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Hydrogen or Not, North Korea Conducted a Fourth Nuclear Test

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The January 6, 2016 artificial earthquake in the northeastern region of North Korea was caused by a hydrogen bomb explosion, or so the official North Korean announcement claimed. Until international efforts to gather samples of atmospheric debris of the explosion provide stronger indication of whether this is true or not, the emerging international consensus is that the explosion was similar in its yield (its "power") to the three previous ones. In other words, the explosion was at most a boosted nuclear explosion, and not a hydrogen one. The yield of a full-blown hydrogen bomb explosion would have been much greater than the recent explosion. In December 2015, North Korea's ruler claimed that his country had mastered the technology for a hydrogen bomb; as such, regardless of the actual result of the current explosion, Kim Jong-Un would probably find it hard to back away from this claim.

It is not clear what motivated North Korea to carry out this explosion – perhaps internal reasons or an attempt to command international attention. Moreover, the timing of the test was puzzling, as it seemed recently that North and South Korea were trying to move closer, and the test obviously angered China, Pyongyang's main economic lifeline. As in previous cases, North Korea justified the test as necessary in order to counter US aggression and nuclear threats. North Korea also noted that this was a "weapon of stability" that would serve as a deterrent against invasion, so that North Korea did not find itself on the same path as Libya and Iraq.

The initial reaction to the news at the global level has so far been quite similar to the reaction to the three previous North Korean nuclear tests. There have been sharp condemnations, mixed with expressions of anger and anxiety from North Korea's neighboring states, particularly Japan and South Korea. There was a quick message from the UN Security Council accompanied by their noted intent to impose penalties. The United States, which in 2013 issued protective promises toward South Korea, made a quick show of force by flying a B-52 bomber over South Korea, demonstrating its commitment to the defense and security of its regional allies. Mostly, however, questions focused on whether North Korea's claims were true – in this case, whether or not this was

a hydrogen explosion, or even a boosted fission-based explosion. South Korea and the US lead the camp of skeptics, but whether hydrogen or not, this was still clearly North Korea's fourth nuclear test – and one would think that would be serious enough.

The implication of the test is a further weakening of the already shaky nuclear nonproliferation regime. In addition to the direct threat that North Korea poses to its neighbors, North Korea, through its proliferation activities, is a serious threat to the Middle East and beyond. North Korea is a major player in supplying know-how, technologies, and components in the nonconventional realm to several countries in this region. These relate to nuclear and missile technologies, and possibly also chemical weaponry, of which North Korea has an abundant supply. North Korea shares its know-how in return for hard cash; there is no issue of ideological affinity or necessarily shared interests.

The case of North Korea is dismal testimony regarding the ability of negotiations to stop a determined proliferator. Negotiations with North Korea that aimed to defuse its military nuclear activities failed, and North Korea is today a nuclear state. The US-negotiated Agreed Framework of October 1994, and the September 2005 agreement with North Korea secured in the framework of the Six-Party Talks were both greeted with celebrations that North Korea had been successfully restrained, and in both cases were proven wrong. While the 1994 agreement most likely delayed North Korea's program, Kim Jong-Il went on to produce both plutonium and high enriched uranium (HEU), each with the potential to produce nuclear weaponry. It had been thought that if the price was right, and that if enough economic assistance was offered, North Korea would be willing to give up its nuclear ambitions. Either the price was not right, or North Korea became an expert at "selling" its nuclear program repeatedly, without actually giving it up.

Looking at the global nonproliferation scene, the picture is gloomy. Iran has not given up its nuclear weapons ambitions, but only delayed their realization by some years. According to some reports, other Middle East states might be considering joining the club. Meanwhile, India's de facto nuclear status will not hinder acceptance of its developing a civil nuclear program, and Pakistan hopes for a similar deal. And although the political pressures may still produce resolutions here and there, the prospects for a Middle East zone free of WMD are practically nil. The mistrust in the region has only been exacerbated following the Iran deal.

Can anything be done? China has the potential to influence the reduction of the North Korean threat, and thus affect the global nonproliferation situation, but even though the latest test has angered China considerably, it is uncertain that it will take firm action. Beijing is still deterred in this regard due to its fear that too much pressure will lead to the collapse of North Korea and a multitude of refugees crossing the border into China. Also,

this could bring the US-allied South Korea closer to China's border, effectively becoming its next-door neighbor.

What about the broader international community? Assuming some penalties will be imposed, what impact will this have on the overall picture? And how long will it take before everyone goes back to business as usual? The sad reality is that once a state crosses the nuclear threshold, not much can be done to turn back the clock. Continued US insistence on the denuclearization of North Korea – without any policy for actually addressing the threat – looks increasingly detached from realities on the ground. The message for Iran's nuclear program – and the celebrated Iran deal reached in July and implemented this week – should ring loud and clear. Focus should be on ensuring that in ten to fifteen years (or less if Iran goes back on its promises) we do not wake up to a similar Iranian nuclear test.