SLOPE—A METAPHOR-BASED STRATEGY FORMATION TOOL

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ABSTRACT

In this era of technological advances and globalization, strategy formation tools such as SWOT (Strengths, Weaknesses, Opportunities and Threats) have been frequently criticized as inadequate. Following a review of ten different schools of thought on strategy formation, this thesis introduces a new strategy formation tool —SLOPE (Strengths, Limitations, Obstacles and Potential Excellence) — and describes its application in a test pilot and three case studies. SLOPE uses a metaphor and story elements based on the myth of Sisyphus to help participants assess their Strengths, Limitations, and Obstacles as they strive towards their vision (Potential Excellence). The study provides evidence that metaphor and story elements, which have seldom been integrated in such instruments to date, can significantly enhance the process of strategy formation. A SLOPE analysis of SLOPE itself is used to identify promising avenues for future research and organizational practice.

DEDICATION

I dedicate this to my parents, Val and Gordon Sutherland, who introduced me to Rudyard Kipling and taught me how to keep my own *Six Honest Serving Men*.

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A journey of this nature is never made alone. I wish to thank Don Burbidge—my first Philosophy professor who took me out of Plato's cave and introduced me to Sisyphus. Without his guidance I would not be where I am, having created SLOPE. I also wish to thank the 2002 VCC Off-Campus M.Ed. Cohort (Satwinder Bains, Allison Brown, Laurie Cheung, Ronald de Villa, John Gabura, Gloria Johnson, Bruce Mol, Carlos Molina, Reba Noel, Bonnie Roberts-Taylor, Judy Shandler, Janet Theny, Peter Thomas, Marlena Vanderwal, Mary Vanveen, Kumar Varma, Natalie (Tally) Wade) and Cathy McGregor. They helped me endure the struggle and supported me taking my own path for which I will always be grateful.

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PREFACE

I became interested in strategic planning over the past 15 years while working in an Institutional Research/Strategic Planning office at a community college in British Columbia. My primary role was as a research assistant, assessing and evaluating programs using SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) and reporting attrition and retention rates of students.

I spend weeks producing data intensive strategic planning reports and environmental scans, only to see how quickly the information became outdated. Long-term and strategic planning seemed to be an uphill incline as government regulations or changes to the funding formula often changed plans or forced a different approach to the way the college operated or reported budgets and FTEs (to name only a few).

As a research assistant, I know the importance of current data and when I began working with SWOT (Strengths, Weaknesses, Opportunities and Threats), I appreciated how current the results were. Although I saw potential problems in SWOT's application, I had little choice but use it due to the limited number of tools available to me. SWOT is the most popular planning tool. It is simple and it helps organizations create objectives and strategies to reach their vision based on their mission, values, and goals. The main problem is that these statements do not stay current in a climate of change and can lead to a misinterpretation of the organization.

Having a vision is extremely important. If mission, values and goals are current, I know as a facilitator, that they can still be misinterpreted since they are not embedded

into the decision-making process, but an off-shoot of it—an after-thought. Also, it is not easy to see the relationships that exist between the variables, making interpretation for decision-making all the more difficult.

It was not until I left the research office that I designed a tool that combined the simplicity of SWOT Analysis with a well-known Greek myth—the myth of Sisyphus. For most of my life I have had an affinity for Sisyphus who was a clever and devious mortal punished by the gods to spend eternity pushing a gigantic rock to the top of a hill, only to have it roll back down as he neared his goal (Graves, 1996). Although his story is one of punishment and failure to some, I identify with his struggle. I believe that striving towards a goal, having a burden, and facing obstacles are part of my life and my determination to succeed is part of who I am. I believe that in every situation I can learn from each attempt and find ways to take advantage of opportunities. As Sisyphus these would be weaknesses in the rock or depressions in the slope to give me a better foothold or more leverage.

In this way, for me, the myth has become a structural metaphor for my own life. Structural metaphors "involve the structuring of one kind of experience or activity in terms of another kind of experience or activity" (Lakoff & Johnson, 1980). In general, metaphors, myths and legends are very important to our heritage and culture. Myths and legends provide ways for us to interpret situations or events and find solutions learned from them—solutions that may not have been considered before. Metaphors can help us interpret events from our own experiences and connect with them on an experiential level, thereby leading to new interpretations. They pervade our lives as words, images, and icons and we use them every day of our lives, in many cases not even aware that we

are doing so. By using the myth of Sisyphus as a structural metaphor for the challenges faced by organizations in a changing world, it is my hope that organizations and individuals will see themselves as Sisyphus, interpret their situation from a different perspective and find solutions that they may not have considered before.

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AN HISTORICAL PERSPECTIVE ON STRATEGY FORMATION

> When strategic planning arrived on the scene in the mid-1960s, corporate leaders embraced it as 'the one best way' to devise and implement strategies that would enhance the competitiveness of each business unit. True to the scientific management pioneered by Frederick Taylor[1], this one best way involved separating thinking from doing and creating a new function staffed by specialists: strategic planners. Planning systems were expected to produce the best strategies as well as step-by-step instructions for carrying out those strategies so that the doers, the managers of businesses, could not get them wrong. As we now know, planning has not exactly worked out that way. (Mintzberg, Ahlstrand & Lampel, 1998, p. 3)

Introduction

In recent years, the field of strategic management—the study of how organizations do or should plan their own development and their response to an ever-changing environment—has itself been in a state of rapid change. The field is constantly expanding to include new theories, even while there are old debates over issues such as what constitutes strategy and whether it is emergent (Mintzberg, 1989; Senge, 1994), ongoing (Markides, 1997), fragmented (Linblom, 1959), incremental (Linblom, 1959; Quinn, 1980) or partially deliberate and partially unplanned (Moncrieff, 1999). Strategic Planners and Managers cannot even agree on terms such as *planning*, *management* and *change*. There is debate whether planned change is even possible where organizations struggle to survive (Chaos Theory) and where organizations are considered unstable due to constant change (Population Ecology Theory).

[1] Frederick Taylor's time and motion studies, made factory operations and factory workers more efficient.

The one thing many strategists seem to agree on is that the world is facing constant change due to factors such as globalization and technology. No one can know anything for certain, except that social and economic conditions will continue to change unpredictably (Liedtka & Rosenblum, 1996; Murphy, 2003; Jennings & Jones, 1999; Tichy, 1983; Lettice, Young & Wickes, 2003). As a result, organizations must constantly adapt to change, and the trend is to move away from strategic plans based on problem-solving, and move towards emergent strategy, a shared vision, and—according to Rowley and Sherman (2001) and many others—a climate of collaboration where organizations learn from their mistakes and use the knowledge acquired to reposition themselves (Schein, 1992; Liedtka & Rosenblum, 1996; Bushe, 2001; Brønn & Brønn, 2002). This is sometimes referred to as *Double-Loop Learning* (Senge, 1994; Morgan, 1998; Chris Argyris, n.d.). Due to the uncertainty of knowing, errors are inevitable; however, they, too, can lead to learning (Morgan, 1998; Senge, 1994). The organization must create an environment where experimentation can occur without reprisal and learning therefore becomes a continuous process (Morgan 1998; Liedtka & Rosenblum, 1996).

There is a substantial gap between this emerging image of the ideal learning organization and the tools available to help bring it about. One of its most contentious and problematic aspects involves the phase of strategy formation, where learning becomes formalized and broad strategic choices are made through a process of assessment and analysis. Although subsequent implementation and change management pose challenges of their own, their overall impact arguably depends on the strategic foundation upon which they are based. If the foundation is weak because of a flawed or

limited approach to strategy formation, the organization's overall development will be compromised.

As the epigraph to this chapter suggests, this is exactly the situation that confronts many organizations today. According to Mintzberg, et al. (1998), specialists in strategic management, "planning has not exactly worked out that way" because planners have been using strategy formation tools designed decades ago for long range planning. This contrasts with the present need for rapid strategic reassessment and response:

> With globalization, consolidation, downsizing, restructuring, streamlining and technological changes, businesses face many challenges and have an increased need for flexibility. To meet these challenges, businesses must develop efficient, innovative and productive work environments with flexibility for expansion and contraction in response to the market. (Gibler, Black, & Moon, 2004, p. 1)

The situation is further complicated by the emergence of a multiplicity of schools of thought regarding the process of strategy formation since the field's inception in the 1960s. Mintzberg, for instance, identifies ten such schools of thought (Mintzberg, 1998). Others prefer a less extravagant typology: Kearns, for example, distinguishes three major approaches, the "*Analytical* (driven by data), *Visionary* (driven by the leader's vision of the future), and *Incremental* (a gradual process of finding the right answers through trial and error)" (as cited in La Piana, n.d., p. 3); while Chakravarthy & White (2001) enumerate four perspectives, the "Rational, Political, Evolutionary and Administrative" (p. 183). What all authors agree on, however, is that the field is characterized by a great diversity of perspectives, none of which offers a definitive or comprehensive guide to present-day challenges of strategy formation.

From this multiplicity of views, Mintzberg and colleagues (1998) conclude that new strategy formation processes are needed to deal with a changing world and improve practice. They equate the field of strategy formation to the fable "The Blind Men and the Elephant" by John Godfrey Saxe where each blind man is concerned with describing a part of an elephant, and in the process ignores what others are saying and misses the big picture:

> We are the blind people and strategy formation is our elephant. Since no one has had the vision to see the entire beast, everyone has grabbed hold of some part or other and 'railed on in utter ignorance' about the rest. We certainly do not get an elephant by adding up its parts. An elephant is more than that. Yet to comprehend the whole we also need to understand the parts. (p. 3)

They argue that each school of thought focuses on a reduced set of variables and processes involved in strategy formation, but when taken together, form a complete picture. Thus, "any new strategy process, has to combine various aspects of the different schools" (p. 367).

This thesis describes the design and initial applications of a new strategy process that seeks to respond to the challenge posed by Mintzberg et al. The research questions which drove this study were the two that immediately arise from this context: first, does the process actually aid organizations in the process of strategy formation; second, does it offer clear advantages over other widely used processes? These questions will be addressed through the empirical study described in Chapters 3 and 4; however, I will first establish, in the remainder of this chapter and in Chapter 2, a theoretical rationale for an affirmative answer to both questions.

The following discussion employs the taxonomy established by Mintzberg and colleagues (1998) who classify the existing approaches into three different types—prescriptive (comprising three schools), descriptive (comprising six schools), and the final school that combines all types (Mintzberg, et al., 1998). Prescriptive schools are concerned with how strategies *should* be formulated, whereas descriptive schools are concerned with how strategies "necessarily *do* form" (Ibid., p. 5). As previously clarified, a number of alternative typologies are available; this one was chosen as offering the most fine-grained analysis of the field.

The Design School

The first prescriptive approach to strategy formation is the Design School—a conceptual process that influences most teaching and practice to this day (Mintzberg & Lampel, 1999) and for this reason, will be discussed in detail here.

The design school includes SWOT (*Strengths*, *Weaknesses*, *Opportunities* and *Threats*) and tools of similar ancestry (TOWS, SWOL, etc.). Strategy formation in this school is a process of simple and informal design, and the most popular of the design school tools is SWOT Analysis.

SWOT's popularity is due to it being "simple and non-threatening" and inexpensive (Corsini, 2003, p.1). Groups are more effective than individuals since they provide a more structured, objective and clear focus with less influence from politics or self-interest (Balamuralikrishna & Dugger, 1995)—one of the criticisms of SWOT when performed by individuals. Although it encourages participation from all stakeholders, variables can be misinterpreted. On the other hand, it is compatible with other strategic

planning methods such as program evaluation and is a good way to begin the strategic planning process (*Benefits*, n.d.).

Basic SWOT

A basic SWOT analysis comprises four elements—*Strengths, Weaknesses, Opportunities* and *Threats* in a simple grid pattern (see Figure 1). Two elements are internal factors, and two are external factors. Through brainstorming or interview (usually with a facilitator), four questions are asked: What are our strengths? What are our weaknesses? What are our opportunities, and what are our threats? (For a brief description of how SWOT analysis works, please see Appendix A).

Figure 1 SWOT Analysis Variables

Internal Factors	**Strengths**	**Weaknesses**
External Factors	**Opportunities**	**Threats**

Once the grid is populated with inventory items from discussion, decision-making takes place. This is usually a simple process of finding ways to increase or take advantage of strengths while decreasing weaknesses, and increasing or taking advantage of opportunities while decreasing threats. Following, are some of the common SWOT-like tools to help decision-makers find relationships between the variables and choose possible courses of action.

Strategy Matrix

The first of these tools is the *Strategy Matrix* (Figure 2) that illustrates how one can use the basic SWOT analysis mentioned earlier by simply re-thinking it to help one take advantage of the opportunities, avoid the threats (or turn them into opportunities), build on the strengths and take action against weaknesses (or eliminate them) (*Benefits*, n.d.).

Figure 2 Strategy Matrix

Internal Factors	EXPLOIT *Strengths*	EXPLORE *Weaknesses*
External Factors	CONFRONT *Opportunities*	AVOID *Threats*

Two other methods of interpretation are commonly used methods for simple analyses since they spark discussion and attempt to arrive at decisions; however, they also do not illustrate the relationships between the variables. The first method is to ask the following four questions in order to arrive at a decision through discussion (Kyle, n.d.): How can we use our strengths to take advantage of the opportunities we have identified? How can we use these strengths to overcome the threats identified? What do we need to do to overcome the identified weaknesses in order to take advantage of the opportunities? How will we minimize our weaknesses to overcome the identified threats? (Kyle, n.d.). The second method is to compare SWOT results to the institution's Vision Statement. This gives decision-makers a starting point for discussion that centres on taking advantage of the strengths and opportunities that support the vision while dealing

with crucial issues that hamper achievement of the vision. The Vision Statement is a discussion-based tool that can be used with SWOT to make decisions.

Minimax (TOWS)

Although Strategy Matrix is a simple method for interpreting SWOT results that does not require reorganization of the variables or the accompanying values, one method that does make reorganization necessary is *Minimax* (*SWOT analysis*, n.d.). It is sometimes called TOWS.

Minimax or TOWS begins with the completion of the basic SWOT analysis mentioned previously. Values are then reorganized so that strengths and weaknesses are paired with opportunities and threats. The goal (shown in Figure 3) is to minimize threats while maximizing opportunities (tO), and minimize weaknesses while maximizing strengths (wS). When strengths and opportunities meet (SO), strategies are formed.

Figure 3 Minimax or TOWS Analysis

	Internal Strengths	**Internal Weaknesses**
External Opportunities	SO Strategies	wO
External Threats	St	wt

There is no attempt made to find a relationship between *all* the variables, only some of them. For example, if one of the threats to a small store is a new competitor, and an analysis of strengths shows that the affected store has well trained employees, one would seek to minimize the threats by capitalizing on the strengths. This might mean

providing incentives to ensure employee loyalty in order to save money on new employee training.

This matrix appears to work well in showing us the relationship between two variables at the same time (internal strengths with external threats); however, it is a static model (never changing) and does not allow us to see the relationships between all the variables.

Weights and Rankings

The last method is a complex analysis of using weights and rankings. It attempts to be assessment-based and assist decision-making by demonstrating a relationship between the variables through ranking and weighting of their values. After completion of a SWOT analysis, the results are tabulated and the findings structured into a more complex business management style that measures the importance of issues and their frequency. The result is two measures: *Total Points* and *Count*. Total Points are calculated by assigning a weighting to the most important points for each SWOT category as measured by the total number of votes by participants ("dots"). The issue with the most dots is ranked as the most important; the second most number of dots is second-most important, and so on. The #1 issue is assigned 5 points, #2 receives 4 points ... #5 receives 1 point. Therefore, the issue with the highest number of points is voted most consistently as one of the most important issues. Count is found by simply recording the number of times an issue is mentioned, irrespective of whether or not it is in the top five.

Although this method is a little more successful at demonstrating dynamic relationships than other types of SWOT-based analyses, it still does not fully illustrate the

interrelationships that exist between variables which remain static. They lack a dynamic quality and do not serve the added purpose of being able to measure any change in the relationships between SWOT variables after decision-making. It is also very complicated.

Limitations of SWOT-based models

Despite its popularity, problems with SWOT's application and subsequent interpretation of results have caused some individuals to demand its "recall" (Hill & Westbrook, 1997, p. 46), rebuff it (*Swatting SWOT*, 2000) or to use the initials SWOT to mean "Significant Waste Of Time" (Armstrong, 2002, p. 1). In today's competitive world, it cannot answer the most fundamental question of how some organizations (such as businesses in Japan) do better than others identical to them in terms of size, service and/or product; and it cannot help organizations to learn to adapt quickly to today's changing environment because it is a tool designed for long-range planning. The Mission and Vision statements, on which it depends, remain static and continually out of date with the changing environment. Also, because it is a military model its emphasis is on negative problem-solving seen in combat or strategic positioning, and not "vision building" (Bushe, 2001, p. 236).

I have found that when using SWOT, discussion is difficult to maintain because there is no definitive way for participants to see the relationships between the variables of strengths, weaknesses, opportunities and threats in order to interpret their meaning for decision-making (*SWOT analysis*, n.d.; Haberberg, 2000). This lack of relational analysis is just one of the problems with SWOT. Another problem is that at present, it cannot be re-applied in the same way to evaluate the impact of SWOT-based decisions because

SWOT cannot be applied in a consistent manner to accurately measure outcomes of SWOT-based decisions[2].

The Planning School

Originating around the same time as the design school, the Planning School based on Ansoff's model of strategy flourished from 1965 until approximately the mid-1970s, when its popularity began to wane (Mintzberg & Lampel, 1999; Mintzberg, et al., 1998). Like the design school, this school is prescriptive. It has its roots in systems thinking and cybernetics. Strategy is a conscious process of formal planning with clearly delineated steps, rigorous checklists and detailed timelines "especially with regard to objectives, budgets, programs, and operating plans" (Kotelnikov & Ten3 East-West, n.d., p. 3). The formal structure permits anyone to facilitate the process but it is a detached process with no room for creativity and some elements can be ignored (Mintzberg, et al.,1998, p. 69).

The Positioning School

Made famous by a model developed by Michael E. Porter in the 1980s and based on military strategy dating back to Sun Tzu in 400 BC (Mintzberg & Lampel, 1999), the Positioning School uses an environmental scan to identify external opportunities and threats and evaluate an industry's overall attractiveness in terms of its value (Oliver, 2002). Through an analytical process, factors are identified that could reduce that attractiveness and offensive or defensive scenarios are created. The process leads to substantial investigation, it is data intensive, and it therefore allows planners to become lucrative consultants/analysts because they can show decision-makers how a choice of

[2] This is my personal viewpoint based on my experience.

strategies can work to their organization's advantage (*Why Higher Education*, n.d.). According to Mintzberg, and colleagues (1998), this last prescriptive school has made a significant contribution to strategic management although it can tend to dominate the process.

The Entrepreneurial School

The three previous prescriptive schools focus on providing frameworks on which strategy is designed, planned or positioned. The next six schools attempt to describe how strategy is actually formed in organizational practice. The Entrepreneurial School is the first descriptive school. It describes strategy as a visionary process that exists in the mind of the Chief Executive Officer and rooted in what Mintzberg and Lampel (1999) call "the mysteries of intuition" (p. 23). The leader is central to the vision which is interpreted often through metaphor or myth (Alvesson & Berg, 1992).

Although this school recognizes the contribution a visionary leader can make to an organization, it relies heavily on that one individual who promotes the vision single-mindedly, even obsessively at times, and maintains personal control over the implementation process. This can make it difficult for others in the organization to share in that vision or continue it in the leader's absence (Mintzberg, et al., 1998).

The Cognitive School

The Cognitive School has its roots in Psychology and bridges the descriptive and prescriptive theories. It began in the 1980s and still continues today to examine the origin of strategies (Mintzberg & Lampel, 1999). In this school, strategy formation is a cognitive process that takes place in the mind of the strategist. Members of this school try

to understand how the mind constructs social reality (i.e. "meaning construction") (Alvesson & Berg, 1992, p. 105), how it processes information, and how it develops concepts—thereby leading to an understanding of how strategy actually develops. According to Mintzberg and Lampel (1999), progress has been slow, and has led to a newer branch of the Cognitive School that focuses more on strategy as a collective process where "cognition is used to construct strategies as creative interpretations" (Mintzberg & Lampel, 1999, p. 23) and less on strategy as an individual process—as objective pictures of reality (Alvesson & Berg, 1992).

The Learning School

Like the cognitive school with roots in Psychology, the Learning School also has its roots in Psychology. In the learning school, learning is an integral part of the strategy process because learning emerges through behaviour resulting from experimentation that stimulates retrospective thinking that makes sense out of past patterns of action, and leads to future action (strategy). "...Strategies appear first as patterns out of the past, only later, perhaps, as plans for the future, and ultimately, as perspectives to guide overall behavior" (Mintzberg, et al., 1998, p. 209).

It should be noted that there are many theories on organizations as learning systems (Senge, 1994; Morgan, 1998; Chris Argyris, n.d.; Donald Schön, 2005). Mintzberg, et al. (1998) support this school but argue that there is a difference between learning theories that relate to managing change, and the learning school that relates to the strategy of change. They contend that although we can learn strategies for dealing with change, we should be careful to ensure that learning does not lead to a "disintegration of strategy" (Ibid., p. 223).

The Power School

The fourth descriptive school is the Power School, where strategy is shaped by power and politics and strategies emerge through a process of negotiation. There are two branches of thought—*micro power* where internal negotiation and bargaining take place with those who share power, and *macro power* where the organization uses its power to negotiate external joint ventures, strategies, etc. that serve its interests. This school takes the narrow view that strategy is only about power. While politics can play an active role in strategy, according to Mintzberg, et al. (1998) on a *micro-power* level it can also "be the source of a great deal of wastage and distortion in organizations" (p. 260). On a *macro-power* level, it "can create severe problems of collusion in a society of larger organizations" (p. 261).

The Cultural School

Unlike the power school, strategy in the Cultural School takes the form of perspective rather than position. Discussion moves from systems of values, beliefs, and norms to "shared social knowledge" (Alvesson & Berg, 1992, p. 76) where members of an organization interact as a collective and generate deliberate (as opposed to emergent) strategies that reflect the shared beliefs and understandings of all the participants. According to Mintzberg, et al. (1998), strategy formulation in this school tends to lead to vague concepts and favours perpetuation of the status quo and "discourages necessary change" (p. 281).

The Environmental School

Whereas the cultural school is influenced by internal factors, the sixth descriptive school—the Environmental School, describes strategy as a reactive process whereby organizations respond in a natural manner with their external environment. It is based on contingency theory that maintains there is one best way to run an organization. In the case of the environmental school, there is one best environment for each type of industry and it maintains that industries in similar environments will flourish in similar ways. Even though this is a fallacy according to Mintzberg and Lampel (1999), this school deserves acknowledgment for recognizing the contribution that environmental factors make in creating strategy. On the other hand, since it is concerned with how organizations "use degrees of freedom to maneuver through their environments" (Ibid., p. 25) in actuality, they are confined by their environments and have little or no strategic choice (Ibid.).

The Configuration School

The final and most complex school is the Configuration School where organizations are described by their characteristic states. It maintains the premise that organizations in a configuration are in a state of equilibrium, but if they are between configurations, they are nonviable until they reach a more stable configuration (Ibid.). Any change from their original state is consciously done through strategy formation that focuses on the process of transformation. Although it will work well for some organizations that tend towards the status quo, Mintzberg, et al. (1998) state that it may force unnecessary and detrimental change upon others.

Conclusion

No strategy formation tool is perfect, but taken together, the ten schools discussed, form a complete picture that includes: conception (Design School), formality (Planning School), attractiveness/value (Positioning School), vision (Entrepreneurial School), cognition (Cognitive School), learning (Learning School), power and politics (Power School), culture (Cultural School), environment (Environmental School), and transformation (Configuration School).

There is thus still a great need for strategy formation instruments that can take account of the internal and external dynamics affecting an organization and help to weigh competing goals and priorities, opportunities and visions. In the next chapter I will introduce a new strategy formation tool called SLOPE (Strengths, Limitations, Obstacles and Potential Excellence) and present arguments for its ability to achieve exactly this, based on the typology of approaches elaborated in this chapter.

CHAPTER TWO:
A NEW STRATEGY FORMATION TOOL

> The making of strategy today is inextricably linked with, and in large part really about, the management of change. The strategy making process is, in fact, the cognitive component of the change process. Change begins in the mind, with new ways of thinking that are later translated into and shaped by new ways of behaving. This new reality calls for a fundamental re-conceptualization of the traditional Balkanized strategy frame that draws boundaries between organizations in their environments, senior managers and subordinates, mindsets and skill sets, and strategy content and process. (Liedtka & Rosenblum, 1996, p. 142)

Introduction

This chapter will introduce a new metaphor-based tool called SLOPE (Strengths, Limitations, Obstacles and Potential Excellence) and compare its potential as a strategy formation tool with the ten schools of thought mentioned in Chapter 1. In the process it will also examine the work of other theorists including Mats Alvesson and Per Olof Berg (1992) to posit how well it can assist organizations in meeting today's challenges.

SLOPE - A New Strategy Formation Tool

Justification for using a metaphor as a guiding image for discussion of an organization comes from Peter Vaill who first suggested that

> When relationships between the organization and the environment are extremely complex, strategic planning may be started by using symbols and metaphors rather than data directly. The planning group would create a guiding image or metaphor and discuss the organization in terms of it. He noted that this usually produces either very little or a great deal of data. (Vaill as cited in Cleary & Packard, 1992, p. 232)

SLOPE was inspired by the simplicity of SWOT analysis found in the Design School and a Greek myth—the Myth of Sisyphus. Sisyphus was a mortal who was punished by the gods and spent eternity pushing a gigantic rock up to the top of a hill, only to have it roll back down as he neared his goal. I use the myth as a structural metaphor to represent organizations in a world facing many challenges.

As mentioned in the Preface, although his story is one of punishment and failure, Sisyphus is determined. I believe there is hope for his success in the fact that he can learn from each attempt and respond to the subtlest of changes in the rock or the hill to make his goal an achievable one. In this way the myth becomes a structural metaphor for the challenges faced by organizations today since it "involve[s] the structuring of one kind of experience or activity in terms of another kind of experience or activity" (Lakoff & Johnson, 1980). Sisyphus has a clear Vision (to get the rock up the hill), Strength (to push it), Limitations (the size of his rock) and Obstacles (the incline of the hill). (In SLOPE, these are depicted as story elements—a goal, Sisyphus, a rock, and an incline, respectively.)

The following brief discussion of the relationship of SLOPE to the various perspectives on strategy formation described in the previous chapter is not intended to be exhaustive. Rather, it attempts to sketch a plausible case for a positive answer to the two research questions that drove this study:

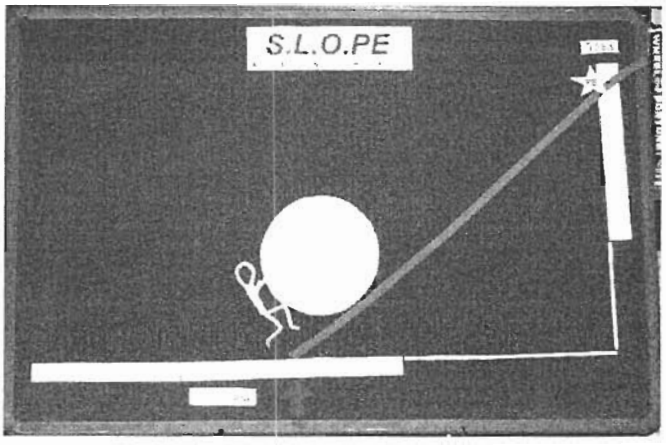
1. How well does SLOPE appear to meet the strategy formation needs of a range of organizations?
2. Do clients/participants perceive potential advantages to SLOPE in comparison with SWOT and other strategy formation tools?

The expectation is that a strategy formation process that draws on, or is relevant to, many or all of the schools of thought described by Mintzberg et al. (1998) will be more effective in actual practice. This prediction will then be tested empirically through the case studies described in subsequent chapters.

The Design School and SLOPE

SLOPE, like SWOT, uses a simple process that can be conducted by one person, and inventories are derived from discussion of four variables (although SLOPE contains three different variables—Limitations as opposed to Weaknesses, Obstacles as opposed to Opportunities, and Potential Excellence as opposed to Threats). As discussion of each variable takes place, inventories are written on flipchart paper and then assessed according to their intrinsic value to the group based on 5-point Likert-type scales of reference referring to height and steepness (*Very Low*, *Medium Low*, *Medium*, *Medium High*, and *Very High*), or size (*Very Small*, *Medium Small*, *Medium*, *Medium Large*, and *Very Large*). These values are then pictorially displayed on a felt board using the Sisyphean story elements—a goal (Potential Excellence), an incline (Obstacles), a rock (Limitations) and of course, Sisyphus (Strengths). The picture uses mathematical slope (rise/run) proportions. A straight line that joins the rise values to the run values is the incline of the hill that represents the Obstacles (see Figure 4).

Figure 4 SLOPE Story Elements



Once the values are plotted, a pictorial snapshot of the organization is formed and participants step into Sisyphus's shoes and are asked if given the current conditions, could they get the rock up the hill? They then step out of his shoes and make decisions based on *how* they would get the rock up the hill. This is where the dynamic qualities of the model become important. Participants may decide that what they need is a smaller rock (decreased limitations), a stronger Sisyphus (increased strengths), a lesser degree of incline (fewer goals), a longer incline (decreased obstacles) or any combination of the above. Because a dynamic relationship exists between the variables, a change in the value of any variable will change the picture and affect all variables (including Sisyphus) in a real-world way. This allows decision-makers the opportunity to experiment with different scenarios by adjusting the different values to see what the possible outcomes of decisions might look like prior to implementation of those decisions.

Unlike SWOT, since these story elements are dynamic and show the inter-relationships that exist between the variables, decision-making can take place

immediately—eliminating the need to implement Strategy Matrix, Minimax/TOWS, and/or rankings and weightings.

The Planning School and SLOPE

Like the Planning School, SLOPE uses a precise methodology that is replicable and permits anyone to facilitate individual or group discussions in one or more brainstorming sessions. It can be used for long range or short range planning because it simulates a real hill where *plateaus* can be used as mini-goals. Also, due to its pictorial nature and method of delivery, SLOPE can be replicated at the different levels or layers of an organization and/or re-applied with the same participants to assess the impact of previous SLOPE-based decisions. In the latter situation, the inventories and pictures from each brainstorming session can be compared to measure any possible changes.

The Positioning School and SLOPE

As stated in the previous chapter, the process of strategy in the Positioning School is data intensive and planners become lucrative consultants/analysts. SLOPE is not data intensive and planners are not consultants. In fact, I originally designed SLOPE to help organizations conduct their own analyses at little expense, and if successful, this tool could put many consultants out of work. What SLOPE does borrow from the positioning school is scenario-building. This is achieved in SLOPE by participants reducing or increasing the values they have attached to the four variables—the goal, the obstacles, the rock and Sisyphus. By manipulating the values, they can change the landscape and change the emphasis on policy and decision-making. The scenario building could also

include further SLOPE analyses in which story elements are used to measure the possible future impact proposed scenarios could have on an organization.

The Entrepreneurial School and SLOPE

So far in this discussion I have used the terms *goals* and *Potential Excellence* interchangeably. In many ways they are interchangeable, but in actual fact, goals are short-term and Potential Excellence is really the act of striving towards a Vision. Potential Excellence is cast, in SLOPE, as an environmental variable—that is, it requires participants to envision their organization in its environmental context, and thus undercuts more individualistic notions of vision as something arising from within the Chief Executive. There are, however, opportunities in the process for a visionary leader to communicate their ideals to other participants. The importance of vision and leadership tends to be downplayed in other instruments developed by the Design School; SLOPE may offer a better compromise between these opposing perspectives.

The Cognitive School and SLOPE

> Metaphor is one of our cognitive grappling tools; it enables us to see the world in multiple perspectives and to engage with the world flexibly. Metaphor is much more profoundly a feature of human sense-making than the largely ornamental and redundant poetic trope some have taken it to be. (Egan, 1998, p. 58)

It is only fairly recently that metaphor has come to be seen as central to human cognition within the mainstream field of cognitive science (Lakoff and Johnson, 1980). This oversight has been reflected in the cognitive school of strategy formation, which has so far ascribed little importance to metaphor. It should be emphasized that metaphors of organizations and of the process of strategy formation abound in the literature; however,

a search of major research databases in the fields of business and policy studies yielded no examples of metaphor being used as a strategic planning tool (see the concluding chapter for further discussion). In SLOPE, it is through the use of metaphor and story elements that strategies are constructed, deliberated, and most importantly, measured. This suggests that research on SLOPE and other metaphor-based tools could make an important contribution to the development of the Cognitive School.

The Learning School and SLOPE

According to the Learning School, organizational learning entails a messy, informal process that takes place in many locations and settings not directly affected by SLOPE. This insight is undoubtedly relevant to the ways in which the results of SLOPE are interpreted and implemented following a planning session. It seems quite plausible, however, that the metaphor and story elements of SLOPE will have a more lasting and pervasive impact on the learning process than other kinds of strategy formation tools. Such an outcome becomes more likely, the more frequently SLOPE is used to assess problems as they arise.

The Power School and SLOPE

In the Power School, strategy formation is overt and politics and power favour "particular interests" (Mintzberg, et al., 1998, p. 234). Since SLOPE either assumes or promotes group cohesion with a shared burden and slope, it fosters identification with the figure of Sisyphus and could disguise or embed any threats. Also, since it uses a pre-conceived metaphor, it may be less prone to the influences of power and politics. Of course, there is little in the SLOPE process itself that precludes its manipulation by

powerful individuals or groups within an organization. This possibility will be addressed in the concluding chapter, when the limitations of the instrument are discussed.

The Cultural School and SLOPE

SLOPE encourages collaboration from all members of an organization and results reflect the shared beliefs and understandings of all the participants—whether they are sharing beliefs of a department, division or the organization as a whole. This is something SLOPE has in common with the Cultural School.

Previously, I outlined how power and politics play a role and how the metaphor of Sisyphus could disguise or embed any threats. But there is a paradox here that even though Sisyphus represents the participants and is *affected by change*, at some point the participants have to remove themselves from the picture and become the change agents—the ones to *effect change*. Smircich (1983) states that

> ...it is difficult to engage in contextual reflexive management and research, with the requirement of examination and critique of one's own assumptions and values. It is difficult; but that is what a cultural framework for management and research urges us to do. (p. 355)

However, because strategic change is treated metaphorically in SLOPE, I contend that cultural change without paradox may be possible because according to Heracleos (2002), metaphors "can thus facilitate organizational change by creatively redefining reality for organizational actors and enabling them to see situations or actions in a new light" (p. 258). In other words, they offer ways to see change while acting as a filter for the impact of change. This has the added advantage of making it difficult for any stakeholders intent on personal or political gain, to influence the strategy process.

The Environmental School and SLOPE

The direct interaction of internal factors with external ones brings SLOPE closest to the Environmental School. Discussion of strengths and limitations always takes place in the context of the slope of the hill and elements of the story have the capacity to exhibit in a real-world way, changes in the environment. For example, if the slope of the hill is deemed too difficult to navigate, as on a real hill, obstacles can be moved (decreased), goals can be lessened, or another route found. Unlike the Environmental School, SLOPE does not use degrees of freedom, but instead, uses degrees of inclination in that the incline that represents the obstacles is really an indefinitely extensible line; and as in a real-world example of the top of a hill, it can be discovered that the point reached is only the beginning.

The Configuration School and SLOPE

As discussed previously, SLOPE has the ability to illustrate an organization's present situation, provide a snapshot of it, and build scenarios to see the impact of possible decisions. This allows for discussion of what is needed to "bulk up" Sisyphus, reduce his burden, and flatten the hill. This is similar to the Configuration School's notion of moving between different states.

Like the Configuration School, strategy would focus consciously on the process of transformation, but unlike the Configuration School, it would have the potential to show if change is necessary or beneficial. This is a powerful tool since it leads to transformation through *reframing*. Reframing is the process of changing perspective from one emotional and experiential viewpoint into a new frame that fits the known facts

equally well or better, and changes the whole meaning (Watzlawick et al. as cited in Alvesson & Berg, 1992, p. 165).

SLOPE's Strengths, Limitations and Potential

Discussion in this chapter has focused on SLOPE as an approach to the strategy formation process. Table 1 summarizes the arguments made and attempts to show how SLOPE engages with all ten schools of thought. While somewhat impressionistic, this establishes that a strategic planning tool that combines metaphor with story elements may represent a genuinely innovative approach to strategy formation, and one that responds to Mintzberg's call for more broadly based planning tools.

The next two chapters describe a modest empirical study that attempts to test the practical value of these ideas.

Table 1 SLOPE as Strategy Formation

School of Thought	SLOPE's Strengths (as a Strategy Formation Tool)
Design School	Like other instruments from this school, SLOPE uses four variables and follows a very simple strategy process. In addition, story elements aid decision-making.
Planning School	SLOPE uses a precise methodology, as this school advocates, and is a tool for both long range and short range planning.
Positioning School	SLOPE incorporates the focus on scenario-building that partly defines this school; in addition, story elements can be used to measure the possible future impact of proposed scenarios.
Entrepreneurial School	SLOPE shares this school's emphasis on the importance of vision, but focuses on its development by the collective (the entire organization), not just the Chief Executive.
Cognitive School	The incorporation of metaphor as a central element of the strategy formation process, and not just as a means of describing its outcomes, is relevant to recent developments in cognitive science and may indicate a valuable avenue of future research.
Learning School	The metaphor and story elements of SLOPE may have a more lasting and pervasive impact on the messy informal process of organizational learning described by this school than planning tools that do not incorporate such elements.
Power School	SLOPE fosters group cohesion in the identification of Sisyphus and the metaphor has the capacity to disguise or embed threats; however, there are few safeguards against the deliberate manipulation of the process in favour of particular interests.
Cultural School	The emphasis on shared beliefs and collaboration from this school is reflected in the SLOPE process and its underlying metaphor. Change is an integral part of this school and metaphor offers ways to see change while acting as a filter for the impact of change.
Environmental School	The interaction of internal and external factors highlighted by this school is central to SLOPE, both metaphorically and visually.
Configuration School	The SLOPE process incorporates an exercise in re-visioning that resembles the movement between states characteristic of this school.

CHAPTER THREE:
METHODOLOGY

The research strategy chosen was a qualitative case study incorporating Participatory Action Research and using a semi-structured interview protocol. In most respects, the objectives and methods of the research and the objectives and methods of SLOPE as a strategy formation tool are closely aligned:

> Most participatory action research sets out to explicitly study something in order to change and improve it. It most often arises from an unsatisfactory situation that those most affected wish to alter for the better (although it can also arise from the experience of something which works well, which provokes the desire to reproduce or expand it).
>
> The moving to new and improved action involves a creative 'moment' of transformation. This involves an imaginative leap from a world of 'as it is' to a glimpse of a world 'as it could be'. (Wadsworth, 1998, p. 6)

This citation from an article in *Action Research International* is equally applicable to the SLOPE process and to the overall purpose of my research. My prior experience with strategy formation, described in the Preface, convinced me of the value and importance of instruments and processes that can help individuals and organizations make that "imaginative leap". It was clear to me, from years of experience with SWOT and other tools, that opportunities to make such a leap were often frustrated by the inadequate tools on offer. When I came to study the field of strategy formation, as described in Chapter 1, it became apparent that this problem was endemic. The emergence of SLOPE from an extended period of struggle felt to me like one of the "moments of transformation" that Wadsworth describes. Thus the questions driving my

research were broad and ambitious ones: would SLOPE prove to be effective with a broad range of organizations, and did it offer distinct advantages over the tools that were already familiar to me?

Participatory Action Research (PAR) thus closely matched both my own wishes for SLOPE and my desire to improve my own practice and my understanding of how SLOPE works to help clients. In practice, this meant using SLOPE to aid particular organizations in the process of strategy formation, while requesting their feedback on the efficacy of the process and its perceived advantages over other tools. As the researcher, I took the time to facilitate the dialogue, assist participants with their problems, foster reflective analysis, and provide clients with a final report of their analyses. I also offered my services to provide clients with another SLOPE analysis at any time in the future, without remuneration.

A well-known issue in PAR is the recognition and minimization of researcher bias. Inevitably, the action researcher is committed to a particular vision of change or of the change process, and this can make it difficult to take note of or acknowledge inconsistencies and failures. To minimize possible biases I arranged to meet my clients at a location of their choosing and agreed to maintain privacy and confidentiality in all reports and findings with a promise to use them only for a future dissertation. I was aware of my role both as a researcher and as the creator of the assessment tool being tested, and remained open to suggestions for improvement of either my own performance or SLOPE's. Participants were encouraged to use any or all of the materials as they wished and were permitted to leave the session at any time without question. Upon completion of

the study I reviewed transcripts and findings with the clients and offered them all materials relating to their analyses.

The data were thus collected for two purposes. The first purpose was to give each participant a report of his or her findings and thereby to aid them in the process of strategy formation. The second purpose was to code the data to find possible themes that answer the research questions: How well does SLOPE appear to meet the strategy formation needs of a range of organizations? Do users perceive potential advantages to SLOPE in comparison with SWOT and other strategy formation tools?

Sources of Data

Data sources fall into several categories—audio recordings and transcripts; written notes from the sessions together with photographs of SLOPE diagrams; my personal observations and recollections of the sessions; post-session questionnaires; and, in two cases, a follow-up interview. Audio was recorded on a Panasonic IC recorder, downloaded in .wav format from the recorder using Voice Studio, then converted to .mp3 format using Polderbits editing software, and transcribed using Word Transcriber add-in. The transcripts that resulted helped clarify and objectify points. After each session, I let the recorder continue to record and have post-discussion oral comments that were also transcribed. There are also comments and a transcript from a follow-up interview of two participants conducted almost two months after their initial SLOPE analysis.

Data from narrative sources included post-discussion questionnaires that will provide much of the data on the perceived advantages of SLOPE over SWOT. A source of written data was flipcharts that contain the inventories that emerged from discussion.

They also served to reinforce discussion points, ensure accuracy on the part of the facilitator, and help participants decide what sizes to make their story elements. They are a reminder of the sequence of events leading up to and following dialogue, and provide a visual reference of how elements were combined and remedies sought during decision-making. (Audio tape does not provide a visual reminder of the sequence of events, nor a clear record of how inventory items were changed or combined in the process of decision-making.)

Data from visual sources included pre- and post-decision photographs of each participant's SLOPE analysis. They are a record of SLOPE sessions and remind me (a visual person), of the participants and the discussion. For example, I remember from the pictures observed in tandem some of the comments made about the rocks or the vision/goals and from these, can identify the participants. My observations, the flipcharts, and the audio-recordings are powerful reminders of each session and collectively, they enable me to reconstruct the sessions, analyse them in my mind, and re-interpret them. A crosscheck of the data was done using a post-session survey and a follow-up interview (the latter, on two of the three participants).

The Pilot Study

On November 10, 2003, SLOPE was conducted on a Division Council of Girl Guides of Canada at a regular meeting of 11 of its members. Since I was using SLOPE for the first time and did not know how it would work, I attempted to answer a different research question that examined the use of metaphor in decision-making. I chose a Division Council of the Girl Guides because I had access to it as a member of Council; also, the Division was facing an uphill struggle not unlike Sisyphus with declining

enrolments and a dwindling source of volunteers. Because many women work and volunteer for other organizations such as Parent Advisory Councils, there are proportionately fewer female volunteers today than when Girl Guides first began in 1910. With the imminent departure of the Division Commissioner, this Division was offered the opportunity to join others in a restructuring in an effort to save money and run more efficiently.

From comments made during the analysis and in the post-evaluation, the Sisyphean metaphor was successful in helping the Council assess their SLOPE, which resulted in no changes to SLOPE's design, but several factors did force changes to SLOPE's methodology that made it a pilot study. One factor was the allocation of time. The regular Division meeting was scheduled to start at a specific time and last only 30 minutes, allowing two full hours for a SLOPE analysis before all the ladies headed home. However, the meeting began 30 minutes late which left only 1.5 hours to conduct an analysis. Understandably, ladies wanted to leave before the session was over and the decision-making portion of SLOPE was given very little attention. As a result, I now devote a four hour block of time solely for the purpose of conducting a SLOPE analysis—two hours for assessment, and two hours for decision-making.

Another factor that led to changes in methodology was my attachment to the group. Although I had the apparent advantage of knowing everyone in the room, this was also a disadvantage in that the group was not accustomed to me being in the role of facilitator and became rather boisterous and somewhat unruly. For years I was their peer. We both suddenly found ourselves in different roles. Once discussion started however, the group took the session very seriously. Unfortunately, I did too. While I was

attempting to portray an unbiased *consultant*, I relied too much on story elements to guide the discussion in an attempt to distance myself from the group. I asked questions I knew the answers to, and consciously tried to avoid making any contribution to the discussion. Although this is the way SWOT analysis is usually facilitated, this was unnatural and out of character for me and would have seemed very foreign to those who know me.

The association I had with the participants also prevented me from reminding them to return feedback. I attempted to provide ways for them to do so anonymously (via self-addressed envelope and anonymous email), but I learned from having only four responses that I should have asked someone to send out reminders. Also, I should have asked someone to collect the consent forms. I had to chase after one lady the next day when I realized she did not return her form to me.

I learned from my experience with the pilot group that to be the best possible facilitator, I have to be unbiased by knowing as little about participants as possible, yet I should know just enough (perhaps one or two pieces of information) to prove I have an interest in working with them. In this way, I would see not only how well SLOPE contributes to participants' understanding of their business, but I would see how well it contributes to my understanding of them.

I learned a great deal from the pilot study, namely that it confirmed the potential utility of SLOPE by helping the Division Council see what made it strong in terms of the average years served by leaders (ten), the cohesive bonds/teamwork that have formed, the cooperation and support Council gives to its Division Commissioner, and the opportunities the external community provides girls and leaders. For these reasons, the

Division decided not to join other divisions in a restructuring. I realized then that data analysis for my thesis could not be the focus of a SLOPE session; the foremost purpose must be to help my clients analyze their situation and formulate their strategy. (It's the type of work I have enjoyed for 15 years in a strategic planning department at a community college.)

The pilot study helped me to improve the way SLOPE is administered and to narrow and refine my research question which was too broad since metaphor is used in organizational studies (Morgan, 1998), organizational learning theory (Senge, 1994), and organizational culture (Schein, 1992), to name only a few. Since it was SWOT that inspired SLOPE and the pilot showed me that SLOPE is more than just a metaphor, for the current study I would focus on SLOPE as a strategy formation tool. Unfortunately, because the Division Council members of Girl Guides lacked experience using SWOT (although many had heard of it), the data from the pilot study are not usable in this study. Only the post-session questionnaire pertaining to the use of metaphor, appears to be usable.

The pilot study played an important role in helping me understand SLOPE's potential (since it was able to help a Division Council of a worldwide organization), and fine-tune the methodology. It gave me a better sense of the relative importance of the different sources of data and how to interpret them. (For a detailed account of a typical SLOPE analysis, please refer to Appendix B.)

Current Participants

Because of the research question and its emphasis on SWOT, I now needed to find participants that had used SWOT and were willing to try SLOPE. Because SWOT is a business tool often used by individuals, I felt I could include sole-proprietorships. To find participants, I created a website, offered free services and advertised via friends and word-of-mouth. I created business cards and sent them along with flyers to businesses near my home. I did not find anyone until after I advertised on the Faculty of Education listserv.

I eventually found three participants/future clients and the setting chosen for a SLOPE analysis in each case, was one familiar to them. My first client, Abby, is an SFU Alumna and was the first person to respond to my listserv advertisement. She owns a newly created sole-proprietorship and used SWOT in her business courses. During her analysis (held on campus), I found out that she has an incredible vision, but at the time did not know how to achieve it. Abby recommended me to Betty, (someone she met during a break between business classes) who became my second client. Betty has also used SWOT but unlike Abby, she owns a well-established sole-proprietorship as a Horticulturalist. At the time of her SLOPE analysis, I discovered that she was facing uncertainty with a move to another part of the province and was looking to make a fresh start. I met Betty in her home. The third client, Colleen, is an acquaintance of mine at my workplace and although I know what her job generally entails, I do not know the details of her work. We have known each other for approximately ten years and see each only occasionally over coffee or lunch. Colleen became a client after I casually spoke to her about my thesis. She stated that she has only used SWOT professionally in her work, as a

participant in a process to establish departmental goals and strategies. This time however, Colleen's supervisor gave her specific targets/expectations required of her in the next three years, and Colleen was asked to outline the strategies she would use to achieve them. She received approval from her supervisor to have me visit her workplace during work hours to conduct a SLOPE analysis.

Limitations

There were some limitations to the data collection process of the current case study. Some of these are in the form of technical difficulties. While working with Abby, I forgot to take her first SLOPE assessment picture. I was however, able to recreate the picture later from the audio recording. Also, after audiotaping approximately three hours of discussion, we discovered that the memory was full. I deleted other recordings that were not necessary, and set the recorder to a slower speed to conserve memory. Upon transcribing, I discovered that we had lost approximately 30 minutes of discussion time (I know this from memory, supported by flipcharts). In addition, the slower speed of the recorder made some words difficult to hear. Abby helped me reconstruct what was missing and made edits to her transcript and report. She also met with me to discuss our session.

One practice with Abby that I later avoided with other participants was placing decisions on a separate piece of flipchart paper. This was not a good idea for two reasons: After decision-making, it was difficult to determine what variables she was attempting to reduce/increase, and it forced both of us to have to read the flipchart sheets each time to get our bearings. In addition, because Abby was the first participant, I did not have a

smooth presentation. I felt that I was stumbling to find my words. It did not however, seem to affect the feedback I received.

I met with Colleen nine days after meeting with Abby. I was unable to take my notebook computer as a backup so to prevent any recording difficulties, I ensured I had fresh batteries and unused storage space on the recorder. Because we were at Colleen's workplace, and I had a large easel and felt board, we used a common area of the floor for the SLOPE analysis. This was noisy, and curious people kept interrupting the session to see what we were doing. When we were approximately 45 minutes into the session, the President came by and began asking questions. That was when Colleen suggested we move into her office, which although cramped, was private.

I met with Betty the next day after meeting with Colleen. Betty seemed to want to talk and the conversation flowed without interruption from Potential Excellence, through Obstacles, to Limitations. I did not want her to lose momentum, so as she spoke, I wrote on the flipcharts. She spoke with such rapidity, that before too long we had discussed three variables in quick succession. Because story elements are assessed/rated after discussion of each variable, I recall being worried that the portrayal of story elements for three variables at the same time might accelerate the appearance of the *big picture* (a portrayal of all the story elements), thereby causing Betty to anticipate the outcome. As a result of this worry, I stopped the conversation before Betty started discussing Strengths. From comments made, the acceleration did not appear to have lessened the impact of the picture once all story elements were in place.

I had learned from previous sessions, and during Betty's session, I was able to use my notebook computer as a backup recorder. For some reason though, it did not record

despite my efforts to disable the screen saver and power saving features. My primary recorder however, worked very well.

In general, with all the participants, I noticed that they appeared to wait for me to finish writing before stating their next point. This may have led to a loss of momentum during the discussions. I recall one instance with Colleen where after I had stopped writing, there was an extremely long pause that on the audiotape lasted 33 seconds. I recall at the time, she was analyzing her picture to determine where to begin decision-making. She appeared to be comfortable and I do not believe the pause forced her to say just anything for the sake of breaking the silence.

Overall, these limitations are minor ones. This study however, suffers from more severe limitations that need addressing. First of all, the sample size was smaller than I initially intended. It proved more difficult than expected to locate suitable participants within the time frame of the study, and the three participants analyzed here were all women and owners of sole-proprietorships or (in the case of Colleen), working on personal strategies. In terms of the research questions that were central to the study, these limitations are not fatal. The similarities of the outcomes and reactions among participants provide reasonably strong support for a number of conclusions, some of which were not anticipated at the outset. On the other hand, little can be said on the basis of this study about the applicability of SLOPE in a variety of settings, about possible gender differences in reactions to SLOPE and SWOT, and a host of other interesting questions, including cultural interpretation of metaphors and possible biases surrounding their use. In these areas the study does no more than point the way to promising directions for future research.

CHAPTER FOUR:
DATA ANALYSIS AND FINDINGS

Main Interpretive Themes

Four major themes emerged from the data that addressed the two central research questions: How well does SLOPE appear to meet the strategy formation needs of a range of organizations, and do users perceive potential advantages to SLOPE in comparison with SWOT and other strategy formation tools?

The four main themes were:

the cognitive benefits of a visual/metaphorical approach to strategy formation, especially in comparison to SWOT;

the translation of SLOPE story elements into real-world attributes by participants, and the consequent impact on their perceptions and emotions relating to strategic decisions;

the importance of the role of the facilitator; and

the depth of interaction facilitated by the SLOPE framework, that elicited a great deal of information about the participants.

Advantages of SLOPE's Metaphor/Visuals over SWOT Analysis

As anticipated, the data show consistently that the participants perceived the metaphor/visuals to be an advantage of SLOPE over SWOT analysis. All participants had used SWOT, and in the post-discussion questionnaires, they were asked to list at least

three advantages they think SLOPE has to other assessment tools (i.e. SWOT). From my own observations of participants and the general tone of the discussions, statements by participants either imply visuals or refer to them directly: "...Whole concept easier to understand....Visuals that gave you a good idea of the obstacle you had to overcome.... Easier to find solutions to the obstacles and limitations your business faces" (Betty). "Easily comprehended in terms of *external* and *internal* factors.... Includes follow-up action component" (Colleen).

Abby reflected on the long-term impact of the visuals:

> I remember the decisions we made that day, quite well, probably because of the visual element and the experiencial [sic] element of using metaphors. Had we not used the metaphors, the decisions would have made sense to me that day, but then I would have forgotten all about it and the rock would have felt big again several weeks later.

This is also evident in Colleen's post-discussion comments that "the graphical aspect of it is light-years ahead of SWOT. The end result I think, is so graphic, and that is a tremendous advantage". In a follow-up interview I had with Colleen more than one-and-a-half months after her SLOPE analysis, she provided one possible explanation:

Shona: I just wanted to know what you remember most about our session together?...

Colleen: The image of Sisyphus pushing the rock up the slope.

Shona: ...What do you think the reason for that is?

Colleen: Because the whole... the whole approach is graphic. It just is a graphic program, a graphic activity. That's how you illustrate the results and because we're not used to seeing results illustrated that way, we're used to seeing charts, and words and coloured felts... multi-colours on flipcharts so we have this rather stark image on a black background and it leaves a very strong impression.... I can even visualize the two

different pictures, the beginning one where the rock was huge and the slope was very steep, and the different slope and different sized rock.... I'm not a visual person. I'm totally text-based.... But that was the impact that it had....

Shona: So would you say that that's what makes it different from SWOT? I know you haven't used SWOT as an individual, but just the two...

Colleen: Yes. Definitely. That is the big difference.

This is also evident in post-discussion questionnaires where participants "could clearly see at the end of the analysis what steps could be taken to make reaching [their] goals easier" (Betty). It was also stated to be "more graphic – easy to comprehend" (Colleen). Betty also commented on the positive approach of SLOPE and advantages of it being a complete process:

> You work through it all, the negative and the positive and then you have... Sometimes [with SWOT] you're kind of left with all this stuff on paper and you know, it's all sort of residual kind of, well that's not very good and this is, but here, I mean this has been so wonderful because you can change the negatives into the... its great. I'm very impressed.

> It flowed. It was... There was no comparison as far as I was concerned. I never felt like I was lost or that I wasn't getting it. And then of course, I don't feel like after we had done [SWOT] that there was any resolution. It was like you had kind of put it all out there but then okay, now what do I do with it? Whereas this felt like you went through it, it was a complete thing that began and ended. With something positive in the end... I think this is wonderful... I can't see anybody not finding this really helpful as well as easy to understand.

Transfer and Emotional Impact of SLOPE Story Elements

An important and not altogether foreseen consequence of the use of metaphor in SLOPE was that participants described visuals/story elements as having real world

physical characteristics such as size and weight: "They feel big to me. They really do feel big to me... That rock is huge!" (Abby). "Pretty steep... That rock is huge!" (Colleen). As well as imaginary physical forces such as motion, force and gravity: "Well, I don't know much about physics, but the little physics I do know, something's got to change... From a physics point of view, I can see Sisyphus getting off to a good start here, and going up to about here, but it seems that the rock is going to reach a point where it starts to roll backwards and squash Sisyphus" (Colleen). "Just the visual of seeing there, trying to push that up the hill" (Betty).

In addition to real world attributes given to visuals by participants, there is also evidence that participants imagined the visuals as an extension of themselves. For example, in assessing her limitations, Abby discusses the size of her rock: "I would go with the fourth one. The fifth one could just roll over me and kill me..." (Abby). "It's interesting because as you get higher, it's harder to push, right? Harder to get there. But that's the way it is. As you get into the higher echelons you're dealing with people and competitors" (Betty).

Colleen even went one step beyond imagination, and reshaped her Sisyphus to better represent her own strengths:

Shona: Okay, there's your rock and here's you. Here's your strengths as they are. But those are not really the strengths they are now because you just added extra skills on there. See how these are all related? If you take a [specific] course, how strong do you think you're going make yourself?

Colleen: Well I know I'm not going to be big Sisyphus. Which Sisyphus am I now?

Shona: You're the middle one. If you don't think it's going to increase your strengths at all, then just say so.

Colleen: Well, this one looks weaker than this one to me.

Shona: He looks weaker?

Colleen: Yeah. [Pause]. Straighten him out a bit more.

Shona: Here, you can straighten him out. This is self-help.

Colleen: He's got some energy now.

Shona: How's that? Is that a likely measure of your strengths?

Colleen: I think so. Yeah.

In a follow-up interview with Abby almost two months later, she shared with me the real world impact the visuals had on her:

> For me it is the visual. When you asked me to choose between a small rock and a large rock... I mean, you could have given me a scale. You could have said, determine the extent that you feel that this is... you have roadblocks, and this a Likert-type scale from 1 to 5. You could have done that. But visually seeing that rock, I felt it. It was a sensing thing. I sensed the rock. And I remember in one part of the interview, "Oh, well that one is too big. I'm going to go with one lower than that because the big one is going to roll over and kill me."
>
> ...So I was literally... My business and me and the rock were in relation with each other somehow... So that was really the big part of why today, I still remember that that day something really did happen. Because I felt it.

As a result of visuals having real world characteristics, and participants imagining the visuals as an extension of themselves, it is not surprising that they would also feel the impact of decisions in a real world way. The data from the SLOPE discussions show evidence of this: "Now I'm sort of sitting on top of the rock, it's not going to run over me... I think that taking that course will take the pressure off the limitations... I feel all ready to go up [the hill]. Definitely..." (Abby). "I think that once something is perceived to be manageable, it almost <u>is</u> manageable. And so the perception of the obstacles is a lot

less threatening, so that makes them really less... I think my rock has shrunk considerably... I feel much more enthusiastic" (Colleen). "I think that I would need some tools to do it. I don't think that just from brute strength I could do it, but I think that I'd have to figure out, maybe get help from somebody..." (Betty).

In her follow-up interview, Abby described the impact the visuals had on her memory of the decisions:

> I was able to tell how strongly I felt at the beginning and then again I was able to tell how strongly I felt at the end. Whereas if you didn't have the metaphors, I would just say at the beginning, Oh, I feel awful about my business. Then at the end I would say, Oh, I feel much better. But that's too vague. But now with the metaphors, I have a much better idea....
>
> That's why today, I still know that I don't need to go back and see what the decisions were. Because that feeling has stayed with me.

Importance of the Role of the Facilitator

A third theme that emerged from the data, and which was not anticipated in the design of the study, was the importance of the facilitator. Observations supporting this could be found in all data sources, including the pilot study questionnaires, which state the need for "a good facilitator (which we had) to keep things moving and unless you have a good presenter it may not work as easily for an assessment" (Ann). Other statements from post-discussion questionnaires describe a "great presentation" (Betty) and appreciation for "...the insightful decisions suggested to me at the end of SLOPE" (Abby).

Originally, SLOPE was conceived as a strategy formation instrument akin to SWOT, whose application would not rely on any particular set of facilitation skills. Yet

the data from this study suggest that this may be an oversimplification. The importance of my role as a facilitator becomes evident as I review those parts of the transcripts where I helped the participants work through particular problems. During SLOPE discussions I would ask questions:

Betty: People try to go for the cheap… you're paying for the experience and the knowledge. People don't really want to do that.

Shona: Do they know that the experience and knowledge is in fact what they're paying for?

Betty: That is a good question.

I also helped participants determine their Strengths, Limitations, Obstacles and Potential Excellence, as is evident in this discussion of Strengths with Abby. It is also evident how much I learned about her after not knowing anything at the beginning of the session:

Abby: I tend to think that what I know everyone else also knows. I'm so sure that there's really not much that I know that others don't know.

Shona: Are you sure others know what you already know? Why did I put it over there (pointing to Limitations)?

Abby: Limitations… Because I could realize that that's not true…

Shona: You have an idea. You have an idea that no one else has.

Abby: That's a strength? It's unrefined.

Shona: That's a strength…You have an idea that nobody else has. It is unrefined, though. It's there. You have developed it, and you're passionate about it.

Abby: Yeah. I am.

Shona: Those are supreme strengths. They really are. And along with your education which gives you the right to sell this idea…

Abby: I definitely have the credentials....

Shona: I'm getting a feeling that with all your experience, will all your education, your passion, your creativity... despite all of these things there's one thing that is a Limitation... [written on flipchart, is the word "Confidence".]

Abby: Oh yeah. Absolutely....

With Colleen, I noticed binary opposites in her limitations and by helping her pair them, we reduced her limitations to a manageable size:

Shona: Okay, let's look at your limitations. You think that you're a [specific type of thinker]. If you're a [type of thinker], can you think of an equal strength. For example, are you... I don't want to use the word... Okay, let's see if I can draw another conclusion... [Long pause]. What I'm trying to say is that ...If you're not something, then that makes you...

Colleen: Something else. Yeah.

Shona: I don't want to put words in your mouth so I don't want you to know what I'm thinking right now, but...

Colleen: You can put this down as a strength. I know I'm not a moody person.

Shona: I beg your pardon? [Laughter]...

Shona: Do you think that mirrors some of the things that are said about you here. On the days you lack [something], is it because of... maybe they're tied together. And that this is the cause and this is the reaction?

Colleen: I think that maybe lack of [something] and lack of [something else] are definitely related. And I think these [pointing to two other values].

Shona: I just have to ask because we're building a list, and maybe one is a cause and one is a reaction. I don't want you to think that you have all these limitations [laughter] when one might be the result of another.

Colleen: Okay. So ...

Shona: You can write, you can touch, you can do anything you want.

Colleen: These are all really a package. They're really a bundle.

[Colleen combined two other values.]

Shona: So that narrows the list down to four limitations.

Colleen: I like that!

I also used psychology to help participants. Probably the most telling examples that support this claim are two discussions I had with Abby and Betty. They are also further evidence of how much SLOPE helped me learn more about them. The dialogue with Abby took place over her desire to be in an open structured environment:

Shona: So, when we get to the decision-making section, think about how you're going to get this across in a confined structure format that you currently have.

Abby: That's very interesting, you're very good, Shona. You're very insightful…

Shona: You said you worked in a lab. I'm not a psychologist, but maybe this idea and the fact that you think you're in a confined structure. It's just like working in a lab, and you refuse to put students in a lab-type facility.

Abby: That's a very good point.

The discussion with Betty took place over her desire to be more organized:

Betty: This is my taxes for next year. That is actually probably one of my biggest [limitations]. Not that I'm not disciplined when I'm doing a design. I'll stay up 'til two in the morning and stuff like that. But the other stuff, the kind of backbone, foundation stuff that needs to be done,

it's not good. I realize you can hire people to do those things if you make more money, but at this point it really is falling to me...

Shona: How can we make the backbone stuff more fun for you?

Betty: Just the feeling of satisfaction I get when it is organized. Because if it isn't, it's like here, all the time. I'm doing my life but it's like I've got this little cloud that's getting bigger. It's been a problem all my life. I think I'm ADHD, or whatever.

Shona: Is there anyway you can put it into pots? How can you organize this so that it's organic. Something that relates to what you're doing.

Betty: 'Cause then it wouldn't look so awful.... To me it's like I shove it there and it becomes the mess. It's like I don't want to look at it. It's behind the door, as you see so I can kind of ignore that it's even there.

Shona: You're an organic designer.

Betty: Then I do see it. I see it in a positive way. It actually looks like an exterior design. Because this isn't working. And the other thing that will be good. I realize this envelope, there is a bit of order happening there. But if it was exposed like that, at the end of the month... if I did it for the month. Okay, it's the end of the month. They need to be emptied. Yeah, that is actually good. That's a good idea, actually. It's like a maintenance garden. I have tons of pots. Make it a little project...

Shona: Your gardens aren't flat and they don't just stack like that. Make this into a garden and nurture it.

Betty: That's a great idea, actually. I think I could actually... yeah. And it would be visible.

Shona: It will be something that actually matches with the type of person you are.

Betty: I can't trick myself.

Shona: That's not something you can relate to. If you related to it, you would...

Betty: Keep it going.

The implications of this discovery of the importance of the facilitator will be taken up in the next chapter.

Depth of Interaction Facilitated by SLOPE

Although my personal role as a facilitator significantly influenced the outcomes of SLOPE, the instrument itself played an important role. "You know, you're hearing things that I would never repeat to anyone else!" (Abby) and "you probably know me better than just about anybody else on the campus" (Colleen) were common threads in my discussions with Abby and Colleen. In anticipation of such an outcome, I made an effort to know very little about the participants in advance of their analyses. In order to explain SLOPE's success, I created Table 2 as a comparison of the opportunities provided by SLOPE and SWOT for dialogic interaction with the participants, based on my experience using both these Strategy Formation tools. The results are very interesting.

Down the left hand side of the table are the opportunities for interaction. *List* refers to the part of the session in which participants are asked questions and state inventory items that belong to each of their lists. *Evaluate* is the section in which participants are asked to place a value on their story elements. (These are usually evaluated after each of the inventory lists, but for purposes of comparison, I have grouped them together in this table.) Participants are asked to *Assess* the big picture, *Analyze* the picture to see what story elements need to change, *Decision-Make* possible solutions, *Re-Evaluate* story elements that changed as a result of decisions, and *Re-Assess* the big picture. In total, SLOPE provides 13 opportunities for interaction—8 additional

opportunities compared to the 5 provided by SWOT. I believe these additional opportunities made it possible for me to learn so much about the participants and be able to help them.

Table 2 Opportunities for Interaction (SLOPE vs. SWOT)

		SLOPE	SWOT	
List:	Strengths	YES	YES	Strengths
	Limitations	YES	YES	Weaknesses
	Obstacles	YES	YES	Opportunities
	Potential Excellence	YES	YES	Threats
Evaluate:	Strengths	YES	--	
	Limitations	YES	--	
	Obstacles	YES	--	
	Potential Excellence	YES	--	
Assess:	Big Picture	YES	--	
Analyze:	Determine story elements to change (from big picture)	YES	--	
Decision-Make:	Analyze/examine inventories and decide solutions	YES	YES	Analyze/examine inventories using Strategy Matrix, Minimax (TOWS), or Weights and Rankings
Re-Evaluate:	Re-evaluate story elements that changed as a result of decision-making	YES	--	
Re-Assess:	Big Picture	YES	--	

I further explored the hypothesis that the structure of SLOPE facilitates interaction, and the role of its story elements in bringing this about, by creating a series of

diagrams to illustrate the nature of these interactions, based on my experience working with both SWOT and SLOPE. Figure 5 shows a typical facilitated SWOT analysis and the interactions that occur between the participant(s) and the facilitator via the SWOT tool.

Figure 5 Influences in SWOT

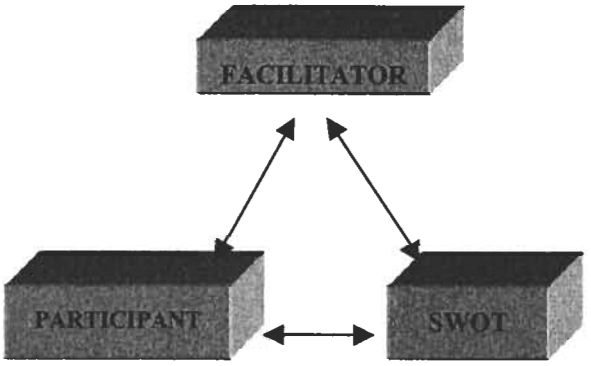


Figure 6 shows the influence of metaphor/visuals in a typical SLOPE analysis and the interactions that take place between the participant(s), the facilitator, and the metaphorical story elements. Imagine what SLOPE would look like without the story elements? It would be just another version of SWOT. As we will see in this section, the story elements add a dynamic element to SLOPE, that when supported by data already discussed, explain how metaphor/visuals helped participants find their SLOPE, and how the role of the facilitator was so important to the SLOPE process.

Figure 6 Influence of Story Elements/Visuals

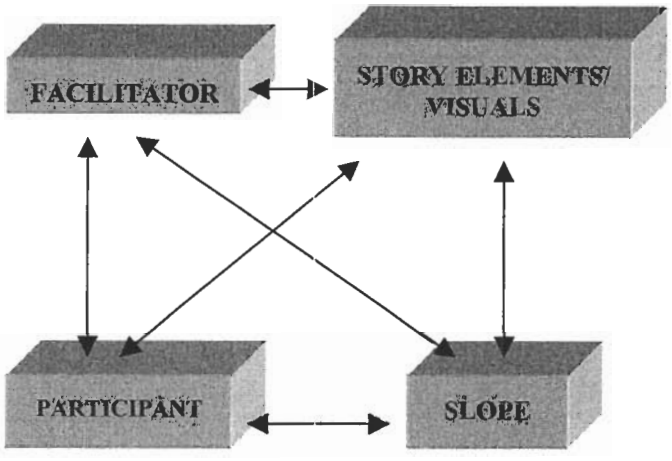
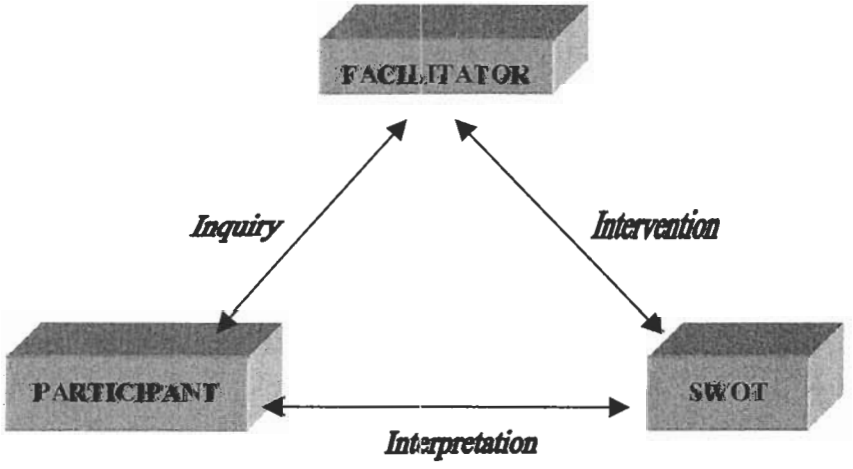


Figure 7 shows a detailed diagram of the three types of interactions that take place during a SWOT analysis. The first type of interaction is *Inquiry*, which occurs between the participant and the facilitator. The second type of interaction is *Interpretation* which occurs in participant/SWOT interaction when inventories are created using the variables of *Strengths*, *Weaknesses*, *Opportunities* and *Threats*. The third type of interaction, *Intervention,* takes place when the facilitator uses SWOT as a tool to help guide discussion.

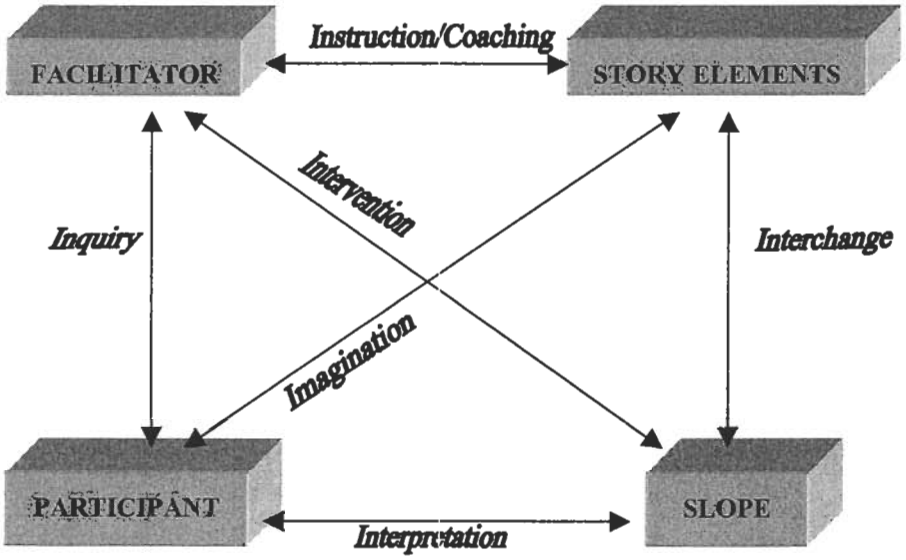
Figure 7 SWOT Interactions



These interactions are also found in SLOPE. The only difference is that story elements add another dimension to SLOPE, not present in SWOT. Figure 8 shows what happens when story elements that comprise SLOPE, are added to Figure 7. Twice the number of interactions occur. These interactions include *Instruction/Coaching* that occurs between the facilitator and the story elements, *Imagination* that occurs between the participant(s) and the story elements, and *Interchange* that results as story elements are a pictorial/metaphorical representation of *Strengths*, *Limitations*, *Obstacles* and *Potential Excellence*. These interactions will be discussed now in detail and findings supported by data collected from the case study.

We know from the data that participants chose story elements (Sisyphus, the rock, the incline and the goal), to represent their SLOPE (Strengths, Limitations, Obstacles and Potential Excellence), respectively, and used them interchangeably. Figure 8 shows that the facilitator used SLOPE variables as an intervention tool for inquiry, so logically, the same should also be true of story elements. However, it appears that as participants selected the sizes of story elements that reflected their Strengths, Limitations, Obstacles and Potential Excellence, *Imagination* took over and the nature of *Inquiry* changed. The facilitator became the *Instructor/Coach* to help the participants see relationships between the story elements and the inventory lists, in order to help them make decisions.

Figure 8 SLOPE Interactions



There is clearly movement taking place in SLOPE. The visual, the narrative and the metaphorical are all working to create a very dynamic interchange. Contained within SLOPE is also a binary structure where visuals are depicted as high/low, steep/level, heavy/light, strong/weak, large/small, and near/far. According to Kieren Egan (1998), "the most basic principle of [binary] theory is that educational development moves forward by bringing to consciousness what had earlier been operations in the mind" (p. 185). He recommends, "...mediating between the opposites, and thereby elaborating them, and then...making them explicit" (Ibid., p. 185), which is exactly what SLOPE does.

The very things that teachers are working with to understand how children learn, are the very things I have found successful in SLOPE. I believe SLOPE is engaging the imagination of participants, heightening their perceptions, giving them a new perspective, and helping them realize their Potential Excellence, all within a positive framework.

Limitations

There is evidence from all sources that participants perceived that SLOPE has advantages over SWOT analysis, and the metaphor/visuals had an impact on participants in real world ways. In addition, as the facilitator, I had an impact on the perceptions of the participants, and SLOPE provided opportunities for me to understand the participants. A major limitation of this study is that as both the facilitator of the process and the creator of SLOPE, I may have had too great an influence on the participants, who might be exaggerating their claims or seeing advantages where they do not exist, in an effort to please me (consciously or otherwise).

Other possible limitations can be found in what participants stated were the disadvantages and those things they liked least about SLOPE: "It might be too easily manipulated, (i.e. OK, if this part is too challenging, let's just make it easier)" (Colleen). "I can't think of anything that wasn't positive and helpful" (Betty). "Might not be easy for some analysts to apply because of materials required—doesn't travel well... Might be more expensive to implement" (Colleen). "Not familiar enough with other methods to make comparisons" (Betty).

> When I was doing the SWOT analysis, I learned the difference between threat and weakness, strength and opportunity. But when we were doing the SLOPE I didn't know, for example, whether a comment I had just made was being categorized as threat or weakness. Had I not done SWOT in the past, I wouldn't have known, for example, that threats are external and weaknesses are internal. I think that is a useful tool for a client, so they would be able to rethink their slope analyses on their own in the future. Maybe this kind of info can be inserted at the end of the analysis. (Abby)

In addition to the above, SLOPE could represent a false picture of the organization and therefore discussion could be based on a false conception of reality.

Also, repetition in the use of the metaphor on the same individuals within an organization may lead to those individuals to contrive results from anticipation and not construct them from understanding.

In a larger forum with group participation, SLOPE results could be influenced by group dynamics, and it is uncertain how the nature of interaction will change from one-on-one interview protocol used in this case study, to group collaboration tools and techniques that will be required with multiple participants.

During a post-discussion interview, I had an opportunity to ask Colleen her opinion on two limitations of this study pertaining to lack of male representation in the study and the possible manipulation of SLOPE. She made some interesting observations:

Shona: I was dealing with three women. Do you think it would appeal to women more than men?

Colleen: Not necessarily. Not necessarily. I mean, you'd want to test that, presumably.

Shona: One of the limitations of my study is that only women came forward and it is a limitation, but when you're dealing with only three people, it's a minor limitation. I don't have the other gender...

Colleen: You might find that you might have to work on the assumption that men are more mechanically minded than women and it might have an even stronger impression because of the laws of physics that are involved in that.

Shona: Maybe. That's an interesting point.

Colleen: If you subscribe to that theory.

Her statements about possible manipulation mention a solution that takes advantage of the interview opportunities of SLOPE. The discussion, which I use to close this chapter, further illustrates the advantages of SLOPE and the power of metaphor:

Shona: A year down the road, ('cause I don't want to do this too soon after I've been with you), but a year down the road or even six months, if you need to do another analysis just to sort of see where you are...

Colleen: That would be great.

Shona: But the problem is again the visual. If you remember the visual, is that going to influence you at all, and it's going to be kind of like...

Colleen: Won't know 'til we try.

Shona: But it could be like your response to the questionnaire that it can be manipulated, even subconsciously.

Colleen: Yes, now that would be my real question about the whole concept. And I don't know how you get around that.

Shona: That's true of anything, even SWOT. If you wanted to, you could fudge answers.

Colleen: Yeah.

Shona: I guess the idea is... the idea for me is that having the tool and having different approaches to it, that the possibility of somebody being constantly on top of it and thinking about oh, I can't feel that way, I've got to feel differently, they're going to make a mistake and some of the information is going to be contradictory.

Colleen: Yes. [Pause]. Yes.

Shona: That's the only hope that I have that it would be [pause] because sometimes the metaphor I think could disguise their ability to manipulate it.

Colleen: Yeah, and I guess the way you get around that is increasing the number of questions and responses, isn't it, so that the more you have, the more

you're going to get a true picture because if there is sort of a manipulated or false response there, it's going to get smoothed out by all the others, I would think.

Shona: You're right, asking more questions will help. And I think SLOPE allows me to answer more questions... I have more opportunities to ask questions because of SLOPE than if I would with SWOT.

Colleen: Yeah.

Shona: That gives me less of a chance of manipulation, and more of a chance to find out more about the person.

Colleen: SWOT seems sort of two dimensional by comparison, and SLOPE seems to have depth because it goes through the various levels of analysis.

Shona: I think so too. SLOPE is just SWOT only it's got story elements. That's the only difference. And yet the interactions that take place, they're just quite unique.

Colleen: Well those myths had a lot of depth, didn't they?

CHAPTER FIVE:
IMPLICATIONS OF THE STUDY

In the preceding chapters, I sketched a range of thought in strategy formation research; gave reasons for thinking that a novel, metaphor-based strategy formation tool might prove a valuable addition to the field; and gave a detailed account of a small empirical study which has yielded some insight into SLOPE's practical application. In this final chapter, I will use SLOPE itself to organize and review the study's conclusions. This will serve the dual purpose of providing one more illustration of SLOPE in action, and of focusing attention on its strengths, limitations, and potential.

In a regular SLOPE analysis, there are two main parts—the assessment portion, which is a discussion of where we want to go and what we want to do when we get there, and the decision-making portion that focuses on *how* we are going to get there. This analysis will be identical to a regular SLOPE analysis except that the Potential Excellence of SLOPE will be measured by how well it answers the research question, Obstacles will deal with those things mentioned in the data that prevent SLOPE from reaching its Potential Excellence, and Limitations and Strengths will be based on the data collected from all sources. As in the case studies, we will begin the discussion of SLOPE variables working backwards, starting with Potential Excellence and ending on Strengths.

Potential Excellence

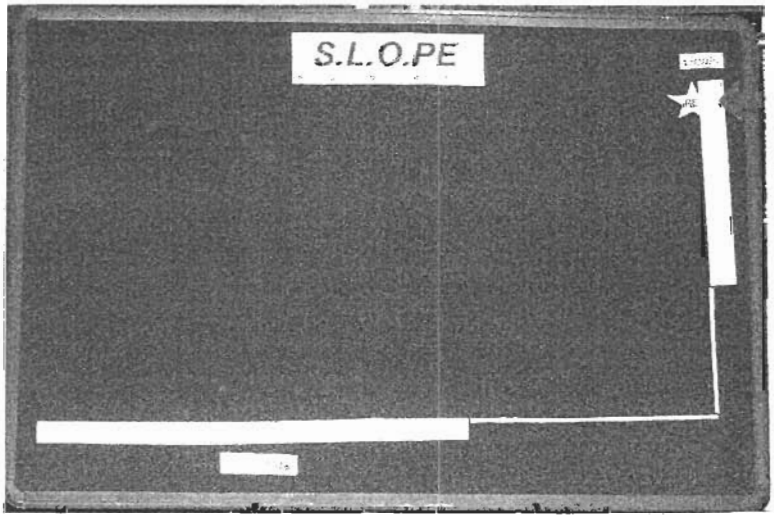
As stated in the research question, SLOPE's Potential Excellence is as a strategy formation tool that has advantages over SWOT and other types of strategy formation

tools and processes. One of my aspirations was for it to be administered by anyone, eliminating the need to hire expensive consultants. Table 3 displays the inventories of SLOPE's Potential Excellence. Figure 9 illustrates the graphical representation of the value I place on those inventories.

Table 3 Inventory of Potential Excellence

1. Simple, convenient, inexpensive strategy formation tool. 2. Can be used in a wide range of organizations for making short-, medium- and long-term decisions. 3. Little need for special expertise in its application. 4. Compatible with wide range of approaches to thinking about and practising strategy formation. 5. Clear advantages over SWOT and other tools demonstrated through empirical research.
The value rating of SLOPE's Potential Excellence is '5' (Very High).

Figure 9 Visual Representation of Potential Excellence



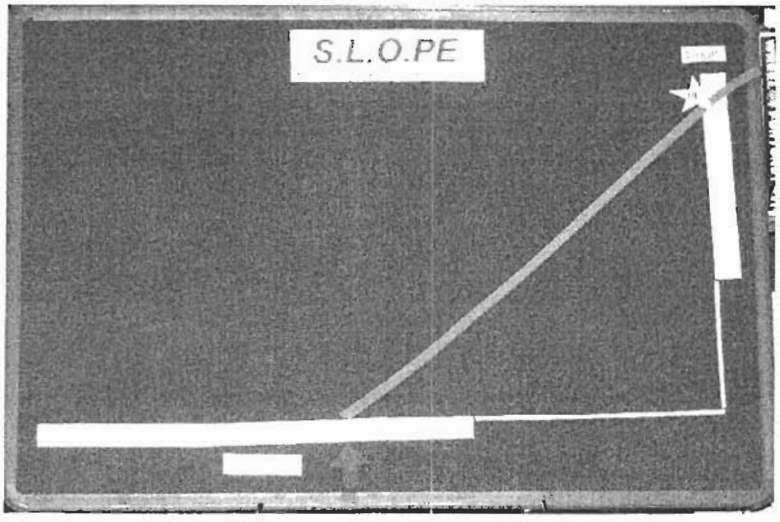
Obstacles

The case studies showed that the facilitator is very important to the process, and therefore this may be an obstacle to its potential as a tool to be administered by anyone. Further to this, because participants had only used SWOT, SLOPE's potential advantages over other types of strategy tools have yet to be determined. Also, SLOPE has only been tested on sole-proprietorships (and one small non-profit group)—not larger companies. Table 4 displays the inventories of SLOPE's Obstacles. Figure 10 illustrates the graphical representation of the value I place on those inventories.

Table 4 Inventory of Obstacles

1. Facilitator very important to the process.
2. Not tested on bigger companies—only sole proprietorships.
3. Limited sample size.
4. Difficulty finding participants due to SLOPE being unknown.
5. Only tested against SWOT (no other strategy formation tools).
The value rating of SLOPE's Obstacles is '4' (High).

Figure 10 Visual Representation of Obstacles



Limitations

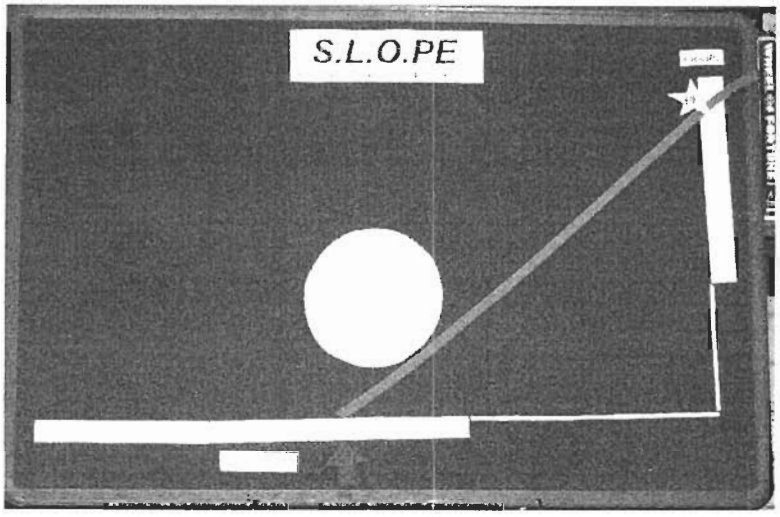
Limitations of SLOPE as they relate to the results of the study include facilitator-related issues. Based on my experience, the facilitator must be a very good listener, he/she must be able to pace the discussion by reading and interpreting body language and pauses in the discussion. He/She must also have very strong analytical skills, be able to guide participants in discussion to make correct decisions, and must be able to balance interview techniques to suit the individuals or the group. In terms of other limitations, as stated previously, one issue raised by one of the participants was the difficulty of self-administering SLOPE; another participant mentioned that SLOPE could be manipulated to produce desired results. A limitation not covered by the data but previously mentioned is that the repetition of SLOPE on the same individuals may lead them to anticipate results and not construct them from understanding. Of particular importance is the finding that visual aspects are long remembered. Table 5 displays the inventories of

SLOPE's Limitations. Figure 11 illustrates the graphical representation of the value I place on those inventories.

Table 5 Inventory of Limitations

1. Facilitator – needs to be a good listener. 2. Discussion – must be paced well. 3. Facilitator – needs to read pauses. 4. Facilitator – needs to have analytical skills 5. Facilitator may guide participants into accepting wrong decisions. 6. Facilitator needs to respond to environment and nature of group. 7. Difficult to self-administer. 8. Model and results can be manipulated. 9. Repetition of SLOPE on same individuals may lead to them anticipating results and visual aspects may be remembered. *(Please note that although there is a tendency to think that values should be combined, I have listed them as they were stated in the manner of a true SLOPE analysis.)*
The value rating of SLOPE's Limitations is '5' (Very High).

Figure 11 Visual Representation of Limitations



Strengths

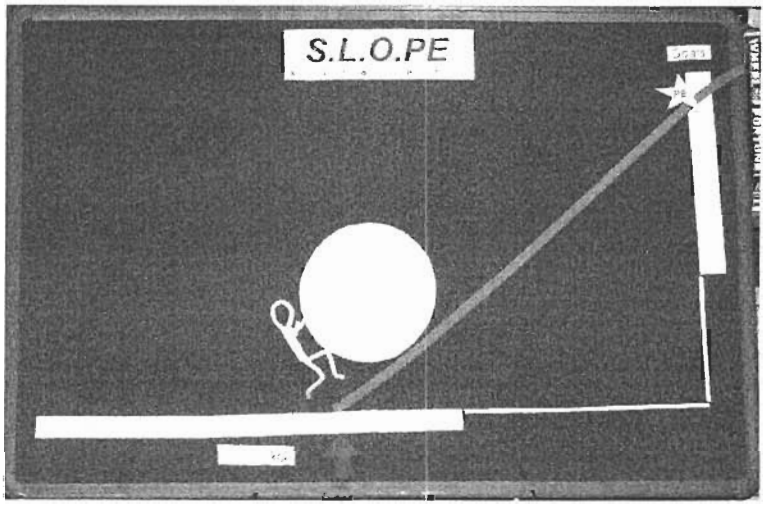
Several of SLOPE's strengths were mentioned in Chapter 2. As a strategy formation tool, SLOPE not only borrows characteristics from all ten schools of thought, but it gives something to each of the schools. For example, it gives to the Design School story elements for decision making, to the Planning School both long range and short range planning, and to the Positioning School story elements that can measure future scenarios. To the Entrepreneurial School, it provides collective vision, to the Cognitive School a way to construct, deliberate and measure strategy, and to the Learning School, it gives imagination. SLOPE fosters group cohesion in the Power School, it filters the impact of change in the Cultural School, it gives real world characteristics to the Environmental School, and to the Configuration School, it provides the opportunity of *reframing*—changing perspective from one experiential viewpoint to another that fits the facts better and gives the experience new meaning.

I indicated in Chapter 4 that SLOPE is also a complete process leading to a plan of action and there are multiple levels of interaction that provide different ways for participants to assess, decision-make and translate story elements into real world perceptions and emotions relating to strategic decisions. There is also the depth of interaction facilitated by SLOPE that elicited a great deal of information about the participants. Table 6 displays the inventories of SLOPE's Strengths. Figure 12 illustrates the graphical representation of the value I place on those inventories.

Table 6 Inventory of Strengths

1. Strategy formation tool that borrows from each of the ten schools of thought. 2. Gives something to each of the ten schools of thought. 3. Complete process – leads to a plan of action. 4. Different levels of interaction. (Twice as many as SWOT.) 5. Almost three times the number of interview opportunities than provided by SWOT. 6. Depth of information provided by interaction.
Based on the case study and a search of the literature, the value rating of SLOPE's Strengths is '5'. (Very High).

Figure 12 Visual Representation of Strengths



Analysis and Decision-Making

Given that the value of three of the story elements (Sisyphus, the rock, and the goal) is a '5' and the incline is a '4', there is no way to the get the rock to the top of the hill. Since SLOPE is already as strong as possible (reflected in the strength of Sisyphus), we need to examine the variables of Potential Excellence, Obstacles and Limitations.

From the data, we know how important the facilitator is to process, however, our Vision (Potential Excellence) states the need for special expertise. A solution can be found by addressing the Limitations of the study. Table 7 shows the inventory list of SLOPE's Limitations. Italicized items are issues related to the role of the facilitator. If one or more remedies can be found, then it is conceivable that the limitations of the current study can be reduced.

Table 7 Grouping Limitations by Theme for Decision-Making

1. *Facilitator – needs to be a good listener.*
2. *Discussion – must be paced well.*
3. *Facilitator – needs to read pauses.*
4. *Facilitator – needs to have analytical skills*
5. *Facilitator may guide participants into accepting wrong decisions.*
6. *Facilitator needs to respond to environment and nature of group.*
7. Model and results can be manipulated.
8. Repetition of SLOPE on same individuals may lead to them anticipating results and visual aspects may be remembered.
9. Difficult to self-administer.

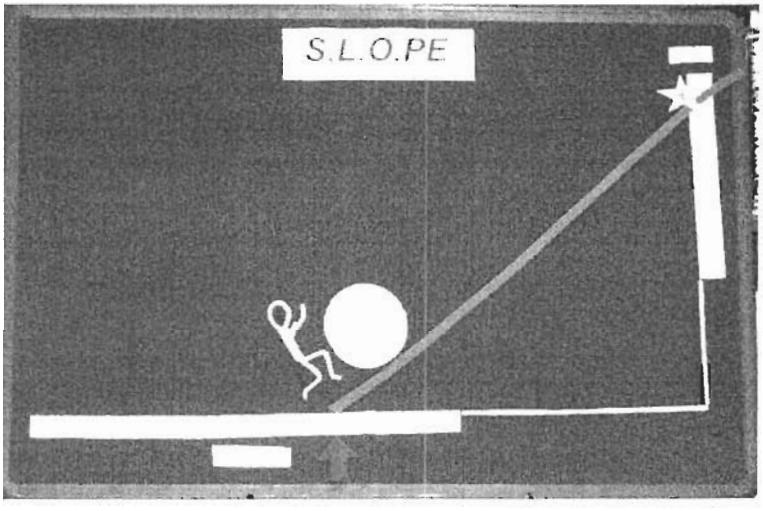
To correct the limitations of this study and ensure SLOPE's future success, a procedure to train individuals and certify them as facilitators will need to be implemented. These individuals would learn effective techniques to deal with individuals and groups in a variety of environments. They would also learn interview skills, ethics, time management skills, good listening skills, analytical skills and learn how to understand the client. This strategy to have qualified facilitators would help reduce the number of limitations, and decrease obstacles (since having a poor facilitator is an obstacle to achieving Potential Excellence).

Other limitations that need addressing are those items in Table 7 that are not italicized—the potential manipulation of SLOPE, the repetition of SLOPE on the same individuals that could lead to them anticipating results or remembering the visuals, and the difficulty of self-administering SLOPE. The first two limitations can be alleviated I

believe, by ensuring that SLOPE is not administered to the same group for a long period of time (i.e. two years), or if it is administered, ensure it is to a different population in the same organization. (For example, if SLOPE was last conducted on the Executive, it may be Management's turn next.)

The last item, the desire of one participant to self-administer SLOPE, is a very interesting concept. If not handled correctly though, it will lead to problems with poor facilitators, such as those already mentioned. To get the best results and to protect SLOPE's reputation, people should be trained to conduct SLOPE analyses—even on themselves. If these remedies are implemented, the value rating of SLOPE's Limitations would be reduced to a '3' (Medium), (from a '5') and the rock would be the size shown in Figure 13.

Figure 13 Visual Representation of Limitations after Decision-Making



The hill is still very steep so further decisions need to be made. We can either reduce our Potential Excellence by goal setting, or reduce our obstacles. Obstacles

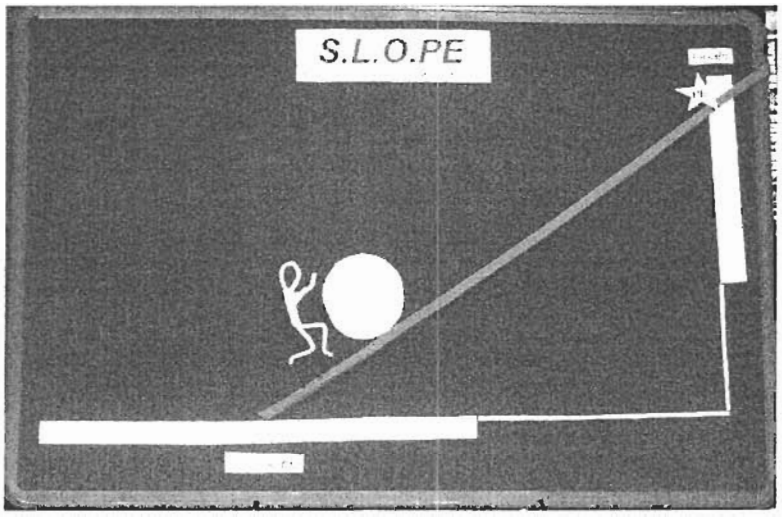
pertaining to the importance of the facilitator were addressed in the discussion of Limitations. The ones that remain have not been met and are the non-italicized items shown in Table 8. These include no testing done on larger companies, limited sample size, difficulty finding participants due to SLOPE being unknown, and SLOPE was only tested on SWOT (no other strategy formation tools). Although I did not include a non-profit organization in this study, the results of the pilot study indicate that SLOPE was able to help one non-profit organization. As such, it is likely that it will be able to help others.

Table 8 Grouping Obstacles by Theme for Decision-Making

1. Facilitator very important to the process.
2. Not tested on bigger companies—only sole proprietorships.
3. Limited sample size.
4. Difficulty finding participants due to SLOPE being unknown.
5. Only tested against SWOT (no other strategy formation tools).

Given its success with sole-proprietorships and the one non-profit organization, SLOPE's potential has been determined, but not on large corporations. Perhaps I can use this study to find a variety of companies willing to help me find answers in exchange for a unique and very inexpensive assessment. Based on these remedies, the value rating of SLOPE's Obstacles would be reduced to a very conservative '3' (Medium), (from a '4') and the incline would be the length and angle shown in Figure 14.

Figure 14 Visual Representation of Obstacles after Decision-Making



SLOPE's Potential Excellence is the only variable left to change. Looking at the items in Table 9, we can see from the data that SLOPE has achieved its Potential Excellence as a simple, convenient, inexpensive strategy formation tool. Based on the literature, it is compatible with a wide range of approaches to thinking about and practising strategy formation; and from both the data and the literature, we know it has clear advantages over SWOT and other tools.

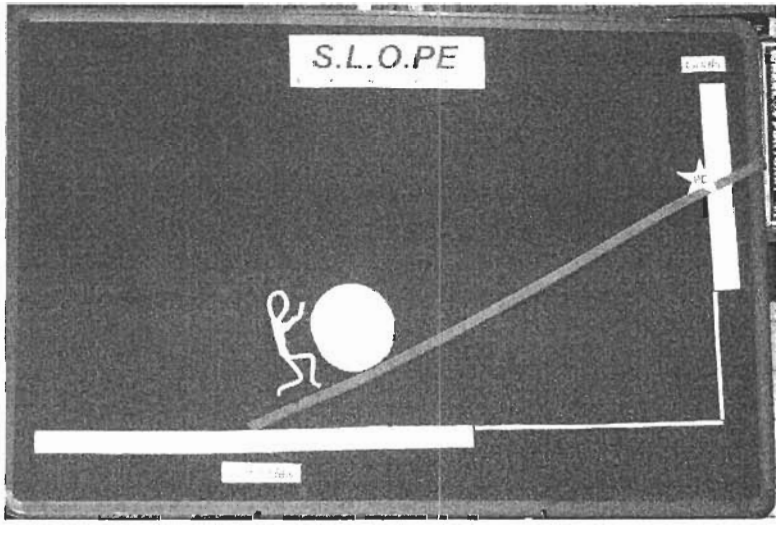
Although special expertise is required in its application, we know this can be remedied with facilitator training. What we do not know is how it will work in a wide range of organizations.

Table 9 Grouping Potential Excellence by Theme for Decision-Making

1. Simple, convenient, inexpensive strategy formation tool.
2. Can be used in a wide range of organizations for making short-, medium- and long-term decisions.
3. *Little need for special expertise in its application.*
4. Compatible with wide range of approaches to thinking about and practising strategy formation.
5. Clear advantages over SWOT and other tools demonstrated through empirical research.

Based on the data and the literature, SLOPE's Potential Excellence would be reduced to a '3' (Medium), (from a '5') and goals would be the height shown in Figure 15. If every suggestion is implemented, I believe the rock can be pushed up the hill.

Figure 15 Visual Representation of Potential Excellence after Decision-Making



Overall Significance of the Study

In conclusion, it seems worthwhile to highlight some of the main findings of this study that may have implications for future research on strategy formation.

It must first be acknowledged that the scope of the empirical research reported here was not as great as I originally envisioned. Because, in the end, only three sole-proprietorships took part in the study, I was not able to answer more than a small part of my first research question, namely, how well SLOPE appears to meet the strategy formation needs of a range of organizations. The study was more successful in generating data that responded to my second question: do users perceive potential advantages to SLOPE in comparison with SWOT and other strategy formation tools?

When it became clear, late in the data-collection process, that I would be working with a very limited range of organizations, I did consider rewording my research questions to fit the available data. In the end, however, I decided to retain the original wording, as it clarifies the intent of the study and my perception of SLOPE much better than a more restrictive definition would. The consequence, of course, is that the study has failed to answer one of its major questions. I hope to have demonstrated, however, that the question is in principle answerable, using methodology much like that described here, and incorporating the strategic changes outlined in this final chapter. Equally importantly, the study has uncovered a number of unexpected findings that have implications for future research in the field.

Metaphor

The data clearly indicate that what I have called the *story elements* of SLOPE (metaphor, imagery, and narrative) are powerful tools for strategy formation. Metaphor

has been used extensively in strategic management to describe and prescribe the strategic management process. Examples include a potter (Mintzberg, 1987), a design based on the Design School (Liedtka, 2000) and a river (Pettigrew, 1990). One source uses a medicine wheel metaphor to describe the learning process (Gilly, 1997). Metaphors are also used to describe organizations as organisms, machines (Morgan, 1998), and language (as cited in Walck, 1996, p. 3), and how organizations transform (Walck, 1996; Perren & Atkin, 2000). In a thorough search of the literature[3], I have not found any reference to the use of metaphor *as* the strategy formation process, although I did find a very interesting article on visual dialogue and the use of visuals to communicate vision and strategy (Burton, n.d.).

One place metaphors are used as the process of discourse during assessment, treatment and therapy, is in the healthcare field (Reisfield & Wilson, 2004; Arroliga, Newman, Longworth & Stoller, 2002). A Psychiatric Nurse I had the opportunity to speak to recently specializes in the use of narrative with great success. He stated that "people live storied lives" and what metaphor does "is capture experience in a way that straightforward, logical rational language cannot" (S. Wade, personal communication, March 8, 2005). Perhaps the same successes could be found in organizational studies if in future, metaphors are used in the process of assessing the health of organizations.

The Role of the Facilitator

In the findings of this study, I illustrated how important the role of the facilitator is to the success of SLOPE as a strategy formation tool. Perhaps this is not a unique

[3] A search using all the keywords "metaphor" and "strategy formation" found the following number of sources in citations and abstracts: ABI/Inform Global - 1, CBCA Complete - 1. The same search criteria found the following number of sources in abstracts: ERIC (EBSCO) – 0, PsycINFO – 0, Business Source Premier – 2; and in all text: Business Source Premier – 84, ABI/Inform – 6.

situation in that some of the variability of data discovered in the use of so many strategy formation tools is not due to the tools themselves, but due to poor facilitation skills and/or methods of delivery. Perhaps in future, the focus of strategic planning could place more importance on facilitation skills and protecting the reputation of tools we currently use, and research into strategy formation could pay more attention to the interpersonal dynamics and the role of facilitation in making the process work.

SLOPE's Potential

This study clearly demonstrates SLOPE's usefulness as a strategic management tool for small companies and organizations. Future research should investigate its potential for medium-sized and larger organizations. Also, its potential as a tool to scenario-build and evaluate previously made decisions, has not been realized, and could be the focus of future studies.

SLOPE as Strategy Formation

As stated previously, metaphor and story elements are unique as the strategy process. Although SLOPE borrows from each of the ten schools of strategy formation and gives something to each of them, it does not appear to belong to any one of them. If SLOPE is a new approach to strategy formation then I would call it the Reflective School since "evaluation and review is standing back and reflecting on what we've been doing. This reflection is a critical part of learning..." (*Evaluation*, n.d.). The reflective school would have as its tenet, strategic reflection which is "a process that gives attention to designing, implementing and monitoring plans for improving organisational effectiveness and decision-making" (*Strategic*, n.d.). It would include management theory (Jørgensen & Sørensen, 2003), and classroom learning theory (*Evaluation*, n.d.). Jørgensen &

Sørensen (2003) state that there is a gap in the literature concerning the need for strategy tools for learning organizations. Because organizations have evolved/advanced beyond the capability of tools that currently exist for strategy formation, they have no way to analyze (except upon strategic reflection), their organization for decision-making.

Perhaps the reflective school could provide strategy tools for learning organizations to remain learning organizations. Additionally, perhaps this school could provide a way for organizations that change over time and cease to be learning organizations (due to changes in leadership, culture, etc.), to return and continue the strategy process—back on the path of learning and change. They would be successful since they would have learned from each attempt and be able to respond to subtleties of change to make their goal an achievable one. Each in its own way, they would be rewriting the myth of Sisyphus.

APPENDICES

Appendix A:
How to Conduct a SWOT Analysis

The first step to conducting a SWOT analysis is to make a worksheet as shown in Figure 16 by drawing a cross to create four sectors one each for *Strengths*, *Weaknesses*, *Opportunities* and *Threats*. Strengths and Weaknesses are internal factors while Opportunities and Threats are external ones.

Figure 16 SWOT Analysis Variables

Internal Factors	**Strengths**	**Weaknesses**
External Factors	**Opportunities**	**Threats**

The next step is to ask questions about the variables of Strengths, Weaknesses, Opportunities and Threats and list values that are appropriate to each of the variables. For example, under *Strengths*, what does the institution do well? What makes it stand out from other institutions? What advantages does it have over other institutions? Under *Weaknesses*, what do people complain about? How are the services and resources? Under the category of *Threats*, what are other institutions doing better? What are future enrolment needs? Are there some future governmental policies that will amplify weaknesses? Great care should be taken to ensure that all the values are correctly placed

under the appropriate variables---one of SWOT's shortcomings. Always keep in mind whether the factors are internal or external. This may entail re-reading the questions and double-checking the wording of all the values.

When it comes to decision-making and planning, there are several ways to analyze SWOT. The most common is to examine the values in the four boxes and find ways of increasing or taking advantage of strengths while decreasing weaknesses, and increasing or taking advantage of opportunities while decreasing threats.

Appendix B:
A Typical SLOPE Analysis

I begin each session by introducing myself and introducing SLOPE—a strategic planning tool that is based on the metaphor of Sisyphus. This brief statement is followed by an explanation of how the struggle of Sisyphus on an ever-changing incline is a metaphor for the struggles faced by many organizations/institutions today. I prefer not to tell the participants anything more about SLOPE in order to not bias the post-evaluation questionnaires. I also want to see how well SLOPE helps me understand the participants, so I prefer not to learn too much about the participants, either. I will learn one or two things—enough to break the ice and make them feel comfortable.

I ask participants to imagine a hill in the distance that they wish to climb to have lunch and take advantage of the view. (Emphasis is on a goal and what they will do when they get there.) Between their current position and the top of the hill are obstacles. On a real hill, these might be rocks, roots, bushes, stumps, sudden climate changes, etc.—things that could either impede their progress or prevent them from reaching their goal. I ask them to imagine that they carry with them their limitations. These could be things they have in excess, or things they lack. Their strengths include their skills and experiences, and their conditioning, which enables them to make the journey.

The hill metaphor is used to help people understand the changes in landscape that organizations face as a result of globalization and technology (to name only a few), where challenges faced are not unlike those faced by Sisyphus in his attempt to reach his goal. He is burdened with a rock—those things that are internal; facing obstacles that are external. These obstacles may require a lot of work to overcome, and/or may entail a

detour. His Strengths are his skills, experience and determination to reach his goal. It should be noted that the metaphor does not represent failure or futility, but instead, it represents a journey and/or a struggle on an ever-changing incline.

The four variables represented in SLOPE (Strengths, Limitations, Obstacles and Potential Excellence), and the four story elements found in the Myth of Sisyphus (Sisyphus, a rock, an incline and a goal), respectively, are used to portray visually on a felt board, an organization's or individual's SLOPE. Participants are told that there are two main parts to SLOPE—the assessment portion which is a discussion of where they want to go and what they want to do when they get there, and the decision-making portion that focuses on *how* they are going to get there. Sessions always begin by working backwards, starting with the PE variable and ending on a positive note with Strengths.

As discussion of each SLOPE variable takes place, I (as the facilitator), write on flipchart paper a list (inventory) of the items that emerge from discussion. It is sometimes necessary to backtrack (i.e. write on previously written flipcharts) when participants discover items that fit into multiple categories. Also, as new categories are discovered, new flipcharts may need to be started. I am careful to ensure that we revisit and re-evaluate previous inventories, and adjust story elements to match any additions/deletions.

When discussion of each variable ends, I direct the participant to the felt board where they use Sisyphean story elements to assess how high or how big they feel their inventories are. For example, after a discussion of Limitations, participants choose the size of rock they feel best represents the size of their limitations. To help them verbalize the size or height of story elements, the felt board contains quantitative measurements on

the X- and Y-axis of a geometric slope (rise over run), and all story elements have values corresponding to size or height, based on a 5-point Likert-type scale. (A value of 1 represents *very small* or *very low*, and a value of 5 represents *very large* or *very high*.)

Once all story elements are in place, the felt board picture gives participants a snapshot of their SLOPE—depicting a hilltop, an incline, a rock, and Sisyphus. I then take a digital picture of the felt board as a pictorial record and for the participant's report, and ask them to imagine themselves as Sisyphus. Could they reach their Potential Excellence? If the answer is yes, then I ask them how they could make it easier for themselves. If the answer is no, I ask them what they think they need to do to get their rock to the top of the hill.

Decision-making occurs when the participant tells me how they would get the rock up the hill. As they speak, I write items on the flipchart paper that contains the inventories relating to the story element they are trying to change. For example, if the discussion pertains to how the participants would reduce the size of their rock, decisions would be written on the flipchart paper(s) containing the Limitations. After decisions are made for each element, the participants once again choose the appropriate sized story element based on their assessment of the inventories. Once all decisions are finished, I then take another picture and ask the participants if (after decision-making), they think they can get the rock up the hill.

After the session, participants receive a pre-addressed and stamped envelope and an anonymous post-discussion questionnaire asking for their feedback to six questions (See Appendix F). After transcription of the audio-file, I produce a report for the client, and conduct a member check of each transcript to confirm its accuracy. Because the

report is an important indicator of how well SLOPE helps me understand my clients' perspectives, I ask each client for feedback on how useful the report is for them and how accurately it represents their SLOPE.

Appendix C:
Consent Form

SIMON FRASER UNIVERSITY

Form 2- Informed Consent By Participants In a Research Study

The University and those conducting this research study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This research is being conducted under permission of the Simon Fraser Research Ethics Board. The chief concern of the Board is for the health, safety and psychological well-being of research participants.

Should you wish to obtain information about your rights as a participant in research, or about the responsibilities of researchers, or if you have any questions, concerns or complaints about the manner in which you were treated in this study, please contact the Director, Office of Research Ethics by email at hweinber@sfu.ca or phone at 604-268-6593.

Your signature on this form will signify that you have received a document which describes the procedures, possible risks, and benefits of this research study, that you have received an adequate opportunity to consider the information in the documents describing the study, and that you voluntarily agree to participate in the study.

Any information that is obtained during this study will be kept confidential to the full extent permitted by the law. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on research materials. Materials will be maintained in a secure location.

Title: **Use of a New Metaphor-Based Strategy Formation Tool**
Investigator Name: **Shona Moody**
Investigator Department: **Education**

Having been asked to participate in the research study named above, I certify that I have read the procedures specified in the Study Information Document describing the study. I understand the procedures to be used in this study and the personal risks to me in taking part in the study as described below:

Risks to the participant, third parties or society:
There are no foreseeable risks.

Benefits of study to the development of new knowledge:
Many institutions and organizations use SWOT analysis as a precursor to Strategic Planning. I have created a new metaphor-based organizational assessment model that I call

SLOPE. It is hoped that it can be compared to SWOT and through application, help individuals better understand their organization(s).

Procedures:
Members of an organization will be invited to participate in a 4-hour audiotaped or videotaped meeting to conduct an analysis of their organization using a metaphor-based model called SLOPE (Strengths, Limitations, Opportunities, Potential Excellence). As discussion progresses, participants will be given the opportunity to represent their findings on a felt board to help them see the inter-relationships between the SLOPE variables. (Flipchart paper will be used to clarify elements of the metaphor.) Participants will then analyze the felt board drawing in terms of its "big picture" of their organization and begin discussion and decision-making. Flipchart paper will further be used to help participants by providing a record of decisions derived through discussion.

Participants are asked to complete a short questionnaire and return it either in-person or via self-addressed stamped envelope to the researcher.

I understand that I may withdraw my participation at any time. I also understand that I may register any complaint with the Director of the Office of Research Ethics or the researcher named above or with the Chair, Director or Dean of the Department, School or Faculty as shown below.

Department, School or Faculty:	Chair, Director or Dean:
Education	**Tom O'Shea, Director - Graduate Programs**

8888 University Way,
Simon Fraser University,
Burnaby, British Columbia, V5A 1S6, Canada

I may obtain copies of the results of this study, upon its completion by contacting:
Shona Moody - semoody@sfu.ca or call 604-985-8505.

I have been informed that the research will be confidential.

I understand that my supervisor or employer may require me to obtain his or her permission prior to my participation in a study of this kind.

I understand the risks and contributions of my participation in this study and agree to participate:

The participant and witness shall fill in this area. Please print legibly

Participant Last Name: **Participant First Name:**

Participant Contact Information:

Participant Signature: **Witness** (if required by the Office of Research Ethics):

Date (use format MM/DD/YYYY):

Appendix D:
Interview Protocol for SLOPE Analysis

- My name is Shona Moody and I'm currently working on a Master's thesis in Educational Leadership through SFU.
- For 12 years I was a Research Assistant with [name of Community College] where I worked on program and institutional evaluation. My experience with organizational assessment led me to develop a new strategy formation tool called SLOPE which we will be testing today.
- Thank you for allowing me this opportunity.

- The session will be conducted as a brainstorming/group discussion and within two weeks you will receive the results of today's assessment.
- As part of your participation, I ask that you sign a permission form and answer a questionnaire containing six questions that will determine how well SLOPE helped you understand your organization.
- The permission form is required by the SFU Ethics Department and confirms the confidentiality and anonymity of the data, how it will be used, and the voluntary nature of your participation. You do not have to participate in this, if you don't want to and you can leave at any time.
- For your convenience, along with the questionnaire, I have provided a self-addressed, stamped envelope.
- Q: May I have one volunteer to please be responsible for collecting all the permission forms before people leave tonight?
- Q: May I also have a volunteer who is willing to remind everyone to send me their questionnaires? Thank you.

(Hand out a permission form and a self-addressed, stamped questionnaire to each participant.)

- Before we begin, I need to find out a little bit about your organization.
- Q: What services or product do you offer?
- Q: How many employees do you have?
- Q: How many of you have participated in a SWOT analysis before?
- (SWOT stands for Strengths, Weaknesses, Opportunities and Threats. It's a tool for business to assess how an organization is doing internally and externally but has been adapted for many organizations.) It is a reflective method for analysing an organization.
- Have you used any other strategic planning tools or models?

- As part of my thesis I have created a new model similar to SWOT.
- This new model is called SLOPE (Strengths, Limitations, Obstacles and Potential Excellence) and was inspired by my experience using SWOT as well as my interest in Philosophy and more particularly, the myth of Sisyphus that contains the four elements of a goal, a pathway, a rock and of course, Sisyphus.

- In Greek mythology we are told Sisyphus is the clever and devious mortal who was punished by the gods and condemned to an eternity of pushing a huge rock up a hill, only to have it fall to the bottom of the hill just as it almost reaches the top. The hill is constantly changing and poor Sisyphus can't reach his goal—which is the top.

- Just as Sisyphus struggles, organizations do too and we'll use the elements found in the story of Sisyphus—a goal, a pathway, a rock and Sisyphus to help you assess your organization's SLOPE—Strengths, Limitations, Obstacles and Potential Excellence.

- We will start out discussion working backwards—beginning with Potential Excellence, and ending on Strengths. As each element is discussed, using a scale we will rate the values of the inventories and display them pictorially using the elements in the story of Sisyphus. As you suggest things, I'll write them down on flipchart paper. When we've finished all the elements, we should have a picture of where you want to go.

- Later, we'll work on decision-making—how you're going to get there, but I don't want to give anything away right now as to how we're going to do that.

- Audiotape and a digital camera will be used to help me with field notes and measure the success of the tool.

POTENTIAL EXCELLENCE ANALYSED
- *Q: Looking at this felt board and imaging yourself pushing this rock, could you make it up to the top of the hill—to your goals?*

OBSTACLES ANALYSED
(Do this once obstacles have been determined):
- *Q: Looking at the felt board, what value would you place on the inventories belonging to the obstacles you face?*

LIMITATIONS ANALYSED
(Do this once limitations have been determined):
- *Q: Looking at the felt board, what value would you place on the inventories belonging to your limitations?*

STRENGTHS ANALYSED
(Do this once strengths have been determined):
- *Q: Looking at the felt board, what value would you place on the inventories belonging to your strengths?*

DECISIONS BEGIN
The elements in the story of Sisyphus are dynamic and their values can by increased, decreased or kept the same depending on the outcome you want. For example, to reach your potential excellence you can either decrease your goals (i.e. decide to go only part way up the hill for now) to reduce the degree of incline, limit your obstacles to increase the length of incline, reduce the size of the rock, or increase your strengths.

Q: Examining your goals, which 4 goals are of the most value to you?
Q: Examining your obstacles, which 4 obstacles are of the most value to you by permitting you to reach your potential excellence?
Q: Examining your limitations, which 4 limitations are of the most value to you by permitting you to reach your potential excellence?
Q: Examining your strengths, which 4 strengths are of the most value to you by permitting you to reach your potential excellence?

Thank you for participating in this study. I will have your results analysed and returned to you in approximately two weeks.

(Get permission form(s) back.)

Appendix E:
Pilot Study Feedback Questionnaire

Feedback Questionnaire:

Please Note: This questionnaire was sent to participants after the session in order to avoid the possibility of them sharing comments and ideas with each other.

1. *The model introduced was based on a metaphor—the Myth of Sisyphus. How useful to you was this metaphor in understanding the Division's Strengths, Limitations, Obstacles, and Potential Excellence?*

2. *What other metaphor do you think might be useful in this type of assessment?*

3. *What did you like most about the SLOPE model?*

4. *What did you like least about the SLOPE model?*

Appendix F:
SLOPE Analysis Feedback Questionnaire

Your feedback is very important to me in order to analyze how well SLOPE helped you understand your organization. Please respond to the following six (6) questions and use the back of the page for extra writing space, if needed. A pre-addressed, stamped envelope has been provided for your convenience.

1. Previous to SLOPE, have you ever participated in any type of organizational assessment (i.e. SWOT analysis)?

YES **NO**

If yes, what tools/models did you use? _____

_____

2. What did you like ***most*** about SLOPE?

3. What did you like ***least*** about SLOPE?

Regardless of previous assessment experience, your responses to the following questions are very important:

4. List at least three (3) advantages you think SLOPE has compared to other assessment tools you have either used or heard about?

5. List at least three (3) disadvantages you think SLOPE has compared to other assessment tools you have either used or heard about?

6. I give permission for my responses/comments to be published anonymously:

YES **NO**

Thank you for participating in this study.

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