## Atomic Era 2.0

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S ince the end of the World War II, we have been living in the Atomic Era. For those born in the second half of the past century, "the baby-boomers," it was the paradigm of



progress and modernity. It held the promise of harnessing the power of the atom for good and for ill. Unleashing the secrets of the atom was (and still is) what separated the world's most advanced and powerful nations from the rest.

For the "millennials" the Atomic Era sounds like the 2011 Fukushima Daiichi meltdown, like the Non-Proliferation Treaty (NPT), like the fear of Iran's bomb. None of these youngsters, however, grew up under a Sword of Damocles bigger or sharper than what became known as MAD, mutually assured destruction. It is based on the theory of deterrence – a sort of game theory, like the Nash-equilibrium, in which no participant can gain through a unilateral change of strategy. So the threat of using strong weapons against the enemy prevents the enemy's use of those same weapons.

This "Damoclean Era," as the French philosopher Edgar Morin once called it, was ushered in 70 years ago, on July 16, 1945, with the Trinity nuclear test in New Mexico's Jornada del Muerto desert. The name translates to "Dead Man's Journey"– fitting, because the detonation triggered a nuclear arms race that made tangible the dark threat of modern Armageddon.

Decades of Cold War kept these anxieties alive but also somehow allayed them. Deterrence worked, as a bilateral equation. The United States and the Soviet Union never embarked on World War III because the cost of a potential conflict was so high. Fear kept the peace, a perverse but solid bargain.

This pattern generally applied throughout the first stage of the nuclear age when China also got the bomb in the 1960s, even between archrivals India and Pakistan, two countries that had fought each other in four major wars before going nuclear.

With the end of the Cold War, there was hope that the world might consign such mind-numbing strategies to history and negotiate away its weapons. But instead, a different reality has emerged. Nuclear issues remain as urgent as ever. In the past few years, the world has been shaken by the Fukushima disaster, disturbed by nuclear saber-rattling in North Korea, unnerved by weapons security in Pakistan, and stirred by the efforts to keep Iran from acquiring the bomb. We have sunk

into a more complicated nuclear phase. And yet, we can't get away from our time – to quote Blaise Pascal, "*Nous sommes tous embarqués.*" And so we've simply carried on with the Atomic Era.

Although deterrence still works as a bilateral equation in certain circumstances – India and Pakistan have avoided major conflict, for instance, and Israel's neighbors are less inclined to attack it – a new set of problems have emerged.

There is the rapidly mounting threat of other countries breaking out of the NPT, which since the 1970s has attempted to keep weapons in the hands of the original five nuclear nations (the US, Britain, China, Russia and France). The impetus behind the NPT was concern for the safety of a world with many nuclear weapons states. But the greatest flaw in the NPT is that it lacks any effective enforcement mechanism against violators. Aspiring nuclear powers, such as North Korea, have found that ignoring this international treaty can pay off: being willing, or seen as willing, to disregard such agreements grants negotiating leverage. And the lesson is: Once a country has nuclear weapons, there is very little the rest of the world can do about it. Thus Kim Jong Un's government, like that of Pakistan, India, and Israel, has arguably gained influence from having an arsenal. While Iran's push toward joining the nuclear club has undoubtedly been inspired by these other countries' experiences, it is a special case, full of apparent contradictions.

Keeping Iran from the bomb, is much more a problem of political purpose than one of technological skill. If Iran believes that its security, regional standing or international reputation depends on possessing nuclear weapons, then the gradual expiration of the framework agreement within a decade will enable Iran to become a significant nuclear, industrial and military power. So, what is to be done while waiting for Iran to get the bomb? – as it surely will.

The history of deterrence teaches that a nuclear Iran would be contained by nuclear forces – US and Israel – poised to deliver deathblows within minutes of a first strike. In other words, any nuclear action by Tehran would be suicidal, as in the past era of MAD.

A big reason for concern, on the other hand, is that Tehran's nuclear rise is happening in a stormy and mercurial region, the Middle East. There is worry that a nuclear Iran could take the world to a proliferation tipping point. Given the tension and rivalries in the Middle

East, Iran obtaining the bomb might trigger an arms race in the region. Saudi Arabia has signalled that it would feel compelled to join the club, others are likely to follow. Turkey, which won't sit by and let Shiite Iran dominate the region; Egypt, which has long viewed itself as the leading Arab state, and perhaps one or more of the Gulf emirates, which may not trust the Saudis. That's in addition to Israel, which is assumed to have had a bomb for many years. And with each new player in the nuclear game, risks mount that weapons will fall into the wrong hands, perhaps those of terrorists.

The Middle East is the kind of place where roiling instability could open the door to nuclear miscalculations or misadventures, and the notion of a suicide-embracing terrorist group having any sort of nuclear capability is extremely chilling. Simply put, this scenario could fundamentally alter the calculus of the nuclear age and usher in a world where the danger of an intentional or accidental use of nukes would be higher than at any time in the past 70 years.

This is a very different world than the one we have been living in since the dawn of the Atomic Era. A world with multiple nuclear players, including some with religious revolutionary impulses or hegemonic ambitions, is a very dangerous place. It would reduce security for all, multiplying the risks of miscalculation, accidents, unauthorized use of weapons. Moreover this kind of proliferated world would limit the credibility of traditional deterrence (is an interlocking series of rivalries with each new nuclear player counterbalancing others in the region enough?) and the role of the US on behalf of allies in order to guarantee international stability. How will these criteria translate in a region where sponsorship of non-state proxies is common, the state structure is under assault, and death in the name of jihad is increasingly seen as a sort of fulfillment?

Henry Kissinger and George P. Schultz, former US secretaries of state, commenting on the Iran deal and its consequences begged the crucial question: "On what concept of nuclear deterrence or strategic stability will international security be based?"

There are no foolproof answers in the contemporary disorder. To strive, to seek, to find the rationale underlying a world which is to be spared even worse turmoil, we need a sharp sense of urgency and a clear strategy to prevent nuclear war and

The current balancing act in

its catastrophic consequences.

the Middle East represents a fundamental rebalancing of American strategy. It is still clumsy and poorly thought out, but it is happening. The US will not intervene. It will manage the situation, sometimes to the benefit of one country and sometimes to another. Using various tools, it must create regional and global balances without usurping internal sovereignty. The trick is to create situations where other countries want to do what is in the international interest.

Iran is a significant national state with a historic culture, a fierce national identity, and a relatively youthful, educated population; its re-emergence as a partner for the West would be a consequential event.

However, the Middle East will not stabilize itself, nor will a balance of power naturally assert itself out of Iranian-Sunni competition. And even if the nuclear agreement holds, we face the mounting challenge of rising Iranian power in the heart of the Sunni world. In Iraq, Tehran plays godfather to powerful Shia militant groups, and wields unsettling influence over the government in Baghdad. In Syria, the Iranian Revolutionary Guard Corps is the Assad government's most effective partner. Iran is the key ally of radical Houthi rebels who have instigated a civil war in Yemen. It also exerts substantial control over Hezbollah in Lebanon and Hamas in Gaza, as they seek to weaken Israel and the moderate Palestinians. And Iran's supreme leader continues to profess a revolutionary concept of international order.

Is it Iran's supremacy in the region or the method employed to achieve it that calls into question international stability? For Iran to be a valuable stakeholder of the international community the prerequisite is that it accepts political restraint (or self-restraint) with respect to its inclination to undermine the equilibrium in the Middle East and challenge the broader international order. On the other hand, do the US and other great players involved in the deal still hope to arrest the regional trend toward sectarian upheaval, state collapse and the disequilibrium of power tilting towards Iran, or do they accept this as an irremediable aspect of regional balance?

As such, the negotiations are much more than a nuclear deal. The right political deal with Iran, if honored, monitored and effectively enforced, might reduce the real risk of a dangerous turn for the worse in the Atomic Era. It is a worthy goal and the great powers have a chance to pursue it. But until such time that it is reached and effectively implemented, the costs of failure are enormous.