since the end of the Cold War, many clichés have developed about the proliferation of weapons of mass destruction (WMD): that the problem has become worse as a consequence of the loss of superpower control over former proxy states and the weaken-

ing of alliance-related nuclear "umbrellas"; that technology diffusion is leading, and will lead, more and more countries to consider the acquisition of WMD; and that proliferation is thus effectively inevitable and will reverse world and regional power balances decisively. All of these views can be found in political statements, scholarly analyses, and journalistic accounts. As this essay will argue, however, none of these clichés are sufficiently sup-

ported by available evidence. Proliferation of WMD is an extremely serious threat; but not just since 1989 or 1991. Rather, the problem has been with us for 30 or 40 years. It is not a mass phenomenon of "the South," but is confined to a small, identifiable number of states and should be treated accordingly.

While this essay may strike some nonproliferation analysts as heretical, its goal is to inject some reason into the post-Cold War nonproliferation debate by refuting a number of overblown nonproliferation clichés. In doing so, it hopes to restore the proliferation threat to its proper dimensions and to refocus our attention on what threats truly are important and how—without the media-based hype—specialists in the field can best go about trying to solve (or alleviate) them.

THE PROLIFERATION PROBLEM AFTER THE COLD WAR: PLUS ÇA CHANGE

It has become commonplace to say that after the end of the East-West conflict, the proliferation danger has grown considerably: as the ability of the (former) superpowers to control their clients in the developing world has diminished, the desire of countries in these new "power vacuums" to develop WMD for their own security or for expansionary designs has grown. In fact, what has actually grown is the *attention* devoted to proliferation. Concerning the problem itself, not much has changed.

All nuclear weapons programs that concern us today date back to the time of the East-West conflict. The same applies to chemical and biological weapons programs; no new candidates have appeared since the mid-1980s, that is, since Soviet leader Mikhail Gorbachev first en-

tered the scene. However, developments in technology have made the production of these weapons easier. Concerning ballistic missiles, a few countries have increased the range of their missiles and developed a greater potential for accuracy using the universally availability Global Positioning System. This development is significant. However, the same countries have possessed ballistic missiles since be-

VIEWPOINT:

NEITHER HYPE NOR

COMPLACENCY:

WMD PROLIFERATION

AFTER THE COLD WAR

Inave made the these weapon cerning balling few countries the range of and develope tential for accumiversally as bal Position. This develope

by Harald Müller

fore 1985, most of them of the old Soviet Scud-B version, or have had domestic ballistic missile programs for decades.

On the other hand, there is good news that would not have been possible without the East-West rapprochement: South Africa has scrapped its small nuclear arsenal, has opened the country for full International Atomic Energy Agency (IAEA) inspections, and will be a party to the African Nuclear-Weapons-Free Zone (as soon as the Pelindaba Treaty enters into force). Brazil and Argentina have subjected their fissile material to IAEA safeguards and have entered broad agreements for confidence-building and cooperation. Argentina and Chile have become parties to the Non-Proliferation Treaty (NPT). Cuba has signed the Treaty of Tlatelolco (although it has not yet waived Article 28 to allow it to enter into force for itself). The risk that the decay of the Soviet Union would result in several new nuclear weapon states has been prevented, as Belarus, Kazakstan, and Ukraine wisely agreed to denuclearize. Iraq's clandestine programs for all sorts of WMD was forcefully terminated by the Gulf war—a campaign that would not

Dr. Harald Müller is Director of the Peace Research Institute in Frankfurt. An earlier draft of this paper was prepared for the Aspen Strategy Group Workshop on the "Challenges of Nuclear and Biological Weapons Proliferation," Aspen, Colorado, August 10-15, 1996. have been possible in the age of U.S.-Soviet rivalry. The Chemical Weapons Convention (CWC) will enter into force in April 1997, and verification will start soon thereafter. The Biological Weapons Convention (BWC) will be amended with a transparency/verification protocol in the next few years and thus receive "teeth" for the first time, though it is still uncertain how well these teeth will bite. There is thus no reason to be alarmist. Yet, by the same token, it would be unwise to be complacent.

First, the proliferation problem is not yet under sufficient control. A few regions are severely threatened by it, notably South Asia and the Middle East, with some danger in East Asia as well. A very small group of states with proven disregard for international law and considerable political ambitions appears poised to bolster these ambitions with WMD. Active and creative diplomacy is needed to shape the security environment of other countries to obviate any motivation to consider WMD as guarantors of their national survival.

Second, the supply policies of a few countries are of doubtful utility for the cause of nonproliferation. While the worst problems in Western countries have been tackled as a consequence of the Iraqi revelations, some former communist countries, notably among the successor states of the former Soviet Union, have not yet installed export control systems that meet the enhanced reliability standards in the West, not to mention Western standards for physical security of fissile materials, crucial chemicals, and biological substances.2 New suppliers are entering the market who are not accustomed to a culture of export controls, even though international obligations, such as the CWC, are beginning to force them into their consideration. Finally, China's policies in this field remain a mystery, as political commitments and actual behavior have shown serious divergences, and the possibility that the central government is not capable of controlling the activities of commercial entities is real.³

Third, the state monopoly of force is no longer guaranteed everywhere. The decay of states that possess WMD or have the capability to quickly produce them raises the specter of subnational units trying to employ these capabilities for their own purposes, possibly across borders. The apparent willingness of a rogue religious sect in Japan to kill indiscriminately for its goals is an indication of what could be possible.

Concern is thus in order. But we should note that among these three factors, only the second is somehow related to the end of the Cold War. It would be wrong to say that the decay of the Soviet Union and present instability in Russia were caused by the demise of the conflict. Rather, both are the consequences of a secular change inside the old Soviet empire.

STATE PROLIFERATION: BALANCE AND PROSPECTS

Proliferation of WMD beyond the Permanent Five (P-5) on the U.N. Security Council is by and large concentrated in three regions: the Middle East with North Africa and the Persian Gulf; South Asia; and East Asia.⁴

These three regions are characterized by protracted interstate conflict and repeated wars. They vary according to the complexity of their conflicts. The Middle East contains a panoply of interstate, internal, and transnational conflicts, such as overlapping ethnic and religious communities. As a consequence, we observe multilateral or multiple, interdependent rivalries providing the context for arms races. The Arab-Israeli conflict has affected the conflict structure significantly, with its most important arms race dyads of Israel-Syria and Israel-Iraq. In addition, the Israel-Libya dyad and, more recently and possibly most importantly, Israel-Iran, deserve much attention, particularly since Iran might be trying to replace Iraq as the proto-nuclear counterweight to Israel. A second fault line is found in the Persian Gulf, where the Iraqi-Iranian competition for regional domination has also stimulated interest in strong (so far conventional) armament among the smaller Gulf states (the Saudi Arabian acquisition of Chinese CSS-2 intermediate-range missiles is noteworthy here). Inter-Arab competition (Syria-Iraq; Egypt-Libya) adds to the region's complexity. Fundamentalist Sudan remains a source of instability at Egypt's southern flank. Fundamentalist movements across the Islamic world, most disturbing in Algeria, are a factor in the background that affects proliferation threat analysis. Such movements, taking over power in a middle-sized or large state, may enter office with quite different calculations concerning the utility and the employment of WMD than moderate secular forces.

The conflict in South Asia is "doubly" bilateral: the Indian-Pakistani rivalry drives Pakistan's nuclear weapon program, while India's proximity to China is its main motivation for developing a nuclear capability. These complex rivalries present stumbling blocks for regional nonproliferation efforts. China is a legitimate nuclear

weapon state, according to the NPT. India rejects regional solutions that do not include China and refuses to undertake any global commitments that would discriminate against India (in comparison to China's rights). Pakistan has declared its readiness to accept either solution, but only together with India. The lingering lowintensity war in Kashmir contains the permanent danger that a hot war may break out that could well escalate into a nuclear exchange. Indian and Pakistani experts declare these fears exaggerated and hope for the establishment of stable deterrence. But this hope may prove elusive, given the particular circumstances prevalent in that region.

In East Asia, the main problem lies in the idiosyncrasies of the North Korean regime.⁵ Pyongyang is characterized by a combination of Stalinist paranoia and the death throes of communism: a dangerous mixture. North Korea's relation to international law is estranged, to put it mildly. Because of its chronic opacity, the intentions, objectives, and capabilities of the country and its leadership are hard to decipher. Assessments of its nuclear potential range between two ready-made weapons and the lack of electronic expertise and precision instruments to permit the production of nuclear weapons in the foreseeable future. There are no doubts about North Korea's massive chemical armament and a missile arsenal with ever-increasing range. A strong suspicion exists that North Korea is also working on biological arms. Whatever motivations lie behind all these efforts, it is likely that a change in North Korea's governmental system would help decisively in overcoming the East Asian proliferation problem. The approach attempted in the U.S.-North Korean Agreed Framework and presently further elaborated under the auspices of the Korean Energy Development Organization (KEDO) is a risky experiment, but for the time being it is the only game in town.

A minor, but still notable proliferation danger in the region is that of Chinese policy. Whether China asserts its national interests and territorial claims, bolstered by increasing military power, or instead adopts the role of a responsible and self-constrained political hegemon, willing to entertain genuine arms control and to accommodate its neighbors' security interests, remains to be seen. The answer to the question will be one of the key variables in East Asian, Southeast Asian, and South Asian security and will influence proliferation motivations across the continent. However, it would be much too simple to draw a linear causal link between Chinese be-

havior and regional proliferation activities.

The Association of South East Asian Nations (ASEAN), an economically and politically very dynamic grouping, approaches the Chinese question with its own four-part strategy. First, they plan a strong conventional defense, particularly in the area of advanced air and naval forces, with a view to developing impressive response options to possible Chinese power-projection attempts far from its shores. Second, ASEAN is trying to entice China into cautious regional confidence-building and arms control measures under the auspices of the ASEAN Regional Forum (ARF), with the backing, inter alia, of the United States. Thirdly, ASEAN has concluded a nuclear-weapons-free zone treaty, with a view to delegitimize the nuclear threat against them and to prevent Chinese nuclear deployments in the South China Sea. They show no sign of an interest in WMD as a counter to Chinese nuclear power. The chemical weapons that may exist—in Myanmar and, possibly, in Vietnam—were procured in the context of other conflicts. Fourth, the presence of the United States is seen as the ultimate instrument of containment, although the countries differ on how close or how far over the horizon this U.S. presence should be.

Very similar observations apply to Japan, where support for a nuclear weapon capability has been fairly stable at about a quarter of Liberal Democratic Party adherents, with the vast majority remaining in opposition to such a move. Japan also is trying to engage China in a bilateral confidence-building and transparency dialogue. It is quite enthusiastic about the idea of an Asian equivalent to EURATOM, which would include China. Japan's Self-Defense Forces are making great efforts to maintain and enhance defensive sea control—air- and navybased—around the islands, and recent protests by Okinawans notwithstanding, Japan has reaffirmed its keen interest in keeping intact, and indeed deepening, the security relationship with the United States.

By the logic of power balancing, the U.S.-Japanese relationship is likely to be reinforced if the Chinese threat should grow, and, conversely, to be loosened when the need for a deterrent against China is less evident. The United States has always had the ambition to be a Asian power; its historical isolationism applied to Europe, but not to East Asia and China. If China's policies become more assertive, Japan and the United States would feel compelled to move closer together. Quite likely, another nuclear weapon state, Russia, would see an interest to

join the two others in an effort to contain and balance China. Japanese motivations for a national nuclear capability would thereby be reduced further.

The conclusion here is: the proliferation problem is not global and generic, but regional and specific. Unless and until many variables within the regional security complex⁶ converge and other, constraining variables simultaneously weaken, further WMD proliferation will not occur. Thus, the identification of single indicators may lead to grossly overstated threat analysis and, in turn, to flawed policies.⁷

PROLIFERATION IS NOT A NATURAL CONSEQUENCE OF "SHRINKING UMBRELLAS"

This discussion has already indicated that power vacuums and changes in alliance coherence do not inevitably lead to a drive towards the bomb. That is all the more true for Europe. Despite the mushrooming of predictions that a united Germany would seek nuclear weapon status, all is calm at the German front, and the same applies to its non-nuclear weapon states neighbors and partners. Interestingly enough, considerations of various European national "bombs" were most lively when the "umbrella" was the thickest: in the late 1950s and early 1960s, when thousands and thousands of tactical nuclear weapons were put into Europe to "couple" the United States with Europe, and U.S. nuclear superiority over the Soviet Union was larger than at any later date.

The Europeans have willingly accepted the relegation of NATO's nuclear assets to the role of "last resort," and watched over the reduction of the previously complex arsenal to a few hundred weapons of only one single type. The German and Western European reaction to the French offer of "concerted deterrence" has ranged between hostility and friendly reservation. The statement of the German Minister of Defense that this was an interesting topic for future discussions, but that NATO's posture served German security perfectly in the light of the existing and foreseeable risks was telling.

The ability of "nuclear umbrellas" to grant extended security is not absolute. It depends on the threat it is supposed to counter. For America's European allies, the threat is gone. Some years ago, 20 to 30 crack Soviet tank and motorized rifle divisions, backed up by a powerful second echelon, a chemical arsenal, and forward-deployed nuclear weapons threatened a large-scale attack

from positions only a few hundred kilometers away from the English Channel, supported by the forces of the Warsaw Pact countries. Today, Russia is deprived of allies and faces hostile attitudes from countries that once were Soviet republics, and it possesses just some 5,000 of the Soviet Union's 60,000-odd tanks west of the Urals. Overall, its armed forces are in dismal shape, with supplies, logistics, maintenance, leadership, morale at a very low level, and these troops have had to move a thousand kilometers east of their previous deployment sites. Combat-ready elite units are confined to a few parachute and Interior Ministry divisions, whose task it is to watch over domestic security. The Western alliance is in better shape than the vast majority of observers would have predicted in 1990 and possesses a superiority on the continent that considerably surpasses that of the Soviet bloc in the past. This is not at all a threatening situation that cries out for a nuclear counter. It should surprise no one, therefore, that U.S. allies in Europe are not contemplating proliferating themselves. Instead, they are focusing more on combatting proliferation elsewhere. For U.S. allies, WMD capabilities are not a subject for serious discussion under foreseeable circumstances. A most improbable combination of events would be required to change this situation: the reemergence of not only an aggressive, but also a powerful Russia, a small probability indeed given the state of the Russian economy; and the dissolution of NATO, the Western European Union (WEU), and the European Union (EU), of which we have not the faintest indication. Moreover, these scenarios are mutually exclusive: if Russia were to become a threat, NATO, the WEU, and the EU would receive a powerful impulse to become more cohesive. If the transatlantic tie were to weaken, the Europeans would have an additional motivation to move closer together. The only NATO country whose security is facing increased, rather than diminished, threats since 1990 is Turkey, sitting amidst the conflict regions of the Balkans, the Caucasus, and the Middle East, and facing both a considerable amassing of Russian conventional forces and the full spectrum of Middle East WMD proliferation. It is clear that Turkey needs a strong and unwavering NATO commitment to its security in order to avoid the possibility of future considerations about enhanced national arms capabilities. Again, the issue is not generic, but confined to a very circumscribed and specific regional threat situation for a state that is, at the same time, in a difficult domestic crisis.

TECHNOLOGY DIFFUSION DOES NOT AUTOMATICALLY LEAD TO HORIZONTAL PROLIFERATION

The "technology imperative" is as time-honored a pattern of thinking as it is flawed. This argument predicts that the more countries that acquire dual-use, WMD technology, the more will indeed see fit to make these weapons for themselves.¹⁰

What are the facts? Today, 40 to 50 countries may possess the capacity to start nuclear weapons programs that could achieve their objectives within five to 10 years or even less. It is worth remembering that the list of countries whose ratification is needed for the Comprehensive Test Ban Treaty (CTBT) to enter into force is 44; these countries have power reactors or research reactors. Taiwan, not recognized as a nation-state but highly capable in nuclear technology, must be added. Half that number has possessed this possibility for several decades. Yet, these countries have renounced nuclear weapons, and this renunciation has become deeper rooted every decade. No nuclear weapons programs can be seen (with the few exceptions that have been discussed in the first section of this essay). The underlying philosophy of the Carter administration, that plutonium (Pu) recycling will "tempt" countries to go nuclear is now 20 years old. None of the four non-nuclear weapon states that have Pu recycling programs has done so (despite the possible risks of such programs).

For chemical and biological weapons capabilities, the number of countries with basic capabilities is even larger. Many countries have laboratories in universities, hospitals, or agrochemical, pharmaceutical, or other chemical complexes that could make them. Still, the number of chemical and biological weapons proliferators is small relative to the number of states with the technical capability to proliferate in this area.

The conclusion is obvious: there is no linear, causal relationship between holding technology and abusing it for weapons purposes. For this reason, the term "virtual arsenals" is another device that inserts imprecision and confusion into the proliferation debate. If, for example, the United States were to abolish its nuclear weapons, but keep an infrastructure in readiness to reconstitute them, if needed, one could deem that posture a "virtual arsenal." The nuclear energy program of Finland, in contrast, is no "virtual arsenal," but just this: a nuclear energy program. The political will, the political culture, the societal support, and the intellectual, technical, and

physical infrastructure for making nuclear weapons are lacking completely. To compare this peaceful state of affairs to a highly threatening situation where these missing links are present is grossly misleading.

On the other hand, we have evidence of how proliferation occurs: not by governments waking up in the morning with the thought that they have good dual-use technology, so why not make a bomb? Rather, states determined to acquire WMD seek coherently and systematically to procure the equipment needed for that purpose. The Indian and the North Korean nuclear programs were consciously dual-use from the beginning with a view to put these technologies to military use. Israel received the needed facilities from France for the single purpose of building nuclear weapons. Pakistan and Iraq started out with complex procurement operations for weapons purposes. Iraq and Libya did the same for chemical weapons. The push was political, and the technology followed, not the other way around.

Does all this mean we should be complacent about technology diffusion? Not at all. But the direction of concern must be different: it is not the growing number of "virtual arsenals" that is of concern. The availability of computers that help with nuclear weapon design and the foreseeable coming of age of laser enrichment technologies that will reduce dramatically the number of stages needed to reach weapons-grade enrichment and reduce the signatures that reveal the existence of enrichment activities, both have a negative effect. Similarly, the rapid advances of biotechnology, which will make the development of biological weapons a small-site, quick, and, possibly, militarily usable endeavor,12 also create new problems. These advances reduce the time needed by any of this handful of identifiable governments that would like to have these weapons to go from decision to completion of a program and make detection of this process more difficult. Thus, the problem is not quantitative, but one of decreasing difficulties for determined proliferators, and increasing difficulties for mounting a successful nonproliferation policy.

PROLIFERATION IS NEITHER INEVITABLE NOR IRREVERSIBLE

Behind proliferation processes, three motivations can be discerned¹³:

• The prevailing motivation is security. India versus China, Pakistan versus India, Israel versus the Arab World, Syria versus Israel and Iraq, Iran versus Iraq and vice versa have been seeking a guarantee for national survival in a weapon of last resort.

- Status and prestige may play a role in enhancing existing motives, but are, at most, secondary in driving governments towards WMD.
- The most dangerous case is that of an ambitious, revisionist state that wishes to bolster its expansionist plans with a WMD capability. If such policies are pursued by an erratic, overambitious, paranoid, totalitarian, and highly personalized leadership, the situation is very dangerous. But these cases are very rare in world politics.

The lust for proliferation is thus not a natural corollary of national development in an anarchic international system. The vast majority of states do not have WMD programs, and many have even developed a genuine abhorrence for them. It is a myth that the nonproliferation regimes are primarily contingent on denial, export control, and superpower threats and pressures. ¹⁴ On the contrary, these regimes are upheld by the voluntary renunciation of these weapons by almost all states, a renunciation frequently fully supported and carefully watched by public opinion. Just as domestic law could not be upheld without the consent of the vast majority of citizens, so international nonproliferation regimes could not survive without the express willingness of unarmed states to abide by their rules. ¹⁵

Proliferation thus emerges from very specific circumstances: where protracted conflict continues to make war a very real prospect, and/or where totalitarian dictators pursue eccentric and expansionist objectives, proliferation dangers loom large. Both conditions are related: "crazy" or "rogue" states exist mainly in regions of active conflict. If and when these conflicts abate or are resolved, when revisionist states become supportive of the existing system, when territorial ambitions turn into a quest for welfare and more symbolic rewards, then proliferation will fade. Thus, the "gaining of time," the main purpose of nonproliferation policies can, with some luck, effectively forestall proliferation in such cases.

That proliferation is not a "natural process" is also proven by the reversals in the nuclear field noted earlier, Argentina, Brazil, South Africa, Belarus, Kazakstan, and Ukraine. Beyond that, many of the states with nuclear energy have at one time considered going nuclear, but have decided against this step. The number of these additional "reversals" is, at a minimum, 15, and probably higher.¹⁷

PROLIFERATION AFFECTS POLITICAL BALANCES, AT MOST, MARGINALLY

The impact of nuclear weapons on power balances in the past was astonishingly small. To the nuclear weapon states, their arsenals have not afforded great additional power. All present P-5 had their permanent seats before acquiring nuclear weapons. Bipolarity during the Cold War rested largely on conventional sources of power geography, population, technological prowess, economic strength, organization, conventional armed forces, and power projection. Nuclear weapons neutralized each other, nothing more. The superpower Soviet Union did not survive a change in the correlation of these forces to a new hierarchy: technology, economic strength, and conventional armed forces, even though the two sides' nuclear arsenals were no less powerful. And nuclear arms have not helped Britain or France enhance their status, prestige, or real influence; their special position depends very much on their past roles as world powers and their particular place in the integration of Europe.

The same applies for the proliferants. Israel's position is mainly dependent on its impressive and repeatedly proven conventional superiority over its Arab neighbors, as well as its much greater administrative and organizational proficiency and societal cohesiveness. India's weight in world politics diminished rather than grew after 1974, when it tested a nuclear device. Its recent resurgence has rested on domestic economic reforms and its regional power projection capability, not on its nuclear capabilities. Its desperate attempts to keep the nuclear option open, as demonstrated during the CTBT negotiations, are now pushing India into increasing isolation from the non-aligned movement and thus threaten to divorce it from its main means of gaining greater international influence. Its recent failure to gain majority non-aligned support for its candidacy for a temporary seat on the U.N. Security Council is telling proof of its waning influence. Pakistan has gained nothing at all by its nuclear activities, but rather has been marginalized through the end of the Soviet presence in Afghanistan. Elsewhere, the powerlessness of nuclear weapons for those trying to acquire influence or to protect core values has been demonstrated by the South African experience.

Conversely, the two countries that have gained the most in terms of international status and influence over the last decades, Japan and Germany, stand out because they renounced WMD. Germany has realized its once utopian national ideal of reunification not despite, but precisely because of, its non-nuclear status. It is unlikely that even its Western allies would have condoned the growth in national capabilities implied by unification if Germany had been seen as nurturing military weapons ambitions. ¹⁸ Japan and Germany are today the leading candidates for permanent seats on the U.N. Security Council, should U.N. reforms take place.

What affects the world power balance is the capacity to project power rapidly and effectively, using advanced state-of-the-art technology. For the foreseeable future, the United States will be the unmatched master in that game and will persevere, though possibly at rising costs and losses, in prevailing over challengers at both the regional and global level.

The effect of WMD on regional balances is more complex. The development of stable deterrence dyads is possible; however, this possibility hinges on specific circumstances, not on a universal law of deterrence. That Israel, a nuclear-armed state, has been attacked twice (in 1973 by a conventional pincer assault, and in 1991 by repeated missile strikes) certainly does not correspond to European notions of successful deterrence. Nor do border skirmishes, like the Chinese-Russian hostilities at the end of the 1960s or the Pakistani-Indian ones at the beginning of the 1990s, correspond to our expectations for risk-avoidance emerging from a mutual nuclear deterrence posture. It is far more likely that the stability of the East-West military situation derived from a variety of factors, not just from the nuclear stalemate, and that these factors might or might not prevail in other regions.

Other evidence strengthens the argument that WMD exert a marginal influence on regional power balances: states that engage in WMD programs are the same states that also invest heavily in conventional armaments. If the expectation were there that WMD afforded a decisive military or political advantage, this bifurcated armament investment strategy would be nonsensical.

So far, the regional level has been discussed in terms of WMD arms races. WMD monopolies would be a different story. The potential for political blackmail because of such a monopoly would be considerable, if the objectives were offensive and expansionist, not purely defensive. However, the inevitable consequence would be strong efforts by neighbors to match the potential or to ally with external powers to have it neutralized. In other

words, the specter of monopoly leads to countermoves that neutralize the potential and lead right back to an "arms race" situation, where the effect of WMD is marginalized. Effects on world politics could emerge from possible rival superpowers allying with antagonistic regional forces, as during the East-West conflict. As long as the hegemonic status of the United States remains unchallenged, though, such effects are not to be expected.

Thus, the consequences of proliferation on world politics might be far less than we would expect at first glance. 19 Admittedly, WMD in regions of conflict would be an additional reason to exercise great prudence before decisions about out-of-area interventions are taken. However, great power behavior in the last decade does not betray a particular lust for intervention in the absence of proliferation. Conversely, if vital interests are at stake, the potential or actual presence of WMD might not be enough to prevent intervention. That Iraq had chemical weapons, might possess biological arms, and cannot be completely ruled out as having a nuclear device was known in January 1991. The counterattack for the liberation of Kuwait was undertaken nonetheless, and, after thorough consideration, the allies decided to utilize conventional means only.

Opposition to nuclear proliferation, thus, should be much less rooted in concern about a radical shift in the global balance of power and much more rooted in the enhanced probability that nuclear weapons might be used as more states acquire them.²⁰

It should be noted that subnational proliferation could insert a new, sobering element into world politics. National governments could be confronted with threat and blackmail from sources that would be difficult to locate, as they would not necessarily be territorially confined, and thus could not be handled with the accustomed responses of non- and counterproliferation. This possibility, however, moves the issue to a much more fundamental problem: the likelihood of the survival of the nation-state as the unchallenged, or at least clearly dominant, actor in the realm of security and power politics (as opposed to the economic field, where actors of considerable weight are already compromising state power). As this essay focuses on issues of statecraft, this question will not be tackled here. However, it must be recognized as one of increasing importance.²¹

PROLIFERATION IS NOT A NORTH-SOUTH CONFLICT

Another red herring deserving prompt dismissal is that the proliferation problem is part of the North-South conflict. This postulate has been expressed in reckless suggestions to turn the Coordinating Committee for Export Controls (COCOM) from the East-West to a North-South direction.²² Again, this cliché bears little relation to reality and is pernicious politically. The nonproliferation regimes, as stated above, rest on the voluntary renunciation of WMD by the overwhelming majority of the world community. Developing countries are an important part of these regimes. Of course, for many of them renunciation means little, as their poverty and limited technological development obviate any plans even to develop biological or chemical weapons, the easiest parts of the WMD triad to obtain. However, for an increasing number of slightly more developed countries, WMD are becoming a real option, as they may have a rudimentary or even well-developed chemical, pharmaceutical, and, in a few cases, nuclear industries, or, at least, research establishments. Their faithfulness in holding to regime norms and rules is thus essential, and will be even more crucial in the future. Fortunately, many of them have no intention whatsoever to breach these rules. To the contrary, they understand well that nonproliferation serves global stability, as well as their own national security interests, and some have become guardians and promoters of these regimes. The role of, among others, South Africa, Sri Lanka, and a group of francophone African states, led by Benin, to secure the indefinite extension of the NPT is a case in point.²³

The cooperation of the developing countries was also necessary for the decisions to strengthen the IAEA safeguards system, the conclusion of the CWC, and the amendment of the BWC to add a transparency and verification protocol. The suggestion of turning COCOM from an East-West to a North-South direction is particularly inappropriate in light of the urgent need to include industrializing countries from the South in the export control regimes. South Africa, South Korea, and Brazil (and Argentina, which has left the non-aligned group) are already members of the Nuclear Suppliers Group (NSG); South Africa and Argentina have also joined the Missile Technology Control Regime; the stipulations of the CWC make it mandatory for quite a number of developing countries to establish their own export control systems; the same applies for a smaller number obliged to observe Article III, 2 of the NPT (on nuclear exports).

Given these important facts, where did the myth that proliferation is a North-South problem come from? One source is the fact that the politics of nonproliferation frequently pit countries from the North against countries from the South. Nuclear weapon states must confront the demands of the non-aligned movement, which is usually inclined to be less compromising regarding the anxiety of the nuclear weapon states in defending their privileges than their allies or partners.²⁴ However, as divisions within NATO countries and within the EU on Article VI during the NPT Review and Extension Conference and worldwide protests against France's last nuclear test series prove, this is not really a North-South issue.

A second source of this myth is the deep distrust that developing countries harbor about export control systems which, until recently, have been exclusively "Northern" clubs. Western negligence, complacency, and arrogance, more than anything else, are responsible for this situation. Rather than creating transparency and conducting extensive consultations about objectives and practices of export control with the faithful "Southern" members of the nonproliferation regimes, export control systems were set up unilaterally, frequently without any publicity, and certainly without serious attempts at explanation. As a consequence, mischievous parties in non-aligned circles have succeeded in rallying quite considerable support behind their requests for the complete abolition of export controls. This division is thus politically serious, but it is the result of inept policies rather than necessity. It is encouraging that—in the aftermath of the NPT extension—the NSG is now taking steps to enhance transparency and to start a dialogue with developing countries.25

A third source is the insatiable desire of developing countries for assistance and cheap technology transfer. Much of this is preposterous, unrealistic, and still wedded to models of state interventionism whose time has passed. Still, the stubborn refusal of the West to make available the modest sums that would help the West at least to show that its cares—notably in the context of the IAEA technical assistance fund—contrasts strikingly with the West's inexorable willingness to throw good money after bad in defense projects. In this context, the resentment of the developing countries becomes understandable.²⁶

A fourth factor is the concern of many developing countries about intrusive verification measures, which they regard as attempts to encroach on their national sovereignty. Given that the nuclear weapon states have put off such measures for a long time, this concern should be understandable, even though it is a rather serious obstacle to install reliable verification systems. However, the argument may well serve as a pretense for governments seeking to flout their obligations and prevent close scrutiny of their activities.

Taken together, these four aspects do not justify all the talk about a "North-South conflict" in nonproliferation matters. They call instead for coherent, active, and sympathetic diplomacy. This diplomacy should aim at isolating those who strive to break the rules, while courting the vast majority of faithful parties to the global non-proliferation regimes. The present course of Western diplomacy risks having precisely the opposite effect: dividing the faithful regime members between North and South and driving the well-minded non-aligned countries into a completely false and deleterious solidarity with a handful of wrongdoers.

CONCLUSION

It is thus unlikely that the proliferation of WMD will exert a strong influence on world politics in terms of shattering power balances or defining new regions of overriding strategic importance. WMD terrorism is a different story, but is unlikely to affect interstate relations. Fortunately, proliferation is a slow and reversible process confined to a small number of states. It is also likely to be a finite process, with a shrinking number of aspirants interested in WMD. We can also expect that for additional countries that enter our list of suspects, some presently on this list will return to the crowd of states that supports international nonproliferation efforts.

The most important barrier today in nonproliferation policy is the lack of consolidation among the nonproliferation regimes. This conclusion follows logically from the fact that the voluntary and binding renunciation of WMD by the great majority of states is the decisive reason why proliferation has been such a slow and relatively exceptional process. This renunciation is built on a prudent assessment of national security interest, on the growing power of an emerging international norm against the use and possession of such weapons, and—increasingly—on domestic norms working in the same direc-

tion. Nonproliferation regimes help in all these aspects. They strengthen the nonproliferation side in the national interest calculus, as they diminish the risk that renunciation may lead to WMD proliferation by one's neighbor. In this sense, the confidence-building effect of the regimes' verification systems must not be underrated. This effect of the regimes would be significantly enhanced by additional steps to provide positive security assurances. The regimes also help to isolate the handful of wrongdoers and create a legitimate and widely shared claim for taking action against their ambitions and activities. They also serve as essential points of reference for the domestic discourse on nuclear weapons issues.

Political efforts to address the proliferation problem are far more important and significant than military ones. Protection against proliferation risks and capabilities to counter them are, of course, not negligible. As long as troops might be asked to operate in an environment where WMD might be deployed, they are entitled to have the best protection possible. This qualification is also the precondition to grant badly needed security assurances to WMD-threatened countries, a very important step toward further reducing motivations for acquiring WMD.²⁷

A last question remains: why are the red herrings discussed in this essay so much in vogue among political, journalistic, and even scholarly treatments of the proliferation problem? In my view, the culprit is the theory of realism in both its more scholarly and its naive populist versions: that the tectonic movements in the international power balance are inducing former "client" states to seek security in national nuclear armaments; that these states would automatically pursue unilateral, military measures over collective security; and that only hegemonic power can create and maintain international nonproliferation regimes. These assumptions pervade current writing on proliferation and nonproliferation. Similarly, the unconscious belief of many authors that one dichotomy (East-West) must be followed by another one (North-South)—bolstered by a nuclear confrontation appears to be deducted from a cruder, narrower, Manichean version of the theory of the eternal power struggle among states.

The problem with many of these assumptions is that they are simply not being borne out by the evidence we have today. In its ambition to construct a parsimonious theory of international relations, the realist model omits relevant variables that shape behavior, events, processes, and structures in the reality of world politics. Its model is thus not congruent with the reality it pretends to describe and explain. While realism describes important variables of international relations at the systemic level, 28 it fails to account sufficiently for the countervailing effects of international norms and the institutional structures in which they are embedded. 29 It also glosses over the internal structures, including normative ones, of nation-states. 30 Both factors play a major role in nuclear proliferation and nonproliferation. To neglect them leads to a highly selective perception, false theory, and wrong and occasionally dangerous policy prescriptions.

Old clichés die hard, but they must be exposed for what they are (false generalizations) if we hope to provide accurate analyses of current proliferation problems and create better policies for future nonproliferation efforts.

- ¹³ Richard Betts's lucid analysis in "Paranoids, Pygmies, Pariahs and Non-proliferation," *Foreign Policy* 26 (Spring 1977) has stood the test of time and has been confirmed by a stream of monographs, country studies, and comparative analyses.
- ¹⁴ Joseph DiChiaro III and Edward J. Laurance, "Nuclear Weapons in a Changing World: Consequences for Development," *The Nonproliferation Review* 1 (Winter 1992), p. 28; and James F. Keeley, "Toward a Foucauldian Analysis of International Regimes," *International Organization* 44 (Winter 1990).
 ¹⁵ An international Peace Research Institute Frankfurt study project, supported by the Ford Foundation, the MacArthur Foundation, and the Rockefeller Foundation has undertaken a major effort to understand the reasons behind the active support given by many non-nuclear weapon states to the cause of nonproliferation. See also Harald Müller, "Maintaining Non-Nuclear Weapon Status," in Regina Cowen Karp, ed., *Security with Nuclear Weapons? Different Perspectives on National Security* (New York: Oxford University Press (and SIPRI), 1991).
- ¹⁶ Yehezkel Dror, Crazy States. A Counterconventional Strategic Problem (Lexington: Heath, 1971); and Michael Clare, Rogue States and Nuclear Outlaws: America's Search for a New Foreign Policy (New York: Hill and Wang, 1995).
- ¹⁷ For a more elaborate discussion, see Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation* (New York: Columbia University Press, 1988), and Reiss, *Bridled Ambition. Why Countries Constrain their Nuclear Capabilities* (Washington, D.C.: Woodrow Wilson Center Press, 1995).
- ¹⁸ Harald Müller and Wolfgang Kötter, Germany and the Bomb. Nuclear Policies in the Two German States, and the United Germany's Nonproliferation Commitments, PRIF Reports, No. 14, 1990; on Germany as a "satisfied power," see Elisabeth Pond, "Germany Finds Its Niche as a Regional Power," Washington Quarterly 19 (Winter 1996).
- ¹⁹ For other views, see Lincoln S. Bloomfield, "Nuclear Spread and World Order," *Foreign Affairs* 53 (July 1975); John J. Weltman, "Nuclear Devolution and World Order," *World Politics* 32 (January 1980); and Roger Molander and Peter A. Wilson, "On Dealing with the Prospect of Nuclear Chaos," in Brad Roberts, ed., *Weapons Proliferation in the 1990s* (Cambridge, MA: MIT Press, 1995).
- ²⁰ On this, I agree with Molander and Wilson ("On Dealing with the Prospect of Nuclear Chaos"), as well as with Scott Sagan in his debate with Kenneth Waltz (see Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate* (New York: Norton, 1995)).
- ²¹ Martin van Creveld, *Nuclear Proliferation and the Future of Conflict* (New York: Free Press, 1993).
- ²² Strategic Survey 1991/92 (International Institute for Strategic Studies: London, 1992), pp. 203, 204.
- ²³ Harald Müller and David Fischer, *United Divided. The Europeans and the NPT Extension Conference*, PRIF Report 40, 1995.
- ²⁴ See Harald Müller, David Fischer, and Wolfgang Kötter, *Nuclear Non-Proliferation and Global Order* (Oxford: Oxford University Press, 1994).
- ²⁵ Harald Müller, National and International Export Control Systems and Supplier States' Commitments under the NPT, PPNN Issue Review 9 (Southampton, England: PPNN, 1996).
- ²⁶ See Lawrence Scheinman, *The International Atomic Energy Agency and World Order* (Washington, D.C.: Resources for the Future, 1987), pp. 246-256.
- ²⁷ Virginia Foran, ed., Security Assurances, Implications for the NPT and Beyond (Washington, D.C.: Carnegie Endowment for International Peace, 1995).
- ²⁸ By far the best effort to apply realism systematically to the field of nonproliferation is the special issue of *Security Studies* 2 (Spring/Summer 1993) edited by Zachary Davis and Benjamin Frankel ("The Proliferation Puzzle. Why Nuclear Weapons Spread (and What Results").
- ²⁹ Volker Rittberger, ed. (with the assistance of Peter Mayer), Regime Theory and International Relations (Oxford: Clarendon Press, 1993).
- ³⁰ Peter Katzenstein, ed., *The Culture of National Security. Norms and Identity in World Politics* (New York: Columbia University Press, 1996).

¹ E.g., *National Defense Industry: Strategic Assessment 1996* (Washington, D.C.:, Institute for National Strategic Studies, 1996), pp. 202-205.

² Graham Allison, et al., Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material (Cambridge, MA: MIT Press, 1996).

³ An interesting analysis is Weixing Hu, "China's Nuclear Export Controls: Policy and Regulations," *The Nonproliferation Review* 1 (Winter 1994), pp. 3-9.

⁴ For an overview, consult Leonard S. Spector, Mark G. McDonough, and Evan S. Medeiros, *Tracking Nuclear Proliferation: A Guide in Maps and Charts* (Washington, D.C.: Carnegie Endowment for International Peace, 1995).

⁵ For background, see Andrea Matles Savada, ed., *North Korea. A Country Study* (Washington, D.C.: Library of Congress, 1994).

⁶ On this concept cf. Barry Buzan, *People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era* (Hemel Hempstead, England: Harvester-Wheatsheaf, 1991).

⁷ This is the distinct risk of "casting a wide analytic net" to understand proliferation dangers, see Leonard Spector, "Strategic Warning and New Nuclear States," in Kathleen C. Bailey and M. Elaine Price, eds., *Director's Series on Proliferation No. 5*, Lawrence Livermore National Laboratory, 1994, pp. 1-16.

⁸ John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," *International Security* 15 (Summer 1990); George Quester and Victor Utgoff, "U.S. Arms Reductions and Nuclear Nonproliferation: The Counterproductive Possibilities," *Washington Quarterly* 16 (Winter 1993), pp. 129-140; and Kenneth N. Waltz, "The Emerging Structure of International Politics," *International Security* 18 (Fall 1993).

⁹ On this issue, see the discussion in *Relations Internationales et Stratégiques*, No. 21 (Spring 1996).

¹⁰ Cf. Albert Wohlstetter, et al., Swords from Ploughshares: The Military Potential of Civilian Nuclear Energy (Chicago: University of Chicago Press, 1979).

¹¹ For a discussion of the term, see Michael J. Mazarr, "Virtual Nuclear Arsenals," *Survival* 37 (Autumn 1995).

¹² Richard Novick and Seth Shulman, "New Forms of Biological Warfare?" in Susan Wright, ed., *Preventing a Biological Arms Race* (Cambridge, MA: MIT Press, 1990).