

# **Nuclear Signalling and Escalation Risk in the India-Pakistan Context: A Critical Overview of the 2001-02 Standoff**

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## **Abstract**

*A terrorist attack on the Indian parliament on 13 December, 2001 resulted in a ten-month long military stand-off between India and Pakistan. Throughout this period, both sides conducted aggressive and provocative signalling by conducting missile tests, and through bellicose speeches, statements and press briefings. These signals were conveyed at various levels by the political, military, and bureaucratic leadership. This paper provides a theoretical framework about signalling, deterrence stability and the escalation risk grounded in the classical understanding on nuclear deterrence and escalation. The paper analyses the nuclear signalling during the stand-off in light of the theoretical framework. The paper tests the hypothesis that a high percentage of indirect signalling would induce instability into a nuclear crisis, and the large number of actors sending signals from either side would increase the likelihood of miscommunication. By sifting through media reports during the stand-off, an elimination exercise was conducted and 72 signals were identified and analysed. The paper is divided into five sections and points to the limitation of the Cold War model to explain the South Asian strategic stability dynamics and the need to work out a model specific to South Asian strategic dynamics.*

**Keywords:** *Nuclear Signalling, India, Pakistan, Strategic Stability, Nuclear Deterrence, Escalation.*

## **Introduction**

In *Thirteen Days*, a movie about the 1962 Cuban missile crisis, US Secretary of State Robert McNamara tells Chief of Naval Operations

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*Disclaimer: The view expressed in this paper are author's own.*

Admiral George Anderson; “You don’t understand a thing, do you? This is not a blockade. This is language. A new vocabulary, the likes of which the world has never seen. This is President Kennedy communicating with Secretary Khrushchev.”<sup>1</sup> Robert Jervis agrees: Signals are like a language in that their meanings are established by agreement, implicit if not explicit.<sup>2</sup> Nowhere is this more applicable than in South Asia.

Following a terrorist attack on the Indian parliament on 13 December, 2001, the Indian Government mobilised its military forces. A crisis erupted between India and Pakistan resulting in a ten-month long military stand-off and amassing of a million soldiers on the border. Throughout the crisis, aggressive and provocative signalling took place by missile tests, speeches, statements and press briefings. These signals were conveyed at multiple levels by the political, military, and bureaucratic leadership.

New Delhi appeared keen to give two major signals to its domestic public, to Islamabad, and to Washington. *First*, its threat to use conventional force against Pakistan was credible, with limits to its restraint and patience. *Second*, it would avoid any nuclear signalling to Islamabad as well as deliberately ignore any nuclear signals emanating from Islamabad.

What sets this research apart from existing works on ‘Signalling’ in the Indo-Pak context<sup>3</sup> is that while these are good at detail but lack a theoretical discussion, whereas this paper provides a theoretical framework about signalling, deterrence stability and the escalation risk. This framework is grounded in the classical understanding on nuclear deterrence and escalation. It also analyses how various types of signalling impact deterrence stability.

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<sup>1</sup> The YouTube clip of this exact scene from 13 Days can be viewed at <https://www.youtube.com/watch?v=BYRCTHj7k8Y>

<sup>2</sup> Robert Jervis, “Signalling and Perception,” in Monroe, ed., *Political Psychology* (Lawrence Erlbaum Associates Publishers, 2002), 14.

<sup>3</sup> For most comprehensive and up to date work see; Naeem Salik, “Nuclear Signalling, Escalation and De-escalation in South Asia,” Nuclear Paper Series No.7, Islamabad Papers, 2019, Institute of Strategic Studies Islamabad, <https://issi.org.pk/islamabad-paper-on-nuclear-signalling-escalation-and-de-escalation-in-south-asia/>

The hypothesis tested in this paper is that a high percentage of indirect signalling would induce instability into a nuclear crisis. And that a large number of actors emanating signals from the two sides would increase the likelihood of miscommunication. Also analysed is the assumption that nuclear signalling during crisis would have an impact on ground preparations either positively (demobilisation) or negatively (accelerated mobilisation).

For this, a simple but robust methodology was adopted. In order to decipher relevant nuclear signals, all major Pakistani, Indian and international press reports published throughout the stand-off were sifted. An elimination exercise was conducted to arrive at the final list of signals. For each of the selected signals, the channel of transmission and the actor responsible for emanating the signal were identified. The author finally analysed the information linking crisis stability to type of signals, number of actors involved, and the context within which each signal was made.

The current paper begins with a theoretical discussion on nuclear signalling deterrence stability and its linkage and impact on escalation risk. After over viewing the standoff, the following section details the signalling channels and the actors during the stand-off. After contextualising the nuclear signals, the paper provides a detailed critical analysis of nuclear signalling during the stand-off.

### **Nuclear Signalling and Deterrence Stability**

As per the rationalist theory of deterrence, ensuring a first-strike capability as well as the ability to absorb a first strike and conduct a second strike is a key prerequisite for deterrence stability. In addition, for deterrence to function, such a capability must also be *perceived* as real by the enemy.

However, while *nuclear signalling* is an essential condition for deterrence stability, it can also act as an instability-inducing factor in a nuclear relationship. Whether nuclear signals end up strengthening or diluting deterrence, to a large extent depends on the *channel* through which signals are transmitted, the number of *actors* involved in the signalling exercise, and the *context* in which the signals are made. Various *channels* through which nuclear signals can be transmitted have varying degrees of risk associated with them. Nuclear signalling can be

conducted through three channels: i) direct signalling (communication through official contact between governments/ representatives), ii) tacit signalling (actual demonstration of a capability; nuclear tests, missile tests or official policy pronouncements to that effect), and iii) indirect signalling (press and media statements addressing multiple audiences).

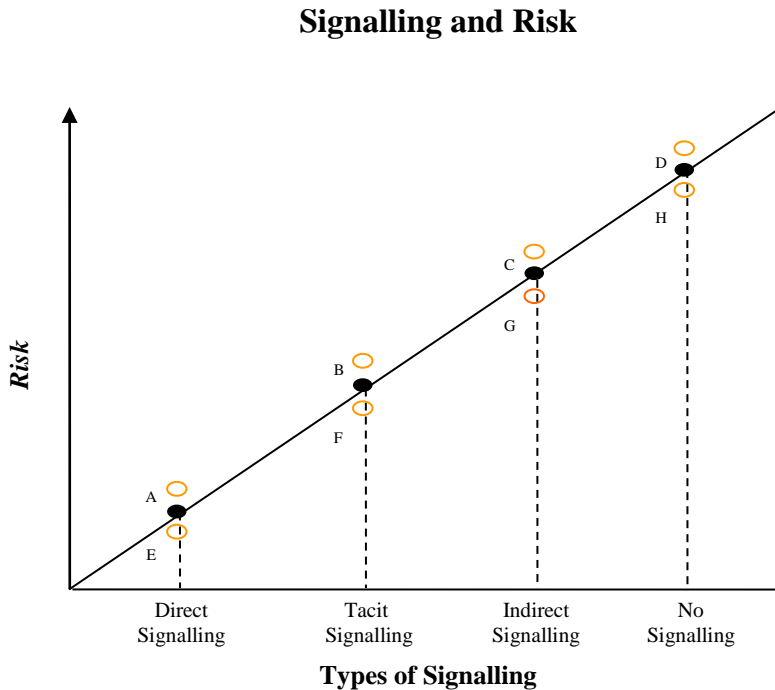
### *The Actors*

While there is little discussion in literature on who the most relevant actors to convey nuclear signals could be, there is emphasis on the need to designate official channels of communication, preferably through high-ranking officials from all nuclear states involved in a crisis.

In order to determine the relative stability, or lack thereof, induced by the number and relevance of the actors involved in nuclear signalling, we take a set-up limited to one or two designated officials on each side as the sole transmitters of nuclear signals as an optimal scenario where crisis stability would be maximised. However, in real life crises some signals would always be channelled indirectly for public and third-party consumption. We contend that even in the case of indirect signalling, the ideal scenario would be in which the same designated officials on all sides are the only ones authorised to issue press statements especially where official channels of communication are non-existent and states are forced to rely solely on press and public statements for signalling.

## Nuclear Signalling and Escalation Risk

The relative risk attached with the various signalling channels is depicted graphically below:



**Source:** *Author's own*

To begin with, we abstract from any external variables impacting the risk factor attached to a certain channel of signalling. The graph reflects the risk factor, in relative terms. The risk (comparing an identical message being transmitted from different channels) increases as one moves from direct to tacit signalling. The risk factor increases further if indirect signalling is employed as it is inherently provocative and geared towards multiple audiences. A complete absence of signalling entails the highest risk, given that nuclear signals are a principal mode of creating credibility, the latter being a key pillar of deterrence stability. The distance between points E-F, F-G, and G-H reflects the quantum increase in the risk factor.

Points A-H complicates the scenario by weighing in on external variables that could alter the risk attached with any signalling channel in a real-life crisis. Each of these points highlights that the level of risk is impacted by the context in which the signal is made. The external variables which would alter the linearity of the graph could include state of the conflict, relative strength of the conflicting parties, public opinion, obtaining environment, who sends the signal, the body language while making the signal (not applicable for tacit signalling), reaction of parties that are not part of the conflict, venue where the signal is made, frequency with which the signal is repeated, and intelligence information available to conflicting as well as third parties. For example, when a public statement (indirect signal) is made by a country's leader implying that preparation for a nuclear attack is underway. The risk factor associated with this signal would vary depending on the situation of the ongoing conflict. If the statement was made at a time when the adversary already has unconfirmed intelligence that the opponent has moved its nuclear arsenal out of the silos, the risk factor would be depicted by point C (higher than the average risk). However, if the statement was made when the adversary had current satellite imagery showing no movement of the nuclear arsenal, and was based on human intelligence, the risk factor would be represented by point G (lower than the average risk).

In our analysis, we abstract from the external variables, only considering that under a given set of external variables (troop deployment, force preparedness, etc.) the relative risk associated with various channels for signal transmission hold according to our premise outlined above.

The other component of our framework is the actors through which various signals are transmitted. In *direct signalling*, since official contact is established between the two sides, any actor must be considered a legitimate representative and his signal must be considered official. In *indirect signalling*, the situation is quite complex as often a number of actors send nuclear signals with little possibility for the recipient to confirm actor's relevancy, accuracy of the message, or whether sanctioned officially. As detangling the authenticity of a signal from the relevance of an actor to a situation is impossible, the smaller the number of signal-transmitting actors during a crisis, the higher is the stability factor in signalling. Moreover, the more relevant an actor is to the crisis (actual decision makers), the lesser the probability of miscommunication.

## 2001-22 Military Stand-off between India and Pakistan

The attack on the Indian Parliament on 13 December, 2001 resulted in massive Indian military mobilisation and a yearlong military stand-off between India and Pakistan.<sup>4</sup> New Delhi blamed Islamabad and Pakistan based militant groups.<sup>5</sup> A list of demands was given to Islamabad,<sup>6</sup> which was outrightly rejected by President Musharraf.<sup>7</sup>

New Delhi mobilised almost 800,000 troops, including three strike corps, being deployed along the India-Pakistan border; furthermore, its Air Force units and satellite airfields were activated, and the Eastern fleet was shifted from the Bay of Bengal to the northern Arabian Sea to join the Western fleet to blockade Pakistan. Islamabad counter-mobilised. This increased the fear of war breaking out between the two caused by accident, misperception, miscalculation or leadership irrationality, or even by a deliberate design.

According to reports, India planned to undertake multiple thrusts across the Line of Control (LoC) to seize territory in Azad Kashmir, including militarily significant areas such as the Lipa Valley and the Hajipir Pass.<sup>8</sup> A major commando operation was also planned to hit and destroy targets on the Pakistani side of the LoC in January 2002, however it was cancelled.<sup>9</sup>

India from the very beginning created a situation in which it was unable to gain most of its strategic objectives. Its posture of not withdrawing troops unless cross-border terrorism ends and that it will have no bilateral contact with Islamabad, at the same time refusing to accept mediation by a third party created a stalemate. The only way of getting out of it was to go to war which New Delhi was not willing to do

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<sup>4</sup> "Stern Warning to Pak," *Hindu*, October 02, 2001.

<sup>5</sup> "Police Claim 'Clinching Evidence'," *Hindu*, December 15, 2001.

<sup>6</sup> Nazir Massodi, "India's Most Wanted: Who is on the Hit List Sent to Pakistan," *Indian Express*, December 31, 2001,

<http://archive.indianexpress.com/old/ie20011231/index.html>

<sup>7</sup> Muralidhar Reddy, "Ready to Act if Delhi Gives Proof: Musharraf," *Hindu*, December 16, 2001.

<sup>8</sup> V. K Sood and Pravin Sawhney, *Operation Parakram: The War Unfinished* (New Delhi: Sage, 2003), 73.

<sup>9</sup> Jawed Naqvi, "India had Planned Offensive," *Dawn*, December 24, 2002.

because its strategic thinkers were not clear how the Pakistanis will react and also because of Washington's pressure that was busy in fighting its war against terror in Afghanistan. As the time passed even this option seemed improbable.

Robert Powell in his study of deterrence has pointed out that "Escalation generally becomes less and less likely the longer confrontation lasts. As the crisis continues each state becomes increasingly confident that it is facing a resolute adversary."<sup>10</sup>In any event, India undertook a "strategic relocation" of troops in end October 2002. India did not achieve its earlier stated objectives.<sup>11</sup>

### **Signalling Channels Used in the 2001-02 Stand-off**

The 2001-02 stand-off represents acute instability in terms of the signalling channels used to transmit messages to the adversary. Out of the three types of signalling, indirect signalling was mostly employed. Below, the use of the three channels of signalling in the stand-off are discussed.

#### *Direct Signalling*

During the stand-off, no signal was transmitted through direct contact. The DGMOs hotline was not operational during the crisis. India recalled its High Commissioner a day after the attack and later cut its diplomatic strength in Islamabad by half.<sup>12</sup> When Islamabad did not reciprocate,

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<sup>10</sup> Robert Powell, *Nuclear Deterrence Theory: The Search for Credibility* (New York: Cambridge University Press, 1990), 180.

<sup>11</sup> For details on this see Rizwan Zeb and Suba Chandran, *Indo-Pak Conflicts: Ripe to Resolve?* (New Delhi: Manohar, 2005); Rizwan Zeb, "US Interests in South Asia: Effects on Pakistan," *Margalla Papers* 2004, National Defence College, Islamabad.

<sup>12</sup> "India Recalls High Commissioner to Pakistan: Samjhauta Express, Lahore Bus Service to be Terminated," *Tribune*, December 21, 2001, <https://m.tribuneindia.com/2001/20011222/main1.htm>; Pranay Sharma and Idrees Bakhtiar, "Delhi Drops Diplomat Bomb," *Telegraph*, December 22, 2001, <https://www.telegraphindia.com/india/delhi-drops-diplomatic-bomb/cid/910187>; Atul Aneja and Samdeep Dilkslut, "Pakistan Asked to Withdraw Staffer," *Hindu*, December 25, 2001, "Indian Threatens to Cut off Ties," *Nation*, January 11, 2002 ; "Pakistan Envoy Asked to Leave India," *Hindustan Times*, February 8, 2003, <https://www.hindustantimes.com/india-news/chauffeur-to-charge-d-affaires-list-of-india-pak-staffers-expelled-in-the-past/story-VhtaJpDLH69V4RcBI2OOOrN.html>



India ignored Pakistani High Commissioner during phase I of the crisis and subsequently forced him to leave.

The Indo-Pakistan leaders attended two international forums but could not establish a direct contact. During the SAARC summit in Nepal in January 2002, Musharraf approached Vajpayee for the famous handshake.<sup>13</sup> At the international meeting on interaction and confidence building measures in Kazakhstan on 3-4 June, 2002,<sup>14</sup> Indian Minister of State for External Affairs, Omar Abdullah declared: “There will be no secret parleys, no official level talks, no dialogue at delegation level. I am the only Minister (in Vajpayee’s delegation) and I can (say) I am not having any talks.”<sup>15</sup>

The only direct signals during the crisis involved the U.S. Secretary of State Colin Powell. On 1 June, 2002, he stated that he has made it clear to both New Delhi and Islamabad that war will not serve their interest. On 23 December, 2001, Powell assured Pakistan that India will not attack it despite growing tensions between the two neighbours and that it will not cross the line of control.<sup>16</sup>

Relevant direct signalling from the U.S. also involved sharing intelligence information with both sides. On one instance, U.S. spy satellite-based information was shared early on in phase I of the crisis, which suggested aggressive troop movements by India along the international border. The information led to the sacking of an Indian Corps Commander for having exceeded orders from New Delhi.<sup>17</sup>

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<sup>13</sup> Josy Joseph, “SAARC: Musharraf Hands Vajpayee a Pleasant Surprise,” *Rediff News*, January 5, 2002, [www.rediff.com/news/2002/jan/05saarc2.htm](http://www.rediff.com/news/2002/jan/05saarc2.htm); “No Immediate Talks: Indian PM,” *News*, January 7, 2002.

<sup>14</sup> “Musharraf Ready for Unconditional Talks,” *News*, June 4, 2002; Laurinda Keys, “Pakistan Explains Nuclear Policy,” *Associated Press (AP)*, June 4, 2002.

<sup>15</sup> Ihtashamul Haque, “Musharraf Ready for Unconditional Talks with India: Almaty Conference Begins Today,” *Dawn*, June 4, 2002, <https://www.dawn.com/news/40171/musharraf-ready-for-unconditional-talks-with-india-almaty-conference-begins-today>

<sup>16</sup> Moeed Yusuf, *Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia*, (Stanford: Stanford University Press, 2018), 83-120.

<sup>17</sup> V. K. Sood and Pravin Sawhney, *Operation Parakram: The War Unfinished* (New Delhi: Sage, 2003), 80; Chari, Cheema and Cohen, *Four Crises and a Peace Process* (New Delhi: Harper Collins, 2008), 154.

### *Tacit Signals*

Since tacit signalling involves policy pronouncements or actual action on ground, they are usually the least frequently used channels to transmit nuclear signals. The 2001-02 stand-off confirms to the highly selective use of tacit signals. In sum, one joint signal, and three signals each from Pakistan and India were transmitted at different times during the crisis. The first signal, amidst heightened tensions, came when Pakistan and India agreed to adhere to the 31 December, 1988 agreement of exchanging the list of coordinates of their nuclear facilities.<sup>18</sup>

India sent the next tacit signal on 25 January, 2002, by testing the nuclear capable Agni I missile.<sup>19</sup> India also tested a supersonic cruise missile, the Brahmos on April 28, 2002. Between May 24-26, 2002, Pakistan tested three ballistic missiles.

The final tacit signal came after the active military stand-off was over. In January 2003, India made its draft nuclear doctrine public in an attempt to convince the world of its responsible nuclear policy.<sup>20</sup> Moreover, it also sought to clearly establish its deterrent capability by underscoring its second-strike capability.

### *Indirect Signals*

Lack of any direct communication between Pakistan and India during the stand-off meant that virtually all signalling had to take place through indirect channels. A total of 67 relevant indirect signals were transmitted during the crisis. One inherent problem with indirect signalling is the

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<sup>18</sup> Rahul Roy Chaudhary, "Nuclear Doctrine, Declaratory, and Escalation Control," in Michael Krepon, Rodney Jones, and Ziad Haider, eds., *Escalation Control and the Nuclear Option in South Asia* (Washington DC: Stimson Center 2004), 105.

<sup>19</sup> Alex Wagner, "India Tests Short Range Agni Ballistic Missile," *Arms Control Today*, March 2002 ; also see Feroz Hasan Khan, "Nuclear Signalling, Missiles, and Escalation Control in South Asia," in Michael Krepon, Rodney Jones and Ziad Haider, eds., *Escalation Control and the Nuclear Option in South Asia* (Washington, DC: Stimson Center, 2004), 88.

<sup>20</sup> Press Release, "The Cabinet Committee on Security Reviews Operationalisation of India's Nuclear Doctrine," Ministry of External Affairs, Government of India, January 4, 2003, <http://www.meadev.nic.in/news/official/20030104/official.htm>

absence of a specified recipient in most cases, forcing all parties involved to assume it is directed to them. Added to this, due to non-specified recipient, it is easier for the transmitters to retract or deny any such signal.

Almost all indirect signals by India or Pakistan pointed to multiple audiences or meant for domestic consumption. Moreover, signals that were either passive or sounded general warnings about nuclear weapons use were directed as much to the US as to the adversary or the South Asian masses.

Signals from Washington were clearer in their targeted audience than messages emanating from Islamabad and New Delhi. Majority of the relevant signals made by the then Secretary of State, Colin Powell highlighted the dangers and futility of nuclear weapons use as well as to dissuade any ambitions of initiating an attack on the other side.

### *The Actors*

The total number of actors transmitting relevant positive or negative nuclear signals from India, Pakistan, and third parties, were as high as 31. From India, 14 actors transmitted signals while Pakistan sent out its messages through 10 sources. Among third party sources, the U.S. was the major external force involved. Signals from the US targeted towards either one or both countries were transmitted through four sources.

An analysis of the make-up of the actors and their relevance across the two phases reveals an interesting picture. Phase I turns out to be more stable in terms of nuclear signalling, with India using six, and Pakistan and the US four sources each.<sup>21</sup> Two of the U.S. signals were sent *directly*. Major actors involved in signalling from the Indian side were Omar Abdullah, the then Minister for State for external affairs, the then BJP Party President, the then Indian Army Chief, General Padmanabhan and the then Defence Minister, George Fernandez. From Pakistan, the then President Pervez Musharraf and the then Foreign Minister Abdul Sattar transmitted majority of the indirect signals. The most interesting set of actors transmitting signals in the first phase came from the U.S.

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<sup>21</sup> Two Indian signals were tacitly transmitted through missile tests during phase 1 and one tacit signal was conveyed by both sides by exchanging lists of the nuclear facilities. These are not considered in the discussion on actors.

Apart from the then Secretary of State, Colin Powell, an official contact between governments of Pakistan, India and the US brought threatening troop movement to their notice.

In the first phase of the crisis, most of the relevant nuclear signalling took place within the first month of the crisis. Within this short period, a total of 12 actors transmitted indirect nuclear signals. This is much higher than an optimal scenario and points to instability within the nuclear regime. The second phase of the crisis, which followed the attack on the Indian Army camp in Kaluchak witnessed a plethora of relevant (indirect) nuclear signals from both sides as well as third parties. The number of actors also grew significantly in phase II, pointing to the fact that neither side saw the presence of a large number of signalling actors as an instability-inducing factor.

Interestingly, while Pakistan and the U.S. seem to have chosen their point men to conduct bulk of the signalling, in the Indian case no actor was entrusted with the central role. For Pakistan, President Musharraf made the most signals. From the U.S., Colin Powell was entrusted with the job of ensuring détente in the crisis and made several relevant nuclear observations in the process. While Indian Defence Minister, George Fernandez made the most signals for India, other key actors remained similarly active. Strangely, Prime Minister Vajpayee was largely dormant until the threat of war had been averted and tensions subsided. His signals, three in total, mostly fall towards the tail end of the active stand-off.

With regard to number-induced-instability, the second phase turns out to be more unstable than the first phase. Apart from the greater number of actors, phase II also witnessed a number of signals being made and subsequently being contradicted or clarified by relevant actors. The Indian side clarified comments made by Prime Minister Vajpayee and Defence Secretary, Yogendra Narain. Vajpayee on June 18, 2002 stated: “if Pakistan had not agreed to end infiltration, and America had not conveyed that guarantee to India, then war would not have been averted.”<sup>22</sup> The Indian Ministry of External Affairs almost instantaneously issued a clarification that Vajpayee’s comments did not in any way signal to India’s desire to start a nuclear conflict. Yogendra Narain said: “India would retaliate with nuclear

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<sup>22</sup> “India Claims ‘Victory without War’,” *Nation*, June 18, 2002; “Pak: Pledge on Ultras Averted War,” *Hindu*, June 18, 2002.

weapons if Pakistan used its atomic arsenal... everything is finalised... we don't expect any delay in issuing orders.”<sup>23</sup> The clarification, as was warranted, came from the Defence Minister himself who suggested: “... India does not believe in the use of nuclear weapons.”<sup>24</sup>

On Pakistani side, after President Musharraf stated on 30 December, 2002: “that if the Indian army moved just a single step between the international or the LoC... it would not be a conventional war.”<sup>25</sup> Islamabad clarified it did not refer to nuclear war, as the media projected.<sup>26</sup>

While it is impossible to establish whether a signal was intentionally transmitted and then clarified according to a pre-determined plan or was a spontaneous statement that did not fall in line with the overall signalling plan, the fact that two of these signals were made from the highest level suggests that it was in fact a lack of planning that led to the transmission of these signals. In the final outcome, this points to the fact that actors transmitting signals, when not briefed about the situation (also a function of the number of actors since the larger the number the tougher it is to coordinate signals), could convey signals contrary to the country's established diplomatic line at a particular point in time.

## **Contextualising Nuclear Signals in the 2001-02 Stand-off**

### *Phase I*

Majority of the relevant nuclear signalling in the first phase was conducted within the first month of the parliament attack. Apparently, little planning went into signals from either side perhaps because of the sudden onset of the crisis. However, an overall signalling pattern does emerge.

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<sup>23</sup> “Indian Official Says Attack Plan Ready: Defence Ministry Plays Down Report, *Dawn*, June 4, 2002, <https://www.dawn.com/news/40179/indian-official-says-attack-plan-ready-defence-ministry-plays-down-report>

<sup>24</sup> “India Rules Out Use of Nuclear Weapons,” *Times of India*, June 3, 2002; “War, If At All, Will be Sans Nukes: Army,” *Pioneer*, June 4, 2002.

<sup>25</sup> “Warning Forced India to Pull Back Troops, says President,” *Dawn*, December 31, 2002.

<sup>26</sup> “Warning Forced India to Pull Back Troops, says President,” *Dawn*, December 31, 2002.

Indian nuclear signals in the first month of the crisis were highly provocative and looked to exert excessive pressure on Pakistan to comply with its demands of roping in extremists and eliminating cross border terrorism. The immediate reaction of the Indian Cabinet was to “liquidate the terrorists and their sponsors wherever they are, whoever they are.”<sup>27</sup> In the first ten days of the crisis, at least two signals from India suggested extreme complacency and a willingness to test Pakistan’s nuclear red lines.<sup>28</sup> Omar Abdullah suggested on the day Operation Parakram was launched that there is a feeling that surgical strikes will not lead to full-fledged conflict. Indian Army expressed its preparedness for a strike and pointed out that limited action in Azad Kashmir would not lead to a large-scale conflagration since Pakistan’s political situation will not allow its army to under-take full-fledged war.<sup>29</sup> Two highly provocative statements were made during this period. Indian Defence Minister, George Fernandez stated: We can strike at Pakistan, and then survive a retaliatory attack and again strike back to finish off Pakistan.<sup>30</sup> On 11 January, 2002, Indian Army Chief General Padmanabhan claiming that India possessed the capability of a retaliatory strike, warned that if any country was “mad enough” to initiate a nuclear strike against India, then “the perpetrator of that particular outrage shall be punished severely.”<sup>31</sup> Perhaps in a bid to

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<sup>27</sup> Celia W. Dugger, “Terrorists Attack Parliament in India, Killing Seven People,” *New York Times*, December 13, 2001. On this point also see Chari, Cheema, Cohen, “Four Crises and a Peace Process American Engagement in South Asia,” (Noida: HarperCollins, 2008) 151; Rahul Roy-Chaudhury, “Nuclear Doctrine, Declaratory Policy, and Escalation Control,” in Michael Krepon, Rodney W. Jones, and Ziad Haider, eds., *Escalation Control and the Nuclear Option in South Asia* (Washington DC: Stimson Center, 2004), 101-103; Moeed Yusuf, *Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia*, (Stanford: Stanford University Press, 2018), 87-88.

<sup>28</sup> J.P. Shukla, “No Weapon Will Be Spared for Self Defence: PM,” *Hindu*, January 3, 2002. Moeed Yusuf, *Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia*, (Stanford: Stanford University Press, 2018), 87-90. Also see T. Jyaraman, “Nuclear Crisis in South Asia,” *Frontline*, vol.19, no.12 (June 2002).

<sup>29</sup> K. Subrahmanyam, “Indio-Pak Nuclear Conflict Unlikely,” *Times of India*, January 2, 2002.

<sup>30</sup> “Pakistan will be Wiped out in Nuclear Counterattack: Fernandes,” Agence France-Presse, January 27, 2003. Also see T. Jyaraman, “Nuclear Crisis in South Asia,” *Frontline*, vol.19, no.12 (June 2002).

<sup>31</sup> Josy Joseph, “Army Chief Goes on the Offensive, Says Situation on Border is ‘War-Like,’” *Rediff.com*, January 11, 2002, <http://inhome.rediff.com/news/2002/jan/11army2.htm>

thwart any impression of India pressing the issue and forcing Pakistan to take extreme measures, within hours of the Army Chief's statement, Fernandez issued a written statement repudiating the "uncalled for concerns" caused by the Army Chief's remarks and suggested that nuclear issues ought not to be handled "in a cavalier manner."<sup>32</sup>

Pakistani signals throughout the early stages of the crisis were balanced and meant to signal its resolve to appear as responsible state, not prone in making a hasty decision to use nuclear weapons. Two of such signals came from Foreign Minister, Abdul Sattar in his statements on 30 and 31 December, 2001. "Nuclear weapons are awful weapons and any use of these weapons should be inconceivable for any state."<sup>33</sup> He maintained that nuclear weapons were meant for defence and deterrence, and Pakistan did not want a local, general or nuclear war.<sup>34</sup>

The only major aggressive nuclear signal from Islamabad was conveyed at a time when tensions in phase I were on a decline. In his Pakistan Day speech on March 23, 2002, President Musharraf emphasised on teaching an "unforgettable lesson" to any aggression from India. The fact that no clarification was subsequently made suggests that the signal was intentional and was aimed at convening the credibility of Pakistan's nuclear deterrent, something Pakistan had refrained from doing thus far in the crisis in a bid to calm international concerns.<sup>35</sup>

Perhaps the most consequential signalling in phase I was undertaken by Washington. Secretary of State, Colin Powell was in direct contact with both sides and even publically asked India that it should desist from military action.<sup>36</sup> The US role was even acknowledged by Musharraf.

In a bid to avoid misunderstanding or action based on faulty or lack of intelligence, the U.S., at least on three occasions shared information

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<sup>32</sup> "Uncalled for Concerns: Fernandes," *Hindu*, January 12, 2002.

<sup>33</sup> "Islamabad Adheres to Norms of Coexistence: Freedom to Struggle Confused with Terrorism: Sattar," *Dawn*, December 30, 2001.

<sup>34</sup> "No Action to Be Taken in Haste, Says Sattar," *Dawn*, December 31, 2001.

<sup>35</sup> "Pakistan President: 'Our Hopes are High,' *CNN*, March 23, 2002, <http://edition.cnn.com/2002/WORLD/asiapcf/south/03/23/pakistan.musharraf.speech/index.html>

<sup>36</sup> "India Must Exercise Restraint: Powell," *Hindu*, December 17, 2001.

with both countries informing them of troop or missile movements on the ground.

Moeed Yusuf in his magnum opus discussed the infamous interview given by Director General Strategic Plans Division (SPD) as Pakistan's attempt "to signal its nuclear threshold for using nuclear weapons in January."<sup>37</sup> According to Yusuf:

General Khalid Kidwai, the defacto head of Pakistan's nuclear establishment, enunciated Pakistan's redlines while talking to a group of Italian scientists who were allowed to make these public: Pakistan would employ the nuclear option if India attacks Pakistan and takes over a large part of its territory (space threshold); if it destroys a large part of Pakistan's land or airforces (military threshold)' if it proceeds to strangle Pakistan economically (economic threshold); or if it pushes Pakistan into political destabilization or creates a large-scale internal subversion in Pakistan — domestic threshold).<sup>38</sup>

This as per Moeed Yusuf's assessment was a signal that could be read in more than one ways:

While many have seen this as a provocative signal emphasising Pakistan's commitment to using nuclear weapons first, it was a clever message that conveyed resolve but was equally meant to allay concerns that Pakistan would choose to employ its nuclear capability early on in a conflict.<sup>39</sup>

## *Phase II*

During this phase, Pakistan adopted a two-pronged approach to nuclear signalling. While emphasising through signals emanating from the highest level, Pakistan's responsible nature and its abhorrence to contemplation of

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<sup>37</sup> Yusuf, "Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia," 93.

<sup>38</sup> Yusuf, "Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia," 93.

<sup>39</sup> Yusuf, "Brokering Peace in Nuclear Environments U.S. Crisis Management in South Asia," 93.



nuclear weapon use, it also sought to give strong signals that it was intentionally keeping all options open and would not compromise on the credibility of its deterrent. The most passive signals came from Musharraf who at least on five occasions from the beginning of the second phase till late July 2002 categorically ruled out even considering nuclear weapon use. However, for the most part, actors around Musharraf sent signals meant to convey the credibility of the country's nuclear deterrent.

In late May and early June 2002, Pakistani Ambassador to the US, Dr. Maleeha Lodhi and the Permanent Representative at the UN, Ambassador Munir Akram both stated on different occasions that Pakistan did not ascribe to the 'no first use' policy with regard to nuclear weapons.<sup>40</sup> Musharraf himself suggested that "one shouldn't even be discussing these things, because any sane individual cannot even think of going into this unconventional war, whatever the pressures," and that "let us hope that good sense prevails (and) this does not lead to escalation. It has not because we are restraining ourselves, and let Indians not test our patience and restraint because it will be very dangerous." Musharraf asserted: "frustration and inability of India to attack Pakistan or conduct a so-called limited war, bear ample testimony to the fact that strategic balance exists in South Asia, and that Pakistan's conventional and nuclear capability deter aggression." Musharraf, in an interview to a German Magazine on April 6, 2002 stated: "Using nuclear weapons would only be a last resort for us. We are negotiating responsibly. And I am optimistic and confident that we can defend ourselves using conventional weapons... only if there is a threat of Pakistan being wiped off the map, then the pressure from my countrymen to use this option would be too great."<sup>41</sup>

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<sup>40</sup> Zamir Akram, *The Security Imperative Pakistan's Nuclear Deterrence and Diplomacy*, (Karachi: Paramount, 2023) 223; Masood Haider, "Islamabad Refuses to Accept 'No First Use Doctrine'," *Dawn*, May 31, 2002; Dharam Shourie, "Defiant Pakistan Threatens to Use Nukes," *Rediff.com*, May 30, 2002, <http://in.rediff.com/news/2002/may/30war2.htm> as quoted in Rahul Roy Ch, "Nuclear Doctrine, Declaratory, and Escalation Control," 109-110.

<sup>41</sup> "Kashmir Konflikt: Pakistan's Musharraf droht Indien der Atombombe," (Kashmir Conflict: Musharraf of Pakistan Threatens India with Nuclear Bomb), *Der Spiegel*, April 6, 2003; "Pakistan Clarifies Threat to Use Nukes," *Rediff News*, April 11, 2002.

To signal credibility, Pakistan sent three tacit signals by testing the Ghauri, the Ghaznavi, and the Abdali missiles within a span of four days in May 2002.<sup>42</sup>

India during this phase sent mixed and often confusing signals because various actors involved in signalling were not operating under a set plan. Post Kaluchak attack, New Delhi made every effort to convince its domestic public of its resolve to take revenge. Amidst such high war rhetoric, New Delhi was looking to convince the international community of Pakistan's culpability and to reinforce the perception that Pakistan was behaving irresponsibly with nuclear weapons.

Responding to Musharraf's televised address on 27 May, 2002 which New Delhi considered 'provocative and counterproductive' Indian MEA exhorted: "India is not talking about it now (nuclear conflict)...we are not greatly impressed by these missile antics, particularly as they are based on imported technology."<sup>43</sup> At the 57<sup>th</sup> sessions of the UN General Assembly in September 2002, Vajpayee warned that nuclear blackmail had emerged as a "new arrow in the quiver of State-sponsored terrorism and that to succumb to such blatant "nuclear terrorism" would mean "forgetting the bitter lessons of the September 11 tragedy."<sup>44</sup>

The second leg of the Indian strategy, like Pakistan's was to convey restraint and signal resolve at the same time. Making a point in response to Pakistan might use nukes if attacked, it was stated by Fernandez that India can survive a nuclear attack, but Pakistan cannot." However, this was clarified by the Indian Ministry of Defence in an official statement which stated: "India categorically rules out the use of nuclear weapons. India is a responsible country and it feels that it would be imprudent to use such weapons."<sup>45</sup>

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<sup>42</sup> Chaudhaury, "Nuclear Doctrine, Declaratory, and Escalation Control," 110.

<sup>43</sup> "Roundup: Pakistan Conducts Missile Tests Amid Rising Tensions with India," as quoted in Rahul Roy Chaudhaury, "Nuclear Doctrine, Declaratory, and Escalation Control," 111; Also see "Pak. Missile Test a Provocation," *Hindu*, October 5, 2002.

<sup>44</sup> Address by Indian Prime Minister Atal Bihari Vajpayee at the 57<sup>th</sup> session of the United Nations General Assembly, New York, September 13, 2002, <https://pminewyork.gov.in/pdf/uploadpdf/68779lms53.pdf>

<sup>45</sup> "Indian Rules Out Use of Nuclear Weapons," *Times of India*, June 3, 2002.

### *Phase II: The Tail-end*

The final twist in nuclear signalling from India and Pakistan came towards the tail end of the crisis. The intention was to signal resolve and credibility of the nuclear threat. Signalling at this stage was aimed at the domestic audience and with future crises in mind. Moreover, the international community was also being targeted to suggest the importance of reigning in the adversary and warning them against any future adventures.

On 30 December 2002, Musharraf stated: “if the Indian Army moved just a single step beyond the international border or the LoC then *Inshallah* the Pakistan Army and the supporters of Pakistan would surround the Indian Army and that would not be a conventional war.”<sup>46</sup> George Fernandez, in January 2003 suggested on two different occasions: “we can take a bomb or two or more...but when we respond there will be no Pakistan” and “...if Pakistan has decided that it wants to get itself destroyed and erased from the world map, then it may take this step of madness, but if (it) wants to survive then it would not do so.”<sup>47</sup> None of these signals, however, were relevant to the 2001-02 stand-off since the crisis was well on its way towards total de-escalation at the time.

### **Analysis**

Having discussed the existence of instability inducing factors in terms of high proportion of indirect signals and large number of actors, as well as the seeming intentions of all involved parties behind sending signals, it is time to analyse the impact of these signals on military planning on both sides. In this section we try to connect the theoretical argument of instability to on ground developments to determine any visible impacts of nuclear signals on either side’s war planning.

As per the conceptual framework based on the classical deterrence literature provided in this paper, provocative signalling could lead to

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<sup>46</sup> “Warning Forced India to Pull Back Troops, Says President,” *Dawn*, December 31, 2002.

<sup>47</sup> “Pakistan will be Wiped Out in Nuclear Counterattack: Fernandes,” *Agence France-Presse*, January 27, 2003.

states interpreting messages conservatively and thus following up with aggressive measures that may create further misunderstanding. It would be interesting to see if provocative signals actually forced either side to make any visible alterations to force positioning or movements on the ground during the stand-off. Of course, on ground movements could be a result of any number of factors. Therefore, admittedly, to determine direct causality between on ground movements and any one factor that might have influenced the movement is a difficult task. For example, it is almost impossible to determine if a move has been made in line with a pre-decided plan or any induced variable such as a specific nuclear signal. However, one would still expect to see at least a weak correlation between on ground movements and provocative signalling if the latter has any bearing on the former.

An analysis of the 2001-02 stand-off suggests almost non-existent/hardly/virtually no correlation between periods of highly provocative signalling and aggressive ground movements. As can be expected, the two major ground movements took place immediately after the 13 December, 2005 and 14 May, 2006 events. Operation Parakram was launched five days after the parliament attack.<sup>48</sup> Post-May 14, 2002 India immediately ordered five warships to be moved from the Bay of Bengal to the Indian Ocean; ordered the Army to adopt offensive operations guidelines, moved Mirage 2000 fighters to forward airfields and conducted a freshwar-game in Bikaner. After the Kaluchak attack, on 22 May, the then Indian Prime Minister Vajpayee visited the area and while addressing the troops announced that the time for a decisive battle has come and that India will be victorious in it.<sup>49</sup> Ironically, two days later, he went for a five day vacation.<sup>50</sup>

### *U.S. Role in the 2001-02 Stand-off*

The stand-off witnessed intense involvement from the international community, particularly the U.S. The aim of the U.S. involvement was to

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<sup>48</sup> Chari, Cheema, Cohen, *Four Crises and a Peace Process American Engagement in South Asia*, (Noida: Harper Collins, 2008), 153.

<sup>49</sup> Luv Puri, "Be Ready for Decisive Battle, PM Tells Jawans," *Hindu*, May 23, 2002.

<sup>50</sup> Nayak and Krepon, *U.S. Crisis Management in South Asia's Twin Peaks Crisis*, (Washington: Stimson Center, 2006), 18.

ensure prevention of conflict at all costs. In the absence of direct signalling channels between the two, both Pakistan and India relied solely on the U.S. to transmit any messages that they ideally would have conveyed directly to the other side. The stand-off thus witnessed the existence of the 'dependence-independence paradox.' Moreover, an active U.S. role also provided a certain level of comfort to both countries that the U.S. would not allow things to spiral out of control. Such complacency overlooks the limitations of U.S. influence and is highly dangerous in a nuclear charged environment.

An evaluation of the U.S. signals in the stand-off also points to certain risks associated with communication 'rechanneling.' Washington's nuclear signals as well as reporting missile and troop movements have the potential of causing unnecessary misunderstanding. The U.S. information on missile movements would automatically point to an aggressive intent of the adversary. It overlooks the fact that missile movement during crises can even be precautionary operational needs or defensive in nature and could actually be stability-inducing.

Finally, while it remains in the supreme interest of the U.S. and the entire world not to see a nuclear outbreak in the region, signalling from third parties is bound to be influenced by their own interest and alliances in the region. At the time of the 2001-02 stand-off, the U.S. was embroiled in a military operation in Afghanistan and Pakistan was its frontline ally. This was one reason many analysts contended that the U.S. did not support India openly and in fact resented India's move to tie its fight against terrorism with the U.S. war on terror. Since the stand-off, the U.S. policy in the region has seen a major shift towards India and the two are set to be partners in a long-term strategic relationship.

### **Threat of Nuclear War: Western versus South Asian Perceptions**

The 2001-02 stand-off also confirms the already known stark difference between the perceptions of the international community versus those at the helm of affairs in South Asia. The heightened alarm among the international community about the realistic possibility of nuclear war in South Asia during the stand-off does not match the sentiments within

South Asia.<sup>51</sup> Anecdotal evidence collected by the author during the stand-off suggests a clear difference between the perceptions. In the U.S., there were heightened fears, suggesting to some that the West did not consider South Asian leaders capable of handling nuclear crises carefully. Signals sent out during the crises reinforce this point. The sense of complacency against an all-out war was clear from Omar Abdullah's statements at the very beginning of the crisis that there is a feeling that surgical strikes will not lead to full-fledged conflict or that several officers are confident that "surgical" strikes won't lead to war. Dispelling any concerns of immaturity among the South Asian leadership, George Fernandez stated in June 2002: "I don't agree with the idea that India and Pakistan are so prudent and excitable that they'll forget what nuclear weapons can do "I think it should be accepted that in South Asia there are responsible leaders. They may be belligerent and not fulfill their promises. But on nuclear matters, the subcontinent is alive to the implications. If the Western powers and China know how to keep their nuclear capabilities under control, the same holds good for India and Pakistan."<sup>52</sup>

## Conclusion

A close examination of the nuclear signalling during the Indo-Pakistan stand-off brings to fore the limitations of the classical literature and theoretical debates on signalling, deterrence stability and escalation risks that evolved during the cold war when applied to the Indo-Pakistan case. It could be argued that there is a need to develop a theoretical model based on the ground realities of South Asian to make sense of issues related to strategic stability in South Asia.

As regard nuclear signalling, following points are important for any further analysis of the impact of signalling on the strategic stability in South Asia: first, the make-up of the actors and their relevance is important.

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<sup>51</sup> Bharat Karnard, "South Asia: The Irrelevance of Classical Nuclear Deterrence Theory," *India Review*, vol. 4, no.2 (April 2005):203-04.

<sup>52</sup> Note that Fernandez included Pakistani leadership in his statement as well, since the signal was pointed to the international community with the aim of dispelling fears about both Pakistan and India being irresponsible with nuclear weapons. Blaming Pakistan in this case would have reinforced Western fear. For details see Jawed Naqvi, "Delhi Sees No Chance of N-Weapons Use," *Dawn*, June 4, 2002; "Fernandes Dismisses Fears of Nuclear War," *Hindu*, June 4, 2002.

Second, timing is very important to study a signal. Third, at times a signal could be misinterpreted or misunderstood. This gets further complicated if and when the receiver fails to get the intended message as it results in more aggressive signals/measures. Fourth, taking a non-signal as a signal. For instance, missile tests are planned well in advance. However, if the timing of such test fall during an active crisis, it is taken as a signal. Fifth, to avoid misperceptions and miscalculations, parties to a conflict should develop a clear set of principles for signalling to each other.

As amply demonstrated in the paper, this research aimed at achieving two research objectives: develop a theoretical model about nuclear signalling and risk of escalation and then test it using the case study of 2002 Indo-Pakistan military stand-off. As the analysis was based on single case study for an extensive and in-depth analysis and paucity of space, it did not mention all signals or incorporate and analyse other Indo-Pakistan crises such as the Mumbai crisis and Pulwama/ Balakot crisis. It would be apposite to see how these crises evolved and how nuclear signalling was conducted during these crises. Equally prudent would be to see whether the conceptual framework/model presented in this paper about nuclear signalling, deterrence stability and risk of escalation is applicable to all nuclear relevant crises between India and Pakistan.