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The Future of Nuclear Weapons in an Interdependent World

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This is not only the age of growing proliferation temptations, but also of globalization and power change. We are in a seminal transition from the European-Atlantic-dominated, state-power-centered, geostrategic, and geoeconomic era to the future Asian-dominated, governance-needy, universalist age—a transition that demands breathtaking changes in thinking.

The well-entrenched strategic communities are, almost by definition, conservative. Even though they peddle the catchword “new” in order to market their preferred strategies (“new threats”, “new nuclear age” etc.),¹ what they market is pretty well known, from French nuclear strategy to NATO’s doctrine to Putin’s revival of Gromyko-like boasting about military power. The new security paradigm we are facing requires bold steps to establish an international order that is based on rule-governed cooperative security.² It is not arms control rule-bound security co-operation, including verified arms reductions, which is obsolete, but the pipe dreams about absolute security, “full spectrum dominance,” and other concepts of unilateral illusion. The Cold War was nothing other than the training ground for a much more ambitious and challenging cooperative game.

The paradigm shift we are facing is no less than what the geniuses of European integration after World War II such as Konrad Adenauer, Alcide de Gasperi, Jean Monnet, and Robert Schuman endeavored after 400 years of mutual slaughter by their fellow Europeans. Intellectual inertia tempts us to deal with old acquaintances as if nothing has changed since the Manhattan Project, the Sputnik shock, or the conclusion of the Nonproliferation Treaty (NPT). Yet, the world is profoundly different. Although the nation state has not already been relegated to the ash heap of history, and the utility of arms control rule-bound cooperation regarding armaments cannot be confined to the special conditions of the Cold War, the circumstances affecting state survival today are very different from those of the centuries since the Westphalian system was installed in 1648.

It is ironic that the pundits of conservatism star as revolutionaries on arms control rule-bound constraints on armaments. They declare that arms control is dead: because it was invented for the Cold War, arms control has to be obsolete because that era is over. The prescription is instead to insist on pushing forward with national missile defense (invented for the sixties, and revived in the eighties), refuse a change in NATO’s nuclear posture (invented for the fifties) and maintain a four-digit number of strategic nuclear warheads, including a sizable part on high alert (as throughout the Cold War). Measures of cooperative security applied to armaments are not obsolete at all under present circumstances, even though these circumstances are different from those of the Cold War. But such measures are naturally anathema if one today embraces unfettered self-help and a position of superiority with a view to staying ahead in an ever-accelerating arms race as many did throughout the Cold War.³

Arms control Rule-bound constraints on armaments, arms reductions, disarmament, and nonproliferation are humble servants of state security. They are not impediments to national defense, but rather they complement it, relieving defense efforts from unnecessary burdens. State security is contingent upon the politico-economic environment within which states exist. For this reason, it would be parochial if the security community did not recognize that states face new and immense changes which call for institutionalized security cooperation, particularly agreed nuclear weapons reductions.

Growing Interdependence

Today’s international environment is characterized by thick interdependency that is growing by the day through the inexorable processes of globalization. Even assuming capability and the obligation of the state to protect its citizens against any excessive negative consequences of unfettered globalization, such regulatory activities necessitate broad-based international co-operation including not just states but non-state actors as well.⁴

Such cooperation leads away from the traditional ways of the Westphalian system in which states and societies usually cared for and fenced in themselves. Self-help as the general norm in security and economics is no longer viable in a world in which almost anybody depends on everybody. Some may greet that development as the dawn of an age of cosmopolitanism, others may loathe it as the beginning of an age of uniformity, but it cannot be helped—globalization is progressing anyway. Pushing unilateralism presents no way out, as the Bush administration is learning at the cost of the people who have elected it twice. This insight forms the basis of the European Union, whose founding members recognized that their security and economic well-being were inexorably intertwined and

acted accordingly, breaching with centuries of political tradition. Today, this basic condition has extended to most parts of the globe.

For tomorrow, the world needs a security order in which distrust among participants is reduced to such a degree that far-reaching cooperation becomes possible. Cooperation yields gains, and gains are distributed among participants. If a state fears that the profit that its collaboration affords to another state actor will be turned against it, readiness to cooperate shrinks down to zero.⁵ If, however, there is sufficient confidence that a partner will abide by the rules to which all have committed, readiness to extend cooperation will grow proportionally. Cooperative security,⁶ then, is the key not only to keeping peace in an age of globalization, but also the necessary condition to enhancing cooperation in non-security sectors as well, with a view to avoid common evil such as climate change or global health hazards, to regulate disturbances such as uncontrolled migration and terrorism, and to enhance welfare by increasing trade and investment and by curbing negative social externalities.

The function of arms control—rule-bound arms reductions, disarmament, and nonproliferation in this context—is to help move the world from an era of self help into an era of cooperative and collective security. Arms control textbooks of the sixties and seventies did not address this transformational function. This role of a catalyst and an amplifier for transformational policy came between 1985 and 1992, when arms control and security policy in general generated a positive feedback circle that transferred the world from one stage, Cold War, to another, general security cooperation in Europe.⁷

It is worth mentioning that, when Michail Gorbachev took power in Moscow, he faced the great problem to convince his Western partners that he was a different type of leader, and to prove to his peers in Moscow that the sweeping changes he was about to pursue in Soviet military strategy and the ensuing posture were not risking the national security of the USSR. Arms control helped him in either regard. He used it to signal to the West that the first political changes were not just cosmetic, but that he meant something that would have tangible positive consequences for Western security. The first signal he sent was the acceptance of binding obligations to accept observers to large maneuvers, agreed during the Stockholm Conference in 1986; one year later, he signed the INF Treaty in which the US and the Soviets agreed to go to zero intermediate nuclear forces; Gorbachev renounced a definitive quantitative advantage (the USSR had to scrap about three times as many warheads as the US) and to accept, for the first time, very intrusive inspections at military facilities on its own territory. Encouraged by this example, the West became willing to enhance security cooperation and, by the same time, to engage in a wider-reaching economic exchange. The CFE Treaty of 1990 created equal levels of conventional forces in Europe from the Atlantic to the Urals, and START I (1990) and START II (1992) enhanced strategic nuclear stability by reducing the warhead-to-missile ratio and—in START II—prohibiting intercontinental ballistic missiles with more than a single warhead altogether. Since the Soviet Union had much more “heavy” missiles that could carry six or even ten warheads, one of the main threat scenarios which had haunted US strategic planners, a possible Soviet first strike, became obsolete. While Gorbachev used arms control to convince his Western partners step by step that he was serious with detente, Western concessions helped him to convince his Soviet colleagues that the West was not about to abuse these bold Soviet steps. The US proved willing to give up the Pershing II in the INF treaty, a weapon that was seen in Moscow as meant to “decapitate” the Soviet leadership in a conflict, due to its very short flight time (8 minutes from Western Europe to Moscow), and to its high precision. The US, with some reluctance, agreed to include conventional aircraft into the CFE Treaty, subjecting the most capable conventional weapon in Western possession to constraints and reductions. And generally, Western behaviour did not become more aggressive as a consequence of more balanced military structures in Europe. Arms control progress thus served as a large-scale confidence building measure, and facilitated concessions at the political plane as well, such as the increasing political independence granted to Soviet allies in Eastern Europe, up to the fall of the Wall in November 1989.

There is no alternative. Hegemony is no longer working, a world state is light-years away, and a heterogeneous community of almost 200 states are pressed to develop peaceful coexistence and cooperation despite an environment of deep mutual mistrust, salient conflicts, and, above all, multiple arms races, not least a new emerging one among the major powers.

The Current Arms Race

The signs of this emerging race are apparent. The United States, according to its national security strategies of 2002 and 2006, is poised to defend superiority at almost all costs against all potential rivals.⁸ In order to achieve this lofty goal, it has developed victory-granting offensive options throughout all dimensions of military contest—sea, land, air, space, and the electronic spectrum. “Full

spectrum dominance”—underlined by the hope, and a determined program, for ballistic missile defense—may sound promising to U.S. strategists, but projects to be a nightmare for those who might view Washington with less trustful eyes than most Europeans do, including major powers China and Russia, among others.

Not surprisingly, China has reacted to the trend in U.S. armaments with a measured but steady development of its nuclear deterrent. Yet, even today the second-strike capability of Beijing's deterrent posture against the United States is at best small and at worst not ensured at all. China has demonstrated an anti-satellite capability, although of relatively primitive vintage, which it has tested as a targeted signal to the United States. After many failed Chinese and Russian attempts to negotiate a start an arms control regime prohibition of stationing weapons in space in space, China is prepared to develop its own military options. A situation in which everybody is nervous about the vulnerability of its satellite assets cannot be labelled stable.

Russia has reciprocated the U.S. withdrawal from the Anti-Ballistic Missile (ABM) Treaty by renouncing its Strategic Arms Reduction Treaty (START) commitment. Consequently, Russia is free to return to the production and deployment of MIRVs, or Multiple Independently Targetable Reentry Vehicles, the stability nightmare of the old days. It is now focusing on maneuverable warheads and advanced decoys while also pushing for enhanced conventional options within the limits of its technical capabilities. The recently tested Russian version of the “daisy cutter” bomb, although not the miracle weapon announced in the press, demonstrates a renewed readiness to compete in the arms race. These dangerous weapons could enter arms trade and eventually end up in the hands of non-state actors—a sobering thought that should not be lost on security analysts.

As China and Russia struggle to find means of self-defense and deterrence to protect their perceived vital interests and status, India is taking efforts to keep up with China's progress. Although the Indian military expenditure is one-quarter to one-third of that of China, India's forces are probably more effective, its navy is more experienced and proficient, and its mastery of information technology may make advances in the “revolution in military affairs” smoother than for its Asian neighbor. India and China are in a subdued and relatively slow but nevertheless progressing nuclear arms race, and a naval arms race is going on as well, with China's naval positions in Burma and Pakistan and India's only joint forces headquarter in the Andaman Islands in the Bay of Bengal as clear indicators. With India racing against China, Pakistan follows racing behind India as well as it can.

The United States is not doing badly for an advanced economy with 3-4 percent growth, but the two Asian giants are making headway with growth rates close to or above 10 percent. Of course, there are stumbling blocs on their road to development such as fragmentation and a backwards infrastructure in India and vast regional disparities and an anachronistic political system in China. Yet, the United States has its own stumbling block: an enormous budget deficit as a consequence of imperial overstretch that shows no signs of abating. Any or all of the three could stumble, or continue the present economic trend. [HM: ok?] Assuming continuation, China will be at the United States' economic [HM: ok?] level within one generation and India will be one-half of a generation later. [HM: cite?no. this is simply a projection of current growth rates which are common knowledge)]

A power transition creates dangerous times.⁹ Most challenges to a hegemon in world history, whether successful or not, have precipitated war or a series of wars. Today's interdependence will surely serve to make great powers cautious about armed conflict, but it cannot completely guarantee such a conflict will not occur. Bones of contention exist, notably between the United States and China: Taiwan, the South China Sea, and the competition for Persian Gulf and Central Asian energy resources. Although there exists a naïve belief that great power war has been eliminated as a possibility in world politics, exaggerated complacency could become extremely dangerous. Interdependence itself and advanced weaponry—nuclear weapons included—would mean a violent contest among the big powers would be an unmitigated catastrophe. [HM: ok?] The relationships among those powers must be carefully managed if a clash is to be avoided, and nuclear weapons reductions [HM: ok?] are an essential contribution to this management.

Pygmies, Paranoids, Pariahs, and Proliferation

U.S. strategist Richard Betts coined the “three Ps” in 1976 to cover the most prominent motivations for nuclear proliferation: pygmies, paranoids, and pariahs.¹⁰ Small states long for an existential deterrent against potentially more powerful enemies. States with exaggerated concerns about existential threats to their security try to procure the ultimate assurance of their survival. For badly isolated states, nuclear weapons might not just be the only way to persist in a wicked world, but might also provide a means to overcome the loathed isolation.

In all three models, the process that leads to nuclear weapons is not independent of the international security environment. This environment, in turn, is largely shaped by the great powers, who happen to be the five “official” nuclear weapon states. Their record in creating a viable

environment for smaller actors to remain nonnuclear is unconvincing. China has been bullying Taiwan and continues to do so. Threatening gestures toward Japan enhances Tokyo's nervousness, already aroused because of North Korea's nuclearization. Chinese territorial claims in the South China Sea could have had serious repercussions among resource-rich countries of Southeast Asia. Fortunately, China has turned to milder manners recently.

In contrast, Russia plays hardball with its near abroad and unwisely flexes its political muscle on the presently favorable energy market. The United States always keeps "all options on the table" and pleases itself with declaring "axes of evil" at will without considering the possible repercussions in the target states. U.S. presidential candidates appear to be in a kind of competition over which Muslim country should be the primary target for an air attack, with Iran, Pakistan, and even Saudi Arabia having been nominated as candidates by armchair strategists.¹¹ The U.S. inclination to pressure, sanction, threaten, and occasionally attack enemies of its choice, a threat which invariably has a nuclear undertone, contributes to the anxiousness of the "paranoids, pygmies, and pariahs" to acquire some sort of deterrent—if not nuclear, then at least biological or chemical weapons.

The smaller nuclear weapon states have a less negative record in practice. Yet, in terms of doctrine, the United Kingdom has quietly followed the U.S. lead to expand the contingencies for employing nuclear weapons to chemical and biological environments,¹² and former French president Jacques Chirac has declared the "approvisionnement des ressources stratégiques" (access to strategically important resources) a vital interest covered by the nuclear umbrella.¹³ Oil-producing states should be forgiven if they are not amused about this hardly veiled threat.

The Brittle State of the Nuclear Nonproliferation Regime

The NPT is the cornerstone of the nuclear nonproliferation regime. It rests on a bargain between nuclear weapon states and non-nuclear weapon states. The latter agree to refrain from acquiring nuclear weapons, but are guaranteed the right to develop civilian nuclear energy without constraints as long as they are parties to the treaty in good standing. All parties are obliged to engage in civilian nuclear cooperation to give this right substance, and the nuclear weapon states are committed to making serious moves towards nuclear disarmament.

Until 2000, the non-nuclear weapon states, particularly those belonging to the Non-Aligned Movement, were not uncritical of the nuclear weapon states' record, but they were satisfied that the process of disarmament was underway. The 2000 NPT Review Conference brought the hard-fought compromise of the "13 steps" on nuclear disarmament, a series of moderate, incremental measures that would lead to some progress without questioning the nuclear weapon status of the five in the foreseeable future.¹⁴ Nevertheless, in 2005, the nuclear weapon states, led by the United States and to a certain degree by France, refused to recognize what they had agreed to in 2000, having apparently come to the conclusion that the then concessions were too far-reaching. Among non-nuclear weapon states, there is now the strong impression that Article VI, the disarmament obligation, is dead in the eyes of the nuclear "haves." With the bargain shattered, the iron law of armament would apply: the most powerful weapon of an era is inevitably either had by none or by all. The present state of the nuclear nonproliferation regime, combined with the fundamental insecurity of all states with whom the nuclear weapon states have unfriendly relations, seems to be a dangerous precondition for rampant proliferation.

A world populated by many nuclear weapon states poses grave dangers. Regional conflicts could escalate to the nuclear level. The optimistic expectation of a universal law according to which nuclear deterrence prevents all wars¹⁵ rests on scant historical evidence and is dangerously naive. Nuclear uses in one part of the world could trigger "catalytic war" between greater powers, drawing them into smaller regional conflicts, particularly if tensions are high. This was always a fear during the Cold War, and it motivated nonproliferation policy in the first place. Moreover, the more states possess nuclear weapons and related facilities, the more points of access are available to terrorists.

Conventional Races

Globalization has seduced some authors into writing off the nation-state as a central actor in international relations.¹⁶ This is a premature judgment. The state is still alive, and many countries in the developing world, not least emerging giants China and India, experience globalization as an era in which state options are expanding. This also applies to the growing economies in southeast Asia and to the states that rely on oil income, from Venezuela through the Middle East to Russia. Even in sub-Saharan Africa, which is condemned according to the Western bias to state failure, war economies, and bad governance, has an average growth rate in the last decade ranging above 5 percent. This growth eventually strengthens the state to which growing financial resources accrue.

Economic growth is good news for the world and for the people concerned. The bad news is that conflicts have not ceased and a share of the new wealth finds its way into armament. Poorer states that do not want to be left behind follow suit in the arms race, depriving their economies of badly needed resources for civilian investments. Apart from great power rivalry but in close connection to proliferation problems, regional conflict and ensuing nuclear arms races remain a concern for global security.

This concern, like the one about nuclear proliferation, emerges from the risks of wider repercussions of regional conflict and war. Wars are dislocating many people, leading to streams of migration that are hard to control, may overtax the social systems and institutions of those countries that are the primary targets for such migration, and may also impact on the economies of states farther away. Depending on the geoeconomic significance of the war-torn region, there might be direct repercussions for the world economy, if, for example, important sources of crude oil or natural gas were jeopardized. In the latter case, there might be a real risk that major powers could clash in a secondary conflict as they try to keep or to establish control over the contested area.

Lessons can be learned from Europe during the Cold War. Hard work resulted in comprehensive regional arms control through instruments such as the Intermediate-Range Nuclear Forces (INF) Treaty, Conventional Armed Forces in Europe (CFE) Treaty, the Open Sky Treaty, and the confidence-building measures pursuant to the Helsinki Document of 1975, the Stockholm Document of 1986, and the series of Vienna Documents after 1990. All of these legal and political undertakings established a dense network of constraints and transparency measures.

Regional conflict management in eastern Africa, East Asia, or the Middle East could greatly profit from targeted regional arms control measures. Such measures would try to establish a higher degree of stability in order to mitigate fears of impending attack by neighboring countries and to enhance transparency so as to acquaint countries better with the intentions of these neighbors. Arms control would go hand in hand with efforts to deal with the political sources underlying existing conflicts.

Combating Nuclear Terrorism

We hear and read frequently that arms control reduction and non-proliferation agreements are useless against nuclear terrorism because terrorists do not abide by treaties. This empty phrase justifies unmitigated self-help strategies, including preventive war. Of course, terrorists do not obey the law, and no one who has proposed considering utilizing arms control non-proliferation agreements for that purpose has ever pretended that they do. What arms control agreements can achieve, however, is to oblige state parties to take measures that make it much more difficult for terrorists to obtain the most dangerous weapons.

One of the striking victories for this approach was UN Security Council Resolution 1540, which was adopted in 2004 on the initiative of the Bush administration. Resolution 1540, in a nutshell, has universalized undertakings that were either contained in the international treaty regimes governing the realms of nuclear, chemical and biological weapons proliferation, or emerged from voluntary agreements of countries that were willing to strengthen the norms contained in these treaties. These measures aim to establish strict state control over materials, equipment, and technologies that, fallen into the wrong hands, could help terrorists to make these particularly deadly weapons.

In addition to Security Council actions, the work of state parties to these treaties to add additional anti-terrorist instruments to their previous practice is noteworthy. The parties to the Biological Weapons Convention use their cycle of meetings of experts and state parties, initially placebos to compensate for the failed attempt to agree on a transparency and compliance protocol, to seek ways for better protection against terrorism.

Nuclear Disarmament and Its Red Herrings

Taking complete nuclear disarmament as a serious and achievable objective would contribute to a world order shaped by cooperative security. Some argue that nuclear disarmament is impossible because nuclear technology cannot be uninvented. This has not hindered states and societies from prohibiting all sorts of unwanted things such as dangerous drugs, fluorocarbons, chemical weapons, dum-dum bullets, and slavery.

Nuclear disarmament is necessary because the logic of armament under the security dilemma is cogent. Either no one possesses them for their security, or all do.¹⁷ If a few possess them while the rest do not, security will be distributed unequally, and the uncertainty will be too big for the have-nots to resist the temptation to catch up in the long run. That the threats and policies of the nuclear haves can only accelerate this process is obvious. The NPT recognizes this crisp logic by combining Article

II, the renunciation of nuclear weapons by non-nuclear weapon states, with Article VI, the obligation by the nuclear weapon states to disarm. To believe that the rest of the world will entrust nuclear stewardship forever in a select few is exactly the naïve, idealist utopianism that nuclear pundits ascribe to promoters of nuclear disarmament such as Generals Smedley Butler and Charles A. Horner or Andrew J. Goodpaster, Henry Kissinger, Paul Nitze, Sam Nunn, William Perry, and George P. Shultz.¹⁸

Second, some claim that what the nuclear weapon states do does not affect the course of proliferation and nonproliferation at all.¹⁹ Rather, proliferators act on their idiosyncratic security concerns or their sinister machinations for power expansion. In reality, however, the actions of nuclear weapon states affect the proliferation/nonproliferation process in no less than four ways. First, they shape the security environment of potential proliferators. Even a conventional threat from a nuclear weapon state always carries a nuclear shadow. Second, they project the politico-military utility of nuclear weapons by their doctrines and strategies. Third, they project the status value of nuclear weapons (this particularly applies to the smaller European nuclear weapon states, Britain and France). Finally, they weaken the norm of nonproliferation by undermining the unity of the NPT community, thus preventing it from acting with determination against rule-breakers. To believe that these four impact paths are inconsequential in the difficult if not agonizing deliberations of a government considering to go nuclear is far removed from political realism.

Whereas the “all or none” logic is the negative part of the pro-disarmament argument, the positive is that identifying the formidable obstacles and devising incremental measures to denuclearize leads toward ever-increasing security cooperation, which is necessary anyway in the age of globalization. Nuclear disarmament will only be possible by devising a sequence of carefully drafted steps, each of which brings us closer to the goal without endangering the national security of any party involved in the process.

That leads to the third anti-disarmament red herring that the end-state is treated as if proponents would wish to achieve it tomorrow. Yet, disarmament is path dependent. It requires, for example, precise knowledge about the nuclear weapons infrastructure of every country involved. This could be achieved by starting with a verified cut-off treaty that would supervise factories in which fissile material has been produced for weapons purposes and of facilities in which there is a flow of material from refurbished nuclear weapons as long as they still exist. As we come closer to the end-state, more and more sites will have to be included, and intrusiveness will become more in-depth. As time goes by, nuclear weapon states gain an ever more precise picture of what their peers have, and where.²⁰

Likewise, the history of nuclear weapons production will have to be established as precisely as possible. A precedent is available. During the International Atomic Energy Agency’s verification of South Africa’s nuclear disarmament claims, the agency had to retroactively re-establish the record of fissile material production and use. The task will be more challenging by orders of magnitude for the larger nuclear weapon states, but it is far from clear that it would be impossible.

The disarmament process would extend over 30 to 50 years. Perhaps an initial goal of 30 years could be a helpful stimulus, after which an extension for all can be granted by agreement if the obstacles prove too formidable. It is unlikely that a national plan for cheating would be kept alive for so long, as the process will not only be the result of governments’ actions, but will, conversely, help transform the way governments think and define their security, as it did during the end-phase of the Cold War, as discussed above. The world of states will not stay the same, just as the European world of states did not stay the same through 50 years of the European integration process. States will change their ways in an environment of increasingly institutionalized nuclear security cooperation. Denser institutionalization and bolder steps will become possible as states change their practices. Twenty years into the disarmament process, different possibilities will be realistically attainable for politicians—just as security cooperation for the European Community eventually became possible after initially being excluded at its foundation.

The process must start somewhere, and its path must be well chartered. For this reason, the recent change in the policies of the U.S. and British governments is highly welcome. They have opened a serious discussion on the conditions of a nuclear weapons-free world, and on the snags and stumbling blocs in the way towards it.²¹ Even though governments’ inherent caution will obviously and inevitably emphasize snags and stumbling blocs more than the goal, it is nevertheless a necessary and positive step to engaging the rest of the world in a serious debate on these issues.

Designing the Future

Decisive parameters must inform the design for future nuclear arms reductions policies. The world has shrunk, and mutual dependence is increasingly the condition of humans and of nation-states as well, which remain the most important political units on the globe. Traditional power politics, an emphasis on national rather than regional and global security, and unfettered attempts at national self-

aggrandizement bring us closer to the abyss and are likely to prove counterproductive to the actor who embarks on these roads in today's international system.

In this environment, institutionalized security cooperation in the form of arms control rule-bound constraints on armaments, arms reductions, disarmament, and nonproliferation are a categorical imperative. Nuclear disarmament is at the center of this process. It is not meant as the goal for tomorrow, but for a fixed date in the distant future. Focusing on this objective will force the major powers to work on their mutual relationship in a way that affects all other aspects of security. In moving toward the objective of zero nuclear weapons, they will also influence the motivations of the have-nots, and through the legitimacy of their own actions, will make it much easier to enforce nonproliferation against those few who would stubbornly pursue nuclear weapons programs in a disarming [HM: ok?] environment.

Notes

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