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Managing Uncertainty: Lessons from Xenophon's Retreat

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MANAGING UNCERTAINTY:
LESSONS FROM XENOPHON'S RETREAT

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Abstract. Propositions on dynamic capabilities and organizational politics are developed from management literature and are then evaluated using case analysis. The goal is to identify complementary aspects of these perspectives to change from an ancient example that can offer insights for management thought and practice today. Initially chronicled by Xenophon, roughly 10,000 Greek mercenaries spent over two years confronting demanding circumstances as they fought their way into and out of ancient Persia. The mercenaries' response to changing circumstances offers a unique case for integrating literature on responses to uncertainty that range between rational and haphazard explanations. The analysis suggests uncertainty management is a complex phenomenon imperfectly represented by existing models.

INTRODUCTION

Uncertainty is an intrinsic component of competition. The need for organizations to cope with or adapt to uncertainty represents an early focus of organizational research (e.g., Alchain, 1950; Coase, 1937; Schumpeter, 1934; Thompson, 1967). The continuing relevance of managing uncertainty is evident with current business researchers and journalists often discussing the rapid pace of change or increasingly dynamic circumstances organizations face today (e.g., D'Aveni, Dagnino & Smith, 2010; Stanton, 2011). Resulting competition among organizations is often described as 'survival of the fittest' with continuous improvement becoming a minimum standard for remaining relevant (Tegarden, Hatfield & Echols, 1999). Accordingly, there is a need for research to examine competing perspectives for explaining organizational change (Graetz & Smith, 2010).

While the nature of competition evolves, lessons from history can provide insights for organizations today (Carmeli & Markman, 2011) and the reliability of learning can be increased by examining critical events (March, Sproull & Tamuz, 1991). The history of military exploits from ancient Greece provides one example of the impact of uncertainty on organizational survival. A specific circumstance that has been called "one of the great adventures in human history" (Durant, 1939: 460-61) is examined. It involves a Greek mercenary force that served

with Cyrus, who contested with his brother Antaxerxes for the throne of the Persian Empire around 401 BC (Warner, 1949). Following the battle of Cunaxa where Cyrus was killed by the forces of his brother, the Greek mercenaries' gamble for riches died with their sponsor (Waterfield, 2006) and they ended up fighting their way both into and out of Persia (see Figure 1) over roughly two years and 2,000 miles (Lee, 2007).

Insert Figure 1 about here

The experience of the Greek mercenaries in Persia was recorded by Xenophon. Xenophon was from Athens and a contemporary of the philosopher Socrates whom Xenophon consulted about joining the Persian expedition. Socrates advised Xenophon to consult the oracle at Delphi and later chastised Xenophon when he learned the question involved ensuring a safe return and not asking whether Xenophon should go (Waterfield, 2006). Xenophon wrote multiple books that have survived and his ideas have had an enduring impact (Lee, 2007). For example, Alexander the Great was familiar with Xenophon's work and his invasion and subsequent conquering of Persia was potentially inspired by it (Hirsch, 1985). While the Greek population had a high awareness of conflicts with Persia, including the defeat of Persian invaders at Marathon, not much was known about Persians and Xenophon took advantage of his firsthand experience and the resulting curiosity to make Persia prominent in his many written works (Hirsch, 1985).

The remainder of the article is organized into four sections. First, relevant management theory is reviewed and propositions developed for two different perspectives of managing uncertainty and change. The goal is to identify complementary aspects of the perspectives while evaluating their relevance for management research and practice. Second, the case method as it is applied to the current study is explained. Third, the case involving the Greek mercenaries is presented and analyzed. Finally, the paper concludes with a discussion of implications and opportunities for additional research.

THEORY AND PROPOSITIONS

Uncertainty drives the search for solutions (Tversky & Kahneman, 1992) and perspectives on approaching change range from rational and logical to the more haphazard (Graetz & Smith, 2010). To improve the understanding of change, propositions are developed

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from two different perspectives. First, a rational perspective assumes organizations are purposeful and able to adapt (Graetz & Smith, 2010). Consistent with this perspective dynamic capability research has developed to explain organization responses to uncertainty (e.g., Eisenhardt & Martin, 2000; Teece, 2009; Winter, 2003). Second, a political perspective of organizations assumes that organizational change and adaptation require effective political skills (Eisenhardt & Zbaracki, 1992; Ferris et al., 2000; Pfeffer, 1992). According to this perspective, organizational politics play a larger role compared to the attention it has received in management research (Butcher & Clarke, 2003). In the following sections, dynamic capabilities and organizational politics literature are summarized and associated propositions developed for managing uncertainty.

Dynamic Capabilities

An offshoot of resource based theory (Barney, 1991) dynamic capabilities explicitly recognizes that organizational resource profiles are not static (Kor & Mahoney, 2000). Dynamic capabilities seeks to explain the organizational processes that respond to both external events and internal pressures and enable adaptation to changing market conditions (Eisenhardt & Martin, 2000, Lavie, 2006). While the role of dynamic capabilities is to transform organizational resources so they remain relevant (Ambrosini & Bowman, 2009), they stem from antecedent processes that alter an organization's resource base that becomes a valuable resource in its own right (Teece, Pisano & Shuen, 1997). Capabilities involve shared meaning or tacit relationships that facilitate task accomplishment and they both enable and limit strategies available to organizations.

An example of how capabilities limit organizations relates to organizational inertia, or accumulated experience interfering with opportunity recognition (Hannan & Freeman, 1984). When change occurs, resulting uncertainty can increase an organization's risk through resource misallocation (Shane & Venkataraman, 2000) at a time when it can least be afforded. As a result, resource management needs to be carefully attended and aligned with an organization's external environment (Sirmon, Hitt & Ireland, 2007). The extent of resource misallocation likely depends on whether associated change is evolutionary (competence enhancing) or revolutionary (competence destroying).

Evolutionary change reinforces existing paradigms, and provides organizations a way to improve performance with existing methods. Building on existing knowledge allows

organizations to increase efficiency by achieving similar outputs with fewer inputs (Grewal & Slotegraaf, 2007), and associated learning can lead to greater competence and improved outcomes (Levitt & March, 1988). As a result, responses to evolutionary change reinforce efforts to more efficiently use existing resources. However, limiting the search for improvements to existing practices creates path dependency (Kogut & Zander, 1996) as the focus stays on solving existing problems reinforces existing paradigms.

Revolutionary change meanwhile represents a greater challenge (Atuahene-Gima, 2005; Burgelman, 1983), because it is more likely to make current resources obsolete (Stieglitz & Heine, 2007). Further, existing resources likely limit an organization's ability to search for new solutions (Stuart & Podolny, 1996). The knowledge and skills needed following discontinuous change are different from prior processes, reducing the likelihood that needed changes will be found and adopted (Atuahene-Gima, 2005). A possible exception involves complementary resources, or interactions between new and familiar resources that often become critical for continued success when an organization's environment changes (Hill & Rothaermel, 2003; King, Covin & Hegarty, 2003). With revolutionary change, to the extent that existing resources can be combined in new resource interactions, successful adaption is more likely because it makes familiar resources more effective.

The implication of the proceeding discussion on different types of change is that resource endowments likely influence organizational responses to uncertainty. A paradox results where pursuit of evolutionary change is needed to remain competitive within an existing paradigm, but the path dependence of successful evolutionary development makes an organization more susceptible to revolutionary change or new and unfamiliar paradigms. Indeed, processes and resources contributing to organizational survival in stable environments are often detrimental in dynamic environments (Hill & Rothaermel, 2003). Therefore, the following relationships are proposed:

> *Proposition 1a: When current conditions resemble the past, organizations focus on increasing the efficiency of using current resources.*
>
> *Proposition 1b: When facing uncertain conditions, organizations attempt to develop complementary resources that improve the effectiveness of familiar resources.*

Organizational Politics

Politics relate to the observable, but often veiled, actions people use to enhance their influence or power (Eisenhardt & Zbaracki, 1992; Pfeffer, 1992). The predominant focus of research on organizational politics until recently has focused on its negatives, but politics can be essential in managing uncertainty and forming constructive responses to change (Ammeter, et al., 2002; Butcher & Clarke, 2003). While politics can create an internal focus at the expense of the external environment that drives change (Graetz & Smith, 2010), politics can help reduce fragmentation by providing a known arena for sharing and interpreting information (Zahra, Nielsen & Bogner, 1999). The ability to share information can be crucial during important decisions that generally require the involvement of more people (Pfeffer, 1992).

In times of rapid and unpredictable change, politics also injects randomness that may be critical to adaptation that avoids destroying the underlying organization (Brown & Eisenhardt, 1998; Pfeffer, 1992). Politics can diffuse power in an organization and allow networks to identify and apply underutilized resources to problems (Morris, Kuratko & Covin, 2008; Zahra, et al., 1999). While political activity can help to manage relationships (Butcher & Clarke, 2003), achieving positive outcomes requires political skill embodied by social awareness of effective arguments and communicating them well (Ferris et al., 2000; Pfeffer, 1992).

In other words, political skill requires the use of influence. The Greek philosopher Aristotle outlined three facets of influence: ethos, pathos, and logos (Bizzell & Herzberg, 2001). While the elements are interrelated, ethos relates to a moral imperative and the credibility of the speaker, pathos appeals to an audience's sympathies to make an emotional connection, and logos relates to rational reasoning. We learn teamwork to coordinate activities and defer to authority in achieving common goals (Pfeffer, 1992), and, next to trust, the crucial element for teamwork is a common goal (Kotter, 1996). Influencing people to reach common goals leads to political behaviors, such as leading by example, promoting a vision, or arguing the value of organization (Ammeter, et al. 2002)—concepts directly related to management.

Managers serve as the basis for organizational growth and adaptation by identifying opportunities that an organization should pursue (Penrose, 1959) and managers need political skill in their pursuit of organizational goals (Butcher & Clarke, 2003; Pfeffer, 1992). Top managers are likely to be more skilled at political activity, but increased demands limit their ability to pay attention to every issue of importance (Garg, Walters & Priem, 2003). While

managers use scanning to identify threats and for responding to uncertainty (Helfat & Raubitschek, 2000), managers are rationally bounded (Eisenhardt & Zbaracki, 1992). For example, managers often limit search to information that supports their perspective (Pfeffer, 1992). Further, higher political skill likely relates to a heightened awareness of politics or a commensurate risk of focusing on internal issues. One implication of this risk involves top managers being less likely to develop and exploit new knowledge (Fiss & Zajac, 2004; Zahra, et al., 1999).

Compared with top managers, middle managers exhibit apparent advantages in responding to change. First, middle managers exhibit less lock-in to policies and procedures, and they typically display a greater flexibility toward fine tuning established processes (Barringer & Bluedorn, 1999; Sayles & Stewart, 1995). Next, middle managers are closer to and are more likely to identify challenges facing an organization (Nohria & Berkley, 1994). Further, with their focus on different areas, middle managers inject divergent thinking into organizations (Floyd & Wooldridge, 1997). As a result, innovation comes primarily from middle managers (Kuratko & Goldsby, 2004) and drives a shift in power as influence is gained by managers coping with critical organizational problems (Pfeffer, 1992). The preceding paragraphs suggest the ability of managers to effectively respond to uncertainty and change may depend on the context or their level in an organization. Therefore, the following is proposed:

Proposition 2: When faced with uncertainty, middle managers are more likely to recognize and act on divergent ideas than top management.

While politics helps in responding to change and getting things done, it comes with a price. Power and influence results from a person's reputation in getting things done, but the use of power to get things done can build animosity (Pfeffer, 1992). One reason is the use of power can be seductive to the point that power becomes its own goal (Simon, 1957), creating a distrust of the powerful. This may help explain attempts to use influence covertly. The covert use of power contributes to internal splits over the control of resources, such as information, that diffuses power (Pfeffer, 1992). The combined effect of these forces is that power is often transitory (Mitchell, Agle & Wood, 1997). Therefore, the following is proposed:

Proposition 3: The consistent exercise of power to enact change culminates in reduced influence.

METHOD

The research design involves a single-case study founded on theoretical propositions (Yin, 1994) to match patterns between a historical event and modern theoretical concepts (Campbell, 1975; March et al., 1991). Managing uncertainty has been long regarded as an organizational challenge, and, while a single-case approach has limitations, its use is justified on three grounds. First, the challenges that Xenophon faced with the Greek mercenaries involved a unique circumstance of how a large organization responded to threats to its survival. Second, the dramatic circumstances of the Greek mercenary force in Persia contributed to a large body of information for building a case. Finally, it is neither appropriate nor practical to design a research study around similar circumstances (Zimbardo, 1973). The case summary was developed from available documentation, including translations of Xenophon's memoir (Warner, 1949) on the experiences of the Greek mercenaries. Additional documentation that evaluates Xenophon's historical record and provides context for the mercenary force was also reviewed in developing the case. An analysis of the developed case summary is then used to assess the research propositions.

CASE SUMMARY AND ANALYSIS

Case summary

The setting is on the heels of the Peloponnesian War (431-404 BC) that resulted in a Spartan hegemony (404-371 BC) over the Greek city-states, including Athens (Jones, 2008). Following the Peloponnesian War, large numbers of unemployed mercenaries provided the foundation to build an army and Cyrus built an army using Greek mercenaries as its core to contest his brother Antaxerxes for the Persian throne (Hutchinson, 2000). The case summary of the surrounding events is presented in four segments beginning with the prelude leading to the battle of Cuxana that includes a discussion of the Greek commanders, because their fate plays a prominent role in the fate of the Greek mercenaries.

Prelude

Cyrus joined roughly 10,400 Greek hoplites[1] and 2,500 peltasts[2] from different units and commanders with his Persian forces (Lee, 2007; Waterford, 2006). The larger force of Persian

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[1] Hoplites were heavy infantry that fought in a phalanx formation of overlapping shields that presented a wall of bristling spears, and were formed from middle class Greeks able to afford the needed equipment.
[2] Peltasts were light infantry that had lower status and fought as skirmishers armed with a wicker shield and javelins.

soldiers was commanded by Ariaeus (Warner, 1949). A Greek general's status depended on the number of men they led, and command of Cyrus's Greek forces was initially given to Xenias who led 4,000 mostly Arcadian hoplites that were already in Ionia (see Figure 1) with Cyrus as garrison troops policing urban centers (Lee, 2007). The remainder of the Greek force was spread across three groups and five generals. First, Proxenus, Socrates (not philosopher), and Sophaenetus commanded an additional 3,000 hoplites recruited from across Greece, and it was Proxenus that recruited Xenophon (Waterford, 2006). Second, Clearchus, a Spartan, commanded a mixed force of 1,000 hoplites, 800 peltasts, 200 archers and 40 cavalry (Lee, 2007). Third, Menon led 1,000 hoplites and 500 peltasts from a force of 2,000 hoplites Cyrus had loaned to Aristippus for use in Thessalia (Lee, 2007). After the majority of Xenias's men defected to Clearchus, Xenias deserted Cyrus and Clearchus became the leading Greek general (Waterfield, 2006). Additional reinforcements brought the Greek force to its culminating size as they marched into the interior of Persia with the understanding they were defending Cyrus from a rival satrap, Tissaphernes (Warner, 1949).

The Greek leaders contributed to a sense of disorder with animosity serving as a dominant feature of their relationship. Clearchus, the ablest of the Greek commanders (Hirsch, 1985), had been banished and sentenced to death by Sparta after he fought a Spartan force sent to retrieve him for abuses in Byzantine (Lee, 2006; Waterfield, 2006). Clearchus was also the only Greek general who likely knew that Cyrus intended to overthrow his brother and not simply to protect his satrap from Tissaphernes (Hirsch, 1985; Warner, 1949). While less colorful and experienced, the other Greek generals likely came from circumstances offering limited options. The only other experienced Greek commander was Menon, a clear rival to Clearchus. On the march to Cuxana, Proxenus had to interpose his army between the armies of Clearchus and Menon to keep them from coming to blows, after Clearchus struck one of a Menon's soldiers and another responded by throwing an axe at Clearchus (Lee, 2007; Waterfield, 2006). With this background, it is little wonder there were problems maintaining control of the larger mercenary force.

Problems became evident early as the mercenaries went on strike for twenty days when they suspected Cyrus intended to use the army for more than protecting his satrap from Tissaphernes (Warner, 1949). The further the mercenaries marched into Persia, the clearer Cyrus's true intentions must have become. The strike came to an end after Clearchus gave a

speech where he wept in front of his troops saying he would never betray fellow Greeks for the friendship of barbarians (Hirsch, 1985; Lee, 2007). At the same time, Clearchus assured Cyrus he would get things under control and Cyrus rewarded him for getting the mercenaries moving again (Lee, 2007). From this, one can conclude the Greek mercenaries were deceived by both their employer and leadership.

Other factors contributing to problems with discipline resulted from the nature of the mercenary force itself. First, the Greeks believed in social mobility or a shared belief that anyone could become general, contributing to a sense of individualism (Hutchinson, 2000). This is also consistent with developing Greek democratic ideals and the use citizen councils to decide on action that was further compounded by the mercenaries being volunteers. Second, the mercenary force had both a formal and informal structure. Lochos, the formal structure, formed military units with selected leaders (Lee, 2007). Overall, the Greek's command structure enabled initiative by identifying and developing capable leaders (Hutchinson, 2000). Meanwhile, informal groups called suskenia shared resources and worked to provide necessities (Lee, 2007). The concept of logistics was not integrated into Greek armies and gave generals less control over foraging, or how troops met basic needs (Lee, 2007). Still, the march into Persia gave the disparate Greek mercenary groups crucial experiences in coordinating activities, such as marching, making camp, and setting sentries.

Battle of Cunaxa

Antaxerxes was aware of Cyrus's army and made plans to meet him with an even larger army. The decisive event came six months after the Greek mercenaries left Ionia near Cunaxa, or present day Fallujah, Iraq (Lee, 2007). One of Cyrus's cavalry officers, Pategyas, spotted the opposing army during a midday march that included crossing a defensive trench that contributed to disarray in Cyrus's army (Warner, 1949). With his brother's army near, Cyrus ordered his army to deploy for battle in a process that took considerable time (Lee, 2007). The Greeks deployed on the right of the Cyrus's army putting their unshielded right side along the Euphrates River (Hutchinson, 2000).

Both armies waited to attack until late afternoon, when the Greek force charged and the Persians opposite them retreated. Meanwhile, the ensuing fight between the Persian forces was more difficult with Antaxerxes' larger army overlapping the army of Cyrus (Hutchinson, 2000). Cyrus focused on attacking his brother's bodyguard creating disorder and allowing Cyrus to

wound Antaxerxes before being killed himself (Warner, 1949). Not aware of Cyrus's death, the Greek force advanced on the Antaxerxes' remaining forces sending them into retreat. At the conclusion of the day, both sides felt they had won. The Greeks held the field and suffered few casualties, but the Persian cavalry had pillaged the Greek's camp destroying their supplies (Hutchinson, 2000). The interim result was an uneasy truce.

After the battle, the Greek mercenaries learned of Cyrus's death and attempted to retrieve success from failure by playing kingmaker, and they offered to make Ariaeus the king. However, he refused and ultimately returned to serve Antaxerxes (Waterfield, 2006). The mercenaries then approached Tissaphernes, the initial focus of the campaign and the general Antaxerxes left with the problem of dealing with the Greek force, but he also refused and, in turn, the Greeks refused to surrender to him (Waterfield, 2006). Ariaeus, whether giving good advice or acting in the interests of Antaxerxes, convinced the Greeks to move north, using the argument that they had stripped the country bare of supplies on inward march with Cyrus (Lee, 2007).

Now the more mundane implications of Cyrus's absence became clear, as the Greeks had depended on Cyrus for planning their route and making supplies available (Lee, 2007). The Persians initially guided and made supplies available to the Greeks, but that ended in treachery when Tissaphernes played on the rivalry between Clearchus and Menon (Hirsch, 1985) to capture the leading five Greek generals, including Clearchus, and killing 20 captains and 200 hoplites that accompanied them to a dinner (Hutchinson, 2000). Only one hoplite, Nicarchus returned to warn the Greek mercenaries of the incident—dying as he held his bowels in his hands (Warner, 1949). The Greek's initial reaction to this shock was to band together (Lee, 2007). A subsequent council endorsed Xenophon as a leader and the decision to go north into the uncharted territory of the Karduchian mountains with the logic that it was easier to cross the Euphrates at its source (Waterfield, 2006).

The Retreat

The decision to retreat north bonded the Greek mercenaries together with the common purpose of surviving and returning home (Waterfield, 2006). However, the mercenaries adjusted their tactics and invested to improve their capabilities as a military force. First, the Greek mercenaries improvised their traditional phalanx formation to form a hollow square that surrounded their baggage train and camp followers with hoplites (Warner, 1949). The

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implementation of a hollow square, or plaison, drove other important changes. To enable forming a hollow square with equal sides, the Greek mercenaries were redistributed to other units helping make ethnic divisions less distinct (Lee, 2007). Next, the attacks from the rear resulted in the creation of a special unit of 600 hoplites to maintain the integrity of the formation as the force naturally spread out and contracted moving over rough terrain (Lee, 2007).

Hollow square formations had been previously used by both Sparta and Athens with mixed success (Lee, 2007) and this change alone did not offer protection from Persian archers and slings. Hoplites carried shields carried on their left, so soldiers on the right and rear of the formation were most vulnerable. Consequently, they became the focus of attack and initially a Persian force of only 600 soldiers was able to slow the movement of over 10,000 Greek mercenaries to only a few miles a day (Lee, 2007). The Persian light troops were able to engage the Greeks from long range and then disperse before they could be engaged in close combat by hoplites. To counter continued Persian harassment, the Greeks implemented additional changes.

Coinciding with a decision to burn their wagons, tents, and other baggage, the Greek mercenaries made a night march giving them a two-day respite from Persian harassment (Lee, 2007). Less baggage enabled faster movement and a smaller and more defensible camp, but it also was not sufficient to protect from Persian attack. Therefore, the mercenaries formed 50 cavalry soldiers from the best of the captured horses, and 200 slingers (Lee, 2007). Slingers were considered less prestigious than hoplites, so a bonus was used to induce soldiers to volunteer as slingers (Warner, 1949). The Greeks also used captured lead with their slings giving them a greater effective range compared to the stones used by the Persians (Waterfield, 2006), though the Greek mercenaries later ran out of lead and resorted to using stones (Lee, 2007). These changes allowed the Greek mercenaries to reach the Karducian mountains.

As the mercenary force entered the Karduchian mountains, the Persian army stopped its pursuit because it had accomplished the goal of getting the Greeks out of Persia. Additionally, few of the Greeks were expected to survive, as no one had returned from a recent force of 120,000 Persian soldiers sent into Karduchia (Warner, 1949). Consequently, the going did not become easier and the Greek mercenaries continued to be harassed by hostile forces. The rough terrain provided its own challenges and on the second day in the mountains the generals removed excess animals and camp followers as the mercenaries went through a narrow pass (Lee, 2007). The smaller army was an attempt to further increase mobility and reduce the supplies needed to

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support it. Still, harassment and the constant need to search for supplies combined to keep the Greek mercenaries moving (Lee, 2007).

In continuing to move north, the Greek mercenaries faced new challenges. For one, they had no maps. The Greek mercenaries depended on scouts and hostages that limited knowledge of their march to only a couple of days (Lee, 2007). At one point, when faced by a mountain pass guarded by hostile forces, two prisoners were questioned about another route (Warner, 1949). When the first repeatedly denied any alternative, his throat was cut in front of the other, and the remaining prisoner provided the Greeks another route through the mountains (Waterfield, 2006).

Constant attacks threatened to separate the Greek force as they stretched out along mountain trails and river crossings. This led to innovative responses to attacks, including hiding behind trees when boulders were rolled downhill by defenders and maintaining forces on parallel high ground (Lee, 2007). Another creative tactic the Greek mercenaries used was to switch the signals for charge and retreat to successfully limit the challenge of a contested river crossing (Warner, 1949). Still, Greek losses the first few weeks in the mountains were comparable to the months they spent in Persia (Waterfield, 2006). The Greek mercenaries also missed the opportunity to adapt Karduchian long bows whose arrows could pierce both Greek shields and armor, threatening hoplite usefulness, and peltasts simply used the recovered oversized arrows as javelins (Hutchinson, 2000). Again, these adaptations helped the mercenary force move through the mountains. The Greek mercenaries celebrated seeing the Black Sea with shouts of "the sea, the sea" that caused successive ranks to rush the crest of the final hill thinking initially they were under attack (Waterfield, 2006).

The Sea, the Sea

Sighting the Black Sea offered the Greek mercenaries a false promise of the familiar and resulted in the return of internal dissension. In one instance, Coeratades briefly assumed command of the Greek mercenaries by promising provisions, but he was unmasked as a fraud when the provisions proved inadequate (Hirsch, 1985). In another case, the latent frustration of the mercenaries turned on Xenophon and he was tried for hubris—a serious charge in ancient Greece involving assault (Waterfield, 2006). Xenophon's accuser was a mule driver whom Xenophon struck during the march through the Karduchian mountains. Xenophon defended himself by playing on the sympathies of the army for having left so many behind. Xenophon

explained that he struck the mule driver after he had ordered him to carry a wounded soldier and that he later found the mule driver burying the soldier alive (Warner, 1949). The mule driver's rebuttal was that the wounded soldier still died to which Xenophon replied "we're all going to die, but does that mean we have to be buried alive?" (Warner, 1949: 131). Xenophon successfully refuted the charge, but that his behavior was questioned showed to all his actions were only condoned by the emergency of their circumstances and the emergency had passed. As a result of the dissent, the remaining 8,200 Greek mercenaries splintered into three groups (Warner, 1949).

However, the smaller mercenary groups were more easily attacked and resulted in 1,000 Greek casualties in a single week (Waterfield, 2006). The harried Greek mercenaries increasingly relied on superstition and ritual sacrifice to divine a way forward as they confronted both the familiar and unfamiliar. Even when the mercenaries came upon Greek settlements their reputation preceded them and the mercenaries were often denied assistance and barred from the settlements. Not only were the Greek outposts along the Black Sea not Greece, but the mercenaries themselves were changed from their experience. Constant and varied battle had honed the mercenaries' military skills making them a versatile, battle-hardened force (Lee, 2007). Since they had learned how to survive as soldiers, the journey of the Greek mercenaries ended similar to how it began. In the spring of 399 BC, Spartan emissaries hired the 5,000 remaining mercenaries under Xenophon and they were sent to Ionia to once again fight Antaxerxes (Lee, 2007).

Case Analysis

In organizational research, what is known to have happened is often less intriguing than the question: What might have been? This is less true with the dramatic changes in the circumstances of the Greek mercenaries. The reason we have their remarkable story is that they survived, and an analysis of their decisions must take this into account. Still, one interesting question is whether the Greek mercenary force would have survived if Tissaphernes had not killed their generals.

The treachery by Tissaphernes was aided by the rivalry between Clearchus and Menon that likely blinded them to the more important external threat to them and their men. Nicarchus's name survives largely due to the dramatic nature of his delivering the news of the Persian treachery as his life literally slipped through his hands. If there was doubt about the

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mercenaries' fate, it disappeared with the message of Nicarchus and their generals. The killing of their leaders also made the Greek organization less hierarchal, or flatter—an outcome with advantages in responding to change (Morris, et al., 2008; Schumpeter, 1934). While the Greek mercenary generals did not have the chance to see whether they could effectively respond to the demands of the situation, it clearly shows that others within the mercenary force were able to emerge and lead them to safety. As such, the experience of the Greeks suggests an under-appreciated role of middle managers in responding to uncertainty. Taken together the events largely support the proposition (P2) that middle managers are more likely to respond to uncertainty with needed innovations than top managers.

The response of the newly selected Greek generals to immediate and subsequent challenges consistently involved bricolage, or using available resources to find workable solutions (Nohria & Berkley, 1994). For example, cavalry was created from captured horses, slingers were recruited and outfitted with lead shot, the mercenaries reduced their baggage and camp followers at the start of their retreat and upon entering the Karduchian mountains, a special unit of hoplites was formed to enable the hollow square formation, and so on. In each case, these innovations pulled on ideas the Greeks were already familiar and resources on hand. For example, Xenophon had cavalry experience (Hutchinson, 2000), and Sparta and Athens previously used hollow square formations. Further, these changes largely focused on increasing the effectiveness of the core force of hoplites. Again, constant battle over two years honed the Greek mercenaries into a formidable force with experience fighting different units in varied terrain. However, the Greek mercenaries failed to incorporate Karduchian longbows that offered the potential to make the hoplite obsolete and instead used the recovered arrows as javelins—a familiar application. These events largely support organizations trying to increase efficiency of current resources and those they are familiar consistent with developed propositions (P1a and P1b). Still, it leaves open the question of whether organizations can successfully deal with revolutionary change. Clearly, organizations need to develop processes to improve their capabilities while being mindful of how the same may also restrict them.

Once the immediate threat of survival passed, the common goal driving coordinated action dissolved and suppressed divisions resurfaced. Once reaching the Black Sea, their elected general Xenophon was associated with unpopular decisions, such as reducing the number of camp followers in Karduchia. The loss of comrades left behind could now able to be felt and,

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while they were gone, Xenophon was a ready scapegoat.[3] Although Xenophon defended himself, the mercenaries still separated into three groups with lower survival rates. While Xenophon retained leadership of one of the groups and led a 5,000 hoplite force recruited by Sparta to fight Antaxerxes again, it is unlikely that Xenophon ever held the same level of authority as he did during the retreat. The mercenaries appeared aware of the adage that power corrupts and took action to put Xenophon on notice. As such, it appears exercising power reduces its usefulness and creates divisions, supporting the final proposition (P3).

CONCLUSION

Although the increased pace of environmental change is widely touted, advances have significantly reduced the range of uncertainty that organizations face. For example, modern conveniences including established financial markets, maps and navigation, communication, and transportation infrastructure are largely taken for granted. Further, modern organizations rarely face true questions of survival as bankrupt organizations are often acquired and integrated into surviving organizations. With this perspective, the Greek mercenaries and their response to uncertainty offer multiple lessons related to the propositions on managing uncertainty for management research and practice.

Implications

Management Research

Having survived their experience the Greek mercenaries returned with different perspectives and to circumstances different from what they had known. However, the attributes that made them valuable to Cyrus remained and they were recruited by Sparta in a similar task. This suggests that both environments and organizations change, but core organizational capabilities can remain valuable. The importance of organizational resources and capabilities has increasingly been recognized as important (Barney, 2001) and increasingly focuses on creating value from using resources together (Barney, 1997; Sirmon et al., 2007). Further, resilient organizations need to know how to make use of available resource combinations (Carmeli & Markman, 2011). Achieving long-term success requires organizations capable of constant adaptation, but existing perspectives of change range from rational explanations to the more haphazard application of politics do not appear adequate individually in explaining or

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[3] While information depends on Xenophon's account, he seems to have been a good choice as general in that he was crucial in developing innovative responses to the challenges the Greek mercenaries faced.

preparing organizations for change. Additional research is needed to explain how resources are developed and effectively used together in changing environments.

Another implication for research from the current study is confirming the need to better understand the role of organization politics (Vaara, 2003), as understanding organizations requires paying attention to politics (Sayles & Stewart, 1995). There is also an opportunity to find ways to use politics effectively and productively. Constructive politics is generally considered a contradiction, but the elements of constructive politics include understanding tactics, considering motives, and an awareness of stakeholders and the environment (Butcher & Clarke, 2003). Meanwhile, related theory and prescriptions for productive uses of organizational politics remain largely undeveloped. However, simply ignoring politics or the use of power and influence misses the opportunity to understand and train people to develop this crucial skill. The need to understand the effective use of power and influence is more acute when one accepts it may serve as the secret of success for individuals and organizations in adapting to change (Pfeffer, 1992).

Management Practice

While the propositions and case do not reflect favorably on the Greek's top management, the example reinforces that top management has a long-term influence on the success of organizations. This is because top management sets the strategic context of organizations (Burgelman, 1983). In the case of the Greek mercenaries, the formal military command structure and culture of individuality and showing initiative ultimately provided the foundation for the mercenaries to adapt. The study also demonstrates the importance of developing an awareness of politics and associated tools, such as stakeholder management (Mitchell et al., 1997). Politics can add an element of randomness that can improve an organization's ability to adapt (Brown & Eisenhardt, 1998). Another managerial implication from the case echoed in modern shortcomings involves the need to be ethical. A telling example related to the case is that the double-crossing by Tissaphernes caught up with him, as he was later killed by Ariaeus, while preparing for a bath, on orders from Antaxerxes for disloyalty (Waterfield, 2006). While skill alone may be insufficient to assure success, a lack of integrity can ruin even the most promising career.

A final implication for managers is the need to constantly evaluate their organizations size and scope. The Greek mercenary force divested its baggage at least twice to become more

nimble and able to survive. The Greek force of 10,000 was also able to stay together and survive Karduchia, when a larger Persian force of 120,000 that preceded them did not. Still, when they broke into three segments after reaching the Black Sea, the mercenaries experienced some of their heaviest casualties. This suggests that the size of an organization can be instrumental to its environment fit. Further, the mercenaries' survival was enhanced by diversifying form a hoplite force to a mixed force with cavalry and slingers. This suggests that uncertainty can lead to legitimate errors that can be partially compensated for using diversification (Van de Ven, 1986). As managers gain experience with restructuring, managers will likely make better decisions (Barkema & Schijven, 2008). An important skill as it is unlikely that an optimal match of organizational size and activity can be achieved as an organization environment changes driving the need for managers to repeatedly restructure their organizations.

Limitations and Future Research

Research generally exhibits shortcomings that limit its influence, and often these limitations represent opportunities for additional research. This study is no exception. The primary limitation of the current study is the use of small samples (here a single case) can be flawed, but it is difficult to match the power of real events (March etal., 1991). The choice of a critical event from antiquity was deliberate in that the juxtaposition of modern and ancient challenges helps to put modern challenges into perspective. However, this goal also represents a potential bias in that in summarizing existing change research and building a case that has been examined by multiple books into a few pages opens the possibility of misinterpretation. Still, the selection of a single case can facilitate inductive insights to better understand the phenomenon of interest (Carmeli & Markman, 2011; Yin, 1994). Additionally, existing research frames propositions that gain meaning through comparison to actual circumstances. While the circumstances of the Greek mercenaries are unique and unlikely to be repeated, organizations continue to face threats to their survival and the development of theoretical frameworks in this area is limited.

The need for continued research on organizational change frameworks, development and use of resources, and politics has already been identified. One research opportunity not mentioned is the need to explore incumbent organizations that face revolutionary change to outline means for adaptation. An additional research opportunity relates to the impact of managerial ethics. The fate of Cyrus and Clearchus may provide a morality tale on managerial

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integrity; however, they may also have simply told the mercenaries what they wanted to hear. It is possible that deception (like politics) has a role in organizational strategy, and exploring appropriate us of deception by managers and organizations represents an opportunity for research. In closing, a commonly accepted management precept is that organizations must change and adapt, but an understanding of how to achieve this remains elusive.

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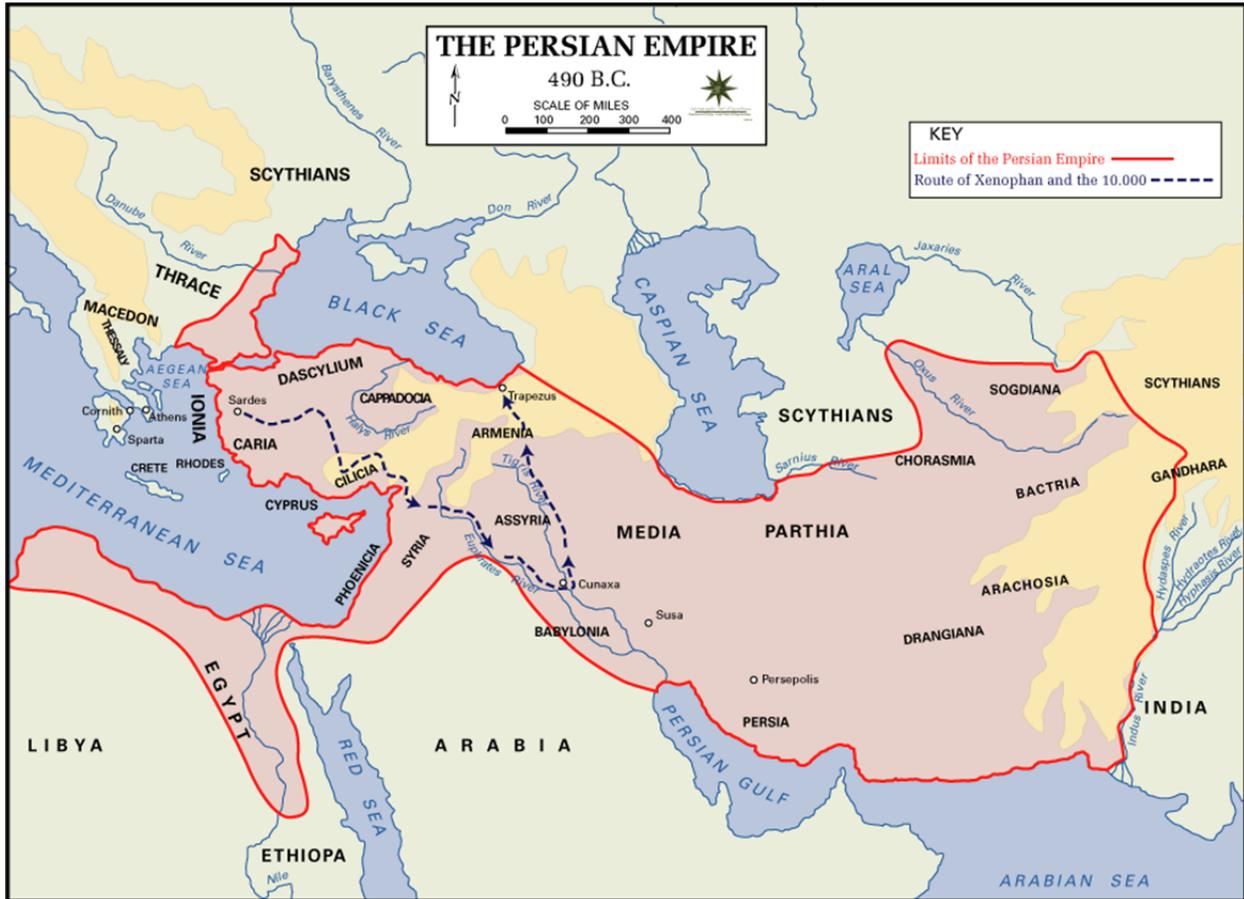
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Figure 1: Route of Xenophon and the Greek Mercenaries

(United States Military Academy, 2011)