

Women as Global Leaders

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Chapter 3

Global Women Leaders: A Leadership Cartography© Perspective

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GLOBAL WOMEN LEADERS: A LEADERSHIP CARTOGRAPHY© PERSPECTIVE

Introduction

Over the past 25 years, multinational companies (MNCs) have proliferated and globalization has moved from periphery to center stage. Although globalization is not a new phenomenon, global leadership is a nascent field of inquiry that has received much less attention than domestic leadership. According to Mobley and Dorfman (2003), the culprits are the relative dearth of leadership talent, the inadequacy of global leadership development processes and the continued derailment of international executives. As a result, global leadership qualifies as an adolescent theory (Sonpar & Golden-Biddle, 2008), mainly because it yet has to reach paradigmatic consensus (Glynn & Raffeelli, 2010). Brodbeck and Eisenbeiss (2014) concluded that “as organizations increasingly face global markets and operate across national borders, career paths become more and more international, and management assignments are most likely to involve multicultural contexts” (p. 672).

Within the field of global leadership is an even smaller but growing body of research that specifically addresses global women leaders (e.g. Adler, 1996; Klenke, 2011; Suutari, 2002). Many forces that were drivers of globalization such as rapidly changing technologies, changing demographics, flattened horizontal networks as preferred organizational structures, market and cost competitiveness, and the emergence of a global supraculture that permits common visions and understandings above and beyond the clashes of customs, myths, and civilizations (O’Hara-Devereaux & Johansen, 1994) are also instrumental in propelling women’s ascent to global leadership in a variety

of contexts ranging from politics and business to arts and sciences. Globalization has become a force that transforms time and place, impacting cultural groups in a temporally and spatially differentiated manner empowering some while impoverishing others.

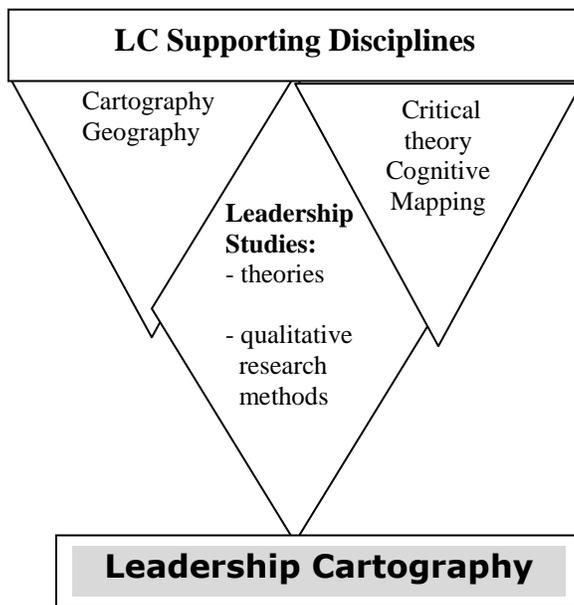
In her ground breaking article, Adler (1996) identified 25 global women leaders who have lead countries and governments in diverse political and socioeconomic contexts around the world. In 2012, a total of 20 women leaders were elected, appointed or succeeded their predecessors. As of July 14, 2013 the number of women who are presently in power worldwide has dropped to 19. Globally women have achieved the highest levels of leadership as political leaders such as presidents, prime ministers of chancellors of countries (e.g., Angela Merkel of Germany, Cristina Fernandez de Kirchner of Argentina, Yingluck Shinawatra of Thailand, Ellen Johnson-Sirleaf of Liberia, Tarja Halonen of Finland, Dalia Grybauskaitė of Lithuania), to name a few. In business, Indra Nooyi leads Pepsi's effort in China, India and Russia and Anne Lauvergeon, CEO of Areva, heads a nuclear company in France that sells uranium, reactors, and waste storage equipment. Reports of global women business leaders in oriental countries include India, China, and Japan. Iranian lawyer and human rights and democracy activist, Shirin Ebadi and Kenyan environmental and political activist Wangari Maatai received the Nobel Prize for their work as global peace leaders.

The purpose of this chapter is to introduce leadership cartography© (LC) which I introduced as a qualitative research method and apply it to the study of women as global leaders (Klenke, 2004a, 2005). I define LC as the confluence of research methods used in leadership and feminist studies, geography, archaeology, cartography, and cognitive mapping as depicted in Figure 1. More specifically, LC is a comprehensive methodology,

combining paradigm and method, by employing comprehensive maps based on geography, critical cartography (Crampton & Krygier, 2006) as a derivative of critical theory (e.g., Delgado & Stefancic, 2010; Sim & Van Loon, 2001) and cognitive mapping, a qualitative technique that can be used to produce causal maps (Stoddart, Leach, & Dawson, 2000; Wood, 1992).

Figure 1

Disciplinary Contribution to Leadership Cartography



Leadership Cartography Defined

Like leadership studies, cartography is multidisciplinary, housed in the physical and social sciences as well as the humanities. Cartography was usually defined as “the art and science of representing the Earth’s physical features geographically (Crone, 1978, p. xi) but in recent years a broader outlook has emerged. In 1964, for instance, the British Cartographic Society defined cartography as “the, science, and technology of making maps, together with their study as scientific documents and works of art. When defined

this way, cartography covers all types of maps and globes representing the earth (terrestrial), including religious maps, any heavenly body (celestial), and astrological diagrams (Harley & Woodward, 1987, p. xv; Wallis & Robinson, 1987, pp. 1-90).

The focus of this chapter is on a specific type of map which I labeled leadership cartography. Using the metaphor of a three-legged stool, LC rests on three major disciplinary contributors: cartography, critical cartography, cognitive mapping, and is augmented by leadership theories and qualitative research methods used in the study of leadership. Furthermore, there are other secondary disciplines which contribute to LC including archaeology, religion, history, management, and information science to name a few. Finally I treat LC as both a paradigm and a research method in the qualitative tradition as discussed below.

Foundational disciplines: Cartography. One of the foundational disciplines undergirding cartography is geography. As Curry (2002) noted, the geographer's method of inquiry concentrates on asking two essential questions: Where are things located? And why are they located there? Thus, the discipline of geography is concerned primarily with interpreting and explaining the occurrence, distribution, and interrelationships of the physical and cultural elements that can be discerned in the landscape. But a cartographer's understanding of globalization does not stop here. Harley (1990) called our attention to the importance of ethics and social theory in cartography. The author argued that the absence of a social dimension in cartography theory has led to a lack of representation that is related to cartography's theoretical isolation behind disciplinary barriers and to its lack of social relevance in a practical sense. Harley makes a case for the retention of topographical maps on the grounds that they can offer a democratic and

humanistic form of geographical knowledge. Hartley's work on maps as representation and sites of power knowledge has been particularly instrumental and reflects the influence of poststructuralists such as Foucault and Derrida (Crampton, 2001).

Leadership cartography, like the geography of the sea and land, takes place in a turbulent, ever changing environment. Currents and wind patterns shift, storms alter the contours of sandbars and shoals. Organizations are characterized by complexity and uncertainty, many are teetering on the edge of chaos (Marion & Uhl Bien, 2000; Regine & Lewis, 2002; Schneider & Somers, 2006; Uhl-Bien, Marion, & McKelvey, 2007). These types of organizations require a new breed of leaders with different competencies which I have described elsewhere including the ability to manage paradox (Klenke, 2014), and emotional, cultural, and spiritual intelligence (Klenke, 2004b). In short, contemporary organizations call for a new leadership, a new paradigm. LC is intended as one approach to fill this gap.

Foundational theory: Critical cartography. According to Crampton & Krygier (2006), critical cartography is a new set of mapping practices and theoretical critique grounded in critical theory (e.g, Sim & Van Loon, 2001.) According to Sim & Van Loom (2001), the last few decades have seen an explosion in the production of critical theories, with deconstructionists, poststructuralists, postmodernists, second-wave feminists, new historicists, cultural materialists, postcolonialists, black critics and queer theorists, among a host of others, all vying for our attention. The world around us can look very different depending on the critical theory that serves as a lens through which we filter organizational and environmental information. As a result, this significant range of

possible interpretations can leave many leadership scholars feeling confused and frustrated.

The relationship between cartography and critical cartography is analogous to the relationship between critical management studies (CMS) and critical leadership studies (CLS), a growing area of interest, particularly in European leadership research which views power as central to leadership dynamics (Alvesson & Spicer, 2012; Collinson, 2011). These authors pointed out that CSL builds on CMS to highlight the numerous interrelated ways in which power, identity and context are embedded in leadership dynamics. Although heterogeneous and diverse, critical perspectives share a focus on the situated power relations and identity dynamics through which power relations and identity dynamics through which leadership discursive practices are socially constructed (Ford, 2006; Tourish, 2014).

Crampton and Krygier (2006) emphasized that critical cartography differs from academic cartography in that it links geographical knowledge with power, and thus is political, hence its grounding in critical theory. According to this view, critical cartography situates maps within specific relations of power and does not treat them as neutral scientific documents. Pickles (2004) agreed when he pointed out that maps are active; they actively construct knowledge, they exercise power and they can be powerful means of promoting social change. Crampton and Krygier (2006) concluded that in critical cartography theoretical inquiry seeks to determine the social relevance of mapping, its ethics and power relations.

Foundational discipline: Cognitive mapping. Tolman (1948) was credited with the development of the *cognitive map* construct. He defined a cognitive map as a type of

mental representation which allows an individual to acquire, code, store, and decode information about the relative locations and attributes of phenomena in their everyday or metaphorical spatial environment (p. 190). A cognitive map approach to organizations begins with the recognition that organizational members edit their own institutional experiences into patterns of personal knowledge. A representation of that knowledge is called a cognitive map; it consists of the concepts and relationships an individual uses to understand organizational situations. If we consider all possible types of relations among concepts, we have a cognitive map. If we limit ourselves to mapping only causal relations, then we talk about a more specific form of cognitive map called a *cause map* (Weick & Bougon, 1986). According to the authors, “organizations exist largely in the mind” (p. 102). Weick (1979) asked, “What do managers do?” He argued that managerial work can be viewed as managing myths, images, symbols, and labels. Furthermore, Weick proposed that “managers traffic in images, and as such, the appropriate role of the manager may be evangelist rather than accountant” (p. 42). Cognitive maps have been studied in various fields such as psychology, education, cartography, management, urban planning, and history (Knight, 2002). However, they have been rarely utilized in leadership research.

Huff (1990) asserted that managers must know two things about cognitive maps. First, they must be aware of the functions of such maps. However, the author is quick to point out, knowledge about map functions, taken by themselves, offer little concrete guidance for managers in attempting to utilize these tools. As is the case with physical maps, the helpfulness of cognitive maps depends on one’s ability to choose the right map or right set of maps. The utility of cognitive maps also depends on the

user's ability to locate current position, desired new positions and routes between them. The second thing managers need to know, then, is how to identify appropriate maps and how to draw on the information they convey (Fiol & Huff, 1992).

Furthermore, Fiol and Huff (1992) contended that a particular difficulty of complex organizations is that the maps that are available, or can be made available through research, convey only parts of the relevant terrain. Moreover, they often conflict and are in a state of flux. To benefit from the expanding technology of cognitive mapping, managers must be able to compare alternative options concerning current locations, improved positions, and the routes between them. These interrelated activities draw on different types or aspects of cognitive maps. Beyond knowing the general functions of cognitive maps, then, managers must learn to recognize and balance the interdependent aspects of multiple maps.

Niccolini (1999) described the 'Self-Q Test' as a sophisticated step-by-step technique developed by Bougon (1992) to plot individual and organizational causal maps. According to Bougon, the Self-Q-Test is based on the combination of self-interviews with a number of structured activities to identify networks of concepts connected by causal relations (causal map) without requiring the interviewee to generate complex abstract representation. The Self-Q-Test, according its inventor, "is non-directive and nonreactive, because it transfers much of the responsibility for the organization, execution and validation of data gathering and map construction from the interviewer to the interviewee (Bougon, 1992, p. 843).

Cognitive mapping software.

Foundational discipline: Leadership theory and associated qualitative methods. Leadership theories, from their humble beginnings known as trait theory which focused on individual characteristics of the leader, have broadened significantly over the past two decades and produced a range of new theories that embrace followers, context, culture and technology. We are now evidence a wide array of alternative models characterized by a focus on core concepts such as spirituality (e.g., Fry, 2003, 2005), authenticity (e.g., Avolio, Gardner, Walumba, Luthans & May, 2004; Harter, 2001; Klenke, 2005, 207), chaos and complexity (e.g., Marion & Uhl-Bien, 2001; Schneider & Somers, 2006), relationality (Uhl-Bien, 2006), ethics (Brown & Treviño, 2006; Ciulla, 2004) technology (e.g., Avolio, Kahai, & Dodge, 2001) as well as bringing followership into leadership dynamics (e.g., Chaleff; 2009; Tourish, 2014).

Likewise, qualitative research method have evolved from the early days of grounded theory (e.g., Glaser, 1967; Glaser & Strauss, 1967) to the current state of qualitative method which now include an eclectic array of diverse methods beyond the most frequently used case study and interview method ranging from ethnography and phenomenology to arts-based research methods.

Leadership cartography as paradigm. Because a paradigm is a worldview, spanning ontology, epistemology, and methodology, the quality of scientific research conducted within a paradigm has to be judged by its own paradigmatic terms (Klenke, 2004a). I argued elsewhere (Klenke, 2005) that both leadership studies and cartography are positioned between a positivistic worldview, grounded in the search for universal truth, and one increasingly dominated by postmodern thought and its emphasis on context (Klenke, 1996, Osborn, Hunt, & Jauch, 2000). Since I am treating leadership cartography

as a paradigm, our worldview or belief system as researchers has to be recognized as an important influence upon our research, intrinsically linked to ontological, epistemological and methodological assumptions. As Krauss (2005) pointed out, our philosophical assumptions or theoretical paradigms about the nature of reality are crucial to understand the overall perspective from which a study is designed and carried out. In general, qualitative research, including leadership cartography, is based on a relativistic, constructivist ontology that posits that there is no objective reality. Rather, we impose order on the world as we perceive it in an effort to construct meaning; meaning lies in cognition not in elements external to us. The construction of meaning is the task of qualitative research and reflects the specific methods used in the qualitative data analysis process (Kraus, 2005). Lythcott and Dutschl (1990) took this issue a step further when they stated that the information impinging on our cognitive systems is screened, translated, altered, perhaps rejected by the knowledge that already exists in the system; resulting in knowledge that is idiosyncratic and purposefully constructed.

Leadership cartography as method. On the other hand, as a field of inquiry, we can also think of LC as a set of unique research methods. LC consists of several distinct elements: it employs some of the tools used by cartographers and geographers, combines them with cognitive mapping techniques for the purpose of constructing causal maps of leadership processes. As a research method, LC is based on the idea of using geographical maps as a framework for developing, generating, creating, depicting, capturing and communicating non-geographic leadership concepts and theories relevant to women as global leaders. In other words, geographic maps are used as the basis for the construction of cognitive maps that allow leadership researchers to progress to causal

maps of leadership processes that are context specific, have a history, and temporal and spatial boundaries that can be empirically examined.

Leadership cartography is a comprehensive method that combines the use of comprehensive maps based on geography in time, space and context (i.e., the social, political, economic climate summarized under the term *Zeitgeist*) with cognitive mapping, a qualitative technique that can be employed to produce causal maps. In leadership cartography we go beyond topographical depictions and the assumption that a map is as accurate a representation of some external physical reality as the cartographer would make it. Instead, we take the cartographer's map and superimpose constructs, relationships, hypotheses, theories, and data so that the cartography base becomes a framework for representing information and idea on other variables or measures.

Presently, the cartographic discipline has not been explored for mapping cognitive processes, let alone applied to the leadership terrain. As in the analyses of other types of qualitative research methods such as qualitative interviewing (Kvale & Brinkman, 2009; Rubin & Rubin, 2012) or case study method (Stake, 2006; Swanborn, 2010; Yin, 2014) where data analyses are facilitated by computer assisted qualitative data analysis (CAQDAS) software programs, a number of powerful packages are available for cognitive mapping. The desired outcome is to develop techniques to produce rich, reliable, value-tapping data, amenable to qualitative (and quantitative) analyses.

Leadership Cartography: From Geographic Maps to Concept Maps

For much of human history, at least until mapmaking was developed as a craft in the ancient civilizations of the Fertile Crescent and China, explorers set out on their journeys without maps (Harley & Woodward, 1987). Women leaders are explorers too,

and many are geographers in spirit, if not in disciplinary affiliation. And many of them set out on their leadership journey without a strategic map. They traverse organizations, engage in a venture of exploration such as charting unknown organizational territories or leading organizations on the edge of chaos. These leaders approach risks they are confronted with or major change efforts without maps such as a compelling vision or effective strategy to guide them; they lack clarity of purpose about why their organizations exist and what their unique contributions are supposed to be. As a result, they are battered by waves of competition, globalization, significant shifts in demographics, and changing definitions of leadership effectiveness.

Maps and Mapmaking

Locations and spatial patterns are important elements in the description, explanation, or interpretation of many phenomena that interest leadership scholars; however, spatial patterns and spatial behaviors of leaders have not been virtually ignored. Maps are supposed to be scale models of reality – yet mapmakers, like leadership theorists, must choose what to show and how to show it, and what not to show. But our maps are much more than that. We want maps that go beyond geographic realities of locales – maps that tell as much about society, culture and leadership. Like the microscope and telescope, geographic maps can be an instrument of observation and discovery; they allow us create or impose structure. Adding causally relevant features can convert a map showing only geographic features to a map offering explanation or interpretation. For cognitive researchers, who often use the idea of a ‘map’ as an analogy, the basic idea is the same. Cognitive maps are graphic representations that locate people

in relation to their information environments. Maps provide a frame of reference for what is known and believed; they exhibit reasoning behind purposeful action.

Karl Weick used to tell an anecdote that has been circulated verbally that illustrates the critical importance of maps to a group or organization.

A group of mountain climbers was in the process of ascending one of the most daunting peaks in the Alps when they were engulfed by a sudden snow squall. All were experienced climbers and each had their own idea of the direction they should go in to get back to the base camp. They wandered around for some time, arguing which way to go, while their circumstances became more dire and threatening with each moment of indecision. Finally, one of the climbers dug around in their backpack and found a map. Everyone huddled around the map, studied it and quickly determined their direction. Several hours later, they arrived safely at the camp. While they were warming themselves around the fire, regaling each other with the story of their misadventure, one of the climbers picked up the map they had used to descend the Alps. On looking at it more carefully, they realized it was actually a map of the Pyrenees! (Weick, Personal Communication, 2010).

Maps, whether cartographic, geographic, cognitive or LC have a purpose. As with positivistic science, maps are designed to represent the truth of the known world. But when we try to put purpose and truth into words, it turns out to be hard. Different maps show different selections from what is available in a medium where you cannot show everything at once. Therefore, all maps are selections from everything that is known, bent for the mapmaker's purpose. In fact, most maps are not at all what they seem to be. The map is a piece of history contextualized in time and place. Since history is one of the contexts for the study leadership, we see immediately that the cartographic features of a map serve as a bridge from geography to the examination of social phenomena.

Mapmaking. There are many ways of making maps as there are truths to maps. As noted earlier, maps are descriptions of the ways things are, descriptions made to support the human purposes that summon the maps into being. Even today, people are as

likely to hand-draw maps as they are to make them with computers. It is important to keep in mind that it is not how the map is made that makes the map. It is not the detail, nor the quality of the printing. The value of the map is the degree to which it serves its purpose. Remember that maps are graphic objects that can preserve descriptions so that these descriptions can be used at other times and places. Mercator's map took the knowledge about the world that people had been gathering for millennia and put it in a form that sailors could sail away with and use when they needed to. Peters' map pulled together what people had learned about the relative size of places and put that in a form that people anywhere could turn to at will.

As we begin to think about the developing our leadership cartographic map, for ourselves, leaders we work with, leaders who inspire us or leaders we wish to emulate, we need to keep in mind that every map comes packaged with a purpose. That purpose determines which properties the map needs to have, whether it needs to show true relative sizes or shapes, directions or distances. It is these characteristics that make the map what it is, that enable the map to achieve its purpose.

The Power of Maps. Both the Mercator and the Peters illustrate that maps often have political agendas. Critical social theory discovered years ago the hidden political agendas within cartography and maps, most particularly the nexus between maps, knowledge and power which provided the initial entry point for the analysis of meanings of and in maps. Critiques of either colonial attitudes or Euro-centric approaches of global map representations as well as those of the maps' presumed objectivity or neutrality have been discussed for quite some time (Wood, 1992).

[The cartographer's task is to design maps that will show the least distortion or no distortion in those properties that maps' intended users deem desirable. For this to be accomplished, a cartographer must draw from a repertoire of projections. The **Mearcator projection** belongs to that class of maps called conformal, meaning correct form. Such a map preserves the shape and small parts of the mapped surface, though it cannot preserve the shape of an especially large continent. Another class of maps is called equal area. While conformal maps are preferred by navigators, engineers, and military strategists, equal area maps are the choice of scientists, geographers and others to whom a standard scale area is more important than correct shape

Women Leaders as Cartographers and Women's Leadership As Leadership Cartography

In this section, I offer some examples to demonstrate the application of leadership cartography to global women leaders. The first case is Shirin Ebadi, the Iranian lawyer and human rights activist who was awarded the 2003 Nobel Peace Prize for her work promoting the rights of women in her home country. She was the first Iranian and first Muslim woman to receive the prize. According to Taheri (2004), awarding the Nobel Peace Prize to Ebadi was a strong signal from the democratic world to those Muslims who are fighting fascism disguised as religion, often at great personal risk. During her acceptance, Ebadi refused to wear the hijab that the Iranian government requires all women to wear during public appearances. Ebadi countered, "instead of telling Muslim women to cover their heads, we should tell them to use their heads" (Taheri, 2003). Her rejection of the hijab became one of the themes used by the Iranian propaganda machine launched against her by the state-owned media in her home country where women are forced to wear the hijab or have to face a six-month jail term aimed at vilifying Ebadi

In her book, *Iran Awakening* (Ebadi, 2006), explains her political and religious views of Islam, democracy, and gender equality when she states:

In the last 25 years, from the days when I was stripped from my judgeship to the years of doing battle in the revolutionary courts of Teheran, had repeated one refrain: an interpretation of Islam that is in harmony with democracy and equality as an authentic expression of faith. It is not religion that binds women, but the selective dictates of those who wish them cloistered. That belief, along with the conviction that changes in Iran must come peacefully and from within, has underpinned my work (p. 204).

Ebadi, now 66, and the mother of two daughters, has been repeatedly beating up by Islam extremists who wish to turn religion into a weapon of rule by terror, as opposed to Ebadi who sees religion as a personal matter. Ebadi was part of a second generation of Iranian women who were able to attend the university where she studied law, a field expressly closed to women by the Islamists, and became a judge in 1974. The advent of female judges under the regime of the Shah was a truly revolutionary event, unprecedented in the 1,500 year history of Islam (Taheri, 2003). Ebadi has been imprisoned, kept under house arrest, prevented from working, and subjected to the most vicious media campaigns. And yet she has not wavered.

Since she was awarded the Nobel Peace Prize, Ebadi has received many other prestigious awards including the International Democracy Award and numerous honorary doctorate degrees. She is also a co-founder founder of the Nobel Woman's Initiative, a group of Nobel Prize winning women working together to raise awareness in creating nonviolent social change. Ebadi now travels abroad lecturing in the West. In her most recent book, *The Golden Cage: Three Brothers, Three Choices, One Destiny*, Ebadi narrates the story of three brothers who live deluded lives in the golden cages of ideology. She tells the story of the Iranian Revolution through three brothers: a

monarchist, anarchist, and a revolutionary Islamist. Of the three brothers, one was executed in prison and the other two left Iran – one was executed in exile, presumably at the behest of Iran. Although Ebadi feels very strongly that she belongs to Iran, working on human rights issues in her home country has become virtually impossible. Despite the difficulties in her country, she refuses to give up hope or stop speaking the truth about injustice.

The LC of Ebadi commences with an ancient map of Persia and a contemporary map of Iran on which leadership constructs are superimposed such as her political and religious views, her exercise of invisible leadership as manifested in her compelling and deeply held devotion to a common purpose (Hickman & Sorenson, 2014), namely her commitment to end discrimination on the basis of gender, race and religion with other women of her generation share arguing that there is no future without human rights, family of origin which in part define her leadership.

The second case I selected involves global women leader I selected is Maria das Graças Silva Foster, CEO at Petrobras, Brazil's leading oil and gas Company which could reshape the profile of Brazil, produces 91% of Brazil's oil and 90% of its natural gas (Orihuela & Millard, 2012). Foster is facing tremendous challenges as Petrobras is confronted with rising debts, falling production, imports and its mandate to buy local. Complex regulation of the distribution of future oil profits has slowed down exploration activities and tough restrictions on contracting foreign companies have been blamed for increasing the company's costs (Pearson, 2012).

Silva Foster was raised by her mother together with her sisters in a one of the most dangerous slums on the outskirts of Rio de Janeiro where she collected recyclable

cans and paper to pay for her books. She described her childhood as happy, joyful but difficult since the family lived in poverty and endured a lot of domestic violence during her childhood. As a teenager, she wrote letters on behalf of literate immigrants and took on other odd jobs to help support her family, staying out of the way of the local drug gangs.

Foster joined Petrobras in 1978 and, over the next 30 plus years, worked her way up the corporate ladder. In 1981 she was hired as a chemical engineer and then moved into various managerial positions. Between 2003 and 2005, Foster served as Secretary of Oil, Natural Gas, and Renewable Fuels and in 2007 former Brazilian president Gabrielli named Foster Petrobras's first female director, the second highest management level position and put her in charge of the gas and oil division. In November 2008, she was named Executive of the Year of Brazilian Finance Executives.

In January 2012, Brazilian President Dilma Rousseff appointed her as CEO of Petrobras. Foster worked first with Rousseff when the former managed the pipeline project of natural gas from Bolivia. Petrobras stock jumped 3.8% on January 23, 2012 when Foster was named the company's first female CEO (Orihuela & Millard, 2012). Her career path to the top of Petrobras came as no surprise since prior to her appointment as CEO, Foster was one of the most prominent business women in Latin America. Her career trajectory underscores the value of education, hard work, and perseverance. Willpower, she has said, is everything to her.

Foster is known for her work capacity, competence and seriousness with which she dedicates herself not only to Petrobras but also to everything in her professional life. She is known for her toughness, political acumen and has been described as dogged,

straight talking and, of course, an 'Iron Lady' which is her nickname. She has a reputation as a hard-driving boss who demands results and sticks to deadlines. In addition, she is also known for her optimism which, as Dunkley (2012) noted fuels the Iron Lady. A self-confessed Beatles enthusiast, she is married to British husband Colin and has two children.

Today Silva Foster and Brazil's president Dilma Rousseff are among the world's most powerful leaders. Rousseff became the first female president of Brazil in January 2011. According to Forbes, she is now the third most powerful women in the world and governs a country where 49% of entrepreneurs with companies less than 42 months old are women. Petrobras is currently 51% state controlled but ultimately Foster, with guidance from Rousseff's government, will have to decide whether to continue to run the firm as a state-owned, job-creating bureaucracy or a modern public company (Orihuela & Millard, 2012).

The LC of LC of Silva Foster begins with a geographical map of Brazil that highlights the countries rich oil resources. The leadership constructs superimposed on Brazil's geography would include her political savvy, perseverance, results orientation, optimism and contextual intelligence which Foster demonstrates as she applies her broad political skills not only in sizing up company politics but also in dealing with various stakeholders representing a broad spectrum of private and public firms.

By comparing and contrasting LCs for global women leaders in different contexts, researchers will be able to analyze the commonalities and differences among global women leaders and develop a repertoire of skills requisite for effective leadership in the international arena. For example, Ebadi's LC can be compared to the LC of a global

business leaders such as Chanda Kockhar, CEO and managing director of the ICICI bank in India or Maria Asuncion Aramburuzabala, called Marisun by her friends in Mexico who heads the Grupo Modelo, brewer of Corona beer founded by her grandfather. Other possible cross-contextual and cross-cultural comparisons could include a comparative analysis of the LC of a global information technology leader such as Peggy Wu who is at the helm of Dangdang.com, China's largest online bookstore modeled after amazon.com with the LC of a global sports leader such as Korean golf sensation Michelle Wu.

Effective global women leaders have the ability to manage uncertainty, balance the often powerful tensions between the need to respond to global issues and withstand local pressures. They must possess political savvy, collaboration and negotiation skills, must be culturally competent, exhibit both cultural and emotional intelligence and embrace positive psychology constructs such as hope (e.g., Snyder, 2002; Snyder & Lopez, 2002; Snyder, Rand, & Sigmon, 2002), resilience (e.g., Crawford & Klenke, 2003; Masten & Reed, 2002) and optimism (e.g., Carver & Scheier, 2002; Peterson 2000; Youssef & Luthans, 2007) which characterized Ebadi's self-leadership during her time in jail and while under house arrest for a number of years. These are just a few constructs that provide the foundation of a leadership cartography perspective on global women leaders.