# Revisiting women's entrepreneurship

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# Insights from the family-firm context and radical subjectivist economics

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# Abstract

**Purpose** – The purpose of this paper is to study women's entrepreneurship from the family-firm context and radical subjectivist (RS) economics. While women's entrepreneurship is a long-standing topic of research interest, there have been calls for more theory-oriented research and research which takes context factors in women's entrepreneurship seriously. The paper responds to this by using an RS's view of economics as a theoretical lens to consider women's entrepreneurship in family firms.

**Design/methodology/approach** – The paper briefly reviews the potential of the family-firm context for examining women's entrepreneurship in a non-reductive fashion, then outlines radical subjectivism (RS). The three main elements of RS's "entrepreneurial imagination" are explained, then linked with other theories of family-firm behaviour and applied to casework on women entrepreneurs in family firms

**Findings** – Each element of the entrepreneurial imagination, empathy, modularity and self-organization, generates new research questions which contest previous apparently settled views about women entrepreneurs. Protocols for investigating the questions are suggested. The third element, self-organization, while more difficult to operationalize for empirical testing, suggests how women's entrepreneurship might generate new industries.

**Research limitations/implications** – While this is primarily a conceptual study, its case studies invite further exploration of both women entrepreneurs and family firms. The RS perspective could also increase understanding of shared leadership and innovation in family firms. Specific research questions and protocols for investigating them are offered.

**Practical implications** – Insights from the research have practical implications for entrepreneurship education, for understanding entrepreneurship at the level of society, the firm and the individual.

**Social implications** – The importance of both family firms and women entrepreneurs to society makes it important to understand both of them better. The RS perspective can help.

**Originality/value** – The paper highlights the value of combining attention to entrepreneurial context (family firms) and theory (RS) to reinvigorate some old research questions about women entrepreneurs. The combination of family firms and RS is also novel.

**Keywords** Gender, Radical subjectivism, Family business, Entrepreneurial imagination, Entrepreneurship theory, Women's entrepreneurship

Paper type Conceptual paper



## Introduction

Research interest in women's entrepreneurship has continued to expand over the past 20 years. Long-established journals such as *Entrepreneurship: Theory & Practice* have sponsored special issues on the topic, and newer journals such as the *International* 

International Journal of Gender and Entrepreneurship Vol. 6 No. 3, 2014 pp. 231-254 © Emerald Group Publishing Limited 1756-6266 DOI 10.1108/IJGE-09-2012-0037 *Journal of Gender and Entrepreneurship* are refining the original debates in light of women entrepreneurs' "significant contribution to innovation, job and wealth creation in economies across the globe" (Brush, de Bruin and Welter, 2006, p. 585). There is also a call for new directions in the women's entrepreneurship field. Brush, de Bruin and Welter, (2006) note that the challenge ahead is "not merely to suggest that more research is the answer – rather, [such research] must be connected to theory". Other authors support this view. Ahl (2004), Bruni et al. (2004), Collinson and Hearn (1996) and Sinclair (2004, 2007) all argue in various ways that more and better theory should replace descriptive or highly local research into women's entrepreneurship. A common theme is that researchers should avoid reductionist claims either that women's entrepreneurship is essentially different from that of men, an implication of social feminist perspectives, or that it is essentially the *same* as men's, a frequent consequence of liberal feminist views (Barrett and Moores, 2009). This paper revisits and extends the women's entrepreneurship agenda by applying a comparatively new theoretical view of entrepreneurship, radical subjectivism (henceforth "RS"), to analyze cases of women behaving entrepreneurially in family firms.

# The family-firm perspective

Focusing on the various contextual factors around women's entrepreneurship promises a more heterogeneous understanding of women as entrepreneurs, a first step towards creating the gender-aware framework of entrepreneurship and away from the limitations of a specific feminist ideology. Taking context seriously could begin with focusing on family firms, which appear to offer women opportunities to act as both leaders and entrepreneurs (Barrett and Moores, 2009; Baines and Wheelock, 2000; Cappuyns, 2007; Coutts & Co., 2011; Danes et al., 2005). Moreover, family-firm leaders are often characterized as entrepreneurs entrepreneurs (Shepherd and Haynie, 2009; Lumpkin et al., 2008), and their firms are recognized as an important source for creating the next generation of entrepreneurs. While family firms and their behaviour are still a relatively new area of study, they have now achieved the status of an independent discipline with a number of agreed principles, problems and paradigms (Moores, 2009). Nevertheless, women entrepreneurs in family firms have so far received little research attention. As the 2009 review by Martinez Iimenez shows, empirical work has focused more on difficulties for women entrepreneurs in family firms and how these might be overcome than on the way family firms may prompt an overhaul of theoretical perspectives on women's entrepreneurship. Findings such as those of Sonfield and Lussier (2009) showing that there were no significant relationship between the gender of family business owner-managers and ten management characteristic variables in 593 family businesses in six countries, highlight how both social feminist and liberal feminist assumptions are open to question. At the same time, family firms constitute a relatively new research site for investigating women's entrepreneurship, while being sufficiently varied to capture major variations in women entrepreneurs' experiences.

# The radical subjectivist view of entrepreneurship

As well as focusing on context, we need an adequately complex, comprehensive and integrated theoretical view of entrepreneurship for investigating entrepreneurial women. While it is a commonplace that there is still no consensus about what

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- a shift in theoretical emphasis from the characteristics of entrepreneurs as individuals to the consequences of their actions;
- a deeper understanding of how entrepreneurs use knowledge, networks and resources to construct firms; and
- a more sophisticated taxonomy of environmental forces at different levels of analysis (population, community and society) that affect entrepreneurship.

RS takes into account all these dimensions as well as being an interdisciplinary integrative way of considering entrepreneurship.

RS (Chiles *et al.*, 2007, 2010a; 2010b; Lewin and Baetjer, 2011) is derived from Austrian economics, particularly the work of Ludwig Lachmann and George Shackle. Lachmann (1956, 1971, 1976a, 1976a, 1977, 1986) and Shackle (1967, 1970, 1979, 1983) offer non-equilibrium alternatives to equilibrium-based economic theories of entrepreneurship and market behaviour, and stress the process of imaginative choice inherent in these processes. Shackle emphasizes the "kaleidic" nature of non-equilibrium markets which lead to and follow from entrepreneurs' imaginative choices. Both Lachmann and Shackle aim to redress the shortcomings of the dominant equilibrium-based perspectives which:

[...] completely eliminate or severely circumscribe such central entrepreneurial phenomena as: (1) entrepreneurs' choices, actions, and opportunities; (2) genuine uncertainty associated with capital investment and the passage of time; and (3) the continual emergence of novel ideas, resources, and products that drive competitive market processes (Chiles *et al.*, 2010b, p. 138).

Consequently, the assumptions of apparently similar theoretical approaches such as entrepreneurial enactment, social constructionism and much of complexity theory are inappropriate because they "emphasize social systems that tend toward homogeneity and equilibrium or human agents who react to imposed environments, search existing terrains, or recall actions already taken" (Chiles *et al.*, 2010a, p. 10).

According to the RS perspective the "entrepreneurial imagination" is central to entrepreneurship. This special capacity is the "ability to conceive of something seen only fragmentarily or superficially as a complete, perfected, and integrated whole" (Chiles et al., 2010a, p. 16). There are two other important principles about the entrepreneurial imagination. First, it is essentially forward-looking rather than inspired by the past. That means it is not the same as analogy or pattern-making. Rather, it entails imagination visualization which is future-focussed, not memory visualization which is past-focussed. Second, entrepreneurial thinking and behaviours are always "decisions of the individual" (hence the "subjectivism" in the term "radical subjectivism"). This return to a focus on the individual seems to run counter to the dominant trends in entrepreneurial research described earlier. However, instead of an idea that an individual's personality is special, the concept of the entrepreneurial imagination summarizes three broad imaginative capacities – empathy, modularity and self-organizing – which transcend classic "personality" analyses to encompass modes of conceptualizing people, firms and markets.

RS has its critics. Wiśniewski (2011), for example, argues that the premises of RS are too radical, effectively rejecting the classical view of equilibrium altogether. Hoppe

(1997, p. 49) similarly argues that Lachmann's ideas suggest, wrongly, that we live in a world of "perfect uncertainty". Marmelejo, a prominent RS advocate, insists that these are misunderstandings. He points out, drawing on Lachmann's (1976a) study that:

Lachmann never said that there was [sic] never equilibrium tendencies, he simply stated that while there are individual equilibrium tendencies, one cannot simply aggregate all individual tendencies into one and formulate them into one big equilibrium analysis. These individual equilibrium tendencies are only internal, thus are only known through subjectivity, but also they do change over time, for there would be no form of action or time if they stayed at [that] stage [...] (Marmelejo, 2011).

Put briefly, the RS perspective argues that the general theory of equilibrium relies too heavily on the assumption of constancy of data, an assumption that does not stand up well to critical inspection. To redress this, RS seeks to develop a theory of markets that takes account of how these constantly change.

Still other theorists, e.g. Baird (1987), Garrison (1982, 1986) and Hoppe (1997), propose "moderate subjectivism" or a "middle way" between the "extremes" of RS and classical views of equilibrium. RS presents an emphasis on constant change not merely in market participants' evaluations of the value of goods but in their expectations of what markets will consist of in future. As Loasby (2001, p. 397) puts it, the future "cannot be known, but it can be imagined, and by acting on that imagination, it can *in part* be changed" (emphasis added). Classical ideas of equilibrium, in contrast, assume that the future is broadly knowable because it is in large measure implied by the present. Some "moderate" subjectivists (Gaglio and Katz, 2001) have developed Kirzner's (1985) concept of "entrepreneurial alertness" to explain why some people and not others identify entrepreneurial opportunities. Again, however, RS theorists regard this "middle way" as untenable, especially if identifying entrepreneurial opportunities is understood as correcting previous "errors", as, for example, when an opportunity is identified that was "there but erroneously overlooked". According to the RS viewpoint, no correction of past error is possible in a world where "the future is not given but is created in an unfolding evolutionary process" (Buchanan and Vanberg, 1991, p. 172).

This paper does not aim to resolve the debate about whether there is or is not a tendency towards equilibrium and, if so, what type of equilibrium is achieved. Rather, the solution proposed by Sarasvathy et al. (2002) seems reasonable, namely that more than one view of the entrepreneurial process is possible depending on the level and location of knowledge in the market. When supply and demand for the product are both known, then the opportunity is founded through the *allocative* process or opportunity recognition. When only one variable is clear, then the opportunity has been discovered, and when neither supply nor demand is known, the opportunity is *created*. Sarasyathy et al. (2002) do not discuss RS. However, because RS is concerned with opportunity where the needs of (as yet) unknown customers are actually created by an as yet unrealized innovation imagined in the mind of the entrepreneur, RS is perhaps the "most created" form of opportunity. Our aim is to use insights derived from the RS view of created opportunity, whose impact on conceptualizations of market processes is acknowledged even by theorists who take issue with it (Klein, 2006), to shed light on ongoing problems of women's entrepreneurship. A different criticism, that the RS concept of the entrepreneurial imagination brings back a discredited, individualistic, indeed masculinist view of the entrepreneur, has been mentioned already and will be dealt with more fully later in the paper.

This paper is structured as follows. In the next section, the focus is on explaining how case data on seven women entrepreneurs in six family firms was gathered and analyzed. This is followed by an overview of the three central facets of the RS "entrepreneurial imagination". Then, using the case data, the paper outlines how each aspect of the entrepreneurial imagination reveals special dimensions of entrepreneurship in family firms. The paper then considers how each aspect plays out for family business women entrepreneurs, which in turn suggests new questions about long-established problems in women's entrepreneurship generally.

### The cases

The case data analyzed in this paper was originally gathered by the author and a colleague for a study which used a broadly "grounded theory" approach (Glaser and Strauss, 1967; Strauss, 1987; Strauss and Corbin, 1990) to understand the experiences of women who achieved (or did not achieve) leadership roles in family firms (see Barrett and Moores, 2009). Case study research focuses on understanding the dynamics present within single settings, and is well-suited to investigating new topics (Eisenhardt, 1989). Because family business and women's leadership in family firms are both relatively new research areas (Jimenez, 2009), a case study approach was an appropriate technique to investigate the intersection of the two topics.

# Assembling the initial sample

For the earlier project, a purposive sample was assembled, with additional cases added in response to issues that unfolded during the analysis (Silverman, 1985; Yin, 1984). Accordingly, the sample comprised both "illustrative" cases, that is, family-business women who were already formally acknowledged through their job titles as leaders and/or entrepreneurs, and "stretch" (or "limiting") cases which revealed more unexpected, less obvious instances of family business leadership. The "stretch" cases included women who had founded their own firm, but had earlier rejected the possibility of heading their original family firm, or women who saw themselves – and whom others saw – as family business leaders without being either the founder of the firm or its Chief Executive Officer (CEO). Some women were acknowledged as leaders by everyone in their firm but nevertheless refused to characterize what they did as leadership. The sample also included other forms of diversity, including the ways by which women had reached the top (from being thrust into a leadership role following the sudden death of a spouse, to a "grooming" period of nearly 20 years), the gender of the previous CEO. whether or not the interviewee had to compete with one or more siblings, especially brothers, who also aspired to firm leadership, the size of the firm the participant led and its current generation of management. In recognition of the often-acknowledged difficulty for women entrepreneurs of starting firms in "male-dominated" industries and our hunch that having a family-firm background in a traditionally "male" industry might lessen this barrier to women's entrepreneurship, firms included both "female"-led industries such as homecare and "male" ones such as roof manufacturing, Finally, the cases were gathered from a range of countries and regions; the USA, the Middle East, the UK, Southeast Asia, Canada and Australia.

# Data gathering and analysis

One or both researchers visited participants at their business premises, their home or at a mutually convenient location which permitted privacy. Each interviewee was simply

asked to "tell her story", that is, to explain how she had got to where she was. This avoided "priming" the interviewee and ensured the focus was on understanding the situation from her perspective. Data from discussions with other members of the firms, additional site visits, media articles and business documents were also analyzed. The qualitative data analysis programme, NVivo, was used to code the case histories and other data according to the issues participants raised, their family situation, quantitative information about their firms, and so on. The analysis ended when "saturation point" was reached, that is, when adding additional cases did not result in new insights. While case data were gathered from 16 entrepreneurs, data saturation was reached after analyzing data from 13 entrepreneurs associated with 12 family firms.

While this earlier research focused on how family business women attain leadership roles, several participants also discussed at length the difficulties and advantages of behaving entrepreneurially in the family-firm context, sometimes as part of the leadership task and sometimes more generally. This prompted the author to re-analyze these participants' case data using RS as an analytical tool for understanding their experiences as entrepreneurs. The cases of Deborah/Robyn (Robyn had recently succeeded to the leadership of the firm her mother founded), Felicity, Gloria, Hannah, Ingrid and Sue exemplified one or more aspects of the RS entrepreneurial imagination and were, thus, selected. It was also apparent that an earlier or a current family business had strongly influenced the way they exercised specific RS entrepreneurial functions. Details of the selected women entrepreneurs and their six firms for the purposes of this paper's argumentation are presented in Table I.

# The three elements of the entrepreneurial imagination

According to Chiles *et al.* (2010a) and other theorists who build on the insights of Shackle and Lachmann, the entrepreneurial imagination – the central concept of Lachmann's RS view – consists of three main elements: empathy, modularity and self-organization.

# **Empathy**

Empathy helps entrepreneurs invent and organize subjectively imagined novel ideas in their minds (Chiles *et al.*, 2010a). Many conceptions of entrepreneurship incorporate ideas of novelty or innovation, but the RS perspective distinguishes itself from these others in stressing how empathy *constrains* novelty. That is, creativity, novelty and innovation are not the only requirements of the entrepreneurial imagination; the outcome of creativity must be appropriate for its target users, that is, it must have *value* for someone, such as future customers, customers in another culture or even customers who do not yet exist and whose needs will be created by the product itself. Empathy is what entrepreneurs use to imagine what will be of value to these customers. It differs from projecting the entrepreneur's own ideas or emotions onto someone. Projection may work as "accidental empathy", and so be the source of many new ventures (Chiles *et al.*, 2010a, p. 21). However, ventures based on accidental empathy are likely to be "one-shot wonders": more likely to fail than ventures based on true empathy.

Empathy needs genuine familiarity with the end-user to prevent the entrepreneur being too conservative when predicting the degree of novelty or risk end-users will find attractive. This leads to an important revision of the traditional view of the entrepreneur as a risk-taker, someone who is convinced – often against much opposition – about the value of his or her idea. The RS perspective argues that someone who relies on his or her

Country	Australia	Australia	(continued)
Industry	Personal services (homecare, childcare, eldercare and advice to government on eldercare issues)	Funerals	
Current generation of management	2	<u>ო</u>	
Number of employees	1,000+	20	
Siblings' involvement in the firm	Robyn's two older sisters tried out for leadership but Deborah decided they were not suitable	Elder brother is being groomed for succession	
Gender, relation-ship of CEO to interviewee	Female (mother)	Male (father)	
Summary of interviewee's career trajectory	Firm founded by Deborah; F Robyn came to work in firm "while deciding what to do with her life". Robyn got to know the firm intimately, introduced new systems, expanded the firm and succeeded to leadership after a two-	Felicity had a close relationship with the firm in her early years, but undertook non-business oriented post-school training. Her father, the CEO, placed her at the head of a new "funerals by women" segment of the family business in a figurehead role. Felicity feels her brother has received preferential treatment in terms of the succession, e.g. his MBA was funded by the firm. She also feels she has hear who had her succession, e.g. his MBA was funded by the firm.	Oue also teels sue has been
Name (disguised)	Deborah/Robyn	Felicity	

IJGE 6,3	Country		Hong Kong	UAE (continued)
238	Industry		Manufacturing (plastic moulding)	Retail trade (supermarket, original firm), then management consultancy
	Current generation of management		0	ო
	Number of employees		20	1,000+ in supermarkets, 5 in Hannah's firm
	Siblings' involvement in the firm		Several younger siblings of both genders. Gloria is encouraging their long-term involvement in the firm	Two brothers are being groomed for succession
	Gender, relation-ship of CEO to interviewee		Male (father)	Male (father)
	Summary of interviewee's career trajectory	left out of important decisions, e.g. her father and brother gave her husband a job in the firm without consulting her, shortly before she and her husband separated. Felicity is now "resigned" to her role which allows her to look after clients in their time of grief	Gloria knew the firm from her earliest years, left Hong Kong for the USA in her teens to study engineering. She returned to Hong Kong after a severe accident to undertake a strategic marketing role in the firm her father founded	Hannah undertook business-oriented training in Europe to avoid political unrest in her home country. On returning to the UAE, she
Table I	Name (disguised)		Gloria	Hannah

Country		The USA	Australia	Revisiting women's entrepreneurship
Industry		Agricultural machinery dealership, real estate	Manufacturing (roofing materials)	239
Current generation of management		01	2 prior to sale	
Number of employees		1,000+	+ 08	
Siblings' involvement in the firm		One brother runs the real estate side of the business	Nil	
Gender, relation-ship of CEO to interviewee		Male (father)	Male (father)	
Summary of interviewee's career trajectory	started a flower importing business with the support of her father, the CEO of a supermarket chain. She later left the family firm and started a management	Ingrid had close involvement with the family firm in early years, but trained in hospitality, entering the firm only to try to solve family disputes. She was appointed CEO at the instigation of the parent	Sue had close involvement Male (father) with the firm in her early years, but trained as a teacher. She entered the firm to improve its marketing but left after an outsider was promoted over her. The firm has recently been sold to a rival firm over Sue's protests	
Name (disguised)		Ingrid	Sue	Table I

own view of how much novelty or risk end-users will tolerate in a new product will tend to make "regressive mispredictions of customers' risk preferences" (Chiles *et al.*, 2010a, p. 20). In contrast, entrepreneurs who are familiar with end-users will likely become aware of circumstances in which customers have tolerated higher levels of product risk and novelty than they would themselves. Chiles and his colleagues' (2010a) extended case study of the development of CareerBuilders, a firm which was founded on then radically new online technologies for advertising and recruiting for jobs, points out that the CareerBuilders entrepreneurs had intimate knowledge of Hewlett-Packard's customers before setting up their new firm. This meant they were aware of the high levels of novelty and risk these customers would accept to solve specific problems. This knowledge enabled them to empathize with similar customers' needs and led them to develop a more novel, riskier, yet ultimately more successful product than they would have if they had relied on their own product risk preferences.

"Empathy" usually refers to the social competency of taking another's perspective, suggesting an affective rather than a cognitive capacity to enter another person's reality. However, radical subjectivist (RS) scholars of entrepreneurship such as McMullen (2010) use it to denote a rational rather than an affective capacity to enter into another person's "perceptual point of view". In his study of the entrepreneurialism inherent in new product development, McMullen (2010, p. 116) prefers the term "perspective taking" to "empathy" to heighten the focus on the customer/end-user. Many end-users themselves become entrepreneurs (Shah and Tripsas, 2007). Their personal needs can alert them to a broader market problem, always assuming that their personal interests, problems and needs reflect others' similar frustrations. Akrich (1995) refers to this as the I-methodology. However, if the designer of an innovation is unaware that her view of the user resembles herself (Oudshoorn et al., 2004), she may become too reliant on her own preferences to infer what future customers' preferences will be. Moreover, markets may over time evolve away from the interests of the entrepreneur, further diminishing the representativeness of her preferences to those of the market (Oudshoorn et al., 2004). Thus, being an end-user – as opposed to being familiar with end-users – can have disadvantages.

It may seem obvious that ideas for new products and services must be attractive to potential customers if they are to form the basis of a viable venture. However, ignoring this problem at a theoretical level obscures the difficulty of imagining end-users, especially in the case of radical innovations. The "fuzzy front-end" of the innovation process – to use McMullen's (2010) description – where the product concept is developed and a decision is made about whether to invest resources to develop it (Smith and Reinertsen, 1997; Koen *et al.*, 2001) – tends to be chaotic, unpredictable and unstructured (Koen *et al.*, 2001). This makes the early phase of innovation very challenging, unlike subsequent phases, which are usually more structured, predictable and formal. Especially with novel transactions, entrepreneurs not only have to take the perspective of others, they must identify who these others should be. In technological entrepreneurship, as Chiles *et al.* (2010b) point out, the customers may not even exist yet, which requires the entrepreneurs to configure the target from the interests they think will be advanced by the product they plan to introduce.

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Having a family-firm background that exposes a potential successor or entrepreneur – often at a young age – to the complexities of the business or the industry in which the firm operates has long been noted as a good way for both men and women to acquire the general and personal disciplines needed for business. These personal disciplines include learning how to recognize and meet customer needs (Moores and Barrett, 2002). Indeed, because of the way family firms encourage situational business learning, they are regularly acknowledged as incubating many of the next generation of entrepreneurs. Intuitively, having a family-firm background which includes exposure to strategy-making based on customer needs would also be an excellent way of becoming acquainted with customers' risk preferences, just as knowing Hewlett-Packard's customers influenced the CareerBuilders entrepreneurs' knowledge of how much risk CareerBuilders' potential end-users would tolerate. Barrett and Moores' (2009) study of entrepreneurial women in family firms features several entrepreneurs whose capacity to imagine novel ways to meet customers' needs was honed well before they had a formal role in the family firm. One example is Gloria, a Hong Kong businesswoman who held a senior role in the plastics moulding firm her father founded after his narrow escape from the Kuomintang in 1947. Gloria's earliest memories are of helping her father demonstrate his plastic moulding machinery to potential customers who had never seen anything like its sophistication and effectiveness, and who were nervous about using it. Gloria noticed even then that the spectacle of a small child – herself – operating large. apparently complex machines both created drama and heightened customers' confidence that the machinery would be easy to use. Moreover, she had grown up hearing the thrilling story of her father's escape and his creation of a successful firm from virtually nothing. Gloria later left Hong Kong by herself at the age of 16 years to study engineering and then work in the USA, returning to Hong Kong only after a severe accident turned her thoughts towards her Chinese heritage and the possibility of applying her skills in her father's firm. She believed the firm needed her entrepreneurial skills (a view she later described as arrogant) if it was to grow beyond its present modest success. Gloria recalled that customers attached value not just to new effective machinery but to stories that added a sense of drama and excitement to the product. Accordingly, she featured her father's escape story and "rags to riches" life history at trade exhibitions, confident that the extra value created by "packaging her father" would compensate for the financial risks she took by spending more on new machines than the firm had ever done before. From the RS perspective, Gloria accurately predicted future customers' risk preferences, mitigated some of that perceived risk in advance, and anchored the product in a trusted individual's adventurous past.

"We might think from family firms" well-documented attachment to tradition and traditional industries that there are few linkages between family firms and innovation, but Craig *et al.* (2006) have found contrary evidence. In a ten-year longitudinal study, these authors found that established family firms place substantial importance on innovation practices and strategy. They identified:

[...] strong perceptions of the role of innovation in these firms, strong observed interactions between innovative strategy and environmental uncertainty associated with technological change, and between the scope and timeliness of information acquisition and use (Craig *et al.*, 2006, pp. 7-8).

New research questions derived from entrepreneurial empathy

The preceding discussion around women, family firms and entrepreneurial empathy suggests some new ways to consider the long-standing issue of the extent to which women's backgrounds prepare them – or fail to prepare them – for entrepreneurial roles in society. Women typically have less appropriate preparation for business leadership than men (GEM Consortium, 2004, 2007, 2008; Barrett and Moores, 2009; Lewis and Massey, 2011). The learning deficit is particularly marked in high technology entrepreneurship (McGrath Cohoon, 2011), owing to women's lesser representation in engineering, science and information technology degree studies. Yet, the fact that in family firms women traditionally occupy support roles and are not expected to become leaders in the firm has also given them space and time to acquire entrepreneurial skills (Curimbaba, 2002; Barrett and Moores, 2009). Examining how women's entrepreneurial skills are developed in the family-firm context using the concept of entrepreneurial empathy could refocus the classic problem of women entrepreneurs' supposed "learning deficit".

To test whether having a family-firm background affects the development of women's entrepreneurial empathy, one could investigate whether the success of women-led firms varied with this demographic characteristic. Firm success should be measured in conventional terms such as return on assets (ROA), return on investment (ROI) and growth measures as well as criteria based on the entrepreneur's personal goals. The length of time the firm had been in existence would need to exceed a certain minimum to screen out firms that might be based on "accidental empathy" (projection of customer needs) rather than true empathy. It would also be useful to limit the selection of firms to a single industry to screen out influences caused by industry variation. Then, varying McGrath Cohoon's (2011) protocol slightly, one could compare entrepreneurs' views about the basis of their firm's success with those of knowledgeable people close to the businesses, for example, internal directors of the firms' boards. The combination of greater success by firms run by women whose business learning began with their background in a family firm, and a stronger belief by the CEO and knowledgeable others that success is due to predicting and meeting customer needs, would suggest that having a family firm background helps develop entrepreneurial empathy.

# Modularity

In the RS view of entrepreneurship, modularity refers to how managers organize their firms' heterogeneous resources to respond to dynamic markets buffeted by continuous change, abrupt shifts and unpredictable competition (Chiles *et al.*, 2010a). A module is "a unit whose structural elements are powerfully connected among themselves and relatively weakly connected to elements in other units", that is, they have "common interface specifications" (Chiles *et al.*, 2010a, p. 23). Because entrepreneurs imagine and assemble the capital structure of their firms through their subjective expectations of the future (and interpretations of the past), that structure is not only novel but inherently heterogeneous. When inputs and demands are both heterogeneous, modularity can greatly enhance the possibility of meeting diverse market demands with diverse system configurations (Schilling and Steensma, 2001).

There are two broad aspects of modularity: *complementarity* and *substitutability*. Complementarity promotes stability within the firm. Complementary modularity can be of two types: *plan complementarity* of a module's resources within one firm, for example,

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slack resources; or *structural complementarity*, for example, resources within a module controlled by different firms which interact with each other, that is, a network. Substitutability, in contrast to complementarity, facilitates change within the firm. It refers to the capacity of individual elements within a firm's system to be removed and replaced with minimal disruption or loss of productivity (Schilling, 2000; Pil and Cohen, 2006), as, for example, in the case of multiple products, multiple divisions, strategic business units or subsidiaries. Compiling complementary resources within each module reinforces organizational stability whereas compiling diverse substitutable modules promotes organizational flexibility (Chiles *et al.*, 2010a). Strategic flexibility is also important in the family business context, as evidenced by Zahra *et al.* (2008), who found that a family firm's culture of commitment is positively associated with its strategic flexibility (that is, its ability to pursue new opportunities and respond to threats in the competitive environment). They also found that a stewardship-oriented organizational culture (which is characteristic of successful family firms) positively moderates the family commitment-strategic flexibility relationship.

Modularity also means entrepreneurs can exercise real options. Chiles *et al.* (2010a) define real options reasoning as the investments entrepreneurs make to avoid finalizing their choices. As they put it, future researchers could treat modules as specific technology options, letting entrepreneurs select the most favourable outcome by determining when to exercise such modular options, when to hold them and when to let them expire. The study by Eddleston *et al.* (2008) previously discussed, suggests a link between familiness (see further discussion below) and the exercise of specific technology options.

# Modularity, women and family firms

The sample of seven entrepreneurs reveals several instances of modularity through complementarity and substitutability. The resource of "familiness" – now a major preoccupation of family business research and scholarship – was important in each case, so an overview of this concept follows.

"Familiness", the understandings among business family members that arise from their shared goals and reciprocal altruism (Habbershon, 2006; Habbershon and Williams, 1999), is increasingly being incorporated into the resource-based view (RBV) perspective as a resource unique to family firms. As such, familiness becomes one of many heterogeneous resources to which a family firm has access. The term "familiness" is still being developed to a level of rigour that makes it adequate as an analytical tool for research, but many studies are already investigating its value to family firms. For example, Eddleston et al. (2008) have studied how a family-specific resource (reciprocal altruism) and a firm-specific resource (innovative capacity) contribute to family-firm performance. They found that family firms can benefit from emphasizing the positive aspects of kinship and from developing innovative capacities. They demonstrated that not only do firm-specific resources contribute to family-firm performance but also that family relationships can be a source of competitive advantage for a family firm. For example, the way Gloria used her father's story as a branding tool shows "positive familiness", or competitive advantage derived from family relationships, albeit directed towards customers rather than to other family members.

We now turn to two other cases of women entrepreneurs who started new firms based on modularity arising from the familiness qualities of an existing family firm.

Hannah, the daughter of a CEO of a major supermarket firm in the Middle East, was encouraged by her father to start a flower importing business. The supermarket's existing customers, the know-how available in the firm and other resources were all available to the new entrepreneur and her firm. The new business was, thus, structurally complementary with the original supermarket business and enhanced its profits. In the second case, Felicity, the daughter of a CEO who ran a prominent funeral firm, set up a new firm exploiting a new trend for funerals run by women. The original firm had sufficient slack resources (enabling plan complementarity) to allow the new business to be established. In addition, the existing family-firm's infrastructure, high profile in the market and its members' know-how allowed modularity through substitutability: the new business's services could quickly be "plugged in" to those of the original one.

Conversely, the cases of Ingrid and Sue illustrate the way family-firms' resistance to the entrepreneurial aspirations of their women members may take the form of blocking their access to modularity options in the firm. Ingrid, now the CEO of an agricultural machinery distributorship, which also dealt in real estate, freely admitted how dysfunctional her family was. Family members' problems with drugs and alcohol, her parents' divorce, and festering family disputes that lengthy court cases failed to resolve. mark her early memories. More happily, she also recalled playing on the agricultural machinery at weekends when she was taken to the business's premises by her capricious and workaholic father. Ingrid avoided entering the family firm by building a career in hospitality, and only joined it "against her better judgement" in an effort to solve long-standing conflicts between her older brother, Paul, and her father. While Ingrid had plans to expand and renew the firm, and was already developing better systems to ensure its future, her more entrepreneurial plans had been stymied until a few months ago by the insistence of her father, the CEO, that Ingrid and Paul confine their activities to separate areas of the firm's operations. His insistence on dividing the firm's resources between the potential heirs both prevented Ingrid from working in the machinery side of the business, which she loved, and reduced her access to finance, infrastructure and other resources to expand the firm. In short, her entrepreneurial ambitions were thwarted by a lack of access to the firm's modularity options. Ingrid eventually became CEO at the instigation of the parent company, but at the time of interview was still trying to quell family conflict and ensure her position as firm leader was recognized and accepted.

Sue also recalled growing up in a family firm – a roofing manufacturing business – founded by her grandfather who had developed a new metal coating process. On his death, Sue's father and uncle ran the business and for > 20 years; it supported three of Sue's aunts on her father's side as well as the partners and families of the two owners. Sue's uncle left the firm a decade after it was founded after using it to support a lavish lifestyle for himself and his family and later, Sue suspects, defrauding it. Sue's father and a close male friend then ran the firm, but both were talented inventors rather than all-round business people. Sue's mother always felt excluded from the firm, and she resented the family conflicts associated with it and the extent to which it absorbed her husband's energies for poor returns, which were, in her view, mostly diverted from their family. Sue observed the firm and the family interactions from the time she was old enough to understand the arguments it created. She trained as a teacher and had minimal involvement in the firm, but entered it on a temporary basis in the hope of improving its marketing function. Having improved its financial standing through

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well-focused marketing, Sue was bewildered and angry when her position in the firm was suddenly usurped by a new male employee to whom her father had promised an important – and permanent – role. She left the firm after demanding her father choose between her and the new employee. At the time of interview, Sue's father had retired and her parents had sold the firm to a rival company, despite Sue's unabashed love of roofs, and her frequently expressed ambition to run the firm and to pass it on to her children. Sue, even more drastically than Ingrid, was prevented from accessing the modular features of the firm, despite having demonstrated her capacity to boost its performance through entrepreneurial effort.

New research questions derived from entrepreneurial modularity

Issues of modularity suggest researchers should dig further into findings such as those by Verheul et al. (2005) that women are considered by men – and consider themselves – to be "less entrepreneurial" than men. This characterization includes the idea that women have less risk-taking propensity than men. However, reviews of the literature such as that of McGrath Cohoon (2011) cast doubt on this finding, arguing that stereotypical signature characteristics of entrepreneurs include stereotypical masculine characteristics, *perhaps* including risk-taking propensity (emphasis added). Indeed Licht and Siegel (2005) find a desire for autonomy to be the prime motivation for entrepreneurship, with a secondary characteristic being the underestimation of risk masquerading as risk-taking propensity. These findings suggest that entrepreneurial modularity – i.e. extending existing enterprises by using the current firm's modular characteristics – may be seen as less entrepreneurial than starting a "wholly new" venture which bears no obvious modular relationship with an existing firm. However, other broadly compatible views of entrepreneurship typically stress that intrapreneurship, or renewal of an existing firm's entrepreneurial capacities, is equally entrepreneurial (Chrisman and Sharma, 1999).

It should be possible to test whether views that men are more entrepreneurial than women are, at least to some extent, artefacts of a masculinist "lone ranger" perspective on entrepreneurship which devalues the contribution of modularity to entrepreneurial behaviour. Women and men could be asked to evaluate the level of entrepreneurialism involved in the following new venture situations:

- plan complementarity (the entrepreneur mobilizes an existing family-firm's slack resources);
- structural complementarity (the entrepreneur benefits from the infrastructure available in an existing family firm);
- substitutability (the entrepreneur plugs the new product or service into an existing family-firm's suite of products or services); and
- starting a new venture which is wholly independent of an original family firm.

If one or more of the first three situations is seen as less entrepreneurial than the fourth, we may have evidence of masculinist bias. Perceptions such as this, particularly if they are linked with other essentialist ideas about gender (i.e. that specific behaviours in society are "natural" or "pre-determined" according to gender), would tend to indicate that a limited and rather traditional view of entrepreneurship underlay the judgement about which gender was more or less entrepreneurial.

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Self-organization

Self-organization is the third aspect of the RS entrepreneurial imagination. According to Chiles *et al.* (2010a), the idea of "self-organization" derives from a dialogue between complexity theory and an RS view of economics. Self-ordering processes creatively organize competitive entrepreneurial markets by generating far-from-equilibrium market order. The entrepreneur has the capacity to imagine a "creative" order, that is, to subjectively imagine novel solutions to future customers' problems, and to realize these solutions as products by recombining firms' resources even when the future is "under perpetual construction". That is, the entrepreneur has the capacity to imagine novel solutions to customer problems when markets move away from, rather than towards equilibrium.

The RS idea of self-organization differs from most Austrian economics, in that it does not assume that equilibrium is a somehow more desirable situation than disequilibrium, and that disequilibrium is inherently disordered. Rather, disequilibrium is taken as the normal state, and has its own form of order. This special form of "disordered order" is born of what Geldof (2002) sees as the natural affinity of disequilibrium with the complexity, uncertainty, and subjectivity of processes that perpetually generate novelty. Shackle (1979) theorized that entrepreneurs not only interpret past experiences but formulate their expectations of an imagined future. This takes the form of creating mental images of possible future actions and outcomes. The decision maker considers those sequels she or he deems possible, orders them from most to least desirable and, ultimately, chooses by focusing attention on the most and the least desired of these imagined sequences of events. Shackle's (1983, p. 7) emphasis on the unique generative power of such choices, which he likens to "uncaused causes", allies them with the generative possibilities envisaged in complexity theory.

Craig et al. (2006), examining 1,304 Australian family firms in manufacturing over ten years, found strong interactions between the firms' innovative strategies and environmental uncertainty associated with technological change. This suggests entrepreneurs in family firms share in the generative propensities of self-organizing markets. To date, the idea of self-organization has not been used much in entrepreneurship research, mainly because of inattention to market processes and a lack of longitudinal studies in entrepreneurship generally (Chandler and Lyon, 2001; Davidsson and Wiklund, 2001). Equally, strategy researchers have not considered disequilibrium contexts in their study of how intra-industry firm heterogeneity evolves (Noda and Collis, 2001; Hambrick et al., 2004), or how persistent heterogeneity fuels sustained innovation in an industry (Knott, 2003).

# Self-organization, women and family firms

Low and MacMillan (1988), in an early review of the entrepreneurship literature, reinforce the view of Gartner (1985) and Vesper (1983) that entrepreneurs are socially important not because they exist as individuals but because they succeed in creating organizations, often against severe odds. In short, entrepreneurship is about what entrepreneurs do, not who they are. The RS perspective, with its emphasis on the entrepreneur as an object of study as an individual, represents a partial return to the traditional romantic interpretation of the entrepreneur that Low and MacMillan (1988) and others, especially feminist theorists, have criticized. The romantic view of the entrepreneur obscures the fact that most entrepreneurs achieve only modest success and

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that success does not depend entirely on the capacities of individuals. Studying how family firms both create and adjust to disequilibrium markets can function as a corrective to this romantic tendency in the RS view of entrepreneurship. Because family firms present an overlap among family, owners and managers (Moores, 2009), they bring organizational as well as individual elements to understandings of entrepreneurial behaviour. Considering women entrepreneurs in a family-firm context extends this shift in the focus of entrepreneurship research away from the single, heroic, highly visible and virtually context-free individual towards a focus on others who may be equally influential but are often less visible in the firm, and who knowingly create and leverage familiness aspects of the firm to further its success (Barrett and Moores, 2009; Curimbaba, 2002; Lewis and Massey, 2011).

Researchers into women's entrepreneurship have criticized entrepreneurial studies which focus unduly on firms producing highly technical products that are less representative of the type of product or service more usually offered by women entrepreneurs' firms. However, examining the experience of business women in family firms could allow this issue to be finessed. Ingrid, Gloria and Sue, who for shorter or longer periods exercised formal or informal leadership of firms located in traditionally male industries (an agricultural machinery and real estate dealership, a plastics moulding business and a roofing manufacturing firm), all acknowledge that they were very unlikely to have been effective without long exposure to the industry's male norms via their family firms. Their cases suggest that, at least sometimes, growing up with and absorbing the business and industry knowledge embedded in the family firm removes the obstacles to women being able to act entrepreneurially in a male-dominated industry.

# New research questions derived from entrepreneurial self-organization

It is more difficult to formulate research questions around women's entrepreneurship in relation to self-organization than for empathy and modularity, the other two elements of the entrepreneurial imagination. This is because, first, the analytical focus of self-organization is at the level of an entire industry rather than the individual or even the firm. Second, few entrepreneurs, female or male, have sufficient impact at industry level to be seen as changing it fundamentally, which limits the number of illustrative cases available for study. Third, industry-level change attracts most research attention to firms in high-tech industries where women entrepreneurs are traditionally less well-represented (McGrath Cohoon, 2011) and where long-standing family firms, which by definition were formed in older industries, are less frequently found. Finally, the language describing this aspect of the entrepreneurial framework is highly metaphorical, making it harder for researchers to operationalize so that it can be empirically tested.

Despite these problems, our sample included one female entrepreneur whose firm, now in its second generation, is recognized nationwide as having created an industry. The business offers housecleaning, childcare and elder care services. It began because the entrepreneur, Deborah, a new mother living far from her family when she started her business in the 1960s, believed there must be other women in a similar situation who also needed help with housecleaning and other support usually provided by family. Over time the entrepreneur added childcare and eldercare to the business's offerings. The firm, which is now run by Robyn, the founder's daughter, now also advises

government on trends and costs in aged care. Deborah answered a customer need which in large measure did not exist previously (the need for non family-based support for new mothers) and the successor, the founder's daughter, Robyn, has organized herself and her firm's resources to meet ongoing changes such as the increase in numbers of elderly people, and the government's need for advice. It is difficult to be sure how much of the firm's success is due to the innovative nature of its product (the focus of the RS view) or to societal changes. It may not matter. Research questions about women entrepreneurs and entrepreneurial self-organization may be generated over time as women gradually attain a greater presence in high-tech industries, respond entrepreneurially to other changes in the wider society or both.

# Discussion and conclusion

The paper applied an RS approach to women's entrepreneurship, viewing it through the contextual lens of family business where many new firms are incubated. The result has been new research questions that stem from the three aspects of the entrepreneurial imagination: empathy, modularity and self-organization. These new questions have the potential to reinvigorate some old debates in women's entrepreneurship, such as how well women are prepared for an entrepreneurial career, whether men are more "really" entrepreneurial than women or whether such perceptions arise from a limited view of the entrepreneurial imagination and how entrepreneurship by women as well as men may create new industries.

The answers to these questions have the potential to prompt practical responses. At the societal level, family firms are increasingly being recognized in the academic and popular media for their resilience in times of economic downturn (Kachaner et al., 2012) as well as their long-term economic contribution to national and world economies (Mandl, 2008; Firstrust Bank, 2008; Kauschik and Dutta, 2012). The growing role of entrepreneurial women is also attracting public policy attention in many countries (Hart, 2003; Brush, de Bruin and Welter, 2006; Acs and Szerb, 2007). Attention to the experiences and contributions of family business women using the research perspectives and empirical questions presented here is important to both these agendas. There are also implications at firm level. Family-firm leaders, when considering who should follow them, may take a more informed view of what constitutes entrepreneurial aptitude, and, therefore, be more likely to consider female as well as male candidates for management and ownership succession. At an individual level, women or men hoping to lead an existing family firm and take it to a new level of development, or perhaps start a new firm, may seek a wider range of learning experiences and revalue what they have learned in the family-firm context.

In terms of entrepreneurship education, from a practical perspective the RS approach of categorising entrepreneurial competency into empathy, modularity and self-organization may offer an interesting and potentially useful view of entrepreneurship, particularly if such an approach yields a greater understanding of the entrepreneurial mindset and the ability to spot and exploit opportunity. Business educators already use some other recent creation-oriented perspectives on entrepreneurship such as effectuation (Sarasvathy, 2005) to encourage entrepreneurial awareness and development (Sarasvathy, 2005, 2012). Educators could also draw on the RS perspective to understand and develop students' entrepreneurial mindset and increase their understanding of the nature of

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entrepreneurial opportunity. Researchers may also use RS perspectives to deepen the theoretical underpinnings of future conceptual and empirical explorations of family business. Applying RS with its individualistic leanings to family business issues would present challenges, but doing so could complement the developing research agenda into other areas of family business strategy such as shared leadership in family firms, whether this takes the form of rotating individual leadership or sibling partnerships. Shared and individual leadership in the context of business families' propensity to innovate (Farrington *et al.*, 2012; Lansberg, 1999; Litz and Kleysen, 2001) is another area where the RS perspective could help. Possible research questions are:

- Must one or all members of a shared family business leadership/innovation team
  participate in all three entrepreneurial functions or can these elements be
  distributed among individual members of the team?
- Are there optimal combinations of the three elements within the team which enhance family firm innovation?
- If so, do optimal combinations vary with business life cycle or other phases of firm development?

Good news stories about women, entrepreneurship and family firms may not always result from exploring the research questions proposed in this paper. Empirical findings may yet reveal further barriers to women's entrepreneurship in family firms, or other ways that families in business resist the influence of female would-be entrepreneurs. Investigating the research questions arising from modularity, for example, does not pre-empt whether or not family firms in reality allow women to exercise real options as much as men. Our case studies revealed examples of family business women's access to the firm's modular options but also instances where the firm's modular options were denied them. Whatever the possible empirical outcomes, other researchers are invited to refine and test the research questions presented here. In all, the combination of family firms and radical subjectivist economics suggests both a likely way forward for connecting women's entrepreneurship research with more and better theory and another useful tool for family business research.

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