One of the most remarkable attributes of India as an independent state has been its reticence to use force as an instrument of policy. From the delay in sending troops to defend Kashmir in 1947 to the 24-year hiatus in testing nuclear weapons before 1998, Indian decisions on military force have come as an unwelcome last resort, and with rare exception, have been counterproductive, solidifying the wisdom of restraint.

India’s rapid economic growth, ambitious military modernization—particularly the 1998 nuclear tests—and rapprochement with the United States have raised the prospect of India’s rise to great-power status, including an end to the country’s enduring strategic restraint. With more options available, will India finally abandon its long-standing international political—military posture? The consequences of an end to restraint could be revolutionary, but the doctrine’s strong roots—and its survival despite failures, including against China and Pakistan—suggest that it will endure.

The Foundations of Restraint

The Indian political leadership has generally seen military force as an inappropriate instrument of politics, and military spending as an unnecessary burden in the context of threats. India’s founding fathers, Mahatma Gandhi and Jawaharlal Nehru (prime minister from 1947–1964), who had the greatest influence on the direction of independent India, saw the use of armed force as normatively flawed and practically costly for India. Nehru recruited P. M. S.
Blackett, a Nobel Prize-winning British physicist who had been at the center of the Allied war effort in science and technology, to examine how science could contribute to Indian defense.

Blackett’s 1948 report recast the defense of India. He recommended that India limit its ambitions and pursue a policy of nonalignment to escape an unnecessary arms race, proposing that military spending not exceed two percent of GDP.\(^3\) Blackett also argued against nuclear and chemical weapons, but emphasized India’s need to develop an industrial and technological base. Blackett’s general recommendations have remained in place since, despite war, rearmament, and failures in the use of force.

**India’s Military Record (1947–1971): Strategic Restraint Rules**

In October 1947, two months after India gained independence, the status of Jammu and Kashmir was undecided as thousands of Pashtuns from Pakistan’s North West Frontier Province gathered in *lashkars*—tribal militias—to invade Kashmir, but India did not preempt or move military forces into the state.\(^4\) Indian Army troops landed in Kashmir only after the raiders reached the outskirts of the capital city of Srinagar, and the Maharaja—the ruler of the state—had acceded to India. The delay meant that the Army had to fight fierce battles throughout that fall to evict the *lashkars.* On December 31, India approached the UN Security Council for relief, but the UN began an inquiry instead. As the inquiry proceeded, there was another opportunity for the Indian Army to push to control greater territory, but the government did not devote the necessary resources. A year later, a ceasefire agreement effectively partitioned Kashmir, giving India the eastern two-thirds and Pakistan the western third. The Kashmir dispute has bedeviled India ever since.

There were good political reasons for waiting to send the Army to Kashmir and not recovering the entire state. A military intervention prior to accession would have weakened India’s position internationally. Later, the UN process tied Indian hands, and increasing support from regular units of the Pakistan Army made military progress difficult. The population in the western parts of the state were aligned with Pakistan as well, but equally, early military action to stop the *lashkars* might have obviated the tough fighting that came later and could have put India in a better position on the ground. The Indian leadership nevertheless chose to wait until the last hour to send the Army to Kashmir.

In 1960–1961, after years of wooing China, a frustrated Prime Minister Nehru adopted a policy of forward military deployment into contested territory without the requisite military preparation.\(^5\) Nehru’s belated attempt at strategic assertion against the Chinese juggernaut ended in a humiliating defeat in 1962. Nehru died two years later, and though India initiated its first rearmament, the main lesson of the war was that politicians should refrain from misusing the
military. The defeat created a civil–military relationship in which politicians became hesitant to take leadership of the military. Even Prime Minister Lal Bahadur Shastri (1964–1966), who ordered a general war in response to Pakistani infiltration into Kashmir in 1965, remained tentative during the hostilities, reaching yet another stalemate.

In contrast, the 1971 war between India and Pakistan was a case where India grabbed the initiative with dramatic results. The Indian Army attacked along three axes and easily took Dacca, the capital of then-East Pakistan. Pakistani forces were unable to put up resistance, and the Bengali uprising that had occasioned the invasion helped the Indian Army in no small measure. The war lasted 14 days. After securing victory in the eastern theater, the Indian Army did not swing west to assert its dominance on Pakistan proper (then-West Pakistan), the true source of the “Pakistani threat.” Nor did India use the 90,000 Pakistani prisoners of war, captured in liberated Bangladesh, to coerce Pakistan into relinquishing all claims over Kashmir. India and Pakistan agreed in a 1972 treaty negotiated at Simla to settle future disputes, including Kashmir.

Why did India not pursue its strategic goals more completely? The conventional answer is that India could not. President Nixon had ordered the USS Enterprise carrier group into the Bay of Bengal to coerce New Delhi into limiting its military actions against Pakistan. Even India’s Soviet allies wanted a quick cessation of hostilities. There was also the military reality that Pakistani defenses in the west were much stronger than in the east. The irrigation ditches in the Punjab, which were a considerable obstacle in 1965, continued to present a serious challenge. No popular insurrection would welcome Indian forces. There is also the view that India had concentrated its military capacity so overwhelmingly in the east that a change of theater to the west was not even feasible. Further, Indian military stocks were low and needed replenishment.

Yet, the reality is that these problems were surmountable. New Delhi could have prevailed on Moscow to undertake a serious resupply effort and send Soviet submarines to the Bay of Bengal to counter the threat from the U.S. task force. Had Indian leaders been ambitious, they might have taken these risks to win a more comprehensive military victory in the west. As it turned out, the 1971 defeat became the fuel that has fed the Pakistan Army’s sustained campaign against India. As the strongest political institution in the country, it has held back prospects of peace. But these risks were acceptable because New Delhi did not want to prolong the war. Strategic restraint remained India’s doctrine.
Prime Minister Rajiv Gandhi (1984–1989) pushed India's strategic posture and objectives further than any other Indian leader. Working with General Krishnaswami Sundarji, the Indian Army chief at the time, and Arun Singh, his minister of state for defense, Rajiv ordered a dramatic modernization of the armed forces. India bought MiG-29s, T-90s, and submarines from the Soviet Union. Moscow even leased India a Charlie-class nuclear submarine, the rare case of a nuclear-weapon state sharing a military nuclear asset with a non-nuclear weapon state. The Indian Air Force bought the Mirage-2000 fighter from France, the Indian Navy bought diesel submarines from Germany, and the Indian Army bought howitzers from Sweden.

Buoyed by new military capability, Rajiv made two dramatic attempts at strategic assertion. The first came in 1986, when he approved General Sundarji's plans to conduct a large-scale military exercise on the border with Pakistan. Called Brasstacks, the military maneuvers were later reported to have been open-ended and could have turned into an invasion of Pakistan. Military advice to the Indian prime minister is not publicly available, but General Sundarji wrote after his retirement that Brasstacks was India’s last opportunity to decapitate Pakistan's nuclear program and force a Kashmir settlement on its terms. During the exercise, Pakistan indirectly threatened to use nuclear weapons and India backed down.

In 1990, when the two countries came to another military crisis as Kashmir raged in rebellion, Pakistan made much more overt nuclear threats and compelled India to accept nuclear parity as the new reality. India's conventional superiority, including its modernization program, served little purpose. Indeed, the wars India would fight thereafter were against insurgencies, and demanded troops and superior organization rather than advanced weaponry and technology.

Rajiv's second act of strategic assertion came in 1987, when he sent the Indian Army to police a peacekeeping deal he had forced on the Sri Lankan government and the Tamil Tigers. Both sides rejected the agreement, and the Indian Army was caught between an insurgency on one side and an unhelpful host Sri Lankan government on the other. India's only campaign of peace enforcement was a chastening experience. The conflict came to be seen as India's Vietnam.

Since then, the problem of how to fight an insurgency has beset India. Once India and Pakistan accepted the basic reality of nuclear deterrence, Islamabad quickly escalated sub-conventional conflict, causing what nuclear theorists call the stability–instability paradox (meaning the presence of nuclear weapons decreases the likelihood of direct war between India and Pakistan, but increases the chance of having minor conflicts). Islamabad openly supported an
indigenous rebellion in Kashmir and spawned a 20-year insurgency in the disputed territory which has diverted and bled the Indian Army to the point that the institution, by its own admission, lost sight of its main mission—fighting the Pakistan Army. Restraint by choice became restraint without choice. No Indian leader could risk the chance of a Pakistani attack on an Indian city.

**Nuclear Restraint**

India first tested a nuclear device in 1974, calling it a peaceful nuclear explosion. There are many theories about the timing of that test—chief among them is then-prime minister Indira Gandhi's own domestic political concerns—but it is equally noteworthy that the Indian nuclear weapons program slowed down, if not froze altogether, for at least the next decade. The country did not think it was necessary to conduct another nuclear test for 24 years—a period during which India's strategic resolve was tested by repeated provocations, and India was shielded from international sanctions by the Soviet veto.

Why did India restrain the development of its nuclear weapons program? Nuclear weapons offered India the only viable deterrent against China and even against the possibility of another U.S. effort at gunboat diplomacy such as the 1971 Enterprise deployment. If India had conducted more tests after 1974 and built a nuclear arsenal, it might have forced early changes to the emerging nuclear proliferation regime, or it might have joined that regime as a declared nuclear weapons state. Although Soviet leadership may have been uncomfortable with a nuclear India, it was not in a position to dictate Indian nuclear policy, and might have found a nuclear India to be a better balancer of a troublesome China. India's relations with the West were already at their nadir due to the nuclear sanctions. What else was there to lose? We believe that India's decision not to go down the nuclear path after the 1974 test is rooted in the country's preference for strategic restraint over risk taking.

Following its Cold War victory, however, the United States spent significant energy in the early and mid-1990s revamping the international nuclear nonproliferation regime in an effort to cash in on the peace dividend. The Clinton administration sought to extend the Nuclear Non-Proliferation Treaty (NPT) indefinitely, conclude a Comprehensive Test Ban Treaty (CTBT), and push along a Fissile Material Cutoff Treaty (FMCT). These changes in the international treaty regime threatened to close off India's nuclear options, which New Delhi had preserved despite international sanctions since the 1974 test. Seeing that the nuclear option was closing down, India tried to test in 1995, but U.S. satellites picked up the test preparations and Washington was able to pressure New Delhi into backing off. It was only three years later that a new government ordered the tests, and a new domestic consensus replaced the older one on keeping the nuclear option open.
Will India Abandon Strategic Restraint?

The 1998 tests and subsequent economic growth raised expectations of an end to strategic restraint based on two kinds of arguments: the realist theory of how affluence or threat will bring India to reject strategic restraint, and a cultural rationale of how a new conservative nationalism has pushed India toward a more ambitious consensus on use-of-force issues.

The Realist Case

For classical realists, India has long faced security threats which call for rebuilding its armed forces, but poverty and limited access to modern weapons restrained military capability and strategic choices. A decade of sustained economic growth is removing the financial constraints on national power. Ashley Tellis, a U.S. strategist central to the reordering of U.S.–India ties, writes, “The record thus far amply substantiates the claim that India will be one of Asia’s two major ascending powers. It is expected that the Indian economy could grow at a rate of seven to eight percent for the next two decades. If these expectations are borne out, there is little doubt that India will overtake current giants.”

With an expanding economy, India’s defense budget rose from $11.8 billion in 2000 to $30 billion in 2009. The number is likely to rise further because defense spending as a percentage of GDP has decreased. In other words, the rate of economic growth exceeds the rate of increase in military spending, which would imply growing latent capacity for generating military power. Rodney Jones, a U.S. analyst of South Asian security issues, reports that between 1990 and 2003, India’s ability to conduct combined arms operations against Pakistan improved 3 to 1 in India’s advantage.

In contrast, structural realists who emphasize a rising threat argue that India’s improving defense capability is responding to the dangers of a rising China and a troubled Pakistan. China has been a growing cause of Indian security concern. Then-Indian defense minister George Fernandes specifically pointed to the Chinese threat in justifying the 1998 nuclear tests. The border dispute between the two countries continues to linger, as neither side has committed to a settlement. In 2010, the Indian government ordered the armed forces to raise new divisions and refurbish unused forward air strips on the border with China.
The onset of a nuclear deterrent relationship with Pakistan introduced the stability–instability paradox in the subcontinent, making India’s strategic environment less secure. In the past 20 years, India and Pakistan came close to war at least four times: in 1990 at the height of the Kashmir rebellion; in 1999 during the Kargil War; in 2001–2002 following the terrorist attack on the Indian Parliament; and in 2008 following the Pakistan-originated terror attacks on Mumbai. The Indian government, and especially the Indian Army, has had to think about ways to punish Pakistan for its sponsorship of terrorism in India without escalating to nuclear threats. Indian efforts to protect itself will compel it to reconsider its policy of strategic restraint.

The Cultural Case
From the cultural perspective, U.S. strategist George Tanham argued in the early 1990s that India had been unable to develop a robust security policy and a strong military force because it lacked strategic thinking. Only a small elite felt responsible for strategic matters. Political scientist Stephen Peter Rosen argued that internal social divisions in India prevented collective action necessary for strong defense. The relaxed Chinese view of Indian military power could be rooted in this understanding of social and cultural obstacles in India’s generation of military power.

But the 1998 nuclear tests suggested a shift in Indian strategic culture. For the first time, India seemed willing to be proactive and bear the costs of a dramatic strategic initiative. A new conservative government, which had promised nuclear testing as part of its election platform, ordered the tests, knowing well that they would precipitate widespread criticism and bring the country under international sanctions. A growing cadre of hardline nationalist thinkers came to the fore, suggesting a new consensus in India on national security matters.

Following the tests, the United States placed wide-ranging sanctions on India, but also sought to engage India in an effort to put the nuclear genie back in the bottle. Strobe Talbott, who was then U.S. Deputy Secretary of State, initiated talks with Indian Foreign Minister Jaswant Singh which became the most sustained engagement in the history of India by the United States. The Talbott–Singh talks, designed to persuade India to roll back its nuclear weapons program, instead legitimized India as a nuclear weapons state and put the two countries on a path to realignment that culminated in the 2005 U.S.–India civil nuclear deal.

The U.S.–India rapprochement has included a significant cultural component. The change in policy has required Indian officials to see the United States in a dramatically different light, and though there are exceptions, India today ranks number one, ahead of many U.S. allies, in countries holding a favorable view of the United States. To a considerable degree, the
rapprochement has been made possible by the presence in the United States of more than three million Indian immigrants—a community that is also well-organized to mount a political campaign.

**The Future of Strategic Restraint**

The nuclear tests and rearment made possible by rapid economic growth and newfound technology access do not necessarily indicate a departure from strategic restraint. In our view, the 1998 tests were not a cultural shift in India’s international politics, but a defensive and reactionary response to mounting U.S. nuclear nonproliferation pressure. Expectations of a major change in India’s strategic posture along the rationale of realists may also be misplaced. India’s current rearment efforts lack clear political guidance, and the imbalance in India’s civil–military relations means that reforms necessary for the effective use of force have failed to proceed.

Since the tests, India’s nuclear weapons program seems to have gone back into a holding pattern. While credible information about nuclear devices is hard to find, reports in India and abroad suggest that India may lag behind Pakistan in nuclear readiness, including in the number of weapons, the delivery systems, and the command and control mechanisms. U.S. intelligence and military sources report that Pakistan’s nuclear arsenal has increased from 30–60 to 100 bombs.\(^{25}\) Thirteen years after the tests, there is no Indian missile that threatens China. A little more than a decade after the nuclear tests, the hardliners in India’s strategic community have been marginalized, even within the conservative Bharatiya Janata Party (BJP), which should be their natural home. Certainly, no one in New Delhi predicted realignment with the United States coming from the government’s decision to test nuclear weapons.

Meanwhile, India’s primary security challenge continues to be combating insurgency and terrorism. After the Mumbai attacks, the Indian government and the people of India are said to have resolved to tackle the problem head-on. With nuclear deterrence in place, the Pakistani threat is largely manifested as an internal security issue. But insurgency and terrorism do not constitute the centerpiece of the military modernization effort. Indian armed forces are primarily interested in buying weapons for conventional war such as aircrafts, tanks, and ships. Endemically weak police organization and a constitutional
grant of law and order to the states (not the Union government) makes police modernization, which would better prepare the country for terrorist threats, nearly impossible to achieve.

The armed forces remain at arm’s length from government ministries and departments, consulted but not integral to the process of defense policymaking. The military cannot seek formal support for policies it deems important. The Integrated Defence Staff is supposed to provide coordination across the three services, but it is toothless without a chief of defense staff who can reconcile demands. Despite repeated calls for reforms in the higher defense structure, planning, intelligence, defense production, and procurement, the Indian national security establishment remains fragmented and uncoordinated.

The government has done little to create a speedy, transparent, and legitimate procurement system. It takes decades to meet the demands made by the armed forces. The Defence Research and Development Organisation, the umbrella agency better known by its acronym DRDO, has not produced a single weapon system that could alter the strategic balance in the subcontinent. \(^\text{26}\) (Indian nuclear weapons are a product of the Atomic Energy Commission.) The head of the DRDO serves as the scientific adviser to the minister of defense, with no recognition of the conflict of interest between the two roles of supplier and evaluator. New guidelines on procurement spell out in minute details what vendors must do, but do not clean house in the government. Corruption in defense deals is rampant—even a contract for coffins for soldiers killed in the 1999 Kargil War was tainted. Overall, that is not a recipe for an end to the doctrine of strategic restraint.

**Pakistan**

If India were to deviate from strategic restraint, Pakistan would be central to that change. The Indian Army—and the other services—have been looking for ways to punish Pakistan for sponsoring terrorism without precipitating nuclear escalation. The Army’s wish list of new weapons such as attack helicopters, long-range artillery, unmanned aerial vehicles, and precision-guided munitions seems to rest on the notion that a sudden but limited attack against Pakistan will not precipitate a nuclear riposte. Consequently, Pakistani efforts to maintain a regional balance of power embroil India in ways that preclude effective military modernization and undermine efforts to achieve great-power status.
Futhermore, Islamabad has never bought into New Delhi’s posture of strategic restraint. India’s global aspirations complicate communicating that position, with Pakistanis viewing India’s rise as an erosion of their own position. The ongoing rivalry shapes the nature of demands the Indian armed forces make to their government. The 1999 Kargil War caught the Indian Army unawares. Operation Parakram in 2001–2002, designed to bring coercive pressure on Pakistan, failed in part due to the lack of military options. After 2002, the Indian Army propagated the Cold Start Doctrine to develop a strategic space where India could use force, and its threats to use force would be a credible deterrent to Pakistan. This maneuver—influenced by NATO’s approach at the height of the Cold War—envisaged a quick and deep strike against enemy targets followed by rapid escape from hostile territory. Cold Start remains limited to the thinking of the Army. The Indian government has not officially endorsed the doctrine, though the concept informs army modernization, which occurs without the benefit of clear political and strategic guidance from the political leadership.

But Cold Start did not prevent the 2008 commando attacks on Mumbai. Whoever in Pakistan launched the Mumbai assault—or whoever could have stopped it—was undeterred by Indian claims that there would be a price to pay for such action. What is even more extraordinary is that the Indian government did not even bother to ask the Army to mount a retaliatory campaign after the Mumbai attacks. Despite New Delhi’s protestations, Pakistan does not see India in quite these benign terms. Pakistanis view the U.S.–India nuclear deal as confirmation of Indian desire for regional domination, now with U.S. backing.

India has to deal with some tough dilemmas in Pakistan. The eventual U.S. withdrawal from Afghanistan has raised the prospect of increased Pakistani influence in Kabul. Indeed, the Obama administration, especially the efforts of the late special representative Richard Holbrooke, has emphasized an increased Pakistani role in an Afghan settlement. To Indians, an Afghanistan dominated by Pakistan means a return to the days of the Taliban. As a result, India has increased its own aid efforts in Afghanistan, which has further angered the Pakistanis. The United States has wanted India to step back to allow Washington greater freedom of action in including Pakistan in the effort to stabilize Afghanistan.

Pakistan itself presents a challenge on which India and the United States do not agree. Whereas Washington continues to see the Pakistan Army, and the
Pakistani elite more generally, as potential partners, New Delhi has held the military and the elite responsible for the rise of Islamic extremism. The potential of a failed Pakistan would have horrendous consequences, and India seeks to be strategically active in limiting the fallout of a collapse. Yet, India has not moved to abandon strategic restraint and develop the institutional capacity to deal with such an eventuality.

**China**

Following the 1986–1987 Somdurong Cho military crisis, when tensions escalated over New Delhi formalizing control over disputed territory on the border with China, India sought to engage China, an effort that culminated in a 1988 visit by Prime Minister Rajiv Gandhi to Beijing. Since then, India and China have carried on negotiations to resolve the border dispute, though no breakthrough has occurred as yet. In the 1990s, the Indian Army routinely diverted its China-oriented mountain divisions to counterinsurgency duties in Kashmir and Assam. New Delhi has also emphasized political and economic relations, and China has become India’s fastest growing trade partner. The 1998 nuclear tests did not alter this dynamic. Even though defense minister Fernandes pointed to the Chinese threat to justify the 1998 nuclear tests (he later recanted), no Indian missile threatens China 13 years later.

The threat from Beijing is not direct, but lies in its special ties with Islamabad. China has wobbled on issues such as Kashmir to lead some Indians to expect that trade and other relations can lead to a normal India–China relationship, and India has sought to break China’s link with Pakistan through rapprochement with Beijing for two decades. Beijing equivocated between India and Pakistan during the 1999 Kargil War and has since kept away from the Kashmir problem. After some verbal jousting with China in 2009, the Indian government agreed to an Army proposal to raise four new mountain divisions oriented toward the border with China. The Indian Air Force is also reopening forward air bases in the northeast. However, India has been unwilling to match Chinese investments in defense modernization.28

India has so far tried to deflect the anti-Chinese implications of its growing relationship with the United States; at the same time it has continued to allow the Dalai Lama, the Tibetan leader, to remain in exile in India. India and China continue to negotiate the border dispute, but neither is ready to compromise or to abandon the talks. Only hardline conservatives are keen to take on China.29

The political debate in India over the nuclear deal with the United States, especially as it relates to China, is about preserving India’s ability to expand its nuclear arsenal. The parties on the Left, which until recently held the domestic balance of power, opposed the deal not because they seek strategic parity with
China, but because their leaders do not trust the United States to keep its side of the bargain and not act in ways detrimental to Indian interests and security.

Overall, the India–China bilateral relationship has been as cooperative as it has been conflicting, not unlike U.S.–China ties. There are Indians who see an inevitable competition with China, but there are many others, including Prime Minister Manmohan Singh, who do not want to enter into an expensive arms race with China that will detract India from its primary task of economic development—the same impulse that led Nehru to accept Blackett’s recommendations in 1947. India’s strategic restraint, therefore, is likely to survive the current level of competition with China.

**Wisdom, Limited**

To be sure, a strategically and militarily assertive India could be revolutionary. It could finally end its 60-year strategic equivalence with Pakistan (a country one-fifth its size), precipitate a more competitive relationship with China—not only on the border but also in the Indian Ocean, or become militarily adventurous. New Delhi would be in a better position to both share the burden of its new partnership with the United States and behave independently of U.S. interests, especially on Afghanistan and Iran.

In the past, strategic restraint has been wasteful and dangerous. Without political guidance, the armed forces are left to themselves to figure out what they must do. There is an imbalance among the services, and little or no serious integration of strategic planning, let alone operational coordination. The Indian armed forces have long maintained that strategic restraint is poor policy, but have largely been overruled and marginalized in Indian civil–military relations.

But India’s strategic restraint has been wise as well, especially in a part of the world that has seen so much conflict. India’s preference for restraint has stabilized and deescalated military stand-offs in the region; when India has not shown restraint, often in the face of Pakistani aggression, crises have escalated. India’s strategic restraint has also been central to other great powers in the world facilitating, rather than fretting over, India’s current rearmament. Today, only Russia will supply China with advanced weapons, but Russia, Israel, France, Germany, the United Kingdom, and increasingly the United States are all willing to sell arms to India. Would this widespread international support continue if India became strategically assertive? Linear projections of current
trends do not predict India abandoning its strategic restraint; for that, it will require a major and unforeseeable disruption at home or abroad.

Notes


5. For a still-valuable history of the 1962 war, see Neville Maxwell, India’s China War (London: Jonathan Cape, 1970).


8. For the most comprehensive and balanced history of the 1971 war, see Leo Rose and Richard Sisson, War and Secession: Pakistan, India, and the Creation of Bangladesh (Berkeley: University of California Press, 1990); a brilliant reexamination of the conflict is by Sarmila Bose, Dead Reckoning: Memories of the 1971 Bangladesh War (London: Hurst and Co., 2011).

9. For a critical account of military modernization in India during the 1980s, see Chris Smith, India’s Ad-hoc Arsenal (Oxford, UK: Oxford University Press, 1994).


29. See Karnad, *Dealing with Reality.*