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# Critical Appraisal of Recessed Deterrence in South Asia



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## Abstract

*The effectiveness of a state's nuclear deterrent relies greatly, on its nuclear posture and nuclear-use doctrine. For years, the doctrines and postures adopted by India and Pakistan were able to prevent a nuclear exchange between the two, but as India seems to be shifting away from its posture of recessed deterrence, towards the pursuit of a ready arsenal, this will have serious implications for South Asian strategic stability. Using qualitative methods of analysis, this paper explores how India's recessed deterrence posture will be effective in strengthening deterrence stability between India and Pakistan and how a ready arsenal will be counterproductive for regional stability, potentially creating a security dilemma and arms race between the two nuclear states. Due to the lack of comprehensive data on both states' nuclear postures, the research is limited mainly to analysing available literature from secondary sources and official statements. Most of the existing literature studies recessed deterrence broadly, however, the paper analyses the importance of recessed deterrence specifically as a determinant to ensure stability between India and Pakistan, especially in light of India's recent doctrinal developments.*

**Keywords:** *recessed deterrence, strategic stability, nuclear posture, security, nuclear weapons, South Asia*

## Introduction

Since the advent of nuclear weapons, the world has seen a shift in the purpose of military establishment. The use of nuclear weapons, more as political rather than war-fighting tools, has brought about a change in the perceptions and mindsets associated with their

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utility. They have made military power more dangerous and costly, which now requires greater wisdom and caution to operate.<sup>1</sup> It is due to the lack of understanding and experiences associated with the destructive power of nuclear weapons that the world is bound to exercise greater caution regarding their use. Owing to the different mindsets and perceptions of security elites, when new weapon technologies are introduced in a region, it clouds the cost-benefit calculation associated with them, which in turn has implications for deterrence stability.<sup>2</sup> Simultaneously, the mere introduction of nuclear weapons in a particular region does not provide an assurance against conflict or war. A state's nuclear doctrines and postures play an important role in communicating the factors governing its nuclear use to the adversary. This has implications both for deterrence purposes, as well as for the prevention of misperceptions and miscalculations among states.

India and Pakistan are two states in the South Asian region which possess nuclear weapons. Since their nuclearisation, both states have remained engaged in strategic modernisation programmes, constantly modernising and evolving their sea, air, and land-based forces.<sup>3</sup> India rationalises its nuclear programme as a response to security threats from China and Pakistan. However, it is noteworthy that the bureaucratic pressures arising from its scientific-technological complex also drove the programme.<sup>4</sup> Pakistan, on the other hand, has been reactive to India's policies. The shifts in India's doctrines and its postures largely govern Pakistan's policy response. It is worth mentioning, however, that Pakistan has maintained ambiguity in its doctrines, believing that the ambiguity builds up the value of deterrence.<sup>5</sup> Pakistan has held the stance that it maintains India-centric nuclear deterrence, directed by the security concerns that it faces.<sup>6</sup> This shows that India's doctrines and postures directly impact South Asian stability by playing a decisive role in steering Pakistan's response to them.

## **Theoretical Framework**

### **Neo-Realism**

Neo-Realism is a theory of International Relations, introduced by Kenneth Waltz. It focuses on international anarchy as the ultimate cause of state behaviour.<sup>7</sup> Without the existence of a central authority in the international system, a self-help system persists where states must pursue security for themselves through the build-up of arms and alliances.<sup>8</sup> Neo-realism has two further branches, offensive realism and defensive realism.

### **Offensive Realism**

In offensive realism, John Mearsheimer suggests that owing to the anarchic international system states desire to maximise their power and aim to attain supremacy for securing themselves and ensure their survival.<sup>9</sup> The ultimate goal is to become the hegemon, not because the state is bellicose but because the system necessitates it, to procure maximum security under the state of anarchy.<sup>10</sup> According to neo-realism, the international system is anarchic, states are rational actors and survival is the supreme goal, the motives of other states can never be accurately known by a state, and thus the following patterns of behaviour are exhibited; fear, self-help, and power-maximisation.<sup>11</sup>

### **Defensive Realism**

In defensive realism, Waltz argues that when a state builds up too much power, it leads to other states seeking a balance of power against it, and this can in turn cause a decline, rather than an increase in the primary state's security apparatus.<sup>12</sup> The aggression and competition to maximise power are not productive as they incite a security dilemma and force other states to take balancing measures.<sup>13</sup> Defensive realists further argue that the eruption of conflict can be explained through factors such as geography, security dilemma, the

beliefs of the elites, and the role of perceptions.<sup>14</sup> The international system often favours moderation.<sup>15</sup>

This paper relies on the theory of neo-realism to study the implications of a shift in India's recessed deterrence posture on regional stability in general and Pakistan in particular. Neo-realism provides an appropriate lens to explain the importance of recessed deterrence in the context of South Asia.

### **Recessed Deterrence**

Indian strategist Jasjit Singh put forward the term recessed deterrence, which was later worked upon by Ashley J. Tellis in 2001. Recessed deterrence describes an arsenal where nuclear warheads are not mated and are kept separate from their delivery vehicles (missiles or aircraft that are intended to carry them) and during peacetime, the nuclear weapons of a state are either in a semi-assembled or completely unassembled form.<sup>16</sup> Such an arsenal requires time and lengthy preparation to be able to launch warheads after it is assembled.<sup>17</sup> However, effective command and control systems, plans, procedures, and organisational mechanisms, as well as, the ancillary elements required for an effective nuclear arsenal are to be developed and kept intact.<sup>18</sup>

Jasjit Singh viewed recessed deterrence as "a credible nuclear weapons capability which the country is able to draw upon for political and diplomatic purposes, and is able to deploy a nuclear arsenal within a defined time-frame and effectively use it physically for military purposes."<sup>19</sup>

A ready arsenal, on the other hand, requires pre-mating nuclear warheads with their delivery systems.<sup>20</sup> States may even keep certain deterrent forces in recessed position while readily deploying others to serve deterrence purposes. For effective deterrence, states have to carry out an appropriate cost-benefit analysis, analysing the regional and strategic environment to choose either the strategy of recessed deterrence or of a ready arsenal.

Ashley Tellis holds that while a recessed deterrence posture would require India to refrain from the production of new nuclear weapons, the spent-fuel reprocessing, uranium enrichment, and fissile material production would continue to take place at the present pace.<sup>21</sup> Likewise, research and development regarding missile technologies and delivery systems would also continue, because missiles are capable of being used to carry both conventional and nuclear warheads, and without development and testing, they will not serve as an effective deterrent, though the development of strictly nuclear delivery systems and the modification of dual-use technologies will not be allowed.<sup>22</sup>

Tellis views that recessed deterrence is useful because a state can manage its security and deterrence requirements without bearing the immense costs and burdens associated with a ready arsenal. This posture allows for the development of nuclear capabilities, while also not undermining the international disarmament efforts.

### **Recessed Deterrence vs Non-Weaponised Deterrence**

Recessed deterrence is different from non-weaponised deterrence. While the former is associated with non-deployment and avoidance of the pre-mating of nuclear warheads and delivery systems, the latter is more focused on the acquisition of fissile material and technologies which will be needed to build nuclear warheads, though not practically developing such warheads.<sup>23</sup> Thus, while recessed deterrence does allow for the manufacture of warheads and other components needed for an effective nuclear arsenal, non-weaponised deterrence only permits the procurement and retention of fissile material and related technologies but does not allow warheads to be manufactured.<sup>24</sup> A recessed deterrence posture by India will be particularly effective in meeting deterrence requirements and stabilising the strategic environment in South Asia.

## **Benefits of Recessed Deterrence**

A secure and dispersed nuclear arsenal will be particularly effective in maintaining deterrence while preventing the costs associated with a ready arsenal for India.

A recessed deterrent, being de-mated and non-deployed gives more room for rational thinking.<sup>25</sup> States are thus less likely to act irrationally because the mating of nuclear weapons would require time and lengthy procedures, providing more time for rational decision-making. A recessed posture by India will encourage Pakistan to do the same. If a state possesses alert nuclear weapons, it may be tempted to act irrationally to launch a first strike against its adversary in a crisis, and a first strike by India or Pakistan will arouse a retaliatory response by the other, leading to mutual destruction.

A recessed posture is also capable of preventing a full-scale nuclear war. This is because de-mated nuclear weapons provide sufficient time for the states to prevent escalation and to de-escalate tensions once the war begins. The recessed posture of India and Pakistan's strategic ambiguity during the Kargil conflict resulted in providing both states sufficient time for de-escalation and prevented the war from turning into a full-scale nuclear exchange between them.<sup>26</sup> Such a posture is likely to continue to enhance stability by providing time for de-escalation in case a conflict starts.

Both India and Pakistan are highly vulnerable to a devastating attack, hence, holding each other at risk.<sup>27</sup> By keeping nuclear weapons in a non-deployed and de-mated form they will have greater chances of survivability during a crisis.<sup>28</sup> Keeping the nuclear warheads and missile components separate may prevent the adversary from destroying one's nuclear force, increasing the chances of survivability of weapon components and the ability to carry out a retaliatory attack in the process.<sup>29</sup>

Moreover, the nuclear forces that India and Pakistan possess, are still evolving, which makes them susceptible to a pre-emptive

attack primarily through the use of nuclear or conventional forces.<sup>30</sup> A ready arsenal in this case will be particularly dangerous because uncertainty increases during a crisis and there might be a temptation to carry out a strong conventional attack or to resort to a first-strike if nuclear use seems inevitable, which might cause an unintended detonation of nuclear weapons on the other state's territory.

The nascent command and control infrastructure and vulnerable nuclear arsenals of both states are subject to a risk of accidental or inadvertent launch. By keeping the nuclear weapons in a de-alerted and de-mated form, the chances for accidental launch are reduced considerably. Likewise, the risk of nuclear weapons passing on to non-state actors will be greatly reduced as well.<sup>31</sup>

Moreover, as India adopts a posture of recessed deterrence, immediate nuclear threat to neighbouring non-nuclear weapon states will greatly decrease, by imparting a sense of security to them.<sup>32</sup> A ready arsenal, on the other hand, will have a contrary effect by instilling greater fear and a sense of threat in the non-nuclear weapon states. This can provide them with the incentive to develop their nuclear weapons and can lead to an arms race in the region.

A recessed deterrence posture establishes deterrence at ground level.<sup>33</sup> The exhibition of such a posture by India will encourage Pakistan to adopt the same, enhancing stability in crisis and preventing nuclear use in conflicts and wars. Such a posture systematically approaches deterrence, resulting in the maintenance of security at minimum costs, and aiding the international non-proliferation efforts.<sup>34</sup> A ready arsenal by India, on the other hand, will lead to a greater threat to Pakistan and will lead to an arms race between the two nuclear states. There will be greater chances for Pakistan to pursue a similar posture in the future, putting South Asian stability at risk.

A recessed deterrence posture also has great diplomatic benefits. Now that nuclear weapons are a reality for India and Pakistan,

rolling back this capability is almost impossible.<sup>35</sup> In this case, for the US security managers, the second-best option would put a restraint on the manufacture of nuclear weapons and their delivery systems.<sup>36</sup> This will also reduce the international concern associated with the strategic position of India.<sup>37</sup> Such a posture neither affects the costs and benefits related to the posture of ambiguity nor does it have a significant influence on the international status of India and Pakistan.<sup>38</sup> Weaponising arsenals can lead to misperceptions and miscalculations during a crisis.<sup>39</sup> Moreover, as India will enhance its nuclear capabilities to service its deterrence requirements against China, it will lead to insecurity for Pakistan, in turn creating an arms race which may be undesirable for India itself. From a narrow perspective, a ready arsenal can enhance security. A broader understanding of security is undermined by the pre-mating and deployment of alert nuclear weapons. The high costs associated with such a programme will hinder India's economic development, and its ability to combat domestic issues.<sup>40</sup> It will also cause damage beyond repair to global non-proliferation efforts.

In the South Asian context, where conflict and crisis between India and Pakistan have been occurring regularly, there are chances for inadvertent launch of nuclear weapons to occur. In such situations, if the state believes that the adversary might attack or that nuclear weapons will have to be used inevitably, with a ready arsenal, the likelihood of a pre-emptive strike or a preventive strike increases greatly. In case India adopts a more aggressive posture against Pakistan, the latter will be forced to increase its nuclear and conventional capabilities to enhance the deterrence requirements, leading to greater implications for the region.<sup>41</sup> Conventional asymmetry between the two states and the political and economic instability in Pakistan further exacerbate such dangers. A crisis may then escalate to a full-fledged nuclear war between the two states.



## **Limitations of Recessed Deterrence**

Despite considerable advantages, recessed deterrence also has certain limitations. A recessed deterrence posture would require India to keep its nuclear warheads in a de-mated form during peacetime, i.e., aside from their delivery vehicles, it will be difficult to quantify the exact number of nuclear weapons that India possesses. De-mated arsenals, owing to this ambiguity, make arms control agreements and reduction treaties more difficult.<sup>42</sup> Thus, arms control agreements between India and Pakistan will become more difficult to conclude in the times that follow.

Moreover, as India possesses nuclear-armed submarines, there are questions regarding whether it would be willing to de-mate its Submarine Launched Ballistic Missiles (SLBM) and nuclear warheads. As submarines have to go underwater, mating warheads with SLBMs could strengthen deterrence because sub-surface ballistic nuclear forces (SSBNs) enhance the survivability of nuclear forces.<sup>43</sup> But following a recessed deterrence posture would require India to de-mate its nuclear weapons. The problem here is that with India's Arihant submarines, once the submarines are on patrol, the mating of ballistic missiles with nuclear warheads becomes a bit difficult.<sup>44</sup> Additionally, the mating of nuclear weapons can limit the effectiveness of a recessed deterrence posture, especially when India possesses a credible second-strike capability. This signifies a shift from its complete reliance on recessed deterrence.

With a recessed deterrence posture, as India and Pakistan will have reduced reliance on nuclear weapons, and nuclear weapons will take time to be assembled during a crisis, there may be greater temptations to invest more in their conventional capabilities to respond to the adversary immediately and to deter it. This can trigger a conventional arms race between the two states.

### **Importance of Recessed Deterrence in the Context of South Asia**

The importance of recessed deterrence in South Asia can be effectively demonstrated through the lens of neo-realism. Since their independence in 1947, both India and Pakistan have had adversarial relations. They share a common border and have had several conflicts and skirmishes. Both states have fought four wars, and the unsolved Kashmir dispute, intra-state conflicts, and power asymmetry between them further exacerbate their hostility.<sup>45</sup>

India attributes the justification of its nuclear weapon programme to the threat arising from China.<sup>46</sup> Nevertheless, its posture and the deployment of its weapon technology are specific to Pakistan.<sup>47</sup> Pakistan is bound by its geographical factors and conventional asymmetry with India to adopt a defensive posture against it, as it has certain very important cities and strategic communication arteries lying close to the Indian border.<sup>48</sup>

India's advancing conventional and nuclear capabilities increase its power greatly and it continues to maximise its power. Its offensive policies vis-à-vis Pakistan and its adoption of doctrines like the Cold Start Doctrine can be explained through the lens of offensive realism where India is maximising its power more than the minimum deterrence against Pakistan. This will compel Pakistan to respond through its policies, by increasing its capabilities, to enhance its security, which is greatly destabilising for regional stability in general. Moreover, as India enhances its power and nuclear capabilities to deter China, this will in turn create a security dilemma for Pakistan, compelling it to balance out India by ultimately enhancing its power and capabilities, reinforcing the assumption of defensive realism that increase in power of one state creates a security dilemma for the other states, thus, compelling them to counter-balance the first state, so the security of first state decreases rather than increases. This will create an arms race which might itself be undesirable for India.

In case India adopts a posture of a ready arsenal, neo-realism suggests that Pakistan would perceive India's intentions in the worst light, thus, as India and Pakistan have nuclear forces that are still evolving, India's nuclear and conventional forces hold Pakistan's nuclear arsenal susceptible to a pre-emptive strike.<sup>49</sup> Assuming that India may carry out such an attack during a crisis or may be tempted to attack, uncertainty is greatly increased. Therefore, Pakistan may consider it rational to pursue a ready arsenal, because since the 1970s, Pakistan has considered its nuclear capability to be a balancing mechanism against India.<sup>50</sup> Due to conventional asymmetry with India, Pakistan's reliance on its nuclear weapons remains high for deterrence purposes, as with the costs associated with conventional weapon technology, nuclear weapons provide a cheaper and more effective balancing option.<sup>51</sup> Moreover, as the South Asian region faces what has been called the "stability-instability paradox" Pakistan has always relied on a posture of nuclear first-use to deter a conventionally more powerful India.<sup>52</sup>

Throughout recent years, India's deals such as the US-India Nuclear Cooperation Agreement and the annual increases in its defence budget demonstrate its progress and aspirations towards its military and technological advancement.<sup>53</sup> The insecurity that this creates for Pakistan will require Pakistan to respond by increasing its own military and technological capabilities to suit the deterrence requirements.

Furthermore, India has been moving away from its no-first-use nuclear policy. It has reiterated its right to use nuclear weapons by retaliating massively against a nuclear first strike or any attack against Indian territory or Indian forces, through the use of chemical or biological weapons, anywhere in the world.<sup>54</sup> A statement by India's Defence Minister Rajnath Singh in August 2019 reflected that the no-first-use policy of India was not unalterable and depended on the circumstances.<sup>55</sup> A shift from a no-first-use policy will cause Pakistan to

enhance the readiness of its nuclear forces as well. Pakistan holds the stance of credible minimum deterrence but the measure of minimum deterrence force depends on different variables, which also include India's technological developments.<sup>56</sup>

Recent developments show that India has been evolving its posture from that of a recessed deterrence to a ready arsenal.<sup>57</sup> According to claims from India's Strategic Forces Command, India has been keeping some portion of its nuclear forces, especially those aimed against Pakistan, at a much greater level of readiness, which can be operationalised within minutes or seconds.<sup>58</sup> This is bound to cause Pakistan to react with similar policies because it creates insecurity and a security dilemma for Pakistan, causing it to enhance its capabilities to balance its power with India as defined through defensive realism. Two nuclear weapon states with relatively vulnerable forces and nascent command and control systems are bound to be at a greater risk with mated nuclear weapons during situations of conflicts or crises.

The shifts in India's policies and postures, along with its technological advancements have strategic implications. These changes assert the claims of offensive realism. Through its force assertion, India appears to be more proactive.<sup>59</sup> Its shift from a no-first-use policy and changes in deployment and nuclear posture raise questions regarding the credibility of India's policy of minimum deterrence. These changes will inevitably lead to an arms race with Pakistan.

These developments are not suitable for the stability of the South Asian region. A recessed posture by India would lead to greater stability because Pakistan's policies are reactive towards India and owing to economic instability in Pakistan, Pakistan itself will not be willing to engage in developing a ready arsenal due to the immense costs associated with its maintenance. A ready arsenal by India would, on the other hand, lead to a security dilemma for Pakistan and would

lead it to increase its military spending and develop a ready arsenal of its own. Such proceedings will not be beneficial and will further undermine the international non-proliferation efforts.

Furthermore, Pakistan and India exist in a strategic environment where both face several external and internal security problems. The risk of problems related to the inadvertent and accidental launch of nuclear weapons, the slipping of nuclear weapons into the control of non-state actors, and the problems related to the command and control mechanisms are particularly pronounced in the Indo-Pak context. A recessed deterrent will, therefore, provide both states with credible deterrence with minimum costs, while being particularly effective in the South Asian context to reinforce and strengthen deterrence stability in the region.

## **Conclusion**

A state's nuclear use doctrines and postures greatly determine the effectiveness of its nuclear weapons and their credibility as an effective deterrent. The mere acquisition of nuclear devices can neither create an operational nuclear arsenal nor can it provide a credible and effective nuclear deterrent.<sup>60</sup> Despite acquiring nuclear weapons, India and Pakistan have engaged in conflicts and a limited war with each other, which demonstrates that though nuclear weapons have brought stability on an all-out level, clashes and skirmishes continue to occur.<sup>61</sup>

For years, recessed deterrence by both India and Pakistan has prevented the crises and limited conflicts from escalating to a full-scale nuclear exchange because such a posture provided enough time for the de-escalation of crises. However, owing to the recent technological developments and shifts in the nuclear posture and policies of India, there are greater chances for an arms race to develop between India and Pakistan.<sup>62</sup> This will have broader regional implications, especially impacting the deterrence stability between both states. Pakistan maintains reactive policies towards India and India's nuclear posture.

Since doctrines play an important role in shaping Pakistan's policy responses, a ready arsenal by India will create greater insecurities for Pakistan and will threaten South Asian stability in general. Owing to the conventional asymmetry, prevailing mistrust, and uncertainty between both states, such a posture will inevitably compel Pakistan to raise the readiness of its nuclear forces. This is particularly threatening in an environment where India and Pakistan are susceptible to threats to the security of their nuclear arsenals. The vulnerability of nuclear arsenals to a pre-emptive strike and the nascent command and control infrastructure can lead to security concerns for both states, which are exacerbated by mistrust and lack of communication.

A recessed nuclear posture will, therefore, prove to be more beneficial by enhancing stability, providing more time for de-escalation of crises, and enhancing mutual trust by acknowledging that the adversary has not kept its nuclear weapons alert and ready to fight. This will be especially helpful in reducing misperceptions and miscalculations, especially during crises. Moreover, should India develop a ready arsenal, it can raise concerns among the regional states regarding its intentions and ambitions, increasing the chances of a security dilemma and arms race, in addition to compelling a similar response from Pakistan. A recessed nuclear deterrent will be meaningful in reducing such concerns while also maintaining an effective and credible nuclear force. Moreover, both India and Pakistan currently face internal problems which affect their domestic stability. Such a posture will maintain effective deterrence, while also providing them enough space for dealing with more urgent issues. A recessed nuclear deterrent will not impede economic development and will allow India and Pakistan to focus on other domestic and non-traditional issues that they face internally. This will be better for the internal and external security and stability of both states and the South Asian region in general.

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