehensible Identities for Entrepreneurial Firms

Theoretical arguments. Our first point is that narratives play a critical role in conveying an entrepreneurial firm’s identity (O’Connor, 2002, 2004). The narrative form represents “an essential logic used by human beings for self-presentation” (O’Connor, 2004: 109). Stories help individuals understand and describe who they are. By telling stories in which they play leading roles, individuals “construct” themselves as “characters” whose attributes can be revealed and communicated (Gergen, 1999). Thus, narratives shape not only how individuals view themselves, but also how others view them. This function of narratives in general also applies to entrepreneurial narratives, which

are primarily designed to create as comprehensible an identity as possible for an entrepreneurial firm (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; O’Connor, 2004; Santos & Eisenhardt, 2004).

But why do narrative theorists consider stories to be a particularly effective means of constructing and conveying a social entity’s identity? The main argument is that stories configure “apparently independent and disconnected elements of existence” into “related parts of a whole” (Barry & Elmes, 1997: 431). Stories do more than just present “facts as information” (Gabriel, 2004: 64); they “represent” facts in an elegant way (Smith & Anderson, 2004: 127). By presenting facts as part of a complex whole, organizational stories are more easily learned and remembered by others (Shaw, Brown, & Bromiley, 1998: 42). Likewise, we expect that entrepreneurial narratives help convey a more comprehensible and memorable identity for firms seeking external capital by encoding and ordering facts about their existing resource endowments within an overarching framework. As with stories more generally, this overarching framework likely involves temporal sequencing (Gabriel, 2004). In the case of entrepreneurial narratives, temporal sequencing does more than just provide a logic to link facts about a firm’s resource stocks together—it also makes those facts appear more certain by recasting the firm’s history as a natural progression.

As such, information about an entrepreneurial firm’s identity that is presented within a narrative format can help entrepreneurs overcome the two key challenges that hinder external resource acquisition: information asymmetry and uncertainty (cf. Shane, 2003: 165). More specifically, by packaging information about a firm’s existing resource endowments into an appealing format, narratives can help decrease information asymmetry between prospective investors and entrepreneurs regarding the latter’s ability to exploit identified opportunities. In turn, this should make it easier for potential resource providers to evaluate the likelihood that the entrepreneurs will be able to realize the profit potential of their proposed initiatives, thereby also reducing perceived uncertainty. Identities that are effectively constructed and conveyed within entrepreneurial narratives can thus facilitate resource acquisition.

Qualitative analysis, findings, and emergent hypothesis. Our qualitative analysis offers rich descriptive insights into how the entrepreneurial firms in our sample constructed their identities through the narratives in their IPO prospectuses. One of our first observations was that these entrepreneurial narratives did, in fact, encode specific information about firms’ existing stocks of tangible

and intangible capital within themselves, thereby providing signals of the ventures' quality (as emphasized by Lounsbury and Glynn [2001]). The excerpts from the semiconductor company presented in Table 1, for example, draw attention to the company's affiliations with high-status third parties ("We have established close working relationships with leading compound semiconductor manufacturers"), track record ("We have a history of innovations"), and intellectual capital ("We also intend to expand our intellectual property portfolio").

We also noticed that the prospectuses appeared to construct and convey a common set of overarching identities for the entrepreneurial firms. To explore this impression more systematically, we conducted a latent content analysis—that is, "an interpretive reading of the symbolism underlying the physical data [of a text]" in which we focused on the "deep structural meaning conveyed by the message" (Berg, 2004: 269). To do this, one of the authors carefully read the business section of each prospectus in its entirety, noting the essence of the narrative's story line and underlying "pitch" to the intended audience of potential investors. The second and third authors then examined these notes, looking for common story lines and underlying pitches. Convergence was attained quickly, resulting in six latent identity constructions. We then classified each narrative into one of these six categories, using the forced-choice method adopted by Suddaby and Greenwood (2005). This step was completed by two independent coders: an author and a student majoring in finance who was familiar with IPO prospectuses and trained on the coding protocol we used. The initial level of interrater agreement was 79 percent; we discuss the reason for this percentage below. Table 2 summarizes the results of the identity construction classification.

As indicated in Table 2, a sizeable proportion of the entrepreneurial firms (29 percent) portrayed themselves as *established leaders*. These firms' prospectuses touted them as the original pioneers and current leaders of an industry and thus as "safe bets" for potential investors. An even higher proportion (40 percent) were portrayed as *aspiring leaders*, but their narratives differed in noticeable ways: some emphasized a firm's track record (6 percent); others focused primarily on the firm's strategic plans (11 percent); and the remainder stressed its social ties (23 percent). A much smaller proportion of the entrepreneurial firms' prospectuses (9 percent) portrayed the firms as *potential contenders*—that is, as innovators on the brink of commercialization. The representation of these firms as potentially lucrative "long shots" for potential investors came closest to reflecting the

premise that "emerging organizations are elaborate fictions of proposed possible future states of existence" (Gartner, Bird, & Starr, 1992: 17). An even smaller proportion of the firms (1 percent) were portrayed in almost the converse manner, as *potential noncontenders* that would likely cease to exist if outside investors did not rescue them. In sum, these identity constructions not only conveyed signals about a firm's market leadership position (as noted by Santos and Eisenhardt [2004]), but also conveyed varying degrees of credibility (as implied by Lounsbury and Glynn [2001]), with the established leaders and potential noncontenders appearing most and least credible, respectively.

The remaining entrepreneurial firms (21 percent) appeared to possess *ambiguous* identity constructions. These were the cases in which the categories assigned by the two independent coders did not match. We considered them to be ambiguous because, when the coders met to discuss their decisions, it became apparent that the discrepancies weren't attributable to misapplications of the coding protocol, but rather to ambiguity within the narratives themselves. That is, each of the coders could see how the narrative could be classified into the category assigned by the other. Although it is possible that the ambiguity was unintentional in most instances, it is also plausible that some of these narratives were deliberately crafted in this manner. Research on ambiguity in organizations has shown that ambiguously presented information can have a more favorable impact on recipients than explicitly and unambiguously presented negative information (Eisenberg, 1984). It is possible that the ambiguity inherent in some of the entrepreneurial narratives was deliberately used to conceal a less-than-appealing entrepreneurial firm identity. Such an interpretation seems consistent with Lounsbury and Glynn's intriguing speculation that "entrepreneurial accounts about their stock of capital may be inaccurate or even intentionally misleading" (2001: 561; see also Santos & Eisenhardt, 2004).

Following on the above point, another impression that we formed upon reading the IPO narratives was that the information provided about an entrepreneurial firm's existing resource endowments seemed to be selectively presented so as to convey a *certain* identity for it. In some instances, for example, the narratives contained phrases suggesting that a firm was an established leader even though, in our opinion, insufficient factual information was presented to support such a claim. A comparison of the characteristics of Axcelis, as presented in Table 3, with those of Integrated Circuits illustrates this observation. Their IPO prospectuses

TABLE 2
Identity Constructions Evident in the IPO Firms' Entrepreneurial Narratives^a

Identity	Latent Coding Protocol	Illustrative Excerpts
<p><i>Established leader</i></p> <p>29 percent of sample</p>	<p><i>Essence of story line:</i> We were a pioneer in this industry, are currently one of the industry leaders, and want to become <i>the</i> leader (or enhance our number one position) in the future. We intend to achieve this goal primarily by refining what we've done before.</p> <p><i>Underlying pitch to investors:</i> Bet on something tried and true.</p>	<p>Our Web site, Bolt.com, is a leading online destination that targets 15 to 20 year old teens. According to our database, our member base has grown to more than 1.9 million. . . . According to Nielson I/PRO, we had over 196 million page views and over 6.6 million user sessions in January 2000. . . . Our goal is to be the leading media company focusing on teens. . . . We believe that continuing to build brand awareness for our site is critical. . . . We will continue to develop our content, community and e-commerce product offerings . . . we plan to launch localized versions of our Web site.</p> <p>Source: IPO prospectus for Bolt.com</p>
<p><i>Aspiring leader with track record</i></p> <p>6 percent of sample</p>	<p><i>Essence of story line:</i> We have developed an innovation and want to become a leader (if not <i>the</i> leader) in this industry. As you can see from these numbers, we've been very successful with our first product. We want to repeat our success by launching new products.</p> <p><i>Underlying pitch to investors:</i> Be a part of replicating our initial success.</p>	<p>We design semiconductor devices. . . . We currently operate 19 design centers throughout the United States and Canada. . . . We have been profitable every year since 1991. . . . Our goal is to become the leading independent provider of electronic design services. . . . We leverage our 19 design centers to recruit engineers from diverse locations. We employ seven full-time professional recruiters who maintain long-term relationships within the industry. . . . We have acquired three businesses since May 1998.</p> <p>Source: IPO prospectus for Intrinsix Corp.</p>
<p><i>Aspiring leader with logical plans</i></p> <p>11 percent of sample</p>	<p><i>Essence of story line:</i> We have developed an innovation and want to become a leader in this industry. As you can see, we have solid, sensible plans in place to achieve this goal.</p> <p><i>Underlying pitch to investors:</i> Back an up-and-coming player with solid ideas.</p>	<p>We believe that by responding to current industry trends, we can become a premier marketer of health care products for midlife women. . . . To achieve this goal, we intend to . . . reach our target market of 57 million midlife women through our sales and marketing program to OB/GYN practices and our direct-to-consumer marketing program. . . . We enhance our sales and marketing efforts through our . . . toll-free telephone service staffed with nursing professionals. . . . We continue to engage in discussions with major pharmaceutical companies to license [products].</p> <p>Source: Women First Healthcare Inc.</p>
<p><i>Aspiring leader with social ties</i></p> <p>23 percent of sample</p>	<p><i>Essence of story line:</i> We have developed an innovation and want to become a leader in this industry. We have great ideas and big dreams—but they're not too crazy. As you can see, we've already be able to convince some of the "big guys" that we're credible.</p> <p><i>Underlying pitch to investors:</i> Take a chance on the new kid on the block—others have.</p>	<p>The company has developed a proprietary technology. . . . The Company has recently established collaborative arrangements with Pfizer Inc. ("Pfizer"), Schering-Plough Research Institute ("Schering-Plough") and Genentech, Inc. ("Genentech"). . . . The Company's objective is to be a leader. . . . Abgenix intends to collaborate with leading academic researchers . . . [and] to generate short and long term revenues by entering into multiple collaborations with pharmaceutical and biotechnology companies. . . . In the former, including the Company's existing collaborations with Pfizer, Schering-Plough, and Cell Genesys.</p> <p>Source: IPO prospectus for Abgenix</p>

Continued

TABLE 2
Continued

Identity	Latent Coding Protocol	Illustrative Excerpts
<i>Potential contender</i> 9 percent of sample	<p><i>Essence of story line:</i> We're on the brink of commercialization. We have developed an innovative product or process. We're just awaiting regulatory approval and/or seed capital. In the meantime, we'll keep innovating and planning.</p> <p><i>Underlying pitch to investors:</i> Why not take a risk on a long-shot?</p>	<p>We are a development stage company having launched the quepasa.com Web site in November 1998 and have not yet generated significant revenue. . . . We believe that a branded, multi-featured, Spanish-language Internet community that focuses primarily on the needs of the Spanish-language market would be uniquely positioned to capitalize on the growth of this market segment. . . . The basis of our strategy is to provide Spanish-language Internet users with an innovative, technologically-advanced, content-rich Web community.</p> <p>Source: IPO prospectus for Quepasa.com</p>
<i>Potential noncontender</i> 1 percent of sample	<p><i>Essence of story line:</i> We are innovative and have a lot of potential. Unfortunately, we are running into some problems; fortunately, we have some potential solutions in mind. Things aren't as bad as they might seem (the between-the-lines story, though, is that the company needs to be rescued).</p> <p><i>Underlying pitch to investors:</i> Help save us!</p>	<p>We are now applying our mixed-signal and communications expertise to the development of innovative ICs. . . . We have no long-term purchase commitments from any of our customers. In addition, PC-Tel is qualifying a second source for the ICs that we currently sell to it and we are currently in litigation with 3Com, which could result in decreased sales of our products to either or both of these customers</p> <p>Source: IPO prospectus for Silicon Laboratories</p>

^a The remaining 21 percent were coded as having *ambiguous* identity constructions (see the rationale provided in the body of the article).

TABLE 3
Comparing the Identity Constructions and Resource Stocks of Selected IPO Firms in the Semiconductor Industry^a

Variable	Axcelis Technologies	Integrated Circuits	Intrinsic Corp.	RF Micro Devices	ZiLOG Inc.
Identity conveyed within IPO narrative	Established leader	Established leader	Aspiring leader with track record	Aspiring leader with social ties	Ambiguous
Resource factor score ^b	3.80	0.30	0.14	0.07	2.00
Specific resource stock facts	Revenues = \$397.3M Patents ^c = 782 TMT tenure = 98 years Strategic alliances = yes	Revenues = \$139.1M Patents = 7 TMT tenure = 54 years Strategic alliances = yes	Revenues = \$30.7M Patents = 0 TMT tenure = 60 years Strategic alliances = yes	Revenues = \$9.5M Patents = 3 TMT tenure = 66 years Strategic alliances = yes	Revenues = \$245.1M Patents = 175 TMT tenure = 116 years Strategic alliances = yes
Other facts about firm	Age = 5 years Employees = 1,787	Age = 24 years Employees = 259	Age = 15 years Employees = 235	Age = 6 years Employees = 112	Age = 26 years Employees = 1,377

^a Information on a firm's resource stock and other facts came from the pro forma tables presented in its IPO prospectus, verified by its 424B form.

^b The factor score was derived from a principal components analysis of the specific resource stock facts, with a forced single factor and varimax rotation (\bar{x} = 0.00, min. = -2.30, max. = 3.82).

^c Patents owned and pending.

portrayed both of these semiconductor firms as established leaders, yet they differed considerably in actual resource stocks. Axcelis had the highest overall resource factor score in our sample, whereas Integrated Circuits had only an average score.¹ Moreover, Integrated Circuits' score was close to that for Intrinsic, which portrayed itself as an aspiring leader rather than as an established leader. Thus, it seemed to us that some firms were being represented somewhat inauthentically—as something more than they were in reality.

In other instances, we noted that the IPO narratives emphasized certain facts while downplaying or virtually suppressing others, thereby conveying a particular identity for a firm (e.g., an aspiring leader with a track record) when another could have justifiably been portrayed (e.g., an aspiring leader with social ties). A comparison of Intrinsic and RF Micro Devices in Table 3 illustrates this impression. Both of these firms had similar overall resource factor scores and comparable constituent stocks of tangible and intangible capital. Yet the narrative for Intrinsic emphasized its track record, whereas that for RF Micro Devices emphasized its ties to other organizations. Thus, the identities conveyed for these two firms were noticeably different—even though their resource stocks were very similar.

We also noted that some narratives conveyed a less credible identity for an entrepreneurial firm than that suggested by other sources of information about its resource endowments. Firm E (ZiLOG), for example, possessed a very high overall resource factor score and specific resource stocks comparable to those of Axcelis. Yet ZiLOG's IPO prospectus represented the firm's identity in an ambiguous manner, whereas Axcelis was represented as an established leader. Thus, it seemed to us that some prospectuses did not portray their focal firms in the most adept manner possible.

To further explore the relationship between firms' extant resources and the identities portrayed in their entrepreneurial narratives, we cross-tabulated each firm's resource factor score (coded as "low," "moderate," or "high") with its identity construction (coded as "an established leader" or "not an established leader"). Although firms with low

resource factor scores were much less likely than those with high resource factor scores to portray themselves as established leaders, two of the low-resource firms (9 percent) were described in this manner. Moreover, almost equivalent proportions of the high-resource firms (36 percent) and the moderate-resource firms (31 percent) possessed established-leader identity constructions. Thus, the resultant chi-square value for the cross-tabulation was only marginally significant ($\chi^2 = 5.43, p = .07$). This additional analysis provides further evidence to suggest that entrepreneurial storytellers have at least some latitude when it comes to "re-presenting" the facts about their extant capital stocks.

In sum, then, the qualitative findings presented thus far reveal that the narratives told within IPO prospectuses constitute more than just lists or chronologies of factual information about an entrepreneurial firm's existing resource endowments. Rather, the authors of such documents, like storytellers more generally, appear to have at least some freedom to "mould material for effect . . . while [claiming] to be representing reality" (Gabriel, 2004: 64). This observation is noteworthy given that IPO prospectuses are legal documents that are supposed to contain truthful and complete information (Lowry & Shu, 2002). The question, however, is whether the identities that prospectuses convey influence potential resource providers when the effects of the factual information about stocks of capital that the providers could attain elsewhere are controlled for. Drawing on the work of organizational narrative scholars summarized at the outset of this section, we hypothesize that identity constructions will have an additive effect:

Hypothesis 1. The identity constructed for a firm in an entrepreneurial narrative has an influence on resource acquisition that is net of the influence of factual information about the firm's existing resource endowments.

Making Sense of Proposed Means of Exploiting Identified Opportunities

Theoretical arguments. Thus far, we have focused on narratives as a powerful means to convey an entrepreneurial firm's identity (i.e., what the firm *is*). But narratives are also an effective means of communicating an entrepreneurial firm's actions (i.e., what it is *doing* or *will do*—its *current or intended actions*). As with identity, however, a potential investor's assessment of an entrepreneurial firm's intended actions is likely to be fraught with information asymmetry and uncertainty. This is because resource providers typically possess less

¹ We derived firms' resource factor scores from a principal components analysis (with a forced single factor and varimax rotation) of four resource stock facts: (1) logged prior revenues (in US\$ millions), (2) total number of patents owned and pending, (3) total years of industry tenure for the top management team, and (4) the existence of any strategic alliances.

knowledge than entrepreneurs about the potential value of proposed entrepreneurial initiatives, the profitability of which is fundamentally unknown (Shane, 2003: 165). We suggest that effectively crafted narratives can help firms overcome these additional resource acquisition challenges.

Our starting point here is that narratives represent an excellent forum through which entrepreneurs can articulate why their proposed means of exploiting identified opportunities are sensible, given the circumstances faced by their firms. Narrative theorists suggest that stories, in general, are a fundamental tool by which humans make sense of ambiguous situations and communicate their insights to others (Bruner, 1986; Gioia & Chittipeddi, 1995; O'Connor, 2004; Weick, 1995). Stories act as sense-making and sense-giving devices by linking causes and effects, both within and between different parts of the narratives (Gabriel, 2004). As such, they are often used to explain a social entity's actions (past, present, or future), making those actions appear justified and/or plausible within a given context (Barry & Elmes, 1997; Smith & Anderson, 2004).

Referring to organizational actions more specifically, Shaw and colleagues (1998) argued that strategic plans presented in a narrative format create a richer picture for audience members. A narrative logic "forces to the surface the writer's buried assumptions about cause and effect" (Shaw et al., 1998: 46). Thus, stories allow for the author's "thinking about the relationships between concepts to come through," which enables readers to more easily grasp the connections contributing to the writer's insight (Shaw et al., 1998: 47). When such thought processes are made explicit, they can be held up against the reader's own mental models, thereby placing "audience members in a better position to evaluate the plan critically" (Shaw et al., 1998: 47). If the resulting critical assessment is positive, audience members will be more receptive to the proposed initiatives.

Likewise, narratives have been touted as an ideal forum through which entrepreneurs can explicate their "personal theories of managerial action" (Porac et al., 2002: 117), thereby providing "a rationale for the arguably irrational risks of enterprising" (Smith & Anderson, 2004: 127). If understood and accepted by potential resource providers, the theories or rationales presented in an entrepreneurial narrative can decrease information asymmetry, thereby facilitating resource acquisition. To be even more effective as a resource acquisition tool, however, these theories or rationales must also reduce uncertainty. One way of doing so is to "frame risk in a way that is more acceptable to investors"

(Shane, 2003: 185; see also Bhidé, 2000; Roberts, 1991). This can be accomplished by elaborating how the proposed means of exploiting identified opportunities help *attenuate* the risks that an entrepreneurial firm is facing. As illustrated below, however, the content of entrepreneurial narratives can vary considerably in this regard—even when such explanations are a mandated component, as is the case for the accounts presented within IPO prospectuses (Beatty & Welch, 1996; Lowry & Shu, 2002).

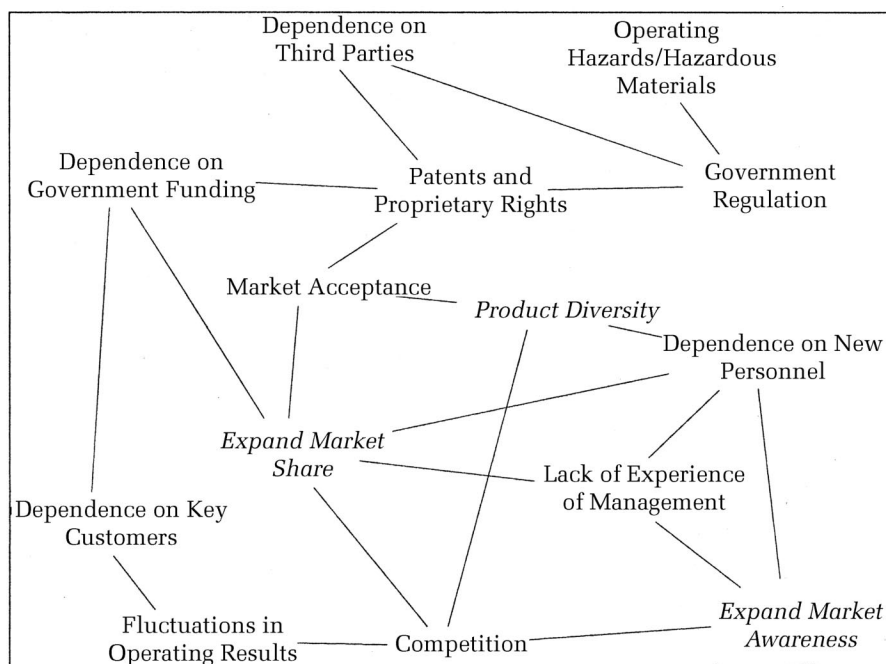
Qualitative analysis, findings, and emergent hypothesis. Upon reading the rationales provided for the IPO firms' intended strategic actions, we were struck by the variation among the prospectuses. Some elaborated numerous, often interrelated, ways in which a firm's proposed means of exploiting identified opportunities would reduce the risks that it was facing, yet others offered only a few such causal connections. To explore this impression more systematically, we created a "story map" for each prospectus, examples of which appear in Figure 1. As illustrated, each map represents a network-like array of the risks and intended strategic actions listed in a prospectus. Each risk and strategy is a node, and each pair of nodes is connected if the proposed strategy was explicitly described as a means of attenuating an identified risk factor.

To identify the risks and strategies, we conducted a manifest content analysis. In contrast to the latent content analysis described earlier, this component of our qualitative analysis involved coding "those elements that are physically present and countable [in a text]" (Berg, 2004: 269). In our case, the focal elements were the intended strategic actions identified by the headers in the strategy section of a prospectus as well as the identified risk factors listed in the risk factor section. For each prospectus, two research assistants separately coded each intended strategic action into 1 of 17 categories, such as "product diversity strategy" or "technological leadership," and each identified risk factor into 1 of 76 categories, such as "dependence on a key supplier" or "lengthy sales cycle" (for a more detailed description of the typology developed to code the risk-strategy maps, see Martens [2002]). Initial interrater agreement was very high—95 percent for the strategic actions and 86 percent for the risk factors—and the remaining differences were discussed until complete agreement was reached. The two coders then identified the links among the risk-strategy nodes; once a consensus had been reached, they constructed a story map using Decision Explorer (Banxia Software, 2001).

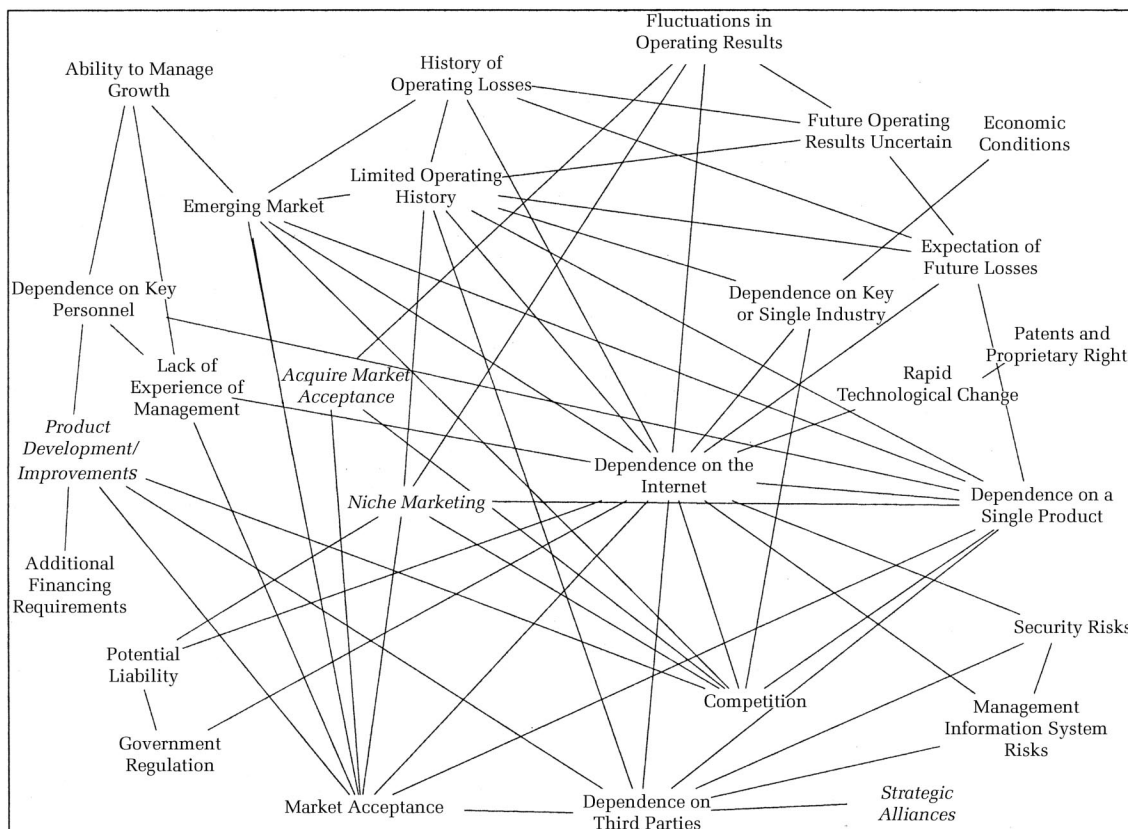
The two story maps presented in Figure 1 differ

FIGURE 1
Capturing the Degree of Elaboration Evident in Entrepreneurial Narratives: Illustrative Story Maps
Linking Intended Strategic Actions with Identified Risk Factors^a

Commonwealth Biotechnologies



Go2Net



^a Intended strategic actions are in italic; identified risk factors are in regular type.

markedly in the density of their risk-strategy links, and hence in the degree to which the entrepreneurial narratives elaborated how the proposed initiatives would attenuate the risks the firms were facing. As illustrated, the story map for the firm Go2Net is considerably denser, containing 103 links in comparison to Commonwealth Biotechnologies' 27. Looking at the density of Go2Net's story map, however, we wonder if such an elaborate narrative might be too complex for readers to follow. Although some degree of elaboration is undoubtedly necessary for potential investors to comprehend an entrepreneurial firm's proposed initiatives and deem them sensible, it is also likely that explicating a very large number of risk-strategy links will confuse investors about the firm's direction and cause them to question the entrepreneurs' understanding of core success factors—which would heighten rather than reduce the investors' skepticism. This scenario seems especially plausible, given that one of the key objectives of narratives about entrepreneurial firms is to “simplify the complex” (Smith & Anderson, 2004: 130; see also Aldrich & Fiol, 1994: 651).

Such reasoning is consistent with research on the psychology of persuasion. According to both the heuristic-systematic model (Chaiken, 1980) and the elaboration likelihood model (Petty & Wegener, 1999), people tend to focus on the central features of a message—such as the strength of the argument—when their capacity and motivation to process information is high. These conditions are likely to exist for readers of IPO prospectuses, most of whom are institutional investors who are potentially committing substantial resources to an entrepreneurial venture (Bhabra & Pettway, 2003; Ljungqvist & Wilhelm, 2002). Under such conditions, the prediction based on the heuristic-systematic and elaboration likelihood models is that readers will attend closely to the merits of the argument being presented; such conditions, however, also provoke readers to find faults in the argument's logic and to give those faults more weight (Killea & Johnson, 1998; Rucker & Petty, 2006). As a result, “stronger claims may . . . encourage unwanted counterarguments” and thus backfire, leading to negative attitudes and behaviors (Cline & Kellaris, 1999: 72). Falbe and Yukl (1992), for example, demonstrated that rational persuasion (i.e., providing logical arguments) is as likely to generate resistance to an influence attempt as it is likely to foster compliance or commitment. Moreover, Elsbach and Eloffson (2000) showed that difficult-to-understand rationales, in particular, lower assessments of a “sender's” trustworthiness, which may decrease willingness to comply. In light of the extant theory

and research on the psychology of persuasion, we therefore hypothesize:

Hypothesis 2. Elaborating the rationale behind a firm's intended actions in an entrepreneurial narrative has a positive, but diminishing, effect on the firm's resource acquisition ability.

Generating Interest and Commitment through Contextual Embedding

Theoretical arguments. In addition to conveying comprehensible identities for entrepreneurial firms and sensible rationales for their proposed initiatives, effectively constructed entrepreneurial narratives must also pique the interest of potential resource providers. As Smith and Anderson put it, stories about entrepreneurial firms aren't meant just to “legitimize entrepreneurial actions”; they are also meant to “provoke us, challenge us, and transform us” (2004: 131). In other words, influential entrepreneurial narratives answer the proverbial “So what?” question effectively. Similarly, organizational narrative scholars argue that successful stories don't just inform readers; they generate interest and commitment, thereby motivating audience members to act in a manner consistent with the author's intended outcomes (Shaw et al., 1998; see also Boje, Oswick, & Ford, 2004; Rindova, Bercera, & Contardo, 2004). To generate interest and commitment, narratives must resonate with their intended audiences (Hardy, Palmer, & Phillips, 2000; Hjorth & Steyaert, 2004; Lounsbury & Glynn, 2001). A primary means by which storytellers achieve resonance is by attending closely to the sociocultural context in which they are crafting their stories (Barry & Elmes, 1997). Being embedded in a larger discursive context gives a story greater meaning for the individuals to whom it is directed (Hardy et al., 2000). Likewise, cultural entrepreneurship scholars suggest that the stories told by entrepreneurs need to invoke symbolic devices that connect their ideas to “pre-existing, ongoing and encompassing conversations” (O'Connor, 2004: 105), thereby “anchor[ing] their reality in context” (Smith & Anderson, 2004: 128; see also Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; Suddaby & Greenwood, 2005).

The challenge for storytellers is to ensure that their narratives are appropriately positioned vis-à-vis established cultural accounts. To accomplish this, effective narrativists borrow *familiar* symbols, so that their stories are understandable within a given discursive context and deliver verisimilitude—yet they also invoke *original* symbols, so that their stories stand out from others and deliver a

different way of viewing the established order (Barry & Elmes, 1997; Gabriel, 2004; Hardy et al., 2000). Effective entrepreneurial storytellers are likely to do the same, incorporating both familiar and unfamiliar contextual elements into their narratives, so that their proposed endeavors appear less risky yet also highly intriguing.

Qualitative analysis, findings, and emergent hypothesis. Our qualitative analysis offers descriptive insights into how entrepreneurial storytellers embed both contextually familiar and contextually unfamiliar elements within their narratives. In reading the IPO prospectuses and creating the story maps described earlier, we noticed that pursuing a mix of common and less common strategic initiatives was frequently portrayed as an intention. To explore this impression more systematically, we compared the strategies articulated in a focal entrepreneurial narrative against the entire set of strategies mentioned in all prospectuses issued by firms in the same industry during the 12 months prior to our analysis. Table 4 contains illustrative data.

As indicated in Table 4, the prospectus for Applied Micro Circuits stated the intention of pursuing four strategic initiatives, two of which (“niche marketing” and “technological leadership”) were commonly articulated by other semiconductor firms that had recently issued IPOs, and two of which (“leverage client base” and “product devel-

opment”) were infrequently articulated by the others. In contrast, Commonwealth Biotechnologies claimed to be pursuing only one strategy frequently mentioned in the biotech industry at the time of its IPO (“product diversity”) and two rarely mentioned initiatives (“build market awareness” and “expand market share”). The Internet content provider Go2Net was more like the semiconductor firm Applied Micro Circuits, claiming intent to pursue a more balanced combination of commonly articulated strategies (“niche marketing” and “strategic alliances”) and less frequently mentioned ones (“acquiring market acceptance” and “product development”).

These qualitative findings suggest that the entrepreneurial firms in our sample tended to be described as pursuing a mix of strategies that were either widely articulated or infrequently articulated by others within their various industries. As a result, their entrepreneurial narratives appeared to incorporate both familiar symbols from the broader contextual discourse and unfamiliar symbols that would likely appear distinctive within the encompassing industry-level conversation. Although it is likely that the storytellers unwittingly invoked these two forms of contextual embedding, it is also plausible that some of the narratives were deliberately crafted to contain both familiar and unfamiliar elements. As Aldrich and Fiol surmised, “En-

TABLE 4
Embedding Familiar and Unfamiliar Elements from Broader Contextual Discourses: Illustrative Examples of Strategies Commonly and Infrequently Articulated in the IPO Prospectuses^a

Intended Strategic Action	Percentage of Prior Semiconductor IPOs with Strategy	In prospectus for Applied Micro Circuits	Percentage of Prior Biotechnology IPOs with Strategy	In prospectus for Commonwealth Biotechnologies	Percentage of Prior Internet IPOs with Strategy	In prospectus for Go2Net
1. Build market awareness	8		8	Yes	80	
2. Leverage client base	31	Yes	0		0	
3. Customer service	54		15		40	
4. Expand market share	15		15	Yes	40	
5. Human resource strategy	0		8		20	
6. International expansion	15		0		60	
7. Acquire market acceptance	8		0		0	Yes
8. Low-cost leadership	23		8		0	
9. Market leadership	8		8		0	
10. Niche market focus	69	Yes	62		80	Yes
11. Product diversification	15		62	Yes	0	
12. Product development	31	Yes	62		40	Yes
13. Revenue stream diversification	38		8		40	
14. Strategic acquisitions	8		23		20	
15. Strategic alliances	54		46		60	Yes
16. Technological leadership	92	Yes	31		0	
17. Technological protection	0		8		0	

^a Strategies were deemed to be commonly articulated in the broader contextual discourse if they appeared in more than 50 percentage of an industry's prior IPO prospectuses; otherwise, they were deemed to be infrequently articulated.

trepreneurs need to disguise the truly radical nature of their new activity and the challenge it may pose to established organizations, while simultaneously making a case that they are different enough to hold a comparative advantage" (1994: 652). This conjecture accords with the more general principle of optimal distinctiveness, according to which individuals are most comfortable with social representations that balance needs for similarity and uniqueness (Brewer, 1991).

We wonder, however, about the effectiveness of entrepreneurial narratives that combine a *very large number* of both commonly articulated and infrequently articulated strategic initiatives within them. Social cognition research indicates that when an unknown entity is depicted in a way that taps many categories of social identification, evaluators are likely to experience "recognition confusion" (Brewer, Weber, & Carini, 1995). This cognitive burden is particularly pronounced when an evaluator has no prior experience with the social categories being tapped (Chen & Chaiken, 1999), as would be the case for prospective investors reading an entrepreneurial narrative containing a large number of unfamiliar strategic initiatives. Under such conditions, research has shown that individuals tend to exhibit more discrepant assessments of the entity under evaluation (Brewer & Feinstein, 1999). As such, although it is possible that some potential resource providers may respond positively to an entrepreneurial narrative containing a large number of familiar and unfamiliar strategies, it is also plausible that others will react negatively to such accounts. The implication, then, is:

Hypothesis 3. Embedding both contextually familiar and contextually unfamiliar elements in an entrepreneurial narrative has a positive, but diminishing, effect on resource acquisition ability.

THE EFFECTIVENESS OF NARRATIVES AS A RESOURCE ACQUISITION TOOL: QUANTITATIVE METHODS AND FINDINGS

Data

Our sample for testing the above hypotheses consisted of the entire population of 169 semiconductor, biotechnology, and Internet content provider firms that filed an intent to issue an IPO on the NYSE, NASDAQ, or AMEX stock exchanges between mid 1996 and the fall of 2000, as recorded in the Electronic Data Gathering, Analysis, and Retrieval system (EDGAR) in the U.S. Securities and

Exchange Commission Web site.² One firm, ASE Semiconductors, was eliminated from our analyses because of its extreme size. Eighteen firms were eliminated from some analyses because they withdrew from the IPO process after filing their intent to go public. Checks revealed that these firms did not differ significantly from those that completed the IPO process in terms of both their existing resource stocks and the nature of their entrepreneurial narratives. Moreover, the inclusion of the withdrawn firms in our analyses of preliminary resource acquisition revealed a pattern of effects similar to those for the issuing firms. Thus, our "surviving" group of IPO firms did not appear to be systematically biased.

Dependent Variables

In our analyses, we utilized three dependent variables to capture a firm's ability to acquire externally provided capital at different stages of the IPO process and its overall effectiveness in doing so. The first was the *issue valuation premium*, calculated as the difference between the pre-IPO book value per share and the IPO issue price, multiplied by the number of shares issued to subscribers, all transformed to logarithms (Stuart et al., 1999). This variable captured the net dollars raised by an IPO firm that it could directly use as its own capital. Similar variables, especially issue price premium adjusted for share numbers, have been used to measure the value added by entrepreneurs at this stage (Nelson, 2003; Rasheed, Datta, & Chinta, 1997; Welbourne & Andrews, 1996). Data on the pre-IPO book value, issue pricing, and shares issued were obtained from the Securities Data Corporation database and verified by the 424B filing on EDGAR.

Our second dependent variable was the *retail market valuation premium*, which was calculated as the difference between the first-day market closing price and the IPO issue price, multiplied by the number of shares outstanding, all logged. This variable captured the net change in a firm's valuation at the end of first-day trading relative to its IPO issue price. Although a firm does not have direct access to these resources, this dependent variable was useful for two reasons. First, it should have been sensitive to the stories told about firms because the broader market uses IPO prospectuses, along with other information sources, to assess candidates for investment purposes (Bhabra & Pettway, 2003). Second, this variable might have captured some of

² <http://www.sec.gov/edgar/searchedgar/companysearch.html>.

the value added by the stories that the entrepreneurial ventures should have earned but did not, owing to underpricing (Loughran & Ritter, 2004; Pollock & Rindova, 2003; Tiniç, 1988).

Our third dependent variable, *total valuation premium*, was calculated as the difference between a firm's first-day stock closing price and its book value prior to its IPO, multiplied by the total number of shares outstanding, all logged. This variable captured the total change in stock value from the time of the "road show" (see Martens [2004] for a detailed explanation of IPO road shows) through the end of the first day of market trading; investors often refer to this value as "total valuation." The total valuation premium was not simply a linear combination of the issue and retail market valuation premiums, however. For any given firm, there may be a positive or negative trade-off between these components of total valuation (Loughran & Ritter, 2004). We therefore considered it prudent to examine the total valuation premium in order to assess the full impact of entrepreneurial narratives on resource acquisition at IPO.

We recognize that finance scholars are generally more interested in the change in a firm's market value as represented by price differentials for shares—particularly underpricing (Loughran & Ritter, 2004; Tiniç, 1988). Although our variables incorporated price and share differentials simultaneously, we ran separate models for underpricing and shares sold on the first day of trading. As indicated in the supplementary table presented in Appendix A, these variables were both sensitive to entrepreneurial narratives, with underpricing being slightly more so. In addition, our supplemental analyses showed that the pattern of narratives' effects on underpricing was quite similar to that for the total valuation premium. Nevertheless, given that our central theoretical outcome of interest was the *resources* acquired during the IPO process, and not the increase in firm value, we thought it was more appropriate to use various forms of net valuation, rather than underpricing, in the analyses reported below.

Independent Variables

Type of identity constructed for an entrepreneurial firm. All of the entrepreneurial narratives were classified into one of the seven identity constructions presented in Table 2: (1) established leader, (2) aspiring leader with track record, (3) aspiring leader with logical plans, (4) aspiring leader with social ties, (5) potential contender, (6) potential noncontender, and (7) ambiguous identity. We then dummy-coded these categories, com-

binning the potential contender and the potential noncontender categories as the omitted baseline in the analyses. These omitted categories contained a much smaller proportion of the narratives than the others and seemed relatively less likely to attenuate investor uncertainty and skepticism.

Degree of elaboration evident in the rationales for intended initiatives. To calculate this measure, we first transformed each firm's story map into a 93×93 symmetric matrix. This matrix contained values of either 1 or 0, depending on whether or not a link existed between a particular risk-strategy pair. Theoretically, each firm in any time period could have experienced the 76 risks and most of the 17 strategies used in the study, because these risks are well established through case law (MacCrimmon & Martens, 2001) and many of the strategies, though not used routinely in each industry of interest here, were based on standard corporate or business-level forms of strategy (Porter, 1980). Ignoring directionality (Bonacich & Lloyd, 2001), we summed all links in the lower half of the matrix, excluding the diagonal, to create an overall measure of the *elaboration* evident in the rationales provided for an entrepreneurial firm's intended initiatives. Similar measures have been used to capture the complexity of knowledge structures more generally (Fransella & Bannister, 1977; Spender & Eden, 1998).

Use of familiar and unfamiliar symbols from broader contextual discourses. To code the degree to which familiar contextual symbols were invoked in an entrepreneurial narrative, we focused on the intended strategic actions articulated in a firm's prospectus that other IPO firms in the same industry commonly mentioned (as discussed for Table 4). We then calculated an overall measure of *familiarity* (F) as follows:

$$F_f = \sum_{s=1}^n P_s \text{ for } P_s > 0.50, \quad (1)$$

where P is the proportion of IPO firms in the same industry that had mentioned the same strategy (s) as focal firm f in their prospectuses during the previous year, and n is the number of strategies listed by more than 50 percent of the prior year's IPO firms in the industry.³ This cutoff point en-

³ In the case of the IPOs issued in the first year of our study's time frame ($n = 15$), for which the EDGAR database offered no prior IPO information from which to form a baseline referent, we used the cases in the 12 months after a focal IPO. The results obtained without these 15 cases included in the analyses were quite similar for

sured that familiar strategies were articulated in the majority of previous prospectuses circulated by IPO firms in an industry; as such, the strategies should have been recognizable to most readers.

Similarly, we calculated an overall measure of *unfamiliarity* (U) as follows:

$$U_f = \sum_{s=1}^n (1 - P_s) \text{ for } P_s \leq 0.50, \quad (2)$$

where P once again represents the proportion of IPO firms in the same industry that had listed the same strategy, s , as focal firm f in their prospectuses during the previous year. In the unfamiliarity measure, however, n is the number of strategies listed by 50 percent or less of the prior year's IPO firms in that industry. Thus, unfamiliar strategies were those articulated in the minority of previous prospectuses circulated by IPO firms in the industry; as such, these strategies should have been less recognizable to readers.

IPO prospectuses from the year prior to a focal firm's initial filing date were the referent for both measures because the familiarity and unfamiliarity of any particular narrative are essentially temporal (Barry & Elmes, 1997). That is, what is considered unfamiliar one year may well be familiar by the next. Moreover, investigations of the IPO process have shown that when authors craft IPO prospectuses, they typically rely on several well-known prospectuses that have recently circulated within a given industry (Bhabra & Pettway, 2003; Martens, 2004).

Control Variables

Three temporal and two heterogeneity controls were used in our analyses. First, we controlled for the different founding periods of the entrepreneurial ventures using *firm age*. Firms with longer track records are known to have a higher chance of IPO success (Chang, 2004; Stuart et al., 1999). Second, we controlled for *hot IPO time period*, which was measured by the number of IPOs issued within the same week as a focal firm's (Jenkinson & Ljungqvist, 2001). Third, we controlled for whether an IPO was issued before or during the "dot.bomb period" (*Economist*, 2000) which was coded 0 for any IPO issued before March 31, 2000, and 1 otherwise (Ritter & Welch, 2002). In the case of heterogeneity, we controlled for the level of *ex ante risk*

each firm appeared to face. This variable, a count of ten risk factor categories, captured the essence of firm-level risk (MacCrimmon & Martens, 2001; Welbourne & Andrews, 1996). Given that industry differences, even within the high-tech sector, are known to influence IPO success (Certo, Covin, Daily, & Dalton, 2001; Nelson, 2003; Stuart et al., 1999), we also included dummy variables for *industry*, with the most stable and mature industry (semiconductors) being the omitted category.

We also included a substantially different group of controls to capture the main alternative theoretical explanations, those outside our narrative perspective on resource acquisition. Our controls for the social tie approach included the average prestige of the underwriter group involved in an IPO, calculated with Loughran and Ritter's (2004) updated underwriter prestige measure, and the percentage of an IPO firm's top management team that was placed by venture capital firms (Higgins & Gulati, 2006). Our controls for the quality signaling approach included four commonly utilized variables capturing a firm's existing stock of tangible and intangible resources: (1) logged prior revenues (in US\$ millions), (2) total number of patents owned and pending, (3) total years of top management team industry tenure, and (4) existence of strategic alliances (e.g., Cohen & Dean, 2005; Das, Sen, & Sengupta 1998; Pollock & Rindova, 2003). To avoid potential common method bias, we took the data for these control variables from sections of the IPO prospectus that were *not used* for coding the narratives, such as the financial tables and management team section.

Methods of Analysis

As have other researchers examining IPO proceeds and pricing (e.g., Cohen & Dean, 2005; Lester, Certo, Dalton, Dalton, & Cannella, 2006; Tiniç, 1988), we used ordinary least squares (OLS) regression to assess the impact of the narrative constructs net of the controls. Our main concern in using OLS was with the autocorrelation that might exist in a sector-based sample over four years (Greene, 1993). Although we did not pool observations for the same firm over time, there was likely to be some serial correlation that could affect the residuals and error terms, thus biasing our estimates. Without the inclusion of the temporal controls described above, the Durbin-Watson values were sometimes in the grey range, between 1.75 and 1.90. With the inclusion of the controls, the majority of the values

most variables, if slightly weaker owing to reduction of observations.

were between 1.90 and 2.05, indicating low autocorrelation.⁴

Given the large number of resource-related variables in our analyses, a second concern was with multicollinearity. The correlation matrix presented in Appendix B indicates that the vast majority of the correlations were below .40. Although the squared elaboration term and the familiarity by unfamiliarity interaction terms are highly correlated with their constituent variables, this form of multicollinearity only influences the efficiency of a *t*-test (via inflated standard errors) and not the interpretation of the joint effects (Jaccard, Turrisi, & Wan, 1990). Thus, we were confident that autocorrelation and multicollinearity were not problematic for our analyses.

⁴ We also computed the number of months that had elapsed between 1996 and each IPO issue date, but the inclusion of this variable did not affect the Durbin-Watson statistic any more than our existing temporal controls; hence, it was not used in the final analyses.

Results

The effects of identity constructions. The first hypothesis derived from our qualitative findings is that the identity constructed for a firm within an entrepreneurial narrative has an influence on external resource providers that goes above and beyond the influence of other means by which they could obtain information about the firm's existing resource stock. Table 5 contains our quantitative findings. The first three models show the effects of specific facts about a firm's tangible and intangible capital without the identity narratives included. As predicted by the social tie and quality signaling perspectives, several of these indicators exerted a significant impact on a firm's ability to acquire additional capital. Moreover, the variance explained (R^2) for each model is significantly different from that for the baseline model containing only the temporal and heterogeneity controls. The second three models show the effects of the various identity constructions without the resource-related factors. In keeping with a narrative approach to

TABLE 5
Effects of Identity Constructions on Resource Acquisition at IPO^a

Variables	Issue	Market	Total	Issue	Market	Total	Issue	Market	Total
Firm age	0.00	-0.19	-0.02	0.01	-0.28	-0.01	0.00	-0.18	-0.01
Ex ante risk	0.01	-0.16	0.05	0.05	0.35	0.11	0.01	-0.09	0.06
Biotech industry	0.01	1.11	-0.06	-0.04	-0.02	-0.49*	0.07	2.03	-0.02
Internet industry	0.08	-1.75	0.22	-0.22	-5.40*	-0.33	0.06	-1.06	0.28
Hot IPO period	-0.02 [†]	-0.39**	-0.05***	-0.01	-0.26 [†]	-0.03 [†]	-0.02 [†]	-0.36*	-0.05***
Dot.bomb period	0.48**	3.53	0.96***	0.58**	3.76	1.10***	0.47**	3.36	0.96***
First-day underpricing	0.01			-0.01**			0.01		
Lead underwriter prestige	0.20***	0.69	0.37***				0.20***	0.54	0.37***
Percent TMT venture capitalist placed	0.04	14.64**	0.17				0.10	15.82**	0.25
Prior revenues	0.03	-0.04	0.05 [†]				0.03	-0.03	0.06 [†]
Number of patents	0.00	0.00	0.00				0.00	0.00	0.00
TMT industry tenure	0.00	0.10**	0.00				0.00	0.11***	0.00
Strategic alliances	-0.05	3.27	-0.57**				0.00	3.60	-0.53*
Identity: Established leader				0.45*	3.44	0.68*	-0.10	0.45	-0.28
Identity: Aspiring leader, track record				0.94**	6.69 [†]	1.36**	0.40 [†]	6.38	0.38
Identity: Aspiring leader, logical plans				0.33 [†]	3.56	0.42	0.08	1.35	-0.17
Identity: Aspiring leader, social ties				0.20	-1.10	0.13	-0.18	-4.04	-0.45 [†]
Identity: Ambiguous				0.47*	-3.68	0.24	0.01	-6.32*	-0.53*
<i>F</i>	5.99***	2.47**	11.28***	2.89***	1.86*	3.96***	4.69***	2.65***	8.81***
<i>R</i> ²	.37	.18	.50	.20	.13	.24	.39	.26	.53
Adjusted <i>R</i> ²	.31	.11	.46	.13	.06	.18	.31	.16	.47
Change in <i>R</i> ^{2b}	.23	.11	.36	.06	.06	.10	.02	.12	.03

^a "Issue" is the issue valuation premium; "market" is the retail market valuation premium; "total" is the total valuation premium. Values are unstandardized coefficients.

^b The change in R^2 for models 1–6 is relative to omitted models with only temporal and heterogeneity controls; for models 7–9, it is relative to models 1–3.

[†] $p \leq .10$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

One-tailed tests for directional constructs; two-tailed tests for control variables.

resource acquisition, several of these also exerted a significant impact on a firm's ability to obtain external capital. As revealed by the R^2 -values, each of these models is also significantly different from the baseline model of controls.

The final three models in Table 5 show the effects of the different identity narratives net of the resource-related controls. Although the changes in R^2 -values for these models are only marginally significant, several of the identity constructions continued to exert a significant impact on a firm's resource acquisition ability. Narratives that portrayed an entrepreneurial firm as an aspiring leader with a track record had a positive impact on the issue valuation premium. Conversely, narratives that portrayed an entrepreneurial firm as an aspiring leader with social ties had a *negative* impact on the total valuation premium. Interestingly, the strongest effects were for the ambiguous identity narratives, which, counter to existing research on organizational ambiguity (e.g., Eisenberg, 1984), exerted a negative effect on two of the three resource acquisition measures.

In sum, then, as predicted by Hypothesis 1, we found some evidence that the identity conveyed for an entrepreneurial firm within a narrative format *does* influence external resource providers above and beyond more purely factual information about the firm's resource stock. We note, however, that this was not the case for narratives portraying an entrepreneurial firm as an established leader, which had exerted positive effects without the resource-related controls. Similarly, we note that the positive impact of narratives portraying an entrepreneurial firm as an aspiring leader with a track record also decreased in strength when the resource-related controls were entered into the models. Supporting Lounsbury and Glynn's speculation, these two entrepreneurial stories in particular do not appear to be completely "independent from the stock of capital to which an entrepreneur has access" (2001: 561).

The effects of elaborating the rationales behind intended initiatives. According to the second hypothesis derived from our qualitative findings, returns to elaborate justifications of a firm's proposed means of exploiting entrepreneurial opportunities would be positive, but diminishing. Table 6 contains our quantitative results. The first three models report the findings when a linear term for elaboration was added to the full models from the previous table. This variable exerted a positive and significant effect on two of the three resource acquisition measures: issue and total valuation premiums.

To test the notion of diminishing returns, we

then added a squared elaboration term to each model. Because of the table's size, we do not report all three columns of estimates. The squared term was negative and statistically significant (at $p \leq .05$) in one of the models—that for total valuation premium—but not in the other two models. Thus, we found only marginal support for the argument about diminishing returns. Overall, then, Hypothesis 2 was partially supported. Although increasingly elaborate justifications of proposed entrepreneurial initiatives appear to facilitate the acquisition of externally provided resources, highly complex rationales sometimes hinder a firm's ability to influence potential investors.

The effects of embedding contextually familiar and unfamiliar symbols. The third hypothesis derived from our qualitative findings was that entrepreneurial narratives that embed contextually familiar *and* contextually unfamiliar elements within them will be more effective as a resource acquisition tool, but that such narratives will also experience diminishing effectiveness beyond a certain point. Our initial step for exploring this hypothesis involved examining the main effects of familiarity and unfamiliarity. As reported in models 4 through 6 of Table 6, we found that familiarity exerted a significant and positive impact on two of the three dependent variables (issue and total valuation premiums). Unfamiliarity exerted a positive effect on issue premiums, but not on the other two forms of resource acquisition. In unreported models in which each variable was entered separately, we found the same pattern of positive effects for familiarity but nonsignificant effects for unfamiliarity. These findings support the argument that familiar elements provide an essential contextual grounding for the successful inclusion of unfamiliar elements; in other words, effective entrepreneurial narratives "[place] stories about the exotic in a familiar context" (Smith & Anderson, 2004: 130).

To examine the notion of diminishing returns for very large numbers of familiar and unfamiliar elements, we added a familiarity by unfamiliarity interaction term, as reported in models 7 through 9 of Table 6. Although this term is negative in all three models, the coefficients were not significant. Thus, we did not find statistically defensible support for the argument that narratives containing high levels of both familiar and unfamiliar elements might lead some prospective investors to evaluate an entrepreneurial firm negatively, thereby decreasing their willingness to commit investment capital. Overall, then, Hypothesis 3 was only partially supported.

Relative effect sizes and substantive importance of the narrative constructs. Combined, the preceding analyses demonstrate that certain as-

TABLE 6
Effects of Elaboration and Use of Contextually Familiar and Unfamiliar
Symbols on Resource Acquisition at IPO^a

Variables	Issue	Market	Total	Issue	Market	Total	Issue	Market	Total
Firm age	0.00	-0.17	-0.01	0.01	-0.17	-0.01	8.31	-0.17	-0.01
Ex ante risk	-0.03	-0.38	0.02	-0.04	-0.48	0.01	0.01	-0.49	0.01
Biotech industry	0.07	1.90	-0.01	0.10	1.77	0.02	0.11	1.83	0.04
Internet industry	-0.07	-1.92	0.16	-0.22	-2.48	0.02	-0.23	-2.52	0.01
Hot IPO period	-0.02 [†]	-0.39**	-0.04***	-0.01	-0.38**	-0.04***	-0.01	-0.38**	-0.04***
Dot.bomb period	0.43*	2.29	0.91***	0.32 [†]	3.81	0.83***	0.31 [†]	3.75	0.81***
First-day underpricing	0.00			0.01			0.01		
Lead underwriter prestige	0.20***	0.44	0.37***	0.18***	0.36	0.35***	0.18***	0.33	0.34***
Percent TMT venture capitalist placed	0.11	17.24**	0.22	0.04	17.16**	0.16	0.08	17.42**	0.25
Prior revenues	0.03	-0.10	0.07*	0.03	-0.03	0.07*	0.03	-0.04	0.07*
Number of patents	0.00	0.00	0.00	0.00	0.00	0.00	0.00*	0.00	0.00
TMT industry tenure	0.00	0.11***	0.00	-0.00	0.11***	0.00	-0.00	0.11***	0.00
Strategic alliances	0.03	3.72	-0.48*	0.09	3.98	-0.43 [†]	0.09	3.95 [†]	-0.44*
Identity: Established leader	-0.09	1.19	-0.37	-0.10	1.80	-0.37	-0.07	1.97	-0.31
Identity: Aspiring leader, track record	0.40 [†]	7.31 [†]	0.28	0.38	8.17 [†]	0.27	0.41 [†]	8.36 [†]	0.33
Identity: Aspiring leader, logical plans	0.11	2.11	-0.22	0.07	1.74	-0.25	0.10	1.94	-0.19
Identity: Aspiring leader, social ties	-0.15	-3.32	-0.51*	-0.18	-3.09	-0.53*	-0.16	-2.93	-0.48 [†]
Identity: Ambiguous	0.03	-5.50 [†]	-0.60*	0.01	-5.11 [†]	-0.62*	0.04	-4.89	-0.55*
Elaboration	0.01*	0.06	0.01 [†]	0.01**	0.08	0.01*	0.01*	0.08	0.01*
Familiarity				0.26**	0.76	0.25*	0.37**	1.44	0.46*
Unfamiliarity				0.11 [†]	-1.25	0.08	0.23 [†]	-0.45	0.34 [†]
Familiarity × unfamiliarity							-0.01	-0.54	-0.17
<i>F</i>	4.71***	2.59***	8.38***	4.87***	2.50***	8.18***	4.77***	2.41**	7.77***
<i>R</i> ²	.42	.27	.55	.44	.27	.55	.45	.29	.55
Adjusted <i>R</i> ²	.33	.17	.48	.35	.16	.49	.35	.16	.48

^a “Issue” is the issue valuation premium; “market” is the retail market valuation premium; “total” is the total valuation premium. Values are unstandardized coefficients.

[†] $p \leq .10$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

One-tailed tests for directional constructs; two-tailed tests for control variables.

pects of entrepreneurial narratives are statistically significant predictors of resource acquisition among IPO firms. But what is the relative and substantive importance of these variables? In the interests of both clarity and brevity, we address this question by focusing on the final models for issue and total valuation premiums reported in Table 6. When we calculated the standardized coefficients for the statistically significant predictors in these models, we discovered that none of the beta weights for the narrative constructs were as high as those for lead underwriter prestige, which was the most significant of our controls for alternative theoretical explanations.⁵ However, when we assessed

their *substantive* impact, by calculating the effects of a one-unit increase in each variable, we discovered that our focal narrative constructs exerted effects similar to that for lead underwriter prestige. In the case of issue valuation premiums, the substantive impact of the statistically significant narrative constructs ranged from \$1.01M to \$1.50M (versus \$1.19M for underwriter prestige); in the case of total valuation premiums, the absolute values ranged from \$0.58M to \$1.59M (versus \$1.41M for underwriter prestige). These clearly represent very large dollar values in absolute terms.

GENERAL DISCUSSION

Integrating work on the resource acquisition process with narrative theory and research, we examined the belief that successful entrepreneurs are effective storytellers (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; O'Connor, 2004; Porac et al.,

⁵ The beta weights for lead underwriter prestige were .38 and .47 in the models for issue and total valuation premiums, respectively, whereas the absolute values of the beta weights for the statistically significant narrative constructs ranged from .14 to .31.

2002; Smith & Anderson, 2004). Our findings support this view, revealing that effectively constructed stories *do* help entrepreneurs acquire the money they need to exploit identified opportunities. More specifically, our results suggest that particularly influential narratives: (1) construct unambiguous identities for entrepreneurial firms, (2) elaborate how the proposed means of exploitation will attenuate risk (without providing overly complex explanations), and (3) invoke familiar elements to contextually ground those that are less familiar. Moreover, we found that narratives constructed in this manner influence resource providers in a way that goes above and beyond the effects of more purely factual information about a firm's resource endowments. Our findings thus support the underlying premise that storytelling is a key mechanism through which entrepreneurs can *leverage* their existing capital to acquire additional resources.

Our spin on the linguistic turn in entrepreneurship research offers a number of important insights to the field. First, by borrowing concepts from narrative theory and research, we extend theory about the resource acquisition process to illuminate how a firm's extant resource stocks can be leveraged to attract more capital. Second, we offer rich qualitative data that illustrate how entrepreneurial narratives are constructed in practice, as well as robust quantitative data that demonstrate how such stories can make a difference that goes above and beyond the factors emphasized in existing resource acquisition research. Third, we created several measures that may help future researchers capture the nature and effects of both the interpretative and structural features of entrepreneurial narratives. We thus view our study as contributing to the broader work on cultural entrepreneurship (e.g., Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; Pollock & Rindova, 2003) in which successful entrepreneurs are viewed as "skilled users of cultural tool kits" (Rao, 1994: 41).

Our empirical findings, however, point to a more complex relationship between entrepreneurial narratives, resource stocks, and resource acquisition than has been previously thought to exist. For example, although we found that narratives about an entrepreneurial firm's identity tended to encode information about its extant resources within them, as suggested by Lounsbury and Glynn (2001), we did not find complete correspondence between a firm's objective resource level and its socially construed identity: those with the lowest and highest resource factor scores were not invariably portrayed as potential contenders and established leaders, respectively. It thus appears that the au-

thors of entrepreneurial narratives have at least some freedom to "re-present" the facts. It also appears that certain identity constructions, in turn, influence resource acquisition more than others. We found that established leader identities, in particular, no longer exerted effects after we controlled for objective data on a firm's existing capital. It seems that this type of identity acted more as a substitute for, rather than a supplement to, other ways of conveying information about a firm's existing resource stock. The implication is that stories emphasizing a venture's track record, connections, and/or other signals of its credibility may not always be more influential—an interpretation that seems counter to one of Lounsbury and Glynn's (2001) key propositions about entrepreneurial storytelling. Similarly, we did not find much evidence of a diminishing effect for story elaboration or contextual familiarity and unfamiliarity. Instead, the primarily positive and linear effects that we found for these variables seem to contradict the presumed importance of simplifying the complex in entrepreneurial accounts (Aldrich & Fiol, 1994; Smith & Anderson, 2004).

Limitations

The mixed-methodology approach that we adopted in this study increases our confidence in the inferences that can be drawn from its findings (Lee, 1999), yet certain limitations suggest that we should portray the above interpretations as provocative insights rather than as conclusive claims. Some may question, for instance, whether the IPO prospectuses contained complete stories of the sort typically studied by narrative theorists. We agree, but would counter that they are certainly much more developed than the "minimal narratives" identified by Czarniawska (1998: 17). We also note that other researchers have recently used IPO prospectuses as a data source for examining the stories disseminated by entrepreneurs (e.g., Santos & Eisenhardt, 2004).

Our focus on IPO firms may also bring into question the generalizability of our findings. We agree that our sample makes our findings most applicable to this form of resource acquisition, but we believe that our research design increases the generalizability of our results. For instance, we selected industries that were established (semiconductors), growing (biotechnology), and emerging (Internet content providers). We also selected both stable and volatile periods in the stock and IPO markets. Moreover, as Lounsbury and Glynn advised, we were "cautious of the potential correlation between observed stories and entrepreneurial resources"

(2001: 560), and obtained measures of a firm's existing capital stock from nonnarrative sections of its IPO prospectus. Finally, to capture the amount of capital raised at various points in the IPO process, we used multiple dependent variables. All of these design decisions help establish the robustness of our findings and their generalizability to similar forms of resource acquisition, such as the processes involved in obtaining capital from venture capitalists and other financial institutions.

From an entrepreneurship theory perspective, less information asymmetry and uncertainty is likely to exist about IPO firms than about *de novo* start-ups, thereby potentially attenuating the effect of entrepreneurial storytelling at this stage of resource acquisition. Some IPO firms are already very well known before going public, especially those that are well established. Thus, potential investors may be able to easily find a lot of credible information about these firms from many other sources, thereby reducing the impact of the stories told in their IPO prospectuses. This reasoning may help explain why established-leader identities did not exert a net effect on IPO valuations in our analyses. Information asymmetry and uncertainty, however, are unlikely to be completely absent in the case of IPO firms. By definition, such firms will be managed for the very first time as publicly rather than privately owned organizations. Moreover, many will operate on a much larger scale—and often under different top management—than they did prior to going public. This situation may help explain why several of the other narrative constructs *did* exert net effects on IPO valuation premiums. In sum, although we recognize that the issuance of an IPO represents a unique form of resource acquisition (Shane, 2003), we nevertheless expect that many of our findings will hold during earlier stages in the process.

In addition to questioning our focus on the IPO stage of resource acquisition, some may question the conceptualization and operationalization of our narrative constructs. We focused on concepts that not only have been espoused in the narrative literature, but also were most apparent to us in the prospectuses themselves: identity constructions, story elaboration, and the incorporation of contextually familiar and unfamiliar elements. Other narrative devices, such as analogies, metaphors, and genres (Barry & Elmes, 1997), may be more salient and influential in other forms of entrepreneurial storytelling—an intriguing question worthy of future research. The measurement of our focal constructs may also appear rather unequal, or asymmetric, to some readers. For instance, we developed a typology to characterize the different

stories told about the IPO firms' identities, but we only characterized the stories told about their strategic initiatives according to their *degrees* of elaboration, familiarity, and unfamiliarity. We believe there is room for other studies with typologies characterizing the various stories told about firms' proposed initiatives, perhaps typologies that capture differences in the quality of intended strategic actions. Alternatively, it may be useful for future researchers to create a single scale for identity constructions, perhaps one measuring the degree of congruence between a firm's actual resource stock and its socially construed identity.

Future Directions

With respect to future research, we can envision a host of other intriguing directions for further work adopting a narrative approach to entrepreneurial phenomena. One of the most obvious is triggered by the dot.com scandals (Lowenstein, 2004): the need to investigate the nature, prevalence, and effects of *inauthentic* entrepreneurial narratives. Narrative theorists believe that stories often represent "poetic elaborations on facts" that allow a storyteller "to exaggerate, to omit, to draw connections where none are apparent [and] to silence events that interfere with the storyline" (Gabriel, 2004: 75). To what extent do entrepreneurs engage in these and other forms of poetic elaboration when telling stories about their endeavors? Do recipients accept inauthentic narratives "as prerogatives of poetic license" or deem them to be "misrepresentations, untruths and lies" (Gabriel, 2004: 75)? And even if investors do not wholly believe certain narratives, does that prevent them from committing capital—or do they suspend their disbelief in the hope that the story will come true?

Implicit in the above discussion is the notion that entrepreneurs and capital providers are equally important in the resource acquisition process. Focusing on the role of the entrepreneur, it would be interesting to examine the additive and interactive effects of both the content and the *source* of entrepreneurial narratives, as has recent work on the psychology of persuasion (e.g., Rucker & Petty, 2006). We suspect that in certain situations, especially face-to-face interactions, qualities of the entrepreneurial storytellers themselves, such as their demographic characteristics and/or social skills (Baron & Markman, 2000, 2003), might be just as influential as the stories they tell, or maybe even more influential. Testing Lounsbury and Glynn's (2001) argument that storytelling may be particularly critical for entrepreneurs heading firms with lower resource endowments represents another in-

teresting and important next step. A related line of inquiry would be to investigate whether those heading firms with certain resource levels possess more or less latitude for storytelling—for example, whether the entrepreneurs in resource-scarce versus resource-rich firms vary in their ability to tell stories.

Turning to the providers of resource capital, we note that it would be worthwhile to investigate when, why, and how entrepreneurial narratives produce different outcomes depending upon the *audiences* to which the stories are being told. Our quantitative analysis revealed that the effects of our narrative constructs differed somewhat over our measures of resource acquisition. These outcome measures reflected a firm's value as perceived by different groups of potential capital providers, notably institutional versus retail market investors. Other recipients of entrepreneurial stories—such as prospective employees, suppliers, and customers—might also respond differently to different narrative constructs. Work on the psychology of persuasion, particularly in the heuristic-systematic and elaboration likelihood models (e.g., Chaiken, 1980; Chen & Chaiken, 1999; Petty & Wegener, 1999) will likely prove useful in theory development for this line of inquiry.

The *context* surrounding the stories entrepreneurs tell resource providers also needs to be incorporated more systematically into future theorizing and empirical research. The work of Boje (1995: 1018) and Czarniawska and Joerges (1996: 46) suggests that entrepreneurial stories do not travel well across different cultural contexts without substantial modification. Lounsbury and Glynn (2001) noted that entrepreneurial storytelling matters more in certain institutional environments than in others. We wonder about the content of the stories that are told about entrepreneurs in different settings. Are entrepreneurs glorified in some regions yet portrayed in less flattering terms in others and, if so, can this distinction help explain the regional variation evident in the prevalence of entrepreneurship? Addressing questions like these will help establish the contextual boundaries of a narrative approach to entrepreneurship research.

Our final suggestion for furthering such an approach is to emphasize the importance of supplementing rich case studies of the stories told by and about entrepreneurs, such as those conducted by Foss (2004) and O'Connor (2004), with rigorous quantitative studies capable of systematically testing the *effects* of entrepreneurial storytelling. Researchers can accomplish this dual purpose by examining the provocative insights first gleaned through qualitative work in later quantitative stud-

ies. Or a single (but complex) mixed-methodology study, such as the one we have presented here, can be used. Regardless of the route adopted, it is only by supplementing qualitative work with quantitative analyses that narrative researchers will best be able to demonstrate that entrepreneurial storytelling is not “mere rhetoric” but is, instead, a practice that plays a “substantial role in organizational outcomes” (Suddaby & Greenwood, 2005: 62).

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APPENDIX A

Effects of Entrepreneurial Narratives on Additional IPO Outcome Measures: First-Day Total Valuation, Shares Sold, and Underpricing^a

Variables	Total Valuation	Shares Sold	Underpricing	Total Valuation	Shares Sold	Underpricing
Firm age	−0.00	2.85	−0.38*	−0.01	0.80	−0.47*
Ex ante risk	−0.01	0.81	−2.26**	0.01	0.43	−1.88**
Biotech industry	−0.27	−26.04	−4.39	0.02	−19.45	−0.85
Internet industry	−0.37*	2.89	0.38	0.02	−11.22	5.86*
Hot IPO period	−0.04***	−2.89	−0.42**	−0.04***	−1.64	−0.52**
Dot.bomb period	0.79***	83.76*	2.21	0.83***	105.97***	3.13
Lead underwriter prestige	0.38***	12.37*	1.82**	0.35***	12.57*	1.99**
Percent TMT venture capitalist placed	0.14	26.28	5.70	0.16	−33.76	6.26
Prior revenues				0.07*	12.47**	0.18
Number of patents				0.00	−0.10	−0.01
TMT industry tenure				0.00	−1.18**	0.01*
Strategic alliances				−0.43 [†]	−4.54	−9.66**
Identity: Established leader	−0.14	−50.09	1.18	−0.37	−86.79	1.26
Identity: Aspiring leader, track record	0.48	−10.21	3.59	0.27	−87.54	3.38
Identity: Aspiring leader, logical plans	−0.02	−27.20	2.95	−0.25	−58.54	1.38
Identity: Aspiring leader, social ties	−0.37 [†]	27.69	−6.01 [†]	−0.53*	0.43	−5.65 [†]
Identity: Ambiguous	−0.38 [†]	−15.19	−6.32 [†]	−0.62*	−54.69	−7.41 [†]
Elaboration	0.01*	42.21	0.21**	0.01*	−0.77	0.21 [†]
Familiarity	0.29*	85.56**	−2.42	0.25*	−21.02	−2.39
Unfamiliarity	0.11	−52.55*	−0.50	0.08	5.36	−3.61**
<i>F</i>	8.38***	1.39*	3.12***	7.77***	1.49*	3.50***
<i>R</i> ²	.52	.15	.30	.55	.18	.36
Adjusted <i>R</i> ²	.46	.04	.20	.48	.06	.26

^a Values are unstandardized coefficients.

[†] $p \leq .10$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

One-tailed tests for directional constructs; two-tailed tests for controls.

APPENDIX B Means, Standard Deviations, and Correlations

Variable	n	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	23	23
1. Issue valuation premium	159	10.83	0.76																							
2. Market valuation premium	149	12.33	12.15	.07																						
3. Total valuation premium	149	19.59	1.21	.83***	.21**																					
4. Firm age	168	7.07	6.56	.11	-.05	.04																				
5. Ex ante risk	168	5.39	1.44	-.00	.01	.09	-.32***																			
6. Biotech industry	168	0.33	0.47	-.09	.03	-.25**	-.02	-.23**																		
7. Internet industry	168	0.35	0.48	-.06	-.14†	.04	-.37***	.38***	-.52***																	
8. Hot IPO period	168	14.47	8.11	-.07	-.12	-.18*	-.04	-.12	.35***	-.23**																
9. Dot-bomb period	168	0.18	0.39	.25**	.12	.24**	.24**	-.19**	.02	-.19*	-.13†															
10. First-day underpricing	150	7.55	13.85	.24***	.41***	.56***	-.14†	.02	-.23**	.19*	-.22**	-.02														
11. Lead underwriter prestige	168	7.30	1.64	.53***	.12	.57***	.05	.08	-.12	.02	.04	.08	.23**													
12. Percent TMT venture capitalist placed	168	0.10	0.18	.02	.16*	.06	-.19*	.23**	-.05	.16*	.10	-.16*	.09	.16*												
13. Revenues	168	7.69	3.12	.34***	.08	.37***	.33**	.01	-.39***	-.12	-.12	.05	.12	.41***	-.01											
14. Number of patents	168	41.08	98.51	.19*	.10	.10	.09	-.16*	.23**	-.30***	.12	.24**	-.06	.10	-.11	.08										
15. TMT industry tenure	168	61.72	34.70	.14†	.26**	.15†	.20*	-.14†	.02	-.45***	.10	.21**	.04	.07	-.17*	.30***	.20**									
16. Strategic alliances	168	0.86	0.35	-.06	.08	-.15†	-.19*	.12	.07	.16*	-.06	-.07	-.20*	.02	.05	-.06	.01	-.13†								
17. Identity: Established leader	168	0.29	0.45	.13†	.11	.19*	.09	.03	-.28***	.11	-.12	-.06	.23**	.20**	.03	.28***	.11	-.01	-.01							
18. Identity: Aspiring leader, track record	168	0.06	0.24	.15†	.09	.17*	-.06	-.02	-.13	.13†	-.06	.01	.10	.08	-.07	.08	-.09	-.10	-.03	-.16*						
19. Identity: Aspiring leader, logical plans	168	0.11	0.32	.08	.13	.08	.03	.06	.11	-.11	.03	.17*	.10	-.03	-.05	-.05	-.01	.10	-.07	-.23**	-.09					
20. Identity: Aspiring leader, social ties	168	0.23	0.42	-.12	-.07	-.12	-.01	-.02	.06	-.15†	.07	-.01	-.19*	-.04	-.04	.04	-.04	.15†	.14†	-.35***	-.14†	-.20*				
21. Identity: Ambiguous	168	0.21	0.41	-.04	-.21*	-.09	-.01	.04	-.02	.15†	-.04	-.02	-.16†	-.02	.06	-.02	-.03	-.06	-.08	-.32***	-.13†	-.18*	-.28***			
22. Elaboration	165	49.57	14.94	.18*	.02	.22**	-.24**	.50**	-.29***	.46***	-.11	-.10	.19*	.16*	.14†	.10	-.17*	-.14†	.02	.07	.07	-.09	.06	.01		
23. Familiarity	168	1.60	0.65	.11	.07	.17*	-.12	.12	-.17*	.22**	-.03	.04	.12	.03	.08	-.11	-.14†	-.01	-.07	-.08	.02	.12	-.02	.04	.03	
24. Unfamiliarity	168	1.53	0.82	.16*	-.06	.16*	.12	-.05	-.24***	.04	-.15*	.21**	-.09	.11	-.02	.28***	.03	.04	-.01	.15*	.18*	-.17*	-.00	.03	.15†	-.35***

† $p \leq .10$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Two-tailed tests.



Martin L. Martens (*mmartens@jmsb.concordia.ca*) is an assistant professor in the John Molson School of Business at Concordia University in Montreal. He received his Ph.D. from the University of British Columbia. His research primarily focuses on the internal and external social forces that shape organizations, with an emphasis on situations in which organizations face new or unfamiliar institutional circumstances.

Jennifer E. Jennings is an associate professor of entrepreneurship and family enterprise at the University of Alberta. She earned her Ph.D. from the University

of British Columbia. Her current research interests include women entrepreneurs, the family embeddedness of entrepreneurial activity, and narrative and discursive approaches to entrepreneurship research.

P. Devereaux (Dev) Jennings (*djl@alberta.ca*) is a professor in the Department of Strategic Management and Organization at the University of Alberta School of Business. He received his Ph.D. from Stanford. His research focuses on new institutional theory with a focus on natural environment contexts and on institutional entrepreneurship.



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