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ABSTRACT

Even as India has had a long-running debate about many aspects of its nuclear doctrine, most importantly, its No First Use (NFU) policy, the country continues to maintain the NFU. This paper makes a critical assessment of recent arguments made by Christopher Clary and Vipin Narang that India may be reconsidering its NFU policy because of counterforce “temptations”. The paper dissects the evidence they present—statements made by mostly retired officials, and discrete bits of technology that India is acquiring—and shows why they are unconvincing. Further, the paper illustrates why the relatively smaller Indian nuclear arsenal both preclude any counterforce first-strike doctrine, and is an indication that India is not pursuing such a doctrinal change. Although a decision to abandon the NFU cannot be ruled out, this is unlikely to be the result of the kind of thinking and preparation outlined by Clary and Narang.

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INTRODUCTION

Since India declared itself a nuclear power in 1998, a decade after it reportedly built its first nuclear weapons, there have been significant debates about both India's nuclear path and its consequences. These debates are vast, well-detailed, and necessary: they highlight potential problems, challenges, costs and dangers, as well as the logic and benefits of India's nuclear policy. Irrespective of whether or not one agrees with the arguments and positions taken in these debates, they encourage a more careful thinking about the choices India faces.

With hindsight, it has become clear that many of the fears expressed about India's nuclear policy in the immediate aftermath of the 1998 nuclear tests were unfounded. For one, the expectation of uncontrolled escalation to the nuclear level has remained unrealised, despite several crises and even an intense but limited war in Kargil. Ultimately, leaders on both sides have demonstrated both calculation and reasonable risk-aversion. Similarly, expectations of an unbridled nuclear arms race in South Asia have turned out to be overblown. India has continued to maintain a No First Use (NFU) doctrine and its nuclear forces have remained relatively small despite the country having two nuclear adversaries. Indeed, New Delhi has shown scant concern about Pakistan's slightly larger nuclear arsenal, and there has been no indication of any arms race of the action-reaction kind.

To be sure, these nuclear debates have helped sensitise the region—in particular, the decision-makers—to the dangers of an arms race. After all, the logic of nuclear deterrence can be counterintuitive to standard military logic. For example, invulnerability is a danger in nuclear relations because any state that achieves it faces the temptation of launching an attack on its adversary. The logic of NFU is similarly

counterintuitive: a country that faces no existential threats (in addition to being the strongest and most powerful one in its neighbourhood) has little need to use nuclear weapons first. This was a conclusion that many Indian civilian strategists reached, both because they understood how India's circumstances dictated the country's choices and they learned the right lessons from the useless and wasteful Cold War nuclear arms race.

Recent statements by senior Indian officials such as former Defense Minister Manohar Parrikar suggest that this logic may not be well-understood.¹ This should be a matter of concern because retreating from NFU will prove to be of little benefit to India and – assuming India follows through with its logic – could make managing and controlling the country's nuclear arsenal much more difficult. This is why it is particularly concerning when scholars conclude that India may be embarking on just this path, as Christopher Clary and Vipin Narang argue in their early 2019 essay.²

Clary and Narang have written an important article that needs to be taken seriously and viewed critically. They map recent developments in India's nuclear weapons program and the continuing Indian debate about how to wield its nuclear arsenal. They tie these elements together to argue that India's nuclear doctrine may be shifting towards a "conscious pursuit of more flexible options beyond countervalue targeting—namely, counterforce options against Pakistan's longer-range nuclear systems" (p. 8). They acknowledge (p. 9) that a counterforce doctrine itself would be consistent with India's massive retaliation strategy (as well as with India's No First Use or NFU policy). But because such a doctrine would put at risk Pakistan's long-range nuclear forces, they argue that this could potentially lead Pakistan to begin any nuclear attack on India with a full-scale assault. In turn, this

may force India to consider a preemptive counterforce attack to destroy Pakistan's long-range nuclear forces before they attack. This last link in their chain of reasoning, assuming that Indian decision-makers are thinking along these lines, would represent a change in India's NFU policy.

There is an important argument that needs to be taken seriously for a number of reasons. First, both are experienced security studies scholars who have spent a considerable number of years looking at India's security and foreign policies, but particularly India's nuclear policy and doctrine. Their work needs to be engaged with seriously. Second, they have amassed and woven together a large volume of circumstantial evidence in making their case, which also needs to be considered seriously. Moreover, it is published in an academic journal that is considered the number one in security studies and one of the top three in the broader international relations field. Third, their argument goes against the grain of much of the existing academic literature on India's nuclear doctrine. If they are correct, it calls for a fundamental reconsideration of how scholars and analysts have understood India's nuclear doctrine. Finally, and most importantly, their argument has obvious policy implications. If India's nuclear doctrine is indeed changing towards counterforce and first use, it could represent a growing danger for nuclear stability between India and Pakistan. This paper agrees with Clary and Narang that if India gives up its NFU policy for a preemptive counterforce attack, it indeed "would mark a seismic shift in Indian nuclear strategy" (p. 9), and one that would carry "significant risks" (p. 10).

This paper outlines key issues that undermine Clary and Narang's essay. The first section addresses the lack of clarity in their claims. The second section examines their claims about changes in Indian

thinking about its nuclear doctrine. The penultimate section considers the question of India's technological advances that Clary and Narang suggest could be used for a counterforce strategy. The paper concludes with a few observations about the likely trajectory of India's nuclear doctrine.

I. UNRAVELLING THE CLAIM: COUNTERFORCE "TEMPTATIONS" OR FIRST STRIKE STRATEGY?

There are two aspects to what Clary and Narang present as evidence of a shift in India's nuclear doctrine: what their claim is regarding the status of that doctrine; and the nature of the change in the doctrine.

Status of India's nuclear doctrine

Clary and Narang fail to make their central claim unambiguous: is India only facing a counterforce "temptation" or is it planning to shift to counterforce, or has already shifted to counterforce? The title of their essay suggests only that India may be facing counterforce "temptations", not that the doctrine itself is changing or has changed. This tentativeness is maintained in the first two paragraphs of their introduction, when they write that although India acquired nuclear weapons only reluctantly, "continued nuclear restraint is less certain" (p. 7), pointing to the kind of capabilities India is developing that is inconsistent with such restraint. When they suggest that continued nuclear restraint is less certain, it suggests a future change to the doctrine, not one that has already taken place. In other words, capability development could change in Indian policy in the future; the Indian nuclear doctrine has not yet changed.

In the succeeding paragraph, however, the authors state that their argument is "that these apparently discrepant capability developments

are most likely the result of India's *conscious pursuit* of more flexible options beyond countervalue targeting—namely, counterforce options against Pakistan's longer-range nuclear systems” (p. 8., emphasis added). This goes well beyond just “temptations”: it is now a “conscious pursuit”, but only of counterforce “options” and not of a counterforce strategy (this paper will address this issue in later sections). Despite the caveat (“most likely”), the “conscious pursuit” is important because it implies that India has already made a decision to move towards counterforce and is now building the forces to operationalise the new strategy. They reiterate this in a latter part of their essay: “India has been developing the components necessary”, they write, “for such a [first strike] strategy” (p. 15).

This reverses the sequence: instead of capability development leading to potential future change, it is a change in Indian thinking that is leading to these new capabilities. Thus, capability development itself is the consequence of a change in Indian policy, implying Indian policy has already changed. Later, while writing about Indian capabilities, they suggest that the development of various capabilities “*allows* Indian civilian and military leaders to start thinking about first-strike strategies” (p. 25., emphasis added). This would suggest that such thinking has not yet taken place and that it is the development of India's capabilities that might lead to potential change in India's nuclear doctrine. This is different from a “conscious pursuit”, which was the argument they made earlier. A few pages later, writing about the increasing accuracy of India's missiles, they appear to reiterate this point, that such technology development will “*enable a possible* shift to a counterforce posture against Pakistan” (p. 31., emphasis added). This once again seems to abandon the “conscious pursuit” in favour of capabilities that now “allows” Indian decision-makers to conceive of

additional strategic options. In other words, this implies that policy has not changed, but could change in the future because of India's advancing technological capabilities.

This goes to the heart of the claim that Clary and Narang make. If the development of Indian missile and other technologies allow Indian nuclear policymakers to start thinking of modifying India's current nuclear doctrine, that bears close monitoring. It is a concern, however, about the potential future direction of India's nuclear doctrine. It is far less dangerous than suggesting that these changes are the result of a "conscious pursuit", which suggests that the technology development is the result of a previous decision to change India's nuclear doctrine. If this is the case, it would imply that India's nuclear doctrine has already changed—this is a far more serious claim.

Nature of change to India's nuclear doctrine

Clary and Narang are also unclear about the nature of change to India's nuclear doctrine. At certain places, they write about India's counterforce options (p. 8); elsewhere, their claim is about a first-strike strategy (p. 25). The first does not represent a change in India's doctrine because counterforce options alone would not violate India's NFU pledge. It is quite likely that India's retaliation will target at least some of Pakistan's nuclear forces, but such counterforce targeting would not make it a counterforce strategy. As the authors themselves acknowledge, India has never stated that its retaliation would be only countervalue (pages 8, 9, 22). This is an assumption, even if a logical one, made by analysts. Therefore, a mixed counterforce and countervalue attack would be well within stated Indian nuclear doctrine. Indeed, this should be expected: Indian retaliation will likely target whatever counterforce targets India

can find and which is still viable after a Pakistani first strike.³ What will take India's nuclear plans out of the four corners of the existing doctrine is if India decides to strike first, not if it simply decides to target some of Pakistan's nuclear forces as part of its retaliation. First-strike strategies will do this; counterforce "options" will not.

Some nuclear theorists argue that the world is entering a "new era of counterforce,"⁴ but they provide little evidence beyond that of the nuclear policies of the United States (US). Clary and Narang aim to align their argument with this hypothesis (p. 49). Even if the US could be facing such temptations, it is because it has developed an overwhelming superiority over other nuclear states; in theory, at least, the temptation exists.⁵ India simply does not have the kind of nuclear superiority that would permit such a counterforce first-strike doctrine. Indeed, India has fewer nuclear warheads and missiles than Pakistan. Moreover, India will have to reserve a considerable part of its nuclear arsenal for deterring China, which enjoys a significant nuclear superiority over India. Once the China requirement is considered, India's nuclear arsenal will be far smaller than Pakistan's, which would make any Indian counterforce first-strike even more difficult to imagine.

There is confusion in the claims that Clary and Narang make. Some of their claims should not be of serious concern, such as the possibility that India engages in retaliatory nuclear attacks that also feature some counterforce strikes, because it fits well within India's existing nuclear doctrine. Other claims—such as about the temptations offered by technology development—represent concerns about the potential future direction of the doctrine. This may bear watching. These two above are conflated with the most explosive of their claims: that India is engaged in a conscious pursuit of capabilities for a counterforce

first strike, which suggests that Indian nuclear doctrine has already changed. This confusion of claims makes it difficult to assess their evidence, because the claims require different evidence.

II. IS INDIAN THINKING ON NUCLEAR DOCTRINE CHANGING?

Clary and Narang argue that Indian thinking about its nuclear doctrine is changing: “In recent years, serving and retired Indian officials have begun arguing for greater flexibility in India’s existing nuclear doctrine – or asserting that its existing doctrine is already more flexible than commonly assumed” (pp. 16-17). The second part of this assertion immediately raises a problem: if existing policy is already “flexible”, and Indian decision-makers are already exploiting such flexibility, it contradicts the first assertion; why argue for greater flexibility if the doctrine is flexible, to begin with?

Importantly, the only evidence that Clary and Narang provide to support the assertion that “existing doctrine is already more flexible than commonly assumed” is one ambiguous statement made by former National Security Adviser Shivshankar Menon to a journalist.⁶ Although they claim that Indian security managers have “repeatedly noted the flexibility of existing doctrine,” they present no other evidence. What Menon meant by “flexible” is unclear, but it is doubtful that he was talking about preemptive attack because Menon has repeatedly defended NFU and opposed first use—evidence that Clary and Narang ignore.

Their explanation of Menon’s views represents one flaw in their analysis—that of misinterpreting different perspectives in the Indian nuclear debate. Menon could not be suggesting any change to counterforce first-strike; the evidence is that he supports the NFU

doctrine. In Menon's book, a couple of sentences of which forms a critical part of the Clary-Narang thesis, he strongly supports NFU: "hewing to a no-first-use policy is the best response to the situation India faces."⁷ Moreover, in interviews Menon gave to the media in late 2016 when his book was published – which happened to coincide with controversial comments by then defense minister Manohar Parrikar questioning the utility of the NFU policy – Menon strongly defended the NFU and criticised Parrikar. In one interview, after reiterating that the NFU was the right policy for India, Menon says he had "not heard a credible scenario which requires first use of nuclear weapons by India yet." Menon went on to characterise Parrikar's comments as "nuclear warfighting", which Menon said was not India's policy, while also explicitly rejecting the idea of first use.⁸ In another interview a few days later, he again defended NFU, arguing that with NFU, "retaliation is certain" and asking of Parrikar's statement, "Why introduce an element of doubt there?"⁹ Menon's repeated and consistent defense of NFU and opposition to first strike is clear evidence that Clary and Narang's interpretation of Menon's view is mistaken.¹⁰

Clary and Narang are also wrong to offer as evidence a speech that Menon made at India's National Defence College in October 2010. In that speech, Menon did not repeat the standard Indian formulation, "no first use and non-use against non-nuclear powers" but characterised Indian policy as "no first use against non-nuclear states." First, it clearly does not fit Menon's repeated defense of NFU. Second, the transcript is clearly nonsensical: any use of nuclear weapons against a non-nuclear state would be first use by definition. The most likely explanation is that the missing two words in the middle – "and non-use" – were left out because of a typographical error in the publicly posted transcript of Menon's speech. In fact, the transcript has since been corrected on the Ministry of External Affairs' official website, which again would make

little sense if India was attempting to signal a change in thinking on NFU.¹¹ Third, Indian officials have restated India's standard doctrinal formulation multiple times before and after Menon's speech (See Appendix-1). Indeed, India's Foreign Secretary, the head of India's foreign service, stated the standard formulation at the same venue, just a couple of weeks after Menon spoke.¹²

Comments by mostly retired officials about the inadequacy of the existing doctrine, or the need for a different doctrine, do not support Clary and Narang's proposition because these statements are clearly recommendations for change. This represents a second problem with the way Clary and Narang wield evidence: recommendations made outside of government cannot be evidence of change or even consideration of change within the government. Indeed, indirectly, these recommendations are clear indication that the doctrine has not yet changed, as pointed out earlier. For example, in an essay that is cited by Clary and Narang, the former Indian Strategic Forces Commander B.S. Nagal argues that it is time for "a dispassionate and critical evaluation of the doctrine" based on which "changes should be recommended/suggested if and where necessary."¹³ Similarly, even the comment by Parrikar about the NFU is clearly a complaint about the inadequacy of NFU, which he hardly needed to make if the doctrine had already been changed.

While Clary and Narang are correct that many former officials and nuclear policy analysts in India have been arguing for greater flexibility in Indian nuclear doctrine, this is not particularly new. India has had an active nuclear debate for decades.¹⁴ Indeed, it is well-known that the National Security Advisory Board (NSAB), which drafted the first "unofficial" Indian nuclear doctrine in 1999, was itself deeply divided, including on nuclear doctrine.¹⁵ Even some of the

members of this group, which formulated the NFU doctrine, are well-known to have opposed the NFU.¹⁶ One of them, Brahma Chellaney, argued that it carries “inherent risk,”¹⁷ while another, Bharat Karnad, called it “unenforceable.”¹⁸ A subsequent NSAB reportedly called on the government to reject the NFU, just two weeks before the Indian government announced the “official” nuclear doctrine in January 2003, which included the NFU.¹⁹

Simply put, arguments by former officials such as Nagal are not new and their recommendations about what they think the doctrine should be, are not an indication of official consideration of any doctrinal change. Menon, for example, has stated that India has carried out three reviews of the NFU since 2003, and every review “has shown that it actually serves India’s interests.”²⁰ Clary and Narang do not acknowledge these comments, but cite an unofficial set of recommendations by one of New Delhi’s smaller foreign policy think-tanks as supporting their case (p. 19). Indian officialdom is notoriously insular, and such non-governmental recommendations have little influence on Indian foreign and security policies, as others have noted.²¹

To be sure, it does make a difference when a prime minister or serving defense minister makes remarks that call into question India’s nuclear doctrine. Clary and Narang point to a public speech that Prime Minister Atal Bihari Vajpayee gave in 2000 where he was quoted as saying that India will not wait for a nuclear attack to take place, suggesting that Vajpayee was hinting at preemption. What Vajpayee said is unclear because the official, albeit highly abridged transcript, does not say what Clary and Narang quote in their essay, and only one newspaper reported it as such. In the official version, Vajpayee is quoted as reiterating India’s NFU, before stating that “(I)f Pakistan thinks that it can destroy India by a nuclear bomb, it is grossly mistaken;” however,

it did not carry the quotation mentioned in that one newspaper report.²² There is a possibility that the reporter exaggerated Vajpayee's statement because the Vajpayee government repeatedly reiterated India's NFU pledge, and the prime minister himself has publicly expressed his strong support for NFU. It was the Vajpayee government that framed India's NFU nuclear doctrine, of course, but Vajpayee had stated the NFU principle even before the doctrine was outlined by the government in January 2003. In October 2002 Vajpayee told the *Financial Times*, "We have repeatedly confirmed our no-first-use doctrine."²³ He reiterated this in another newspaper interview in 2003: "Our nuclear doctrine is based on an explicit no-first-use policy. We have publicly stated our willingness to sign a no-first-use agreement regionally or internationally."²⁴ The overwhelming evidence therefore suggests that the newspaper quote of Vajpayee's speech in 2000 was mistaken.

In November 2016, the Indian defense minister Manohar Parrikar ruminated about NFU at a public function, though prefacing his remarks by saying that these were his personal views and did not mean that India's NFU policy had changed.²⁵ Even as senior officials should not be thinking aloud in public, two points need to be noted. First, as stated earlier, Parrikar's remarks suggest that India's policy continued to be NFU, for why else would he be complaining about the doctrine? Second, Clary and Narang are wrong when they state that Indian government has "refused" to deny such statements because, in addition to the minister himself saying these were his personal views, multiple news reports stated that Indian defense ministry spokesperson Nitin Wakankar also immediately clarified that what the minister said was his personal opinion and not official policy.²⁶ A few days later, the Ministry of External Affairs also reiterated that there was no change in India's policy and that the country is "committed to Credible Minimum

Deterrence and No First Use of nuclear weapons.”²⁷

Finally, Clary and Narang also ignore the numerous other statements by officials reiterating India’s NFU policy, at least 20 times over the last decade.²⁸ In November 2018, Prime Minister Narendra Modi himself reiterated the nuclear doctrine, including NFU, when he congratulated the crew of India’s first indigenous nuclear-powered submarine after its first deterrent patrol. While Clary and Narang noted the prime minister’s congratulatory message to the Arihant crew, they ignored his reiteration of the NFU.²⁹ They write that they do not expect formal Indian doctrine to change (p. 16). They cannot, however, have it both ways—to claim that India had not officially clarified its doctrine (p. 24) while also ignoring numerous official statements, including from the prime minister, that reiterate the doctrine.

It is possible to argue that although none of Clary and Narang’s evidence are conclusive on their own, the volume of evidence at least suggests that analysts and officials are pondering the problems facing India’s nuclear doctrine. The difficulty is that India has long had an active, specialist debate about its nuclear doctrine, and the NFU has been the most controversial.³⁰ It would be unwise to cite the position taken by one side in this NFU debate as indicative of any change in India’s nuclear doctrine. Even if an overwhelming consensus is reached in India’s public debate that the NFU doctrine should be given up – and that is not the case today – that still would not indicate that India’s nuclear doctrine has changed. The evidence would require, in the absence of an official statement by representatives of the Indian government, a clear acknowledgement by a former official that actual Indian doctrine is different from the official 2003 doctrine. In addition, it should include some outline of the new doctrine that includes a nuclear counterforce first use option.

III. DYSFUNCTIONALITY OR DESIGN? CHANGING CAPABILITIES FOR COUNTERFORCE FIRST-STRIKE

The second set of evidence that Clary and Narang present concerns India's new capabilities, especially those that allow the country's leaders "to start thinking about first-strike strategies – or damage-limiting, launch-on-warning strategies" (p. 25). These arguments are highly speculative, reading back from capability development to political intention that stretches their case beyond credibility. Some of these technology developments, such as for Ballistic Missile Defense systems (BMDs), are essential to India's NFU doctrine. They make little sense for a first-strike strategy as Clary and Narang claim. Others, such as India's advances in sensor technology, are driven not by nuclear counterforce requirements but by other security requirements, such as counterterrorism. The most important evidence that India is not considering a counterforce doctrine is that the country's nuclear force remains relatively small, the implication of which Clary and Narang ignore.

The first issue Clary and Narang raise in this section is that of providing for adequate deterrence of both China and Pakistan. India is building long-range missiles that can target China and these could indeed also target Pakistan. However, one of the central problems that India faces is that if it uses all or even a substantial part of its nuclear force against Pakistan, it will be left defenseless against China. Thus, the idea that India's long-range missiles will function in a dual role is suspect because if India expends its missiles on Pakistan, it will have no nuclear forces left to deter China.

It is equally surprising that Clary and Narang would even hint that India's Arihant submarine has a Pakistan-centred mission. While

the current K-15 Sagarika missile with which Arihant is armed does not have the range to be used against China, the submarine is clearly designed to embark longer-range missiles, not the Sagarika. Thus, the Sagarika is not evidence of an intention to develop a counterforce strategy against Pakistan, but more likely yet another indication of India's slow-paced nuclear capability development, which has yet to give India missiles with sufficiently long range to target China from either land or sea.³¹

Clary and Narang point to India's investment in multiple independently targetable re-entry vehicles (MIRVs) and warhead accuracy, depressed-trajectory attack profiles, sensor technology and BMDs as further evidence of technology development that serves a counterforce purpose. Yet they present no evidence for their claim that this is an integrated "conscious pursuit" (p. 8). There are other reasons for the development of these technologies that have little to do with any interest in first-strike or counterforce. For example, while India has indeed invested in MIRVs and warhead accuracy, this is more likely being driven by the "organizational and prestige incentives" of the scientists at India's Defense Research and Development Organization (DRDO), as Narang himself had argued more than once earlier.³² Moreover, if India was interested in counterforce attacks, it might be better to develop Multiple Re-entry Vehicle (MRVs) rather than MIRVs.³³ Organisation imperatives also apply to the development of depressed trajectory missile attack profiles, which are usually a flight profile employed to defeat missile defenses. Considering that India and Pakistan are neighbours, with normal flight times of just about 10 minutes—and considering further that Pakistan's missile defenses and early warning systems are negligible—why would India even need to fire missiles at depressed trajectories at Pakistan?

Similarly, investment in MIRVs is itself not an indicator of interest in first-strike, as demonstrated by China which has made similar investments even though it also has an NFU policy.³⁴ Nevertheless, for states like India and China which have smaller nuclear arsenals, it makes little sense to increase numbers of warheads rather than missiles because they will lose a larger proportion of their warheads in an enemy first strike by presenting an adversary with fewer aim points.³⁵ The investment in warhead accuracy is the only technology development that might indicate an interest in counterforce because a countervalue nuclear force does not require warheads with great accuracy. Considering the overwhelming evidence of organisational imperative in such technology development in India, and the lack of any other corresponding evidence for counterforce, it does not make for a strong argument to say that counterforce requirements are driving the pursuit of accuracy.

India's investment in sensor technology—another point Clary and Narang raise—also appears to be driven by other needs, in particular of counterterrorism, than targeting Pakistan's strategic forces. A good example is the RISAT-2 spy satellite that India developed with Israeli technology.³⁶ The RISAT-2 launch was advanced after the Mumbai terror attack in 2008 specifically for counter-terror surveillance; its replacement, the RISAT-2B, has the same mission.³⁷ Much of India's surveillance capability, including those based on UAV (Unmanned Aerial Vehicles) are driven by India's surveillance requirements against terrorist groups and infiltration, not nuclear counterforce.

The problems with Clary and Narang's arguments about India's BMD program are even bigger than the rest of their arguments in this section. Indeed, India's BMD plans provide strong evidence of a

retaliation-only strategy, rather than a counterforce one. India's limited BMD plans are driven by the need to protect India's National Command Authority (NCA), one of a number of efforts India is undertaking that includes alternate national command centres in case of an attempted decapitation strike.³⁸ An assured retaliation strategy will not work unless the NCA survives an initial nuclear attack. The idea that Indian BMD plans are a way of mopping up the leftover of Pakistan's long-range missiles after an Indian counterforce strike makes little sense. The Indian BMD system is most likely to be deployed only around the NCA in New Delhi. While there is no open-source information about the architecture of India's overall BMD system, most public accounts refer only to the defense of Delhi.³⁹

In any case, India's sheer size makes it inconceivable that any BMD system can protect the entire country, or even all of the largest cities: note that there are nine Indian cities with population of more than five million, and another *fifty-two* with over a million.⁴⁰ Pakistan could simply attack multiple numbers of densely populated cities other than New Delhi, if a BMD shield protects the capital. The destruction caused by even a few Pakistani missiles on these unprotected Indian cities would be so massive as to make any such preemptive counterforce strategy completely unviable. The only way any Indian strategist can depend on India's BMD to stop a Pakistani second strike is if they make the ludicrous assumption that Pakistan will fire all their leftover missiles at Delhi, or at most, at the one or two additional points which may be defended by India's BMD systems.

Moreover, Clary and Narang ignore the capabilities of Pakistan's short-range systems, such as the Nasr missile, which has a range of 60-70 kilometers.⁴¹ Even with this limited range, Pakistan can target

at least two large and important Indian cities—Amritsar and Jammu—with populations of over one million each, and with immense historical and religious significance. They also ignore other systems Pakistan can potentially use, including Babur cruise missile (about a dozen) as well as Pakistan’s F-16 and Mirage 3/5 fighter-bombers (about three dozen), which can target Indian urban centres around the country, none of which will be defended by any BMD system or even leak-proof air defenses.⁴² Any Indian decision-maker will have to consider the consequences of such retaliation because India has no defenses to stop it. It is not technologically feasible to develop a national missile defense system for India. Simply put, no Indian BMD system can “mop up” the variety and numbers of delivery vehicles that Pakistan can throw India’s way, even if India conducts a reasonably successful counterforce first strike, because India’s BMD system will only cover Delhi, and one or two other cities at the most.

Finally, Clary and Narang ignore what would be the most important indicator of any attempt at building a nuclear force capable of counterforce: a significant numerical superiority. India’s nuclear force, by all open-source accounts, is smaller than Pakistan’s. Clary and Narang provide a table of India’s growing capabilities (p. 26), which is quite misleading because they provide no comparison to either China’s capabilities, or more pertinently, to Pakistan’s. But when the relative size of the arsenals is considered, it should become obvious that India is in no position to conduct any counterforce first-strike against Pakistan considering that India’s nuclear force is smaller than Pakistan’s (See Table 1). Of the two open sources considered, *Military Balance* provides more favourable numbers for India but even this still shows India as having fewer missiles than Pakistan.⁴³

Table 1: India-Pakistan Balance of Nuclear Forces*(Based on two different open sources)*

	<i>Bulletin of the Atomic Scientists (2018)</i>	<i>Military Balance (2020)⁴⁴</i>
India ⁴⁵	36 MRBMs + 24 SRBMs= 60 missiles	12 MRBMs + 42 SRBMs= 54 missiles
Pakistan ⁴⁶	52 MRBMs + 50 SRBMs= 102 missiles	30 MRBMs + 30 SRBMs= 60 missiles

India's large numerical disadvantage is clear, especially when some of the country's weapons are "reserved" for China. While analysts have argued that counterforce has become easier because of technological developments, especially in missile accuracy, they still assume at least a 2:1 attack plan.⁴⁷ India has nowhere near that level of superiority, especially considering that Indian missiles are probably not particularly advanced in reliability and accuracy, two important considerations in adopting the 2:1 ratio. Moreover, even this number assumes that India will use all of these missiles against Pakistan, which would leave it without a deterrent vis-à-vis China—surely a choice no Indian strategist or leader would make.

The key question that Clary and Narang need to address is why India has not built a larger missile force if it was interested in building a counterforce arsenal. This is crucial, considering that the country

needs at least a 2:1 superiority over Pakistan (or, more likely, a 3:1 or 4:1, given the uncertain reliability and accuracy of Indian long-range missiles), plus sufficient numbers to respond to any residual attacks from Pakistan and to deter China's much larger nuclear force. Even with a 2:1 ratio, India would require somewhere between 110-174 MRBMs just for a theoretical first-strike against Pakistan and at least another 20 for China. (This does not even include a residual force to deter any Pakistani retaliation to the Indian first strike.) Of course, this number will go up to 150-250 if the ratio is 3:1 (See Table 2). This does not consider all the much more complex command and control and intelligence systems that India will need to build to successfully prosecute a first strike, and ignores the need for extremely risk-acceptant political leadership, neither of which India possesses. And there is little indication that India is planning to build such a larger nuclear force and Clary and Narang provide no such evidence of such plans.

The obvious answer is that India is not considering such an ambitious strategy, which Clary and Narang correctly point out is difficult to achieve. If India did attempt to build such a large nuclear force, it is likely that Pakistan will follow suit; India will therefore not be able to achieve such ratios. In any case, any such attempt will be visible and will provide clear indication of a change in India's nuclear doctrine. In the absence of such an effort, it is reasonable to say that India is not attempting such a shift.

Table 2: Force Requirements for Indian Counterforce Strategy*(Two different open sources for current numbers and two different ratios)*

	Aim Points to Target Pakistan (all MRBMs + 50% of SRBMs)	Force Ratio used	MRBMs required for Pakistan	MRBMs/ ICBMs required for China	Total IRBMs/ ICBMs required
<i>Bulletin of the Atomic Scientists</i>	52 + 25 = 77	2:1	154	20	174
	52 + 25 = 77	3:1	231	20	251
<i>Military Balance</i>	30 + 15 = 45	2:1	90	20	110
	30 + 15 = 45	3:1	135	20	155

Nevertheless, it is still worth considering why India is focusing on technologies that will increase warhead accuracy and MIRVing. As discussed earlier in this paper, and as Narang himself had suggested previously, the best explanation is that India's Defense Research and Development Organization (DRDO) is doing this for organisational reasons. Clary and Narang do briefly consider this explanation but dismiss it too quickly because, they argue, "India is a poor country where defense expenditures are subject to serious scrutiny" (p. 48). This is rather weak. If anything, much of the academic literature firmly point in the opposite direction: that, "poor country" aside, Indian defense planning is "ad hoc",⁴⁸ where there is much "arming without aiming"⁴⁹, and where civil-military dialogue is "absent"⁵⁰ with consequences for military efficiency, including nuclear policy.⁵¹

India's generally dysfunctional defense planning, and in particular, one in which the leadership of the DRDO has organisational and career

incentives to publicly exaggerate their technological achievements, provide sufficient explanation for the various Indian claims of technological achievements. Indeed, this is a far better explanation than expecting that the Indian system, in this one sector of defense planning alone, is imbued with great foresight, planning, coordination and efficiency.

CONCLUSION

Indian strategists have long debated the country's nuclear doctrine. Indeed, even before the first official outlines appeared in the form of parliamentary papers in December 1998, George Perkovich correctly identified the likely outlines of the doctrine based on his close observation of this debate.⁵² The debate intensified after the nuclear tests of 1998, and has not dissipated since. It is a debate that bears watching, and Clary and Narang have done a valuable service by focusing on it closely. It is also important to remember, first, that this public debate may not reflect government policy, even when former officials outline their views. Second, there is no uniformity in the views of former officials about whether or not India needs to change its nuclear doctrine. Finally, the fact that some former officials such as Nagal find fault with current Indian nuclear doctrine and are recommending changes is actually, in an indirect way, a confirmation that the doctrine has not changed.

There is no guarantee that India will not abandon NFU at some point in the future; such a decision does not require India to do much. Especially in the case of the current BJP government, this is more likely to be an ideologically driven change than one that is based on careful thinking, planning and capacity-building of the kind that Clary and Narang are suggesting. Abandoning the NFU pledge affords the Modi government an easy way to appear tough on Pakistan without

making any preparations for an actual first-strike doctrine. Another reason why giving up NFU could prove easy is because India will only need to stop declaring that it will not use nuclear weapons first. There is no prerequisite to build a first-strike counterforce-capable nuclear arsenal. If India does decide to build an arsenal that is capable of a counterforce first strike, as Clary and Narang are suggesting, the signs will be so obvious that it will require little interpretation. We are far from that.

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ENDNOTES

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ANNEX 1

Chronological List of Official Indian Statements Reiterating India's Nuclear Doctrine (2010-2019)

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