

# Quantitative Discourse Analysis

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An Analysis of Prime Minister Imran Khan's Discourse From 2008 – 2018

Deeper Analyses Clarifying Insights Better Decisions

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## **Executive Summary**

This study was conducted to address the question: How can the US increase the resolve and capability of Pakistan to support political reconciliation in Afghanistan and the region?

Two methods of textual analysis were applied to a corpus of 30 Imran Khan speeches that spanned the period of 2007 to 2018, although most speeches postdated 2013 and represent his recent rise to power. The methods were quantitative discourse analysis (QDA) and the Linguistic and Inventory Word Count (LIWC).

The primary political themes Imran Khan expressed in his public discourse are:

- The political machinery of Pakistan and criticism of his political opponents;
- Fighting corruption
- Appeals to religion (generic Islamic values) and appeals to the common masses;
- Pakistani domestic terrorism and extricating from American counterterrorism efforts;
- The Pakistan economy; his interest in the economy has surged in recent years;
  - o Imran Khan has a decidedly left-of-center, welfare state model of economic development that he claims is consistent with Islamic principles.
- His interest in education has increased in recent years, emphasizing improving its quality and access to it, including for women and girls.

### Imran Khan foreign policy:

Imran Khan claims to seek positive foreign relations with India, the U.S., Afghanistan and China. His views on India are unconventional within the context of traditional power elites in Pakistan. The extent to which the Pakistani military has dominated Pakistan's foreign policy and their seemingly close relationship with Imran Khan may limit his ability to act independently on these issues.

His language use indicates the following psychological characteristics

- His language exhibits high status and a need for power;
- He has a negative worldview;
- His interest in economic issues is increasing in time;
- His anxiety levels, although initially high, are decreasing through time.



#### General implications of these findings:

- Imran Khan is very political and particularly open to positions that would enhance his standing and power in domestic politics.
- Support that would enable him to contend with incidents of domestic terrorism and to improve both the Pakistani economy and education system should be particularly attractive to him.
- His appeals to religious conservatism manifested among the common masses (as opposed to formal clergy or Islamic extremists) are vital to maintaining his base; positions that would threaten these appeals would be contrary to his interests and possibly his genuine sentiments.

#### Implications for Afghanistan reconciliation and reintegration:

- Imran Khan has stated that he would like to be a broker in Afghan reconciliation efforts. If he is truthful in this intent, aiding him in shoring up his power domestically is likely to help increase his resolve to support Afghan reconciliation and reintegration. Political issues that matter most to him in his public discourse include:
  - O Domestic terrorism, the economy, education, and maintaining his common, rural and socially conservative base;
  - o Fighting corruption in Pakistan;
  - o Foreign affairs with India, the U.S., Afghanistan and China.
- An important caveat is that Imran Khan's ability to advance his foreign affairs agenda, including reconciliation in Afghanistan, could well be thwarted by Pakistan's military establishment.

### Introduction

The election of Imran Khan, a new and atypical Pakistani politician, as Prime Minister raises the question of how likely he is to influence Pakistani policy and whether his influence will support reconciliation in Afghanistan. The first step in evaluating this question is to assess his worldview, political positions, and elements of his decision calculus. A leader's public discourse provides one window into these perspectives and capabilities. Two textual analytic methodologies were employed to make this assessment, quantitative discourse analysis (QDA), and the Linguistic Inventory and Word Count (LIWC). NSI, Inc. has developed its own quantitative discourse analysis (QDA) methodology to yield measurements of themes that reflect worldview, values, interests, and emotion (see Kuznar, 2017; Kuznar, Popp, & Peterson, 2017 for recent applications). The LIWC is a textual analytic method for "studying the various emotional, cognitive, and structural components present in individuals' verbal and written speech (Pennebaker, Boyd, Jordan, & Blackburn, 2015, p. 1)." This report begins by presenting background information on Imran Khan, and then presents the QDA and LIWC analyses of his public speeches, followed by a description of the corpus of Imran Khan speeches used and the methodologies employed in the analysis.



### Imran Khan Background

Imran Khan began his career as a Pakistani cricketer, achieving fame as Pakistan's greatest cricketer ever during the 1980's. He earned a reputation as a successful athlete and socialite, but turned his attention to philanthropy and politics in the 1990s. In 1996, he began the *Pakistan Tehreek-e-Insaf* (PTI, translated as Pakistan Movement for Justice) party, which remained a minor actor in Pakistani politics for many years. Observers have noted his political opportunism (Coll, 2018), and that he leveraged his public popularity by embracing populist stances. Eventually the party gained substantial popular support.

The party's key positions include: anti-establishmentarianism, anti-corruption, development of a welfare state (publically supported education, health care, employment) based on Islamic principles, Pakistani national self-reliance, religious tolerance and freedom of thought, and women's rights to education (PTI, 2018).

The party came to prominence in 2013 after receiving the second most parliamentary seats in the general election. The party then won the most parliamentary seats in the election of 2018, propelling Imran Khan to the office of Prime Minister (Coll, 2018; Dossani & Awan, 2018; Judah, 2018; PTI, 2018; Schmitt, 2018). Imran Khan's victory over the Pakistan Muslim League party, which dominated Pakistani politics for 30 years, signaled a major change from the status quo (Coll, 2018; Dossani & Awan, 2018). The victory was shrouded in allegations of vote rigging, allegedly orchestrated by the Pakistani military to insure Imran Khan's success; observers speculate that the military is banking on being able to constrain the prime minister and effectively rule Pakistan indirectly (Coll, 2018; Dossani & Awan, 2018; Rashid, 2018). Imran Khan has also expressed that the Taliban's resistance against foreign invasion (i.e. the U.S.) is justified (Coll, 2018). Given the Pakistani military's ties to elements of the Taliban and the military's influence over Pakistani foreign affairs (Ahmed, 2010), a military-supported Imran Khan Prime Minister has the potential to influence reconciliation efforts in Afghanistan. However, his ties to the military and its historical domination of foreign policy may very well limit any objectives Imran Khan may have independent of the military.



### Imran Khan Discourse Analysis Findings

The findings concern what, during 2007 through 2018, has most characterized Imran Khan's worldview and political views, and what if any shifts his views have taken in the past decade. The corpus includes 30 speech and interview transcripts from the Pakistan Tehreek-e-Insaf (PTI) party official website, their Facebook page, as well as several online news outlets, and spans the years 2007 - 2018. The key metric employed in the QDA is the density with which a theme occurs per speech; density is defined as the number themes divided by the number of words per document, which normalizes the metrics to allow comparisons between speeches, through time and with other leaders.

#### Imran Khan's Worldview and Political Priorities

The themes that Imran Khan stresses are largely consistent with his party's platform. Only four themes occur at a statistically significantly higher rate than expected at the p<.05 level; they are democracy, justice, governance and political process (Figure 1). The governance theme includes discussions of organs and bodies of government and issues of proper governance. The political process theme concerns political processes such as negotiations, talks, summits, meetings and elections. The prioritization of these themes indicates that Imran Khan has been mostly concerned with democratic processes in Pakistan, delivering justice to his constituency, and how best to manipulate the organs of government to achieve his ends. He often addresses these issues through the lens of fighting corruption and promoting effective governance.

"We want the kind of institutions that will ask Imran Khan and his ministers questions. Accountability will begin with us and then trickle down. We want to set an example that the law will be supreme. The west is ahead of us purely because of these principles and this must become our guiding principle. We want to make such institutions that will fix the governance system of our country" (27 July 2017)

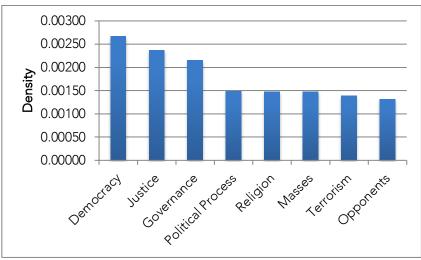


Figure 1. Imran Khan's Most Prominent Themes



Imran Khan deploys Islamic themes frequently, but keeps them at the general notion of upholding Pakistan as an Islamic state without expressing allegiance to any Islamic sect, consistent with the PTI party platform of religious tolerance. The strong majority of Pakistanis identify as Sunni,¹ although there is a strong following of Sufi mystic saints among the rural population. An open question is the extent to which Imran Khan's Sufi beliefs impact his politics and appeal to this rural tendency; he recently married his Sufi spiritual advisor and claims to have followed Sufism for three decades.² His political rhetoric does not exhibit any clear Sufi influence and appears restricted to popular references to Islam in general.

The PTI party principle of general Muslim religious appeal is evident in the following quote.

"Supposing I did pray on stage, am I not respecting the sentiments of my people? This is a Muslim country. Most of the people pray here. Am I not respecting them? If I am a politician, should I try and go against the sentiments of the people of Pakistan?" (18 January 2012)

The PTI platform of creating an Islamic welfare state is expressed in the following quote.

"What did our greatest leader do that made Muslims the greatest civilisation in the world? We are told by the Quran to learn from the life of our Holy Prophet (PBUH). He brought about a system of justice; where the weak knew the state would protect them. Where they were stakeholders and equal citizens. The first welfare state was made by our religion; it was a system of merit... not made for just an elite and there was a focus on education" (6 September 2018)

Imran Khan's avoidance of appealing to certain sects enables him to appeal to his rural base—which is overwhelmingly Sunni and Sufi—as well as others who hold socially conservative, but not extreme, religious views.

Much has been made of Imran Khan's ability to maintain dialogue with the Taliban, earning him the moniker, "Taliban Khan," and raising concerns over his position and potential role in supporting or undermining reconciliation in Afghanistan. However, the Taliban's strict Deobandi school of Islam which rejects Shia as Muslims, and the extreme version of Shariah law they wish to impose (Johnson & Steele, 2013; Nathan, 2009; Osman & Gopal, 2016) appear to conflict with PTI's policy of tolerance and may reflect a potential wedge between Imran Khan and the Taliban. On the other hand, throughout the history of the Taliban, much of their focus has been on the pragmatics of waging war against foreigners and foreign-supported governments and appeasing the conservative religious sentimentalities of their rank and file (Fenstermacher & Kuznar, 2016; Giustozzi, 2008; Johnson & Steele, 2013; Kuznar & Yager, 2012; Nathan, 2009; Osman & Gopal, 2016; Smith, 2009), and less on a well-developed religious doctrine.





<sup>1</sup> CIA World Factbook https://www.cia.gov/llibrary/publications/the-world-factbook/geos/pk.html

<sup>2</sup> Dawn. 22 July 2018. https://images.dawn.com/news/1180500

 $<sup>3\</sup> https://www.nytimes.com/2018/08/17/opinion/-imran-khan-pakistan-prime-minister-united-states-economy-taliban.html$ 

Imran Khan's statements about the Taliban and how he views them focus on the following: how he is not allied with their views; how the U.S. counterterrorism efforts have polarized Pakistani society; and how the solution is an American withdrawal from Afghanistan, a cessation of drone strikes, and diplomatic talks between conflicting Afghan constituencies.

"Taliban is not a homogeneous group. Policy of talks, identification and isolation of hardened anti-state ones, and then hammering those antagonistic ones is the only solution. I'm a political person, and thus always promote political, not military solutions. It does not mean I'm with any extremists!" (19 November 2014)

"[the attempted assassination of] Malala [Yousafzai] is a case of the fanaticism and I mean the insanity that someone could shoot a 14 yr. old girl. I am the first one who went there, I am the first one who openly condemned the Taliban, the other political leaders Zardari and Nawaz Sharif didn't name the Taliban, and I condemned them. But somehow because I talk about political solutions, it's this bush doctrine, either you're with us or against us. So if you are anti-military operations, you must be pro-Taliban, it's a [sic] stupid as that" (11 November 2012)

"I have been anti-war on terror from day one and time has proven that, whatever I have said has proven to be correct. I opposed military actions; I always said there was a political solution. Today, Americans are talking to the Taliban; they've allowed an office to open in Qatar, they are trying to talk to the Taliban. Is that not what I was saying for eight years? That's why they call me pro-Taliban because I opposed military action." (18 January 2012)

#### Who Does Imran Khan Talk About?

The density with which Imran Khan talks about other polities provides insight into those with which he is most concerned. No polity outside of Pakistan<sup>4</sup> is mentioned statistically more frequently than expected compared to other themes. However, polities some are mentioned more than others. The polities Imran Khan speaks of most frequently are, India, the U.S., Afghanistan and Great Britain. These are followed by China and then few references to the Taliban (Figure 2). This review will focus on Imran Khan's statements regarding India, the U.S., Afghanistan, and China (see the previous section for a discussion on his references to the Taliban).



<sup>&</sup>lt;sup>4</sup> Imran Khan tends to refer to the Taliban generically without distinguishing between Pakistani or Afghan Taliban organizations.

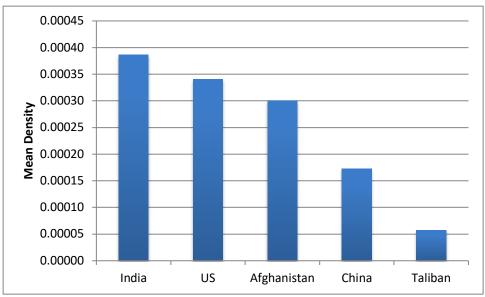


Figure 2. Polities Mentioned Most Frequently by Imran Khan

India is one of Imran Khan's primary concerns among polities and he seeks to replicate the ways India's democratic institutions, trade, and economic development work in Pakistan. He sees a joint cause in battling poverty in the region; furthermore, he seeks political solutions to perennial conflicts such as Kashmir and undermining Islamic extremists. He strongly asserts a desire to enter into political solutions with India.

"I am that Pakistani who has travelled through India because of my cricket. I am that Pakistani who believes that to improve economics in the sub-continent trade between India and Pakistan is important. This will be beneficial for both the countries. Kashmir remains our biggest contention. The human rights violations over 30 years; and the people of Kashmir have suffered massively. The leadership of Pakistan and India now need to come to the table to resolve this and end the blame games. We are stuck at square one. ... If India comes and takes one step towards us, we will take two steps toward them" (27 July 2018)

"This is the fastest growing, probably, region in the world, China, India, and if Pakistan was stable and we had a decent relationship, if we lived as decent neighbours. We have a great opportunity of lifting people out of poverty in the whole sub-continent, which should be our main concern. We should be competing in alleviating poverty in both countries. That should be our goal. So, I am not a hardliner" (18 January 2012)

It is worth noting that Imran Khan's views on political rapprochement with India run counter to established policy since 1947 and the views of political elites and the military (Ahmed, 2010).

The U.S. is mentioned almost as much as India. The two most common themes associated with mentions of the U.S. are American-induced corruption of the Pakistani political elite and the harmful effects of U.S.



counterterrorism efforts in Pakistan. Imran Khan levels many accusations of corruption among Pakistani elites that he argues reduce Pakistan to a puppet nation.

"thanks to the Americans, because they wanted a puppet government here, which would bomb its own people. And so, when Musharraf was weakening, they got them together, as Condoleezza Rice so shamefully, but triumphantly, says in her book. And so, we got this government of crooks" (18 January 2012)

In Imran Khan's view, U.S. influence on Pakistani leadership has come at the cost of bringing the War on Terror home to Pakistan, and only by disengagement with U.S. counterterrorism policy can Pakistan solve its own problems with extremism.

"It is a tragedy that by going into America's war, by taking dollars for a war we ruined our own country and we played havoc in our own tribal areas" (30 June 2018)

"If Pakistan disengages from the Americans it will cease to be a jihad in Pakistan. And therefore once there is no jihad the fanaticism, the suicide bombers go, we can take care of the rest. .... Jihad, if it's against the Americans occupying force it's also against us as collaborators. So therefore I have always maintained you know that these drone attacks are completely counterproductive, apart from all humanitarian laws" (11 November 2012)

However, Imran Khan expresses a desire to work with the U.S. as a partner, along with others.

"As far as America is concerned, we want to work on a policy that is mutually beneficial. Not a One way relationship. There needs to be balanced. We want to improve our relations with Iran and Saudi Arabia both. We want to work as a reconciliation facilitator in the region" (27 July 2018)

Most of Imran Khan's comments on Afghanistan concern the history of resistance against foreign invasion of the Afghan people, the harmful effects of U.S. counterterrorism efforts in Pakistan, and the need for Pakistan to extricate itself from the U.S. war.

"Graham Fuller, the ex-Chief of the CIA station of Afghanistan in Kabul. He wrote this article five years ago saying exactly the same thing. He said until we keep pushing Pakistan to do more, Pakistan is empowering the frenzy of fanaticism. The moment we leave Afghanistan, Pakistan's security forces will be able to control the extremists" (11 November 2012)

His most recent statements indicate he has a desire to play a diplomatic role in resolving conflict in neighboring Afghanistan.



"Afghanistan is that neighbor of ours that has seen the most human misery and damage in the name of wars. The people of Afghanistan need peace, and Pakistan wants peace in Afghanistan. We want to work in every possible way to ensure peace in Afghanistan.... We want to work as a reconciliation facilitator in the region. That country that works towards ending wars rather than being used for them" (27 July 2018)

Imran Khan's statements about China focus on learning lessons from the development of the Chinese welfare state, battling corruption, obtaining successful economic development, and to seek good relations with China for the advancement of Pakistan's prosperity.

"If China has been able to pull out forty *crore* [10 million] poor from poverty trap, there is no reason we can't do same for our eleven *crore*! This is a magnificent charitable nation - it has a large heart - all it needs is an honest leadership at the helm!" (28 September 2014)

"We need better relations with our neighbours so we can focus on nation building. We will strengthen and improve our relations with China. We want to work towards success of CPEC [China-Pakistan Economic Corridor]." (27 July 2018)

#### Changes in Imran Khan's Political Discourse

Few shifts in Imran Khan's political discourse are detected in this corpus. The few statistically significant changes are an increased emphasis on victimization of Pakistan and education (Figure 3), and overall decreased emphasis on political ideology, the latter possibly due to no longer having to criticize opponents and constantly campaign to build power. The shifts that occur are rather abrupt, coinciding with his party's rise to power after 2013. Education, economy and development have become important concerns for Imran Khan within this time period.

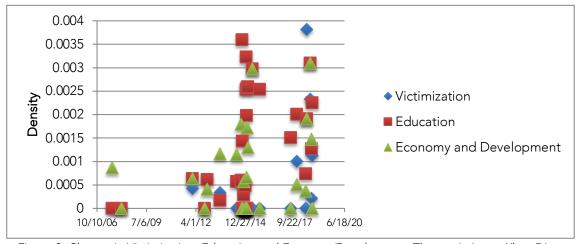


Figure 3. Change in Victimization, Education and Economy/Development Themes in Imran Khan Discourse

Imran Khan's focus on victimization is largely directed at corruption in Pakistan and the resulting victimization of common people, as well as himself.



"I don't think any leader has seen as many personal attacks as I have seen in the past 3 years. I have forgotten it all and it's behind me. This is bigger than Imran Khan. This is about the country, We will not let political victimisation of anyone happen. No one will be above the law; this is our aim" (27 July 2018)

He sees education as a necessary responsibility of an Islamic welfare state.

"The first welfare state was made by our religion; it was a system of merit... not made for just an elite and there was a focus on education. These were the principles that were set. If Pakistan is to rise as a nation; those are the principles we need to follow." (6 September 2018)

Economic development is another key feature of the Islamic welfare state he envisions, as well as an important political objective.

"We want to make such institutions that will fix the governance system of our country. Otherwise we will never be able to win our own challenges; the economy being the biggest. In our history we have not seen such a big fiscal deficit, the rupee at such an all-time low. We need to make an investment and ease of business environment" (27 July 2018)

Finally, Imran Khan has been very explicit about his vision of a future Pakistani economy and its relation to his politics and Islam. He espouses leftist economic theory.

"Even now I think I find someone like Tariq Ali [British Pakistani writer and activist] who is not religious but who is a Leftist. I find my views are far closer to Tariq Ali than probably anyone else. So I don't fit in those stereotypes. I'm deeply spiritual. I lead my life with my faith but I'm totally leftist in my thinking, I'm antineo liberal economics, I think there should be compassion in the world, I believe in a welfare state" (18 January 2018)

But he also asserts that the first Islamic society built by the Prophet Muhammad was a welfare state, and therefore his economic theory is consistent with Islamic principles (see quote on page 11).

### Summary of Quantitative Discourse Analysis of Imran Khan's Political Speeches

80% of the corpus covered the period from 2014-2018; correspondingly, the corpus best represents his recent rise to power. However, considering the corpus as a whole, Imran Khan's primary concerns are political processes and his opponents, possibly reflecting his engagement with the Pakistani political system. Reflecting the central themes of PTI's campaign platform, his two most emphasized themes are religion and appeals to the common masses. His discourse is consistent with his party's position of creating a welfare state based on Islamic principles. The domestic issue that is most prominent in his entire discourse was terrorism—both as issues of domestic terrorism within Pakistan, and with what Imran Khan sees as damaging effects of Pakistani involvement in the U.S. War on Terror.



There were a few themes that changed in a statistically significant manner through time. Imran Khan has become less ideological in his discourse, and more concerned with issues of perceived unfairness and corruption within the Pakistani political system and in advancing education and economic development in the country. These are key pragmatic positions of his political party (PTI, 2018). He is therefore providing indicators of increased pragmatism in his politics, although his views on more pragmatic issues are still consistent with his political agenda.



### Imran Khan LIWC Findings

Two types of analyses were conducted on the Imran Khan corpus through the LIWC: a comparison with LIWC base rates for the whole corpus, and an analysis of statistical shifts over time. The comparison of mean percentages of linguistic categories with LIWC base rates was conducted to gauge how typical or atypical his speech might be, and what if any differences might reveal about his values and psychology. Any statistical increases through time<sup>5</sup> identify the extent to which he might be likely to shift his priorities and where they may be trending.

### Comparison of Imran Khan LIWC Psychological Constructs with LIWC Base Rates

Table 1 presents the findings comparing Imran Khan's psychological constructs and the LIWC base rates in expressive writing and natural speech (See explanation of base rates in section LIWC Methodology). The comparisons with base rates were done for expressive speech—since this is probably the closest genre to political speech—and natural language as a baseline. Imran Khan's mean percentages were compared to the four summary language variables (analytical thinking, clout, authenticity, and emotional tone), several word categories that assess psychological constructs (e.g., affect, cognition, biological processes, drives), and one personal concern category (religion). The four summary language variables were chosen because they seem relevant to political speech and psychological aspects in which the U.S. might have interest in LIWC psychological constructs of a leader for the following reasons: analytical thinking may provide a measure of cognitive complexity, clout is a measure of social status, authenticity is a measure of truthfulness, and emotional tone may reflect emotional versus rational decision making. The psychological constructs examined include: anxiety (measuring how problematic one views the world), anger, family (measure of importance of family values), female and sexuality (measures importance of women and sex), and certainty (as a measure of confidence). Four LIWC psychological constructs, affiliation, achievement, power and reward are reflected in the psychological research on leader motive imagery (Suedfeld, Cross, & Logan, 2013; Winter, 1991, 2007) and may provide measures of a leader's psychological need for these constructs. The words associated with past, present and future orientation may capture these basic dimensions of a person's worldview (Koltko-Rivera, 2004; Kuznar & Yager, 2016a). The base rates were estimated using corpora of thousands of documents, 6 rendering most differences statistically significant. In order to focus on meaningful differences, we set an arbitrary threshold of rates exceeding two times of base rates or less than half of base rates to identify potentially meaningful differences between Imran Khan's use of language and the comparison corpora.

With respect to the summary language variables, there was little substantial difference with the base rates, although Imran Khan's use of language implying his social status is twice that of expressive writing, and he uses

<sup>5</sup> Trends through time were measured by Pearson's r of theme density with document date, and statistical significance was measured at the p<0.05 level.

<sup>&</sup>lt;sup>6</sup> The corpora were gathered and analyzed by the developers, and base rates are provided as part of the LIWC documentation (Pennebaker et al., 2015).



analytical language 3.5 times as much as people do in natural speech, which may be expected when a political speaker is explaining party positions.

Imran Khan uses much less positive emotion language than the base rates, and much more language expressing negative emotions, anger and anxiety than in natural speech. This may reflect a defensive or threatened worldview viz. Pakistan and his political positions. It is interesting that in a society as conservative as Pakistan, family-oriented language is not a prominent construct compared to the base rate corpora. Language involving women and sexuality is notably uncommon relative to base rates but that may make sense in conservative Pakistani society. Imran Khan's use of language that conveys confidence is not really different than the base rates judged by the thresholds we set.



Table 1, Comparison of Imran Khan's LIWC Psychological Construct Percentages with LIWC Base Rates

Psychological Construct	Imran Khan Mean PCT	Imran Khan Std. Deviation	Expressive Mean PCT	Natural Language Mean PCT	Expressive Ratio	Natural Speech Ratio
Analytic	65.0	15.1	44.9	18.4	1.4	3.5
Clout	79.4	9.3	37.0	56.3	2.1	1.4
Authentic	30.1	12.1	76.0	61.3	0.4	0.5
Emotional Tone	30.5	14.6	38.6	79.3	0.8	0.4
Positive emotion	2.4	0.7	2.6	5.3	0.9	0.5
Negative emotion	2.2	0.8	2.1	1.2	1.1	1.9
Anxiety	0.6	0.5	0.5	0.1	1.1	4.0
Anger	0.9	0.5	0.5	0.4	1.8	2.4
Family	0.3	0.5	0.8	0.3	0.5	1.1
Female	0.3	0.5	1.4	0.6	0.2	0.6
Sexual	0.0	0.0	0.1	1.4	0.2	0.0
Certainty	1.6	0.5	1.5	1.4	1.1	1.2
Affiliation	4.1	1.4	2.5	2.1	1.7	2.0
Achievement	1.5	0.7	1.4	1.0	1.1	1.5
Power	5.3	1.4	2.0	1.7	2.6	3.1
Reward	1.1	0.4	1.6	1.7	0.7	0.6
Focus on past	4.1	1.0	5.8	3.8	0.7	1.1
Focus on present	10.8	1.7	10.5	15.3	1.0	0.7
Focus on Future	1.7	0.6	1.9	1.5	0.9	1.2
Religion	0.7	0.7	0.2	0.1	3.5	5.0

As for the constructs possibly related to motive imagery, Imran Khan exhibits a greater need for affiliation than in natural speech, and a much greater need for power in both expressive writing and natural language. His time orientation is not much different than in expressive writing or natural speech, indicating no particular favoring of past, present or future. Finally, Imran Khan exhibits a much greater focus on religious language than in either expressive writing or natural speech base rates. This may make sense for religiously conservative Pakistan and the conservative audience he often courts. It may also be a reflection of his own worldview, since his adoption of Sufism, and his recently close relationship with and eventual marriage to his wife and Sufi spiritual advisor Bushra (Watoo) Khan.

### Changes in Imran Khan's LIWC Psychological Constructs through Time

Only two LIWC constructs change statistically through time in this Imran Khan corpus. His use of words associated with anxiety decreases through time (r=-.564, p=.002). So, while he expresses four times as much anxiety compared to natural speech, his speech is becoming less anxious through time perhaps exhibiting greater confidence in facing Pakistan's challenges.

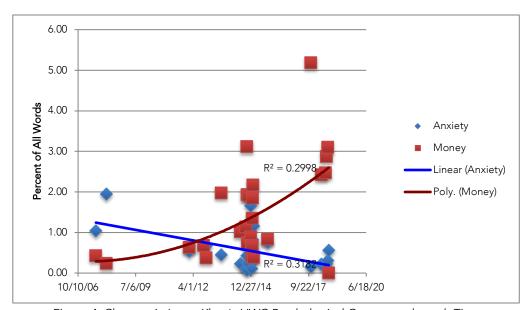


Figure 4. Changes in Imran Khan's LIWC Psychological Constructs through Time.

Imran Khan exhibits an increasing, and actually accelerating rate at which he uses words associated with money, perhaps signaling an increased concern with economic issues (r=0.547, p=0.005). While the discourse analysis did not find that economic issues were statistically significantly more often mentioned, they were mentioned well above the average density (0.00089 > 0.00027, or over three times higher than average), and the density for later speeches far exceeds the average and is well above the statistical significance limit. Therefore, economic issues appear to have become a key issue for Imran Khan, as noted in the aforementioned QDA analysis.

### Summary of Imran Khan LIWC Analysis Findings

According to the LIWC framework, Imran Khan's use of language indicates that he has high status, is a strongly analytical thinker, uses disproportionately negative language and has a strong need for power. These statistical tendencies are consistent with most of his history; he always has had high status, and clearly strives for power. His prominent use of analytical language compared to natural language may indicate that his political thinking may be sophisticated. His prominent use of negative language may indicate a defensive, or dark view of a world arrayed against Pakistan.

His language use indicates less anxiety and an increased interest in economic issues through time. The latter is consistent with the findings in the quantitative discourse analysis.



### Imran Khan Corpus

There was no comprehensive, single collection of Imran Khan's discourse available through any official source. There are a substantial amount of videos of Imran Khan's public speeches, however they rarely included English transcriptions. As a result, this corpus includes speech and interview transcripts from the Pakistan Tehreek-e-Insaf (PTI) party official website <a href="http://insaf.pk">http://insaf.pk</a>, their Facebook page <a href="https://www.facebook.com/PTIOfficial/">https://www.facebook.com/PTIOfficial/</a>, as well as several online news outlets. The final corpus tallies 30 distinct missives over 56,000 words spanning the years of 2007-2018.

### Quantitative Discourse Analysis (QDA) Methodology

People knowingly and unknowingly signal their values and intentions in the way they use language (Beeman, 2001; El-Badawy, Comerford, & Welby, 2015; Fairclough, 2001; Rahimi & Sahragard, 2006; van Dijk, 2005). Thematic analysis focuses on themes people employ that reveal what matters to them (Braun & Clarke, 2006; Guest, MacQueen, & Namey, 2012; Ryan & Bernard, 2003), while discourse analysis focuses on the linguistic tools people use to deploy and emphasize these themes (Farnell & Graham, 1998; Schiffrin, 2003; van Dijk, 2005). The approach used in this study combines thematic analysis and discourse analysis in a quantitative methodology to identify which issues matter most to a speaker and to what degree they do so. Because people are often unaware of the extent to which they signal their values and intentions, identification of key themes can provide early indicators and warnings (I&W) of political actions. The authors have employed this approach in studies of both state actors (Fenstermacher, Kuznar, & Yager, 2012; Kuznar, 2013, 2014, 2016b; Kuznar, Popp, & Peterson, 2016; Kuznar, Suedfeld, Morrison, & Spitaletta, 2014; Kuznar & Yager, 2013, 2016b; Kuznar, Yager, Clair, & Stephenson, 2012) and non-state actors (Kuznar, 2016a, 2017; Kuznar & Hunt, 2015; Kuznar & Moon, 2014; Kuznar & Yager, 2012).

#### Codebook Taxonomy

The codebook is a taxonomy of themes and rhetorical devices that represent topics mentioned, persons, places, things, ideas, and ways of using language that amplify the sentiment associated with the themes. The following terms describe the highest-level categories of the codebook taxonomy:<sup>7</sup>

- Theme something that can be nominalized (named); can be a person, place, thing, idea, or emotion
- **Emotive Theme** subset of themes that convey emotion (sentiment); their mere mention evokes an emotive response
- Rhetorical Device a way of using language to amplify or dampen sentiment
  - o Includes repetition, lists, intensifiers (very, huge), lexicalization (special word choice), pejoratives (contemptuous or demeaning terms), use of kin terms, titles, etc.

The primary codebook categories are found in Table 2.

<sup>&</sup>lt;sup>7</sup> As a convention, actual themes and rhetorical devices will be capitalized and italicized throughout the text, in order to differentiate them from more generic uses of the terms. When appropriate, footnotes defining themes will be given.



Table 2. Primary Codebook Categories

Code Category	Sub-Category	Definition			
Entities		Countries, formal			
		organizations, regions, and			
		sub-state groups			
Cultural Emotive Values		Themes that evoke emotions in			
		audiences, often culture-			
		specific			
	Extreme Negative	A cultural theme that tends to			
	Emotive	evoke an extremely negative			
		response.			
	Negative Emotive	A cultural theme that tends to			
		evoke a negative response that			
		is not extremely negative			
	Extreme Positive Emotive	A cultural theme that tends to			
		evoke an extremely positive			
		response.			
	Positive Emotive	A cultural theme that tends to			
		evoke a positive response that			
		is not extremely positive.			
Political Themes					
	Positive Cohesive	Political issues that tend to			
	Concerns	imply cooperation.			
	Disruptive Security	Political issues that tend to			
	Concerns	imply conflict			
	Other Security Concerns				
	Space Themes				
Rhetorical Devices		Ways of using language that			
		amplify or dampen the			
		sentiment associated with a			
		theme			

### Semi-automated Coding

In order to facilitate rapid coding of large corpora of text, the autocode feature of MAXQDA qualitative data analysis software was used. This required development of a thesaurus of terms and phrases that would represent a particular theme. For instance, the strings, "seiz," "aggress," or "attack" might represent the theme of Aggression. The thesaurus is the accumulated result of ten years of research application to national security issues (Kuznar, 2013, 2017; Kuznar & Hunt, 2015; Kuznar et al., 2017; Kuznar & Yager, 2012; Kuznar et al., 2012; Toman, Kuznar, Baker, & Hartman, 2010). The codebook contains 324 codes for themes and rhetorical devices. The codebook is refined with each new project as new codes are added and better ways of representing themes and rhetorical devices are discovered. The coding for this project represents the codebook as it existed October 29th, 2018.

#### Key Metric: Density

The key metric for measuring themes is **density**: the number of times a theme occurred in a document or speech, divided by the number of words in that document. This provides a normalized measure of how often a theme is used that can be compared across documents and between authors, groups, and across time. The underlying assumption is that the more densely a theme is used, the more important it is to the author, and therefore to a potential audience. Comparison of densities between themes also places a theme in a broader context, and thus guards against bias by judging the relative importance of themes. Theme densities were calculated for each document, and the variations of these densities through time were used to identify trends and possible indicators and warnings (I&W). Only those trends that were statistically significant at the p < .05 level or less are reported.

#### Metrics for Sentiment and the Use of Emotional Language

The use of rhetorical devices and emotionally charged themes are ways to interject emotive appeal into an argument. Emotionality may be an indicator that the speaker is in a more emotive state, as opposed to a more rational and deliberative state. The ability to detect departures from a rational state of mind can provide clues that the speaker's decision calculus is departing from the deliberative, cost/benefit calculus that is at the heart of traditional deterrence theory (USSTRATCOM, 2006).



### LIWC Methodology

Development of the Language Inventory Word Count (LIWC) began in the early 1990s in an effort to evaluate people's language use in therapeutic exercises, and has since undergone major revisions in structure and accompanying software implementations in 2001, 2007 and 2015 greatly expanding the scope of emotional states and general perspectives of writers or speakers it measures (Pennebaker et al., 2015). The 2015 version is based on a dictionary of 6400 words that reflect various psychological variables and interests of an author. Its data output yields "4 summary language variables (analytical thinking, clout, authenticity, and emotional tone), 3 general descriptor categories (words per sentence, percent of target words captured by the dictionary, and percent of words in the text that are longer than six letters), 21 standard linguistic dimensions (e.g., percentage of words in the text that are pronouns, articles, auxiliary verbs, etc.), 41 word categories tapping psychological constructs (e.g., affect, cognition, biological processes, drives), 6 personal concern categories (e.g., work, home, leisure activities), 5 informal language markers (assents, fillers, swear words, netspeak), and 12 punctuation categories (periods, commas, etc)" (Pennebaker et al., 2015, p. 2). It is based on word count alone and its standard metric is a density measured as percentage of times words associated with a particular dimension occur in all of the words in a document, normalizing its statistics for comparison across documents, or between other analyses.

The LIWC is implemented through software provided by its designer and accessible at: <a href="http://liwc.wpengine.com">http://liwc.wpengine.com</a>. The LIWC authors are committed to scientific rigor and transparency, and the LIWC provides a fairly open API, and the ability for the user to customize the dictionary. In order to allow future comparison to other studies that utilize the LIWC, this study was based on the LIWC base dictionary.

The LIWC authors have conducted research to establish the baseline use of words in their dictionary in several different expressive genres: blogs, expressive writing, novels, natural speech, news articles in the New York Times, and Twitter (Pennebaker et al., 2015, pp. 9-10). They provide data on the mean and standard deviation of the percentages of categories characterizing these genres, allowing for comparison of a particular speaker with specific types of expression. Their base rate samples include hundreds at the least (expressive writing), up to tens of thousands of cases, thus making any differences between or sample of 30 speeches likely to be statistically significant. Therefore, we arbitrarily deem any difference between base rates and the Khan corpus that are greater than twice or less than half as potentially meaningful.

For this study, each of the Imran Khan speeches was entered into the LIWC software, analyzed by document, and the data were then analyzed by means for the corpus, as well as any statistically significant (p < .05) changes through time by document.

The comparisons with base rates were executed for expressive speech, since this is probably the closest genre to political speech, and natural language as a baseline. Imran Khan's mean percentages were compared to the four summary language variables (analytical thinking, clout, authenticity, and emotional tone), several word categories that assess psychological constructs (e.g., affect, cognition, biological processes, drives), and one personal concern category (religion).



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