Interpreting Iranian Leaders' Conflict Framing by Combining Latent Semantic Analysis and Pragmatist Storytelling Theory

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ABSTRACT

The purpose of this paper is to do a longitudinal analysis of the speeches of two Iranian leaders: Iranian President Mahmoud Ahmadinejad and The Supreme Leader Ayatollah Sayyid Ali Khamenei. The objective is to offer details about temporal shifts in the nation's communication about nuclear technology and to effect improvements of predictions of what political violent actions may occur in the future. The study combines a quantitative analysis using Latent Semantic Analysis (LSA), which allow quantifying relationship between terms, phrases and documents and a qualitative analysis using Boje's Pragmatist Storytelling Theory (PST). PST defines *storytelling* as dynamically comprised of narratives of the past, living stories of the immediate present, and connective antenarratives. An antenarrative is defined as a *before* narrative coherence and *bet* on the future course of action, which relates to lived stories that are unfolding. The contribution of this study to political communication research is an integration of LSA patterns with PST interpretative shifts as a two-step way to analyze political discourse in a strong international conflict situation. The LSA findings include successful tracing for the quantity of violent phrases. The PST findings include a shift from mainly linear- to spiral-antenarratives. Implications for future studies are addressed.

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"The universe is made up of stories, not atoms." (Poet Muriel Rukeyser)

Introduction

Today, there continues to be a great deal of concern regarding the political posturing of Iran and how the United States and Iran communicate with other as well as with other concerned nations about the possible nuclear weapons of Iran. Many experts note that there is a "war of words" between the two nations. This perplexes many because at times it looks more like a rhetorical game than a precursor to kinetic war. Others disagree and see armed conflict as getting discursively created by the war of words, or the linguistic war turning into physical war. The present tensions between Iran and the U.S. today include two major U.S. concerns about Iran aiding enemies in Iraq and terrorist organizations like Hezbollah and Hamas, Iran continuing to develop a nuclear weapons program (albeit secretly). In both nations, there are camps that seek negotiations with the other side while there are other factions that seek confrontation. In the U.S., for example, there are hardliners who call for military action against Iran. Some of the latter appear to be looking for reasons launch military strikes. Some observers even think that these hardliners are looking for ways to provoke Iranian actions that can be used as *causus belli*. There are two main concerns for this study. First, we are concerned about how conflict framing can be used to integrate quantitative LSA with qualitative PST analyses to give some understanding of Iranian leaders' statements about their political directionality as action moves beyond rhetoric. Second, we are concerned about how more in-depth knowledge about Iranian discourse can aid the interaction of the United States and Iran as it teeters between war and peace in its diplomatic negotiations.

Political communication scholars have traditionally examined international crisis situations with framing, rhetoric, or critical theory perspectives. In this paper, we take a different approach by combining a quantitative framing analysis methodology with a qualitative storytelling theory approach in order to identify and interpret possible escalating longitudinal patterns in Iranian political discourse that have a propensity for direct action.

With or without nuclear weapons, Iran has been a strong regional power. Iranian national security concerns include preventing the rise of another antagonistic Iraq and blocking the United States from seeking to change its government. The U.S. is seen as Iran's largest national security threat (Friedman, 2011). Friedman (2011) argues that "Iran's anti-Israeli rhetoric has been extreme, but its actions have been cautious" (p. 114). He suggests that aggressive Iranian rhetoric is sometimes used to cover its inaction in dealing with domestic economic situations. Claiming it is rhetoric not action has not stopped some Israeli and U.S. leaders from threatening a missile strike on Iranian nuclear plants. For example, recent news reports indicate that President Obama is willing to use various strategies in dealing with Iran that include negotiations, diplomacy, cyber attacks on nuclear facilities, increasingly severe ("crippling") sanctions and military strikes. In March 2012, Obama stated to the American Israel Public Affairs Committee "I will not hesitate to use force when it is necessary to defend the United States and its interests" (Calabresi, 2013, p. 22). The Pentagon has created the largest military buildup of forces in the Persian Gulf since 2003 (Calabresi, 2013). Meanwhile, the Iranian forces are also building up in the region. Both nations claim necessity for what they frame as defensive posturing.

As is often common with states-of-concern versus all-out enemies, Iran has sent mixed messages to the U.S. (Pollack & Takeyh, 2005). The leadership of Iran often defines its policies in terms of needed opposition to the U.S. and its allies. This opposition is not only discursive, it also takes form in actions like supporting terrorist organizations, such as Hezbollah in Lebanon and Hamas in Palestine. There is

evidence that they supported a direct attack on U.S. interests in the form of the Khobar Towers' bombing. This apartment building housed American troops in 1996 (Pollack & Takeyh, 2005).

The 2013 Worldwide Threat Assessment released by the Direction of National Intelligence reaches the following conclusions about Iran. First, Iran continues to develop nuclear capabilities to ensure its national security and increase its regional influence, rather than for just domestic energy needs. Second, actual nuclear weapons development is still unknown. Third, Iran has the scientific and production capabilities to build nuclear weapons if it decided to build them. Fourth, Iranian leaders appear to be conducting a cost-benefit analysis regarding their decision to build or not build nuclear weapons, and, fifth, Iran is attempting to balance the competing objectives of having advance weapons while avoiding war or serious threats to its regime (Klapper, 2013). It is therefore important to make accurate interpretations of Iranian communication and action, so as to make the right strategic response to escalation.

The structure of the paper is as follows: We give a brief overview of the history of U.S.–Iran relations. Framing theory is reviewed, as it provides a way of framing combining Latent Semantic Analysis (LSA) with Boje's Pragmatist Storytelling Theory (PST). Speeches by two Iranian leaders, Iranian President Mahmoud Ahmadinejad and the Supreme Leader Ayatollah Sayyid Ali Khamenei, are analyzed using LSA and PST for their conflict framing moves. The paper concludes with implications for political communication analysis.

The History of the United States-Iran Relations

Iran has a history of framing international conflicts in its communication but not always following with direct action. A close study of recent Iranian discourse alerts us that there may be internal turmoil concerning which messages frame conflicts for the Western world that denotes escalations in probable violent actions. For this research, two Iranian political voices were examined over time to explore whether their discourse from conflict frames that can influence escalation to violence or from non-violent frames, peace.

Iran has a population of about 70-million people, which is about the same as that of Turkey and over twice the population of Saudi Arabia (Friedman, 2011). The trouble between the two nations began in 1953 when the United States had the CIA help to engineer an overthrow of a democratically elected president of Iran. The president was replaced with a Shah, who was hated by most Iranians. There is the possibility that military confrontation could result from accidental events (Hirsh & Bahari, 2007). Iran has sent small boats near U.S. ships and fired test missiles over the waters, while the United States positioned three naval carrier groups in the Persian Gulf.

In the recent G. W. Bush administration years, Iran has claimed that the U.S. aimed to replace its government again. Today, there is evidence of a three-tiered relationship between the two nations:

1   occasional partnership for shared geopolitical goals

2   "hidden war." (Hirsh & Bahari, 2007, p. 30)

3   linguistic jousting – the "war of words."

Since the Iran-Contra scandal of the early 1980s and beyond, the U.S. Government (USG) has worked secret deals with Iranian leaders. After 911, the USG received significant Iranian help in setting up the new Afghanistan Government and in working against Al Qaeda, the global militant Islamist organization. Iran is unfriendly to both the Taliban, the Islamic fundamentalist political movement in Afghanistan, and to Al Qaeda. The Iranians were also long-term enemies of Saddam Hussein.

While the Supreme Leader of Iran, Ayatollah Sayyid Ali Khameini, distrusts the USG and joins others in labeling the United States the "Great Satan," but is said to have felt sympathy for Americans at the time of the 911 attacks (Hirsh & Bahari, 2007). Rather than supporting the Taliban, Iran supported the Afghan fighters (the Northern Alliance), who took on the Taliban. (They had opposed the Taliban for years before the 911 attacks by Al Qaeda.) In November 2001, Iran sent a representative to meet with the

USG and 18 other nations in Bonn, Germany, to talk about an interim Afghan government. Ironically, Iran asked the USG representative if there should not be something about democracy in the plan for the new government (Hirsh & Bahari, 2007).

At another meeting in Tokyo, the Iranians pledged $500 million to the new Afghan Government, an amount more than twice as much pledged by the USG (Hirsh & Bahari, 2007). Shortly after the Tokyo meeting, President Bush included Iran in his "axis of evil" notion and speech (along with Iraq and North Korea). Condelezza Rice, U.S. Secretary of State, encouraged this, and Bush, himself, thought it would resonate in a way similar to Ronald Reagan calling the USSR an "evil empire" (Hirsh & Bahari, 2007). Observers note that the Bush speech contributed to the problems of Iranian-American relations. An aid to Ayatollah Sayyid Ali Khamenei said that the speech confirmed what Iranian hardliners thought of the U.S. and reinforced their distrust of the U.S.

In 2003, Iran and the U.S. held low-level meetings on Iran helping the U.S. capture Al Qaeda operatives and the USG helping Iran to deal with Mojahedin-e-Khalq (MEK), which is an anti-Iran extremist group in Iran (Hirsh & Bahari, 2007). In the same year, Iran sent a memo that indicated its main interests in dealing with the USG. The Iranians brought up the possibility of helping to make Hamas and Hezbollah more political than extremist. They also proposed transparency of their nuclear program. The bargain they sought in exchange was the USG ceasing its hostile behaviors, ending sanctions, and helping more with MEK (Hirsh & Bahari, 2007).

Colin Powell noted later that the USG needed to be talking more with Iran and Syria. He appears to believe that diplomacy and negotiations cannot be hurried. Powell stated, "You can't negotiate when you tell the other side 'Give us what a negotiation would produce before the negotiations start'" (Hirsh & Bahari, 2007, p. 33).

The USG remains suspicious of Iran because it has continued the nuclear development with capabilities moving toward nuclear armament, despite Iran being a signatory of the Nuclear Non-proliferation Treaty (Hirsh & Bahari, 2007). The USG did not try to block Iran's attempt to join the World Trade Organization (WTO). While the U.S. has contingency plans for going to war with Iran, it is not likely that a war will be started by either nation. Accidental hostilities appear to be more likely.

Huntington vs. Khatami

Samuel Huntington (1993) generated the thesis that the fundamental source of world conflicts is cultural. This is an alternative view to the claim that conflicts would continue to involve clashes among nation-states. From the 17th Century, conflicts move from eras of nation vs. nation, people vs. people, and ideology vs. ideology. Huntington argues that all of these conflicts occurred in the context of Western civilization. He argues that today a shift has been made to conflicts within non-Western civilizations and between Western and non-Western civilizations. He defines civilization as a cultural entity which unites smaller cultural entities but does not share culture with other entities (other civilizations). He observes that "A civilization is, thus, the highest cultural grouping of people and the broadest level of cultural identity people can have short of that which distinguishes humans from other species" (Huntington, 1993, p. 24). Huntington divides the world into eight civilizations: 1) Western, 2) Confucian, 3) Japanese, 4) Islamic, 5) Hindu, 6) Slavic-Orthodox, 7) Latin American, and 8) African. The reformist president of Iran, Mohammad Khatami, recently stated the following to the United Nations: "Dialogue is not easy. It is even more difficult to prepare and open up vistas upon one's inner existence to others. A belief in dialogue paves the way for vivacious hope: the hope of living in a world permeated by virtue, humility and love, and not merely by the reign of economic indices and destructive weapons. Should the spirit of dialogue prevail, humanity, culture and civilization should prevail. We should all have faith in this triumph, and we should all hope that all citizens of the world will be prepared to listen to the divine call." (Khatami, 2000).

There is evidence that Iran calculates the effects of its actions and will fluctuate between aggressive and peaceful actions (Pollack & Taykeb, 2005). This suggests that its state behavior may be based on something more than impulsive behavior or ideological movements. Political movements and

groups move toward violence by defining their situations in ways that (a) make violence look like the most viable avenue of assertion and change, and (b) by vilifying certain groups that they perceive to be existential threats to their existence and success. Terrorism is not an individual-level phenomenon but rather a group-based phenomenon. Within terrorist groups, there are strong social pressures. Content analysis of their messages might reveal more about what they would like us to think than what they think in their group situations. Radical political behavior moves from less extreme to more extreme. Two sources of conflict for these groups are (1) tensions between them and needed supporters, (2) and between them and their adversaries. Strong group norms suppress internal conflict among group members. As more discussion occurs among group members, average opinions become more extreme. As views become more extreme, opinions of group members also become more homogeneous.

The USG is attempting to interpret the actions and plans of Iran in terms of nuclear armament planning and development, influence on politics within Iraq, regional political influence, and intentions regarding the sovereignty of Israel. For this reason and for the reason that sectarian violence and insurgent group connections with Iran are still major USG concerns, we believe that groups in Iran provide excellent subject matter for intensive analysis of language, social meanings, and contextual factors of discourse production. Experts on Iran note that the nation has over 200 political parties and numerous informal networks (Green, Wehrey, & Wolf, 2009). The RAND report calls this landscape an "arena for intense factional maneuvering" (Green, Wehrey, & Wolf, 2009, p. 25). While there are hundreds of parties and political networks, it is also noted that there are three main ideological clusters: (1) conservative/Jihadi voices who argue for a consolidation of the 1979 revolution gains and traditional lifestyle; (2) reformist/Ijtihadi voices who argue for a pluralist and democratic Islamic system; and (3) centrist/pragmatic voices who argue for more technological and economic cooperation with the rest but show little concern for democratization. RAND researchers note that there is a "routine fluidity of movement" among these three clusters, and their leaders will adopt coordinated positions when they share common concerns for external threats to their nation (Green, Wehrey, & Wolf, 2009).

If one simply looks at single sentences uttered by leaders of all sorts, there is a high probability of making errors concerning the function and intent of those sentences. For example, Iranian President Mahmoud Ahmadinejad has said, "God willing, with the force of God behind it, we shall soon experience a world without the United States and Zionism" (Staff Report, 2006, p. 3). One might assume that Iran is planning imminent attacks on the U.S. and Israel. Or one might dismiss this as blustering rhetoric with nothing more to it than shock value. Another interpretation might be that it simply reflects a tactic to unify Iranian citizens, playing upon their tendency (real or imagined) to respect leaders who speak against the U.S. and Israel. To get a more accurate reading of the meanings of such discourse, however, it is necessary to gather more contextual information and what kinds of claims, terms, and tone surround this single sentence. Additionally, one should locate these in contexts of time and reactions to messages made by other nations and by the U.S.

There is little doubt that Iran poses a security threat to the U.S., but there is disagreement about what type of threat it represents. There is a need to understand Iran not only as a nation but as a nation of competing factions. Within the nation, there is competition between moderates and fundamentalists; there is also competition between Iran and other Muslim nations. Iran also has ties to various political organizations, such as Hezbollah, a Shi'a Islamic militant group and political party in Lebanon. Despite the uncertain status of the nation's nuclear weapons program, it is known that Iran most likely has biological and chemical weapons programs (Staff Report, 2006). The intelligence community (IC) has the challenge of assessing the intentions of Iranian leaders, and also how much they really care about what they have called "serious negotiations" (Staff Report, 2006, p. 4). It will also take good analysis to follow how much.

Some observers note that Iran has a record of adhering to negotiated agreements. At this point, it appears that there is substantial uncertainty in the IC regarding the Iranian leadership's true intentions. There are numerous interactions that can be analyzed to gain more understanding of how that leadership responds to pressures both from within the nation and from international sources. Observers note that some of the official discourse from the Iranian Government has been threatening and accusatory, yet it is

not known what these behaviors mean in geopolitical terms, or whether they simply represent posturing. For example, some Congressional observers wonder if Iran is practicing deception-and-denial communication tactics (Staff Report, 2006).

American negotiators need to study the cultures of Iran and how it relates to neighboring cultures in the Middle East. The strategic geopolitical importance of Iran makes it necessary to study and understand its strategic environment and its strategic culture. Iran differs from its neighbors in that it is a non-Arab Shi'ite state. It has influence in numerous regional conflicts, including Afghanistan, Iraq, Lebanon, and the Palestinian-Israeli conflict (Bahgat, 2007). Constructive engagement with Iran may be possible with effective intercultural communication and negotiation because of the fact that the U.S. and Iran do share some interests despite disagreeing on issues like the nuclear armament of Iran. Both nations are interested in regional stability and an Iraq that is stable and secure (Bahgat, 2007). Iranians note that they have not initiated any regional conflicts for over 200 years, and that they do not make claims on territories held by other nations (Bahgat, 2007).

Today, there is a great deal of talk about engagement as a new model for U.S. relations with other nations, including states of concern like Iran. In September 2009, there were news reports about Iran being willing to have nuclear experts in Iran meet with scientists from the U.S. and other nations to work on concerns about the Iranian nuclear plans. There was also talk that Iran was considering the purchase of enriched uranium from the U.S. for medical applications. Success in this deal was said to be an indication by the U.S. that it is serious about engagement, according to the Iranian president.

Information from the International Crisis Group reveals that numerous leaders and analysts in Iran have stated that their nation is willing to work with the United States if certain issues, such as Iran's nuclear programs, are not the issues of the negotiations. There is an interesting history of Iran helping the U.S. with various political missions.

A recent analysis concludes that concerns with Iran as involving "war (as) a frightening prospect and fruitful negotiations a still-distant dream" (International Crisis Group, 2013, p. i). Americans and Europeans have chosen decades of economic sanctions against Iran to change its political directions and nuclear ambitions. The hope appears to be that with enough debilitative sanctions, Iran will either change its course or will change its regime. The view from Iran, on the other hand, is that America and its allies are simply committed to destabilizing the Iranian regime as much as possible (International Crisis Group, 2013). Experts have trouble in measuring the effectiveness of the sanctions as Iranian leaders are committed to resisting and surviving the sanctions and making economic deals with China, India, and other nations not committed to the American strategies of coercive diplomacy (International Crisis Group, 2013).

The two nations have had broken relations since 1980. The dueling narrative began there as 52 Americans were taken hostage in takeover of the American embassy in Tehran (International Crisis Group, 2009). As one Iran official states, "Each protagonist is prisoner of its history, which is what makes it deaf to the other side's grievances" (International Crisis Group, 2009, p. 2). Iran referred to the embassy as a "den of spies" and the Supreme Leader, Sayyid Ruhollah Mostafavi Musavi Khomenei, at that time, called breaking of ties with America as one basis of a new Iranian policy.

The exploratory research presented in this paper is intended to identify the dominant frames used by Iranian leaders in an effort to ascertain what themes are most commonly used in the framing processes of the Iranians. It is possible that the results of this research might shed light on the actions and plans of Iran in terms of nuclear armament planning and development, influence on politics within Iraq, regional political influence, and intentions regarding the sovereignty of Israel. Similarly, the history of Al-Qaeda in Iraq, the sectarian violence between Sunni and Shiite Muslims in Iraq, and the relative stability of the Kurdish region provide test cases for this theory and its implementation.

If engagement with Iran and constructive negotiations are to occur, it is mandatory that U.S. analysts and leaders develop much more in-depth understanding of the nation, its state, its cultures, and how its leaders frame various issues. Certainly, both nations have a great deal to gain by moving away from hostile and competitive communication toward partnership communication. Iran can benefit from U.S. trade, regional support, and international networking, while the U.S. can find valuable support from

Iran in ending Al Qaeda's centers of gravity and in leaving stable regimes in Iraq and Afghanistan. Both nations share the enemies of Al Qaeda and the Taliban.

The Obama administration has taken steps forward with talk about multilateral nuclear talks, possible bilateral discussions, and increasing diplomacy. Still, there are the possibly counter-productive behaviors coming from the White House, such as talk about "crippling sanctions," and leaving "all options on the table" (code for military strikes are always possible). The refusal to move straight into bilateral talks is indefensible from a communication theory perspective. Like the U.S., Iran does not simply seek discussions with the other nation; it also seeks changes in the behavior of the other nation (the U.S.). Iran wants the U.S. to recognize its aspirations as being legitimate (International Crisis Group, 2009).

A point of intractable differences of the two nations involves the Israeli-Palestinian conflict. Neither side appeals willing to yield on fundamental arguments. The U.S. is unwilling to lower its backing of Israel, and Iran adheres to leading the Muslim world against Israel (International Crisis Group, 2009).This is not to say that change is not possible, but that it is not likely in the near future. Thus, in communication, we can expect both sides to move very slowly and cautiously. Because of this fact, we should not be expecting radical shifts in policies but should seek instead the momentum of a process of interactivity. Iran appears to seek some form of partnership, but not on a basis on inequality with the U.S. making demands. Iran finds its power in balancing relations with other nations against the U.S.

Having discussed the history of Iran-U.S. relations, we turn now to a review of how Entman's (2004) framing of conflicts can be used to combine Latent Semantic Analysis (LSA) with Pragmatist Storytelling Theory (PST) in ways that could be helpful in interpreting various longitudinal escalations that teeter between intractable and resolvable. We begin with an overview of framing theory; then turn to its relation to LSA, and PST.

Framing Theory

A search of the literature shows that there is a solid basis in research for analyzing political discourse to try to determine intent when it is not overtly stated and to try to predict whether that intent will radicalize and escalate to violent action. Framing theory gives researchers the basis for understanding how people organize, classify, and interpret information in their daily lives and how messages can be constructed to influence that interpretation with an existing worldview.

If conflict frames are related to cognitions or beliefs, which they must be as second-order agenda setting attributes, frames function to reduce complexity to key characterizations for decision makers. As Vertzerger (1981) notes, beliefs provide leaders with convenient ways of making sense of confusing arrays of signals in political situations. The system of belief held by political leaders set boundaries for interpretations of the situations. Ellis (2006), on the other hand, argues that conflicts among political parties are less essentialist than determined by social processes. He also notes that an understanding of the complexity of communication involved in political conflicts is necessary to manage or lessen those conflicts. Old send-receive communication models based on one-way political persuasion and strategic influence are likely to fail in dealing with complex and long-term political conflicts.

Conflict Framing Theory (CFT) assumes that political parties that categorize everything an adversary does as symbolic of their being victimized will never make progress toward peace. Such conflict frames are known as intractable (Ellis, 2006). The implication is that political conflicts are conflicts over framing as much as conflicts are over territory, influence, and force. Conflict frames are those that encourage a perception to the adversary as a strong threat to national security. Intractable framing processes are related to political polarization. Polarization in political discourse can precede political violence even if, sometimes, violent discourse constitutes blustering or exaggerated communication that is intended more to have discursive effects more than planning of violence effects. Nisbett (2012) cites research supporting the claim that violence in political conflicts is likely to follow violence in political discourse. Peace frames, by contrast, are those that encourage cooperation and reconciliation. That being the case, it should be possible to use CFT to search for interactions, and for

signs of cooperation or reconciliation. In what follows, we use differences between patterns of war and peace conflict framing to suggest an innovative combination of LSA and PST.

Latent Semantic Analysis (LSA)

LSA is a technique for analyzing the relationship between a set of documents and the words that they contain. LSA assumes that words that are close in meaning will occur in similar sections of text. There is reason to assume that LSA can be useful in doing research related to framing theory. Like content analysis, there is a search for terms. Unlike content analysis, LSA does not have to begin with *a priori* content categories or themes. This is because LSA generates statistically associations between terms, and between sections, or documents. For example, LSA was used by Nisbett (2012) to test the correspondence between Iranian leaders and Hezbollah texts.

According to Landauer, Foltz, and Laham (1998), LSA is not only a method used for extracting as well as representing contextual-usage word meaning through statistical calculations applied to a great amount of corpus of text, it is also a *theory* of shifts in language use. The theory of LSA suggests that factor analysis can effectively model the human language (Simon & Xenos, 2004). LSA is deemed artificial intelligence by many scholars. Halliday Schilling notes that LSA can simulate many "human cognitive phenomena" (abstract), such as recognizing "vocabulary to word-categorization," (abstract), "discourse comprehension," (abstract), and "semantic priming" (abstract), (meaning that a word is more easily recognized "when it is preceded by a related stimulus rather than an unrelated stimulus" (Halliday Schilling,1998, Abstract). When analyzing documents, if each word only meant one concept and each concept was only described by one word, the task would entail a simplistic mapping from words to concepts (Latent semantic analysis tutorial, n.d.).

In sum, LSA is both a statistical approach to language analysis using Singular Value Decomposition (SVD) (Appendix A) and a theory of how to reflect comparative latent semantic patterns in discursive data in relation to cognitive orientation and meaning (see Appendix A). Further, according to Landauer and Dumais (1997), within LSA theory, words and text, which have similar mathematical relationships within the corpus, have also similar meaning, even if they are totally different terms or frames. LSA outputs numerical cosine values in the range of 0.0 to 1.0 that reflect the similarity from the corpus to the provided terms or frames, as well as other terms or frames that have a similar mathematical relationship within the corpus (Laham, 1997). With this understanding of the theory of LSA, we turn now to how conflict framing can be interpreted using PST.

Pragmatist Storytelling Theory (PST)

In reviewing current approaches to political communication research, Richard Perloff (2013) observes that persuasive political messages have attributes of compelling narratives and strategic framing. Narratives have the ability to psychologically transport message receivers to exalted places in history and to make associations of current political actors with traditional cultural values (Perloff, 2013). Boje (2001, 2008, 2011), on the other hand, theorizes that "narrative" (p. x) is only one of the subdomains of storytelling, the others being unfolding "living stories" (p. x) and the other being "antenarrative processes" (p.x) that make reductive or expansive connections between narratives and living stories. Storytelling is defined here as a combination of narratives of the past, living stories unfolding in the present, and antenarrative process of anticipated futures that interconnect rified narratives to living stories (Boje, 2001, 2007, 2008, 2011; Rosile, Boje, Carlon, Downs, & Saylor, in press). According to Boje and colleagues, storytelling is dynamic interplay between narrative ways for framing and living story ways of framing, which gets mediated by several types of antenarrative processes, including linear-, cyclic-, spiral-, and rhizomatic-antenarrative bridging between narratives and living stories.

Figure 1. Storytelling Genres: Narratives, Living Stories, and Antenarratives (Boje, 2013, p. 49)
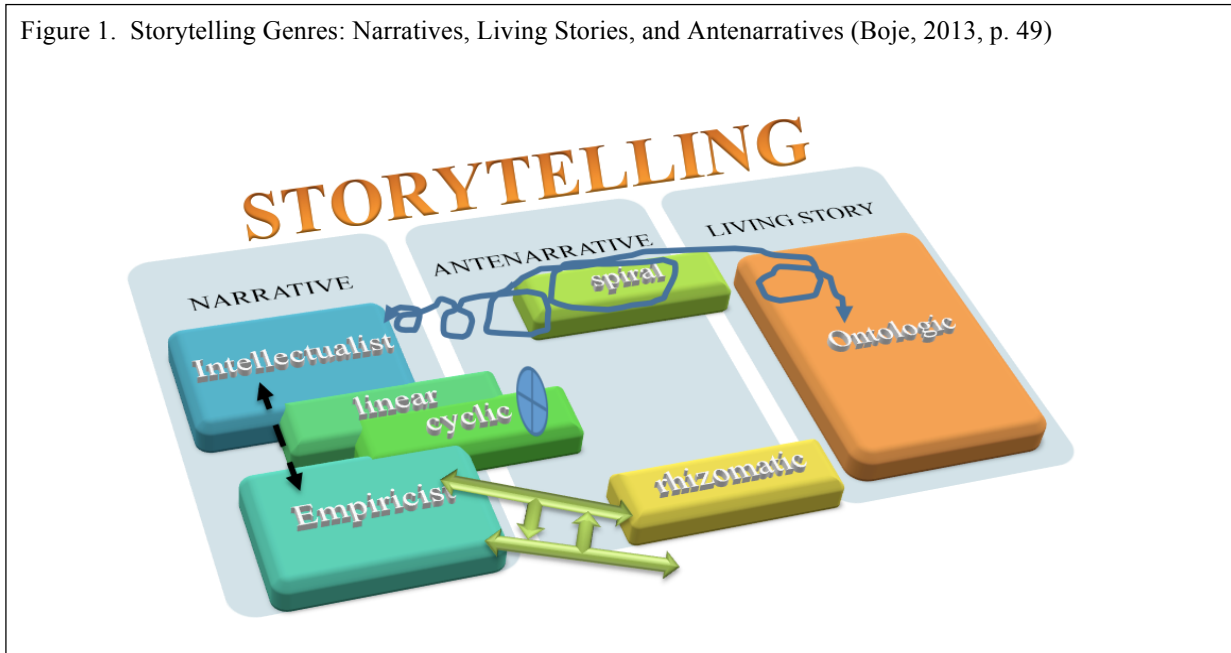
Figure 1 summaries the relation between antenarrative processes (linear-, cyclic-, spiral-, & rhizomatic) that link intellectualist (epistemic) and empiricist formed-narratives, and those narratives with living story once-occurrent Being. Antenarrative process interpretation is a way to explain what happens in storytelling before narrative takes on a fossilized or petrified form or structure. Narrative is most often retrospective, looking backward, while walking forward (Boje, 2001, 2008a, 2011). Living stories are ontological, in the once-occurrent moment of Being, that is in-the-middle, without beginning or end. Narrative tends to reify the living story moments (or eventness) into stereotyped pattern, such as glossing over differences, to frame enemies and allies, editing out exceptions in historical assessments. Storytelling theory, as presented, assumes that much of the narrative works by objectifying or subjectifying living story variability in ways that hides its variations in once-occurrent Being. This reduction and reification process of narrative to living story is done through antenarratives (Boje, 2001, 2011; Rosile et. al, 2013).

There are four kinds of antenarratives: (1) linear-, (2) cyclical-, (3) spiral-, and (4) rhizomatic-antenarratives. Linear- and cyclic-antenarratives are hypothesized as bridging between epistemic- and empiricist narratives. Spiral-antenarratives bridge between epistemic-narratives and living stories. Rhizomatic-antenarratives bridge between empiric-narratives and living stories. For example, a linear-antenarrative makes a reductive characterization of enemies verus allies, by reifying all the good traits with one's own allies, and all the evil traits with one's foes. An example of cyclic-antenarrative, is that stages of historic conflict and its eventual outcome, go through the same stages, glossing over and reifying any exceptions, changes to stages, or new stages as out of the framing of the conflict. An example of spiral-antenarrative is when escalations or de-escalations occur; thus, countermanding the linear- or cyclic- statis of recurring events or stages. An example of a rhizomatic-antenarrative process is terrorism itself, as a network of cells, where when one is found, it makes subterranean roots, to emerge in some other place and time, and is all but impossible to root out using conventional strategies.

By looking at antenarrative linkages to those narrative frames, and how they associate to living stories presently unfolding, we gain some understanding of the framing process by which narrative

attaches itself to living story experience and consciousness. Work has been done applying antenarrative to international situations, but not to nation conflict framing. In prior work, Boje (2007) looked at two types of spiral-antenarratives, (1) path to the bottom, and (2) path to the top. In more recent work, Boje and colleagues are developing a double-spiral, where upward and downward momentums are not dualized into different spirals. Vaara and Tienari (2011) applied antenarrative to changes in international banking as banks across several Nordic countries began to develop joint operations. Next, we look at a pragmatist turn being taken in storytelling theory and method.

PST. Boje's most recent theory and method work relates *storytelling* to American Pragmatism. Here we look at how Pragmatist Storytelling Theory (PST) can be treated as a prospective sensemaking of conflict framing. It is this part of the theory that we will seek to apply. Pragmatism began with full namePeirce's writing in the late 1880's in a new-Kantian approach. James (1907), however, took it in a positivist (empiricist) direction, which Peirce (1905, 1906) reacting to James speeches, took objection. Dewey, on the other hand, was initially convinced by James to an empiric American Pragmatist position, but after reading Heisenberg's (1927) Principle of Indeterminacy, and its observer effect thesis, made a radical shift from empiric to ontologic-pragmatism. Burke also made a shift, from his earlier *Critical Realist* (e.g., his analysis of Hitler's rhetoric) and *Pentad* (1945) to his work (1968, 1978) on an ontological-dramaturgic approach.

Storytelling (with antenarrative connections between narrative reification and living stories unfolding), because of its teleological focus, can be related to the work of these American Pragmatists. Here we focus on Charles Sanders Peirce's interpretant theory that while epistemically rooted in semiotics can be related to ontologic insights of Dewey and Burke. In sum, PST encompasses two semiotic aspects of sign-action interpretants: the *before* narrative coherence occurs, and the *bet* on the future (which is teleological). Boje builds on Peirce's and Dewey's pragmatism to develop a PST theory and method. The focus of PST on interpreting the teleological, using a concept of difference that is potentially relevant to conflict framing between nations.

The concept of difference is embodied in the *pragmatist-storytelling* search for dynamic patterns that are diachronic, as opposed to synchronic searches in the LSA. Both methods, as we shall see, look for repetitions and differences in patterns. Pragmatist storytelling takes a more historical hermeneutic approach. Peirce's focus is epistemic, while Boje's extends to empiric and ontological using an American Pragmatism more from Dewey (1929) after his shift from epistemic- to ontologic-pragmatism. A full review is beyond the scope of this paper. The main point is that it is possible to develop *Pragmatist-Storytelling* in an ontologic direction, by focusing on how the future is occasioning (*presencing* in ontologic and Dewey sense) in the speeches we are to analyze.

Presencing or occasioning is not always in the traditional Western narrative arrow of past-present-future, rather the future is in arrival affecting presencing, and resituating the past narrations. Here we assume, that President Ahmadinejad may be using the non-Western temporal orientation, in his own ontology of how spirituality, justice, and world affairs fulfill some monotheistic teleology in ways that Western narrative time arrow finds nonsensical, unfathomable.

Peirce's interpretant theory is two triads, as shown in Figure 2. The first triad consists of the interplay of immediate-dynamic-final, left, and the second triad, right, looks just at the workings of the dynamic (in the first triad) as emotional-energetic-logical interplay.

Figure 2. Left figure is First Triad and at right is Second Triad of Particular Dynamic-Interpretant
Relations
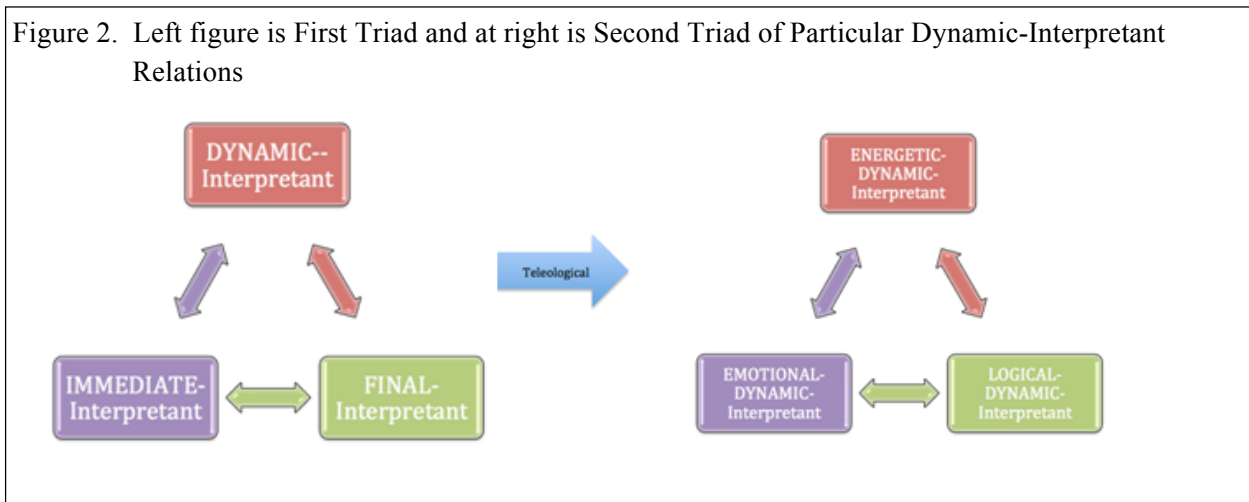
The implication in Figure 2 is that it may be possible to treat PST as a way of interpreting conflict framing in the dynamic back-and-forth of a political issue. In sum, pragmatist storytelling focuses on antenarrative linking of narrative frames to living stories presently unfolding in a pragmatist approach to conflict framing between two or more nations and their allies. As PST is new to this audience, we will give some additional explanation.

Hannah Arendt's (1958) ontology focuses on political action, and how in recent western philosophy, there is more focus on economics of labor and work. Arendt's (1958) political approach to "storytelling" (p. 50) includes her focus on living story, what she terms "a recognizable life-story from birth to death" (p. 19). Arendt's ontological approach calls for a politics of ethical compelling action.

In sum, in terms of international situations, antenarratives are theorized as making connections between fully-formed coherent narratives of the nation's past and *living stories* that are presently unfolding among a nation and its allies that get reduced or reified by those narratives of nations past and present. Two types of formed narratives of the past, epistemic and empirical, have secondary antenarrative connections between them, and with presently unfolding *living stories*. An antenarrative is defined as a *before* narrative coherence sets in (as in myth) and as types of *bets* on the future. In this way, it is possible to look at storytelling framing of past, current (unfolding), and anticipated future scenarios.

Next, we look at the research hypotheses, and then turn to the LSA and the PST analyses of conflict framing in the speeches of the two Iranian leaders. From the literature, CFT, LSA, PST, and two research questions have been established as follows:

Research Questions

RQ1: Is there an escalation of violent conflict framing or terms in the speeches of President Mahmoud Ahmadinejad from 2005 when he came into power and 2012?

Radicalization is the first of two steps that can lead to violence, according to Countering International Terrorism (2006). If someone is alienated from society, he or she may adopt extreme views and become radicalized. Coming from a range of "potential factors" (p. 17), for radicalization, there is "no single factor that predominates" (p. 17). Through framing theory, if the violent frames escalate from 2005 to 2012; therefore, we ask the following question:

RQ2: Is there an escalation of violent framing or terms in the speeches of the Supreme Leader Ayatollah Sayyid Ali Khamenei between 2005 and 2012?

We turn next to the methodology, which is followed by findings, and our interpretations.

Methodology

Sampling

Purposive sampling was conducted to obtain six recent speeches made by each of Iran's two most important political leaders, President Mahmoud Ahmadinejad and the Supreme Leader Sayyid Ayatollah Ali Khamenei (as summarized in Table 1). The speeches were selected at the beginning of the nuclear technology conflict between Iran and the U.S., along communication events, and up to the current situation. The rationale of the sampling was to find speeches of the Ayatollah that were near the time when the Iranian President addressed the United Nations as they called for action on that basis of their respective conflict framing. This allowed us to use two analysis methods, LSA and PST, to triangulate conflict framing over time. We gave the theory of LSA and PST, here we summarize the methods.

Table 1

Three time periods using word association with LSA

Document Time Periods		
Time Period 1 Ahmadinejad Speeches (2005-2006)	Time Period 2 Ahmadinejad Speeches (2009)	Time Period 3 Ahmadinejad Speeches (2010-2011)
Time Period 1 Khamenei Speeches (2005-2006)	Time Period 2 Khamenei Speeches (2007-2008)	Time Period 3 Khamenei Speeches (2010)

Analysis Procedures. LSA was used to analyze trends in conflict framing in the speeches. When using LSA, an analysis is performed from a corpus (body) of documents generating solutions from a particular amount of dimensions (Landauer, Foltz, & Laham, 1998). LSA is related to factor analysis and associated with neural net models, computer simulations of brain circuit integration, and is founded on singular value decomposition (SVD). SVD is a mathematical method producing a semantic space arrangement, which provides reflection of major comparative patterns in the data, SVD is used for data reduction (Baker, 2005; Serafin & Di Eugenio, 2004). LSA was used to determine term similarity (from the top 10% similarities or cosine values) in each speech document, separated by dates, to look for any discourse escalation to either *war* or *peace*. Then the frequency counts per speech were recorded into a spreadsheet and then graphed. In part two, LSA was used to examine the Iranian politicians' speeches by date. LSA searches for similarities (cosine values), and the highest cosine for a particular speech was recorded and graphed. This study examined discourse through a new lens for communication studies resulting in significant possibilities for extended research (Nisbett, 2012). To determine whether associations existed between discourse and subsequent action, the methodology of word association was first used to determine the frequency counts of words used in selected Iranian discourse.

Table 2

Term categories used for word association

Term Categories	
Advocating Violence	**Advocating Peace**
Selecting terms, such as the word "war," and using synonyms from LSA. Example: "War, combat, battle . . . "	Selecting terms, such as the word "peace," and using synonyms from LSA. Example: "Peace, harmony, peacetime . . . "

Pragmatist Storytelling Theory (PST) was used to give a qualitative interpretation of the conflict framing. In particular, the antenarrative shifts from what American Pragmatist Charles Sanders Peirce calls 'emotional-interpretants' to 'logical-interpretants' was done on the same speeches. The procedure was read each speech for its interpretants. For example, immediate-interpretants of events by the speakers, along with past experience narratives. Then when dynamic-interpretants were apparent, we read for the type of dynamic-interpretant. For example, when there was emotional-interpretant reference, then the association with energetic- and logical-interpretants.

We turn next to the findings of the study.

Findings

The first portion of this study examines six speeches of two Iranian politicians: President Mahmoud Ahmadinejad and the Supreme Leader Ali Khamenei. First conflict framing is attempted using a methodology new to Communication Studies, LSA, for testing purposes. This is followed by the qualitative analysis using PST. In part one, using LSA, the Iranian politicians' speeches are compared with the terms, *war* and *peace*, along with a sample of their synonyms, sentence by sentence. In part two, PST is used to focus on transitions from linear- to spiral-antenarrative patterns by assessing the interpretant shifts.

Part I—The LSA results. The LSA software was used as a method to test Iranian leaders' speeches over time to examine the occurrence of violent terms. Subsequently, LSA was used to identify patterns in violent terms over time showing indicators toward escalation to violent action. The following graphs depict this study's course of research. The language-to-action mode depicts real-world experience and word association leading to framed metaphors that form complex frames in our heads that can lead to violent action, as shown in Appendix Figure B.1. (Castells, 2009; Lippmann, 1922). The linguistic radicalization model portrays the likelihood of an increase in violent action from escalation toward violent discourse or violent frames, as shown in Appendix Figure B.2. Peaceful frames can increase the possibility of peaceful intent, as shown in Appendix Figure B.3. A model, as in Appendix Figure B.3, depicts the potential of this research for using statistical analysis of discourse to predict behaviors.

Words or frames with LSA cosine values close to 1.0 are the most similar and those near 0.0 are the least similar. For such purpose of analyzing discourse of Iranian leadership collection of six speeches of The Iranian President Mahmoud Ahmadinejad between 2005 and 2012, these include speeches delivered by President Ahmadinejad at the U.N. General Assembly meetings and at other occasions. The collection contains the English translation of these speeches published by the United Nations having a total of 688 sentences in the English language. Additionally, another set of six speeches were analyzed

from the Supreme Leader Sayyid Ayatollah Ali Khamenei from the same period. This includes 1,817 sentences translated in the English language for the Supreme Leader.

After indexing the collection using LSA, we attempted to explore the set of research questions:

RQ1: Is there an escalation of violent conflict framing or terms in the speeches of President Mahmoud Ahmadinejad from 2005 when he came into power and 2012?

The first speech (at 10% of top sentences with high similarity to the framing term, 'war') has high incidence of violent terms, and then de-escalates in second, building up in third, fourth, and fifth, and lowering the incidence of such latent semantics in the last speech examined. At 25% (top sentences with high similarity to the framing term *war*) there is a more apparent escalation through the first five speeches, and falling sharply off in the last one. As shown in Figure 3, the use of violent frames appears to steadily increase over time until the last speech where there is a sudden decrease. Because of the nature of LSA as quantitative method, it cannot explain the change. Noting the peak in 2010 and 2011, research showed this is when Iran experienced their fourth imposed Western sanction and the speeches were given after protesters had rioted because of the presidential re-election of President Ahmadinejad.

Figure 3. Example of highest 10% of sentence similarity for advocating
violence terms of Iranian President Ahmadinejad's speeches
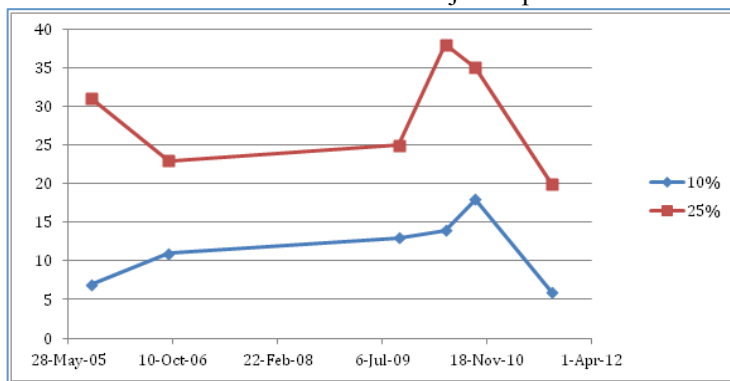
Nisbett, V. (2012). The study of Iranian discourse preceding violent action or peace. Thesis. NMSU, Las Cruces, N.M.

Figure 4. LSA of six Ayatollah Khamenei Speeches
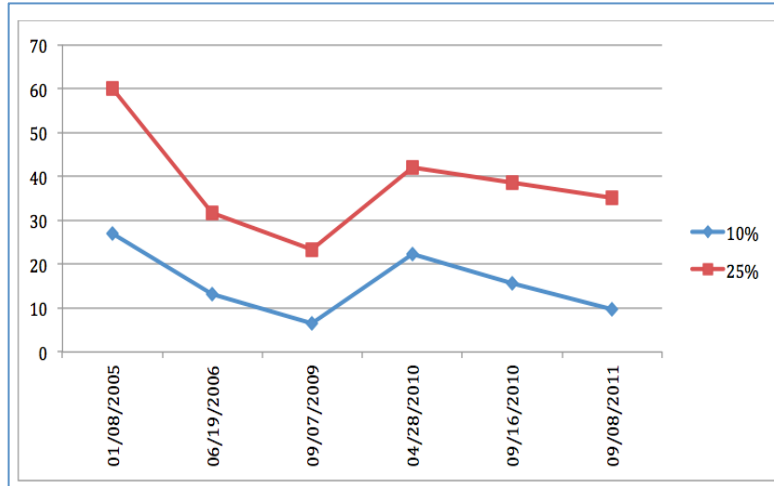
In this section we use PST to analyze six speeches of Iran President Mahmoud Ahmadinejad and six from Ayatollah Khomeini. There are antenarrative and dynamic interpretant changes by President Mahmoud Ahmadinejad from speech to speech, as summarized in Table 3.

Table 3.
Summary of RQ1 Results of President Mahmoud Ahmadinejad

Speech of President	First-Triadic Interpretants	Second-Triadic Interpretants	Relevance to RQ1
17 Sep 2005	Linear-antenarrative between immediate challenges and monotheistic and final-interpretant of injustice and inequality	None found	There is a challenge to U.S. to explain its blame and punish choices for 9-11
19 Sep 2006	Immediate-interpretant - passing of the era of agnostic philosophies with antenarrative link to final-interpretant of monotheism	None found	Rhetoric frames remain polarized (us vs. them). Theme of nuclear energy as different from nuclear weapons development
23 Sep 2009	Gives immediate-interpretants of present disasters, injustices, etc. The is an example of cyclic-antenarrative in cycle of exploit, non-equality, defended in name of West's globalization	None found	Escalates even sharper distinctions between West and Middle East. Escalation includes "racists" and West agnostic militaristic logic in its global approach

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3 May 2010	U.S. and allies made villains opposing monotheistic faith. Retrospective narratives of events tied to bets on the future (final-interpretants). He uses pattern of lots of repetitions	None found	Continues with nuclear technology theme, contrasting for energy as different than U.S. nuclear bomb.
23 Sep 2010	The retrospective narratives of three 9-11 scenarios is used to call for a final-interpretant, a conference held in Iran to study terrorism. There are several other linear-antenarrative links made to other events, such as nuclear energy of Iran, vs. nuclear weapons of U.S.	None found	This is the speech the prompts three delegations to walk out. It is an escalation, at least, as evidence by the reactions of those delegations.
23 Sep 2011	Has a longest successive list of repeats, of who is to blame questions. It is cyclic-antenarrative toward teleology of final-interpretant, the U.S. is to blame	None found	It seems less oriented to linking conflict framing to acts of violence, rather it is a rhetoric of praise and blame.

Source for speeches found in the references

President Ahmadinejad is making antenarrative *bets* in his speeches, and from one speech to the next, about the future of the world, and of the relationship between Iran, USA, Palestine, and the entire world of nations. The changes from speech to speech care not just epistemic, rather they are at times, ontological, as certain spiral- and/or rhizomatic-antenarrative changes of meaning grow and change. Alternatively, President Ahmadinejad uses linear- and/or cyclic-antenarratives to make direct enactments between retrospective narratives (such as past suffering in Iran, Palestine, Vietnam, etc.) or immediate-interpretant situations (in various countries), linked directly to final-interpretant through repetitions of the same old rhetoric. However, when dynamic-interpretant (first triad) is invoked, there are subtle shifts and changes that enact through dynamics (second triad). In other words, analysts looking for trends can differentiate between repetitions of sameness, and subtle shifts in rhetoric of the storytelling, to discern between linear-cyclic-antenarratives and significant spiral-rhizomatic-antenarratives, where violence is escalating or de-escalating.

President Ahmadinejad engages in a good deal of replica uses of storytelling dialogue and rhythm (agency in Burkean dramaturgy). Each of his six speeches is a series of replica uses and more dynamic-interpretant shifts that bespeak ontological potential for changes in habits of action. There is in his storytelling (the narratives of past, the living stories of immediate-interpretants, and the varied sorts of antenarrative *bets* on the future a pronouncement of his teleology about Iran, the U.S., Middle East, and global relations.

Final-interpretant (first triad) in relation to logical-dynamic interpretant (second triad) is a part of this teleology that relates to antenarrative dynamics of culminating teleology. It is a process of storytelling

change in relation to epistemic positions and ontologic proposed action-understanding relations with regards to the world situation. Dynamic antenarrating that is teleological in particular ways can trace the movement between first and second interpretant triads in ways that LSA's focus on lexicon structures cannot grasp. This is because antenarrating shifts not only form out of *before* into coherence, it also can trace a shift into dynamic-interpretant relation to logical-dynamic teleology.

The replicas (repetitions) seem tedious within speeches, and between them over time, yet there are signs of dynamic shifts. LSA is suited to looking at shifts in replicas from speech to speech. President Ahmadinejad has a habit of interpreting immediate-interpretants for final-interpretant, but now and again there is a shift to dynamic-logical-interpretant (e.g., from first to second triadic).

Repetitions of same refrain are part of traditional storytelling, and can, in context, lead to persuasion, by a rhythm, however, in Western modern narrative, the use of replica is frowned upon, rather a tighter more coherent pitch is favored in persuasion. Storytelling is not the same as petrified narrative with its retrospective focus on unchanging values and positions. Rather, in storytelling, there is recognition of importance of retrospective narrative and it unchanging coherence (form, structure, poetics, functions), along with immediate unfolding 'living stories' (such as in immediate-interpretant), as well as the various 'bets' on the future, the teleologies of prospective sensemaking.

President Ahmadinejad's interpretations of world situations give some *pragmatist-storytelling* clues to his bets on the future, and changes in habits of action, not just habits of rhetoric, or lexicon structure replications. There are signals in the move from first to second triad, such as from immediate to emotional, dynamic to more energetic or emotional, or from final to logical end-goal. Logic here does not refer to Western logic or Western rationality. Indeed, President Ahmadinejad professes in his speeches, spiritual and caring-humanistic ethics as his logical-ness, in resistance to Western science, technological, and materialist logic-ness and utilitarian ethics.

The pragmatist storytelling analysis is located in Appendix D. For illustrative purposes we include an example of one speech here.

Example of Pragmatic Storytelling Analysis of President Ahmadinejad's Speech

23 Sep 2011 (6th speech analyzed).

This speech by the Iranian President has the longest successive lists of repeats of highly similar who, is to blame questions.

"Who imposed colonialism for over four centuries upon this world" (66th Session, para. 5)?

· "Who occupied lands and massively plundered resources of other nations, destroyed talents, and alienated languages, cultures and identities of nations" (66th Session, para. 5)?

· "Who triggered the first and second world wars, that left seventy millions killed and hundreds of millions injured or homeless" (66th Session, para. 5)?

· "Who created the wars in Korean peninsula and in Vietnam? Who imposed, through deceits and hypocrisy, the Zionism and over sixty years of war, homelessness, terror and mass murder on the Palestinian people and on countries of the region" (66th Session, para. 5)?

· "Who imposed and supported for decades military dictatorship and totalitarian regimes on Asian, African, and Latin American nations" (66th Session, para. 5)? "Who used nuclear bomb against defenseless people, and stockpiled thousands of warheads in their arsenals" (66th Session, para. 5)? "Whose economies rely on waging wars and selling arms" (66th Session, para. 5)?

·   "Who provoked and encouraged Saddam Hussein to invade and impose an eight-year war on Iran, and" (66th Session, para. 5)?

·   "Who assisted and equipped him to deploy chemical weapons against our cities and our people" (66th Session, para. 5)?

·   "Who used the mysterious September 11 incident as a pretext to attack Afghanistan and Iraq, killing, injuring, and displacing millions in two countries with the ultimate goal of bringing into its domination the Middle East and its oil resources" (66th Session, para. 5)?

·   "Who nullified the Breton Woods system by printing trillions of dollars without the backing of gold reserves or equivalent currency? A move that triggered inflation worldwide and was intended to prey on the economic gains of other nations" (66th Session, para. 5)

President Ahmadinejad then offers answers, pointing to a unified, totalizing they *the West* who did this and that. "It is as lucid as daylight that the same slave masters and colonial powers that once instigated the two world wars have caused widespread misery and disorder with far-reaching effects across the globe since then" (66th Session, para. 5)

He once again points to 'attitudes' of the agnostic 'West' which favor purist of "materialistic ends" rather than monotheistic attitude of faith. And makes his proposal: "I am sure that through international cooperation, diligence and efforts by committed world leaders and governments and through insisting on the realization of justice and the support of all other nations, we can expedite the building of a common bright future" (66th Session, para. 11).

This is once again purely linear- and cyclic-antenarrating of a teleology that does not create a space of dynamic interpretants (second triadic).

In sum, the six speeches present almost total use of first triadic interpretant, mainly with linear-antenarrative connections, and a couple of cyclic-antenarratives of same phases, repeated, in what must have been considered repetitive by western audiences. We turn now to the six speeches of the Ayatollah. The triadic interpretants are summarized in the next table.

Table 4.
Summary of RQ2 Results of Ayatollah

Speech of Ayatollah	First-Triadic Interpretants	Second-Triadic Interpretants	Relation to Research Question Two
8 Jan 2005 to residents of Qom	Linear-antenarrative connection between his narrative of Qom history of nationalism related final-interpretant of future of the nation.	Nationalism, and is re-presented aiding the logic of science and technology. There are emotional- and energetic-connections made along with declaring U.S. and Zionists as enemies.	Strong polarization of Iran with declaration of enemies
19 June 2006 to government officials	Connects a personal experience narrative and several retrospective narratives, such as need to vet new Iran leaders	Uses logical-interpretant of societal well-being related to spiritual blessings or to punishment in form of insecurity and poverty.	A much milder speech, with focus on how to listen to the heart, and the role of gratitude. It is also a call for more

	through the White House.	Curious irony in his call for official not to fan flames of sectarian prejudice	innovation for economic development
7 Sep 2009 to cabinet members & President of Iran	Immediate-interpretant is linearly related to final-interpretant (knockout punch to the enemies of the Revolution). Followed up with several retrospective-narratives pointing out defeat of the enemies	He enfolds spiritual (emotive) appeals into new economic logic-interpretants, such as using management experts to help economic reforms	It is not as divisive as first speech, and is rather sharper in declaring defeat of enemies initiatives than the second speech
28 Apr 2010 to group of laborers	Retrospective narratives used to claim final-interpretant, of Iran's talent producing nuclear technology, and thereby countering empty claims of enemies.	Uses emotion-interpretant of Holy Prophet to connect to Iran's nuclear and stem cell research, as a logical-interpretant. Second example is connecting spiritual to material conditions of labor in Islam that is logically different than Marxist and Capitalist labor. It includes an energetic-interpretant link of managed progress	The topic is nucluear technology which is a way to counter "world of arrogance: and their "clenched teeth" and "bloody claws." The rhetorical frames are definitely violent.
16 Sep 2010 to assembly of experts	Immediate-interpretant of world events, and social networking websites to focus on enmity of the enemies, and how sanctions are not effective, nor is the propaganda	He stricks the chord of emotional-interpretant (a kind of paranoia), and to be ready for final conflict.	There is an escalation of potential violent retaliatory response
8 Sep 2011 to experts	Retrospective narrative of political *figh* is used to connect to a final-interpretant (preserving identity of Islamic Republic that does not go away future).	AN emotional-interpretant (divine assistance to believers with faith) while the enemies use radio broadcasts to lure their hearts	It does link to an escalation in threat of violent action. Mostly, it is a sort of justification of scientific progress and developing economic systems (including the banking system) in a gradual way

Sources of Ayatollah speeches are in the references

The pragmatist storytelling analysis is located in Appendix D. For illustrative purposes we include an example of one speech here.

Sep 8 2011 - Supreme Leader's Speech to Members of Assembly of Experts (sixth Ayatollah speech).

He finds "signs of God's mercy" in the month of Ramadan, and in Quds Day rallies. "Again one can see the hand of divine power which attracts the hearts of the people like that and encourages them to take to the streets on a hot day while they are fasting. They show their loyalty to the Revolution and the revolutionary ideals and they shout slogans. Old men, young children, women and men take part in the rallies" (citations).

The logic is that God strengthens believers, offers "divine assistance" and "It is believers who reserve Islamic governments." Interpreted as an energetic-interpretant, the divine assistance is not "knowledge" on has, rather the Ayatollah stressed, "these things are being done by God." One example of emotional-interpretant is "they are committed to their religious faith and because faith has permeated their hearts." Thus a connection is made between emotional- and energetic-interpretant (in dynamic second triad) to the logical-interpretant.

The Ayatollah gives a caution about what we read as emotional-interpretant: "Notice how many tools there are to lure the hearts of young people. The number of these tools is not comparable with the past. These satellite programs, these websites and different kinds of communication tools lure hearts and lead them astray. They undermine spiritual motives in people. They provoke human passions."

The youth, who attended the rallies, the energetic-interpretant: "They cry. Their tears make people envy them. When people see a youth sitting in a corner with his face covered in tears, they envy him. Such youth have a pure heart and they are closest to God… ." This is followed by a retrospective narrative:

> The point that I would like to raise today - and I will try to make it short - is that political *figh* in Shia Islam dates back to the time when *figh* was first formulated. That is to say, even before derivative jurisprudence was formulated in the 3rd and 4th centuries of the Islamic calendar, political *figh* had a prominent place in Shia *figh* and you can find some examples in Islamic narrations.

From the retrospective narrative, the history of the Shia political fish is extended to Imam Khomeini, who after generations of not having the *figh* system, revised it into the current "idea of religious democracy" of Iran. This becomes a final-interpretant, "preserving the identity of the Islamic Republic and this challenge will not go away in the future" (first triadic).

He uses this first triadic-dynamic to extend to second triadic. For example the "material and spiritual progress" sometimes is accompanied by people's "doubts" which is because of a logical-interpretant, people focused on "short-term goals" instead of "the kind of goals which could be achieved in ten or twenty years" or my many "generations of people to achieve the goals that have been specified on the basis of the principles."

He recalls his own former speech about the Imam's greatness and patience in this regard, and the foundations he managed to establish at the time. "For example, he was told that Iran could make certain accomplishments if he refrained from issuing a certain *hukm* - in the case of Salman Rushdie and other issues. But he did not give in to pressure. Today we are faced with the same challenge… ." We interpret this as first triadic links made between past narrative, immediate-interpretant, and final-interpretant. He uses the links with immediate issues, such as "certain failures on domestic and international levels might

create problems for us." He connects this to two goals: "These two goals are safeguarding the principles of the Islamic Republic and preserving the identity of the Islamic Republic on the one hand and achieving the goals that have been specified by the Islamic Republic on the other, including material goals and advances and spiritual goals, such as establishment of justice and other such things."

The focus turns to how "the issue of rationality and speaking about 'the Revolution [is] coming to its senses'." He cautions against those who "wanted to use rationality as a pretext to give up the main principles and foundations. This must not be done." The logical-interpretnat, is "we should go after progress" because "today our country is not comparable with the early years after the Revolution in terms of scientific progress, in terms of technological progress, in terms of political awareness and experience and in terms of developing effective methods in different organizations, including economic and other organizations." He says while people remained committed to some principles, they backed down form others, and by doing so "divine assistance" is threatened by not being committed to all the principles. His second point is that "developing a system is a gradual process … on the basis of *fighi* principles." You cannot just infer the principles and put them into practice, rant "we should earn form our mistakes and improve ourselves. This is an integral part of developing a system." It is interesting how the Ayatollah becomes a systems engineer of a system of government through his storytelling by making interpretations of the history and future.

"The system of Vilayat-e Faqih, which is a big system of organizations in charge of decision-making and which is led by the Supreme Leader, should be able to push itself forward and transform itself on a regular basis."

He ties this to "change and transformation" as a process of system development towards "perfection" by eliminating flaws and shortcomings. He says, "the enemies do not understand this" and acts on "the bias of his whims" and "is not just." He comments on "the threat" which is "to think that this flexibility should be influenced by foreign pressure and change in the direction of western frameworks."

Finally, he says "in economic areas there are new issues to be addressed. For example, we created Islamic banking" and "it is necessary to see these things within the framework of Islamic banking, a banking system that is free of usury." One thing that is not fulfilled is the need for "certain course in Qom for serious critical resigning in the area of political fish so that religious scholars can discuss and clarify new political issues and challenges that the government faces." An immediate-interpretant follows Islamic banking system development:

> Notice that in 8 months four governments were overthrown in one of the most quiet and subdued regions in the world—namely, in North Africa and the Arabian Peninsula. Four dictators who were relying on the west and America were overthrown in Egypt, Tunisia, Libya and Yemen. Well, this is a very significant event. " With this significant event "the future of the people of these countries is open to different possibilities" and one possibility is "prominent religious figures of these countries will manage to take control of the affairs of their countries and will manage to delineate the right path for their people… . It can create apprehension in one's heart.

This seems to move out of first to second triad, as a relation is drawn between emotional-interpretant and logical-interpretant. He goes into other possibilities such as "the same people whose agents were thrown out of the door will get back in through the window." Here he refers to dictatorships against Islam, and weak anti-Zionist movement in case of Egypt. Those nations are "totally modeled on western systems." In sum, in the sixth speech of the Ayatollah, there is systems theory, and development of systems lecture.

We turn now to answering the third research question, and comparing the LSA and TSA results.

Part Three

In attempting to triangulate the findings from the LSA and TSA findings reported above, we note the following in the data found in the first two parts of this study.

RQ1: Is there an escalation of violent conflict framing or terms in the speeches of President Mahmoud Ahmadinejad from 2005 when he came into power and 2012?

Both parts of this study confirm that the political discourse of the Iranians president escalated in violent framing in the time period studied. The LSA analysis shows tendency for escalation of the use of violent frames by the Iranian President with some downturns on the last speech. PST analysis indicates that The Iranian President's discourse has a more repetitive and linear-antenarrative stitching together of his storytelling with bets on the future. In other words, the discourse looks more rhetorical than advocating or planning specific action.

RQ2: Is there an escalation of violent framing or terms in the speeches of the Supreme Leader Ayatollah Sayyid Ali Khamenei between 2005 and 2012?

Both parts of this study confirm that the political discourse of the Iranians supreme leader escalated in violent framing in the time period studied. LSA results show that the violent frames from the Supreme Leader's speeches fluctuate over time. Note that the later speeches still are not as intense as the first speech of 2005. PST analysis indicates that the Ayatollah's speeches use much more of the second triad, the connections of emotion-interpretants through the antenarrative process to define logics of banking, economics, technological development, and so forth, as linked to Islamic monotheism. In other words, the Ayatollah is using Islamic spiritual traditions in order to legitimate economic and technological developments, including stem cell and nuclear-energy research in the modern age.

When looking at the speeches, it appears that there is a strong relationship between the discourses of these two speakers -Figure 5. The various frames we analyzed confirm such finding. And more precisely, we were able to find that the earliest period between 2005 and 2008 the correlation between the speeches is higher than the later period. This could be explained by the rift between the two leaders in the last few years where the correlation appear to be less stronger than the previous period. The row between the two leaders was overtly reported in the media and specifically rumors of the resignation of the President AhmadiNejadi. See The Guardian (Javedanfar, 27 April 2011), The Huffington Post (06 May 2011) among others.

Figure 5. Correlation between speeches of The Iranian President and the Supreme Leader.

Correlation of speeches between 2005-2008

Correlation of speeches between 2009-2011
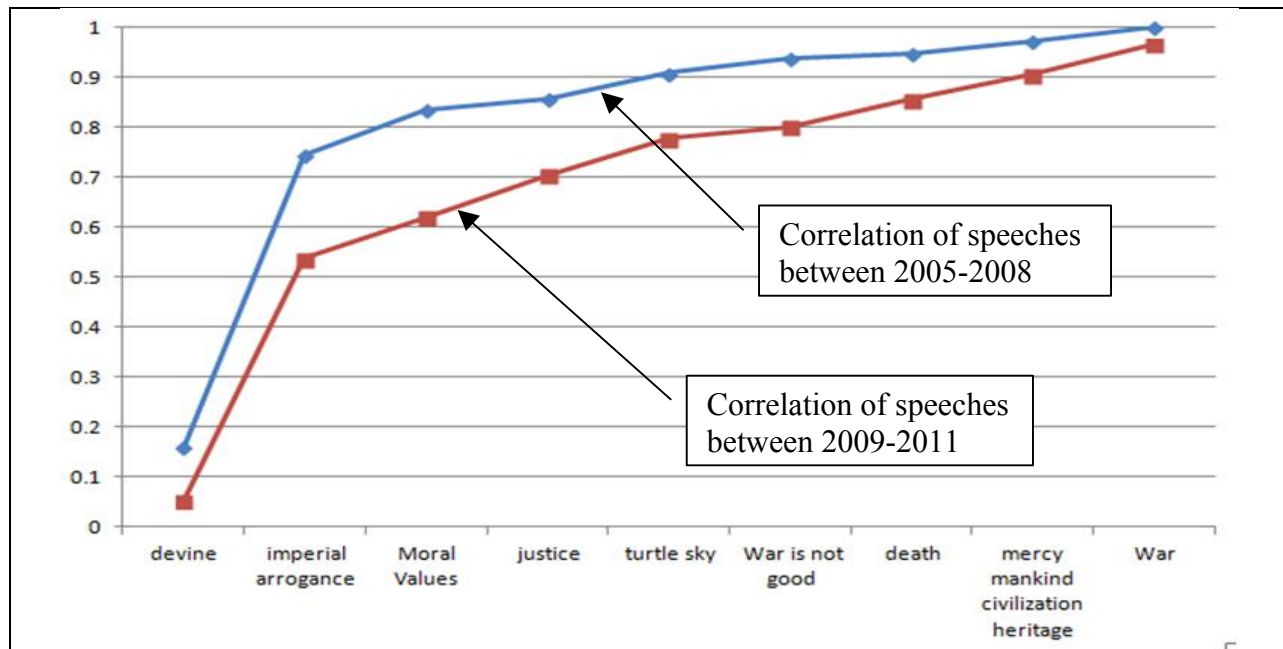
Discussion and Conclusion

In answering our research questions, we observed that the discourse of the two main Iranian political leaders, the President and the Supreme Leader, have been moving in a stable polarizing and aggressive direction. This does not mean that it leads to violence, but that it does employ potentially violent framing.

It appears that the political discourse of the Iranian leaders escalated in aggressiveness over time. As with North Korean, American analysts may view this blustering discourse as a means for building domestic unity against an external threat or as gaining support from other nations or groups like Iraq and Hezbollah. On the other hand, it can be viewed as framing-to-action escalation where polarization of discourse leaders to narrowing of behavioral choices.

Additionally, the Iranian leaders use conflict frames and storytelling they share. There are historical reasons for the conflict framing of Iran. Their leaders have the strategic goals of protecting the Islamic republic they created by their revolution of 1979. The U.S. also has historical reasons for framing Iran as a regional, if not international, threat. This is due partially to Iran not backing down under international pressure to forfeiting its progress toward nuclear technology or weapons capabilities.

Together, the LSA and PST findings indicate that the political discourse of the Iranian leaders escalated in aggressiveness over time. It appears that both Iranian leaders use conflict frames by choice of word patterns and storytelling practices. In sum, we observe that there are similar turns in conflict framing that resulted in the quantitative LSA and the qualitative PST analyses. However, the level of usage of violent frames in the last year's speeches studied is not as high as the levels observed in the 2005 speeches.

The way that the leaders are storytelling shows that while there are initial higher levels of name-calling, and polarizing all evil to U.S. and its allies, and all the is good to those who follow the faith, act without ego, and so forth, while bringing innovations in banking, new technologies, full employment, and justice in government. Their speeches reveal all three storytelling modes in interplay: (1) narrative, (2) living story, and (3) varied antenarratives with a pragmatist orientation that is uniquely Iranian. One difference is that the Iranian President has a more repetitive and linear-antenarrative stitching together of his storytelling with *bets* on the future. The Ayatollah's speeches, by contrast, use much more of the second triad, the connections of emotion-interpretants through the antenarrative process to define logics

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of banking, economics, technological development, and so forth, as a seamless continuation Islamic monotheism. Our pragmatist storytelling reading of their speeches shows a very different sort of pragmatism for the Iranian President, who relies on replicants (repeated dialogue refrains and rhythms in the storytelling along with various teleologies of prospective sensemaking, in an if, then logic. The Ayattollah, on the other hand, uses a more flexible pragmatism, tied to dynamic-interpretants that link energetic and emotional-interpretants to new logics of modernization.

The conflict framing of Iranian leaders involves not only term usage and frame usage, but also stories and narrative that are not moving toward peaceful negotiation as most nations would hope. Politicians and political leaders continuously speak about issues of war and peace and what they decide relates to the stories they tell, the narratives they promoted, how they frame various exigencies. Perhaps there is a tendency to frame discourse about international conflicts in ways that make the conflicts what is called intractable, as argued by Don Ellis and others. Perhaps, we have too many psychological biases in political information processing (Kahneman & Renshon, 2006). What all of this may be true, our research appears to indicate that there are serious research projects regarding framing and narratives, employing multiple research methods, that need to be conducted regarding issues such as how the United States should respond to nations of concern such as Iran.

We urge caution is assuming that either method used in this study can be used to determine radicalization or intention in political discourse. Even if LSA discovers high frequency counts or high similarities to terms and or frames, at least the spokesperson or politicians can change their judgments and not invoke war, even if their discourse has leaned toward it. The theoretical literature review in this research says that it is possible to discover radicalization or intended violent action to, at least, do the research.

There are several implications in the study reported here for future political communication research. First, it can be seen that political discourse and framing have attributes that may require both quantitative and qualitative analysis. Quantitative analysis of framing allows statistical analysis while qualitative analysis allows thicker description of narratives and stories that tie together various frames.

The literature from this study shows that there is turmoil between the elected and unelected Iranian institutions, and even though this may be the case, they have one focus—to be known as a superpower and as an independent nation. According to Fearon and Laitin's (2009) study, from experience and framing within one's own culture, he or she can be convinced to act violently.

The data indicates that from this study, LSA may show that since 2010-2011, there may be radicalization toward violence from Iranian discourse. Since there is no 2012 data, further study is needed. It is with the hope of peace, however, that this research be continued to analyze future Iranian discourse as well as other types of discourse.

Future research could put pragmatist storytelling and interpretant hermeneutics together with LSA analysis. We suggest a more comprehensive understanding of shifts in not only episteme but also ontologic potentiality understanding in relation to action is possible. In particular, attention to shift from linear- or cyclic- to dynamic spiral- or rhizomatic antenarrative can be seen as move by President Ahmadinejad and by the Ayatollah of Iran from first to second triad of dynamic interpretants. Spiral-antenarrative dynamic shifts are of critical importance to diplomatic efforts, as they may signal escalations or de-escalations of previous static linear- or recurring cyclic-antenarrative paths. Key in the analysis is to look for cumulating dynamics of conflict framing.

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APPENDIX A

Dimensions of Singular Value Decomposition

Figure A.1 Singular Value Decomposition (SVD) greatest fit Regression Line Reducing Data from Two Dimensions into one Dimension
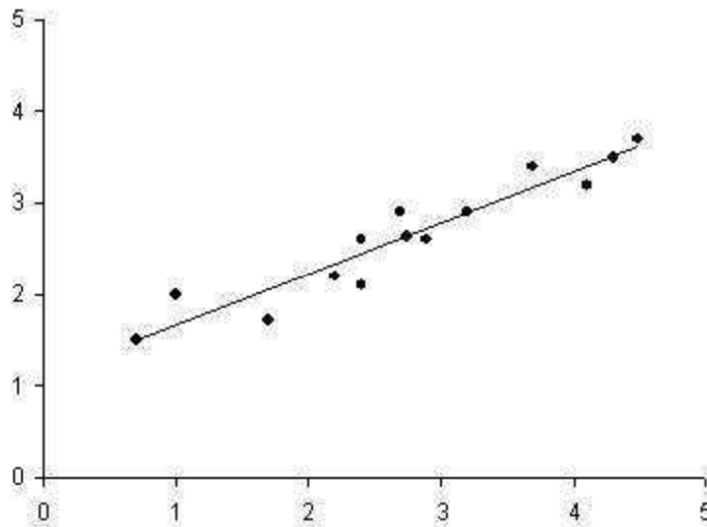
Note: SVD takes a high dimensional, high variable data point set and reduces it to a low dimensional space exposing the substructure of the new data in a clearer manner and puts it in order from the highest variation to the least variation, as shown in Figure A.1.

Figure A.1 Singular Value Decomposition (SVD) greatest fit Regression Line Reducing Data from Two Dimensions into one Dimension.