Since the collapse of the Berlin Wall five years ago, few events have qualified as watersheds in international affairs. Yet, while the conflict in Bosnia-Herzegovina wears on with no end in sight, one event does stand out: the explosion of a mortar shell on February 5, 1994, in the northeast corner of Sarajevo's crowded Markale marketplace.

The bloody results of that incident, a little after noon on a Saturday, were filmed within minutes and televised around the world. The images provoked the first engagement of NATO in European hostilities since it was founded four decades earlier and the first involvement of U.S. forces in combat in Europe since the beginning of the Cold War. Within days it also drew Russia into the hapless circle of Balkan problem-solvers, along with a unit of Russian peacekeeping troops -- the first entry of Russia into the former Yugoslavia since Joseph Stalin's break with Josip Broz Tito in 1948. The massacre in the small marketplace led to an American-neqotiated coalition of Bosnian Muslim and Croat forces, to American air strikes on Bosnian Serb fighters, and to a new international peace initiative (the five-member Contact Group headed by the United States).

Yet to this day it has proven impossible to determine the perpetrator of that single largest killing of civilians in the three-sided civil war that has ravaged Bosnia-Herzegovina since April 1992. (A wildly accepted estimate is 68 dead and 197 wounded.) Despite the magnitude of the incident, reporters on the scene expended little effort in investigating or trying to reconstruct events surrounding the massacre. Nor did local or international authorities in Sarajevo provide much in the way of insights. Still, there was something to be learned, especially from the United Nations peacekeepers assigned to investigate the Markale mortar shelling. Now, through interviews with key U.N. officials charged with probing the massacre, who were sworn to neutrality, and through the confidential final United Nations Protection Forces (UNPROFOR) report assessing
the investigations they conducted, it is possible for the first time to shed light on why there have been such different interpretations of what took place that fateful day.

The aftermath of the massacre was utter chaos, with questions initially raised about whether it had been caused by a mortar, a howitzer, or a planted bomb, and about the direction from which a projectile may have been fired. Confusion was compounded by the inability of UNPROFOR to search for possible mortar launching sites on either the Serb or the Muslim sides of Sarajevo, a lack of forensic studies on victims, and the incomplete identification of the casualties.

The UNPROFOR officers who hurried to the scene immediately after the blast were barred from the interior of the market by Muslim policemen. Partly as a result, the UNPROFOR officers deposed no eyewitness of the shelling at that time. In the UNPROFOR report, the officers stated that they were permitted to stand at the southern edge of the market and observe while casualties were evacuated in the trunks of small cars and on truck beds. That was "done exceptionally quickly," one officer reported -- within 25 minutes. The officers saw no medical personnel attending the evacuation. When the evacuation was complete, the two officers were permitted to walk the 40 yards or so from the edge of the market to the explosion crater in the northeast corner, where they stood watch until the first UNPROFOR crater analysis team arrived at about 2 p.m. They later reported that there had been no tampering with the crater site while they watched.

The four U.N. officers who visited the marketplace in the immediate aftermath estimated that there were between 100 and 150 casualties -- dead and wounded. On a tour of all of Sarajevo's hospitals, a Pakistani major assigned to UNPROFOR counted 61 dead and 148 wounded. He reported most had been hit by shrapnel consistent with a mortar shell detonation.

Conflicting Investigations

The international responses to the Markale massacre developed along a political fault line. Within hours of the explosion, the Clinton administration, while acknowledging there was no definitive culprit, pointed the finger of blame for the massacre at the Serbs. Amplifying the message were television broadcasters -- especially on CNN -- and newspaper editorial writers who flatly charged that the Bosnian Serbs had perpetrated the massacre.

Against a background of 22 months of Serb shelling of Muslim positions in Sarajevo including an attack that killed 10 persons on the previous day and was attributed to the Serbs by United Nations officers -- a majority perception
developed that it was indeed a Serb shell that had struck the marketplace. The perception was understandable, given the relentless and protracted bombardment of the city that had once been home to nearly 500,000 people. Bosnian Serb officials justified the siege with several arguments: They were responding to Muslim shelling, which at times was considerable, according to UNPROFOR itself; they lacked the manpower to take the Muslim-held center of Sarajevo in house-to-house fighting; they already controlled the mainly Serb boroughs of the city, such as Grbavica, and did not want more territory.

In the days following the massacre, President Bill Clinton and his chief foreign policy advisors used the perception of Serb culpability in successfully pressing for a NATO ultimatum demanding withdrawal of Serbian heavy artillery from the siege lines through and around Sarajevo. Madeleine Albright, the U.S. representative to the U.N., said on television: "It's very hard to believe any country would do this to their own people, and therefore, although we do not know exactly what the facts are, it would seem to us that the Serbs and the Bosnian Serbs are the ones that probably have a great deal of responsibility."

Clinton said, "We rule nothing out" in response to the attack. Secretary of State Warren Christopher added that "we do not rule out the use of NATO air strikes," and a senior administration official was widely quoted as saying, "We have very little doubt it was the Serbs." On February 6, Clinton went further, saying, "Obviously it seems highly likely that the Serbs are responsible." Yet, then and later, there was no physical evidence or any official reporting from the field that implicated the Bosnian Serb forces in the shelling, according to a high-ranking American intelligence official.

As secrecy cloaked the investigations of the incident by United Nations officials, reports about alleged Muslim perpetrators appeared, mainly in the European press. One sensational and widely reprinted report was based on a document, skillfully forged by Greece, attributing to Lord David Owen, the European Union peace negotiator, a statement blaming the Muslims. In fact, the salient quote was drawn verbatim from a dispatch by Tanjug, the Belgrade press agency. With quotation marks removed, it looked as if Lord Owen had written it, rather than Tanjug.

The suspicion of Muslim perpetrators was underscored in some minds by previous UNPROFOR reports, which I have seen, of incidents in which Muslim forces fired deliberately at Muslim civilians -- with the aim of creating incidents that could be blamed on the Serbs. Yet other UNPROFOR reports in 1992 and 1993, which I have also seen, list incidents in which Muslim forces sought to provoke Serb reactions (which usually became overreactions) by firing directly at Serb positions during putative cease-fires.
An indicator of the thinking in some U.N. quarters was the final message of the departing head of UNPROFOR in Bosnia-Herzegovina, Lieutenant General Francis Briquemont, on January 9, 1994: "In Sarajevo, the [Muslim-led] BiH army provoke the BSA [Serbs] on a daily basis. This is very easy for us to notice as the BiH mortars are generally located near UNPROFOR units."

Muslim officials bitterly assailed U.N. officials for alleging that their forces may have been culpable on February 5. As an international official noted, they were "accusing several times that U.N. or UNPROFOR members often stated Bosnian responsibility in the market shelling."

What follows are details of the marketplace massacre investigation drawn from interviews with UNPROFOR, U.N., and U.S. officials as well as from hitherto unavailable documents.

According to the final UNPROFOR report of its Markale massacre investigations, a 120 mm mortar shell fell between 12:10 p.m. and 12:15 p.m. into the market, detonating upon hitting the asphalt. Such shells weigh about 26 pounds and carry 5 pounds of high explosives. The market area, 100 feet by 164 feet, is faced by seven- to eight-story buildings on the north and east sides.

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Mortar bombs tend to spray shrapnel in a characteristic splash pattern in the direction of the launch. By establishing the outermost "wings" of a shrapnel splash, a baseline can be drawn. When that line is bisected by a perpendicular line drawn through the center of the impact, the direction of the launch can be determined. Additionally, if the hole made by the shell and the alignment of the tailfin are properly measured, the angle of descent can be determined.

A French UNPROFOR lieutenant accompanied by a warrant officer arrived five minutes after the detonation and stood watch at the market place until officers specialized in artillery -- a French lieutenant and a sergeant major -- arrived about 2 p.m. to analyze the crater. The specialists took a compass sighting based on "the shrapnel scrape pattern" to measure the direction of the projectile. They reported the mortar shell bearing to be "0620 mils," or a northerly direction. They also removed the shell's tail fin.

At 3 p.m. a French captain, also assigned to examine the site, marked lines formed by the characteristic "wings" of the mortar fragment splash and reckoned the bearing to be 0800--1,000 mils, a far more easterly direction. With that direction in mind, he reckoned the descent angle as sharp 1,400 mils, or
about 79 degrees -- to carry the shell over an adjacent 60-foot-tall building. His estimate would most likely have placed the weapon's launch site behind Muslim lines.

Four hours after the explosion, a Canadian major made a third, independent investigation and came to a conclusion paralleling that of the initial analysis of the French lieutenant, but differing considerably from the second analysis, by the French captain. The Canadian reported that the bearing was from the north-northeast and had a shallower angle of descent, closer to 70 degrees.

While the Canadian's first-day investigation concluded that there was no evidence for ascribing the shell specifically to either Serbs or Muslims, the early investigation report of the French captain, implicating the Muslims, remained in currency for several days. Apparently it formed the basis of an allegation, conveyed on various occasions by Lieutenant General Michael Rose in Sarajevo and Yasushi Akashi, the U.N. special envoy in Zagreb, that Muslims had fired a mortar at fellow Muslims. Thus diametrically opposed news came into play in international circles.

On February 9, NATO foreign ministers, animated by the belief that Serbs had fired the mortar, were meeting in Brussels to set a 10-day deadline for a Serb withdrawal of heavy weapons to a point 12 miles outside of Sarajevo. At that moment, Rose, the UNPROFOR commander in Bosnia, was negotiating a ceasefire in Sarajevo. He was operating on the French captain's premise that Muslims may have shelled their own people.

The Serb commander, General Manojlo Milovanovic, showed up on time at Sarajevo's Butmir Airport to meet Rose. But the Bosnian government leaders, long reluctant to commit themselves to ceasefires that they believed gave the Serbs an advantage, stayed away, breaking the date. In a fury, as he later confided to a BBC correspondent, the British UNPROFOR commander drove downtown to the Bosnian government presidency to confront General Jovan Divjak and President Aija Izetbegovic. Demanding that they sign the ceasefire agreement, he waved an envelope at them, according to senior UNPROFOR officers, saying, "I have an allegation here." Rose said that it implicated Muslims in the mortar attack on the marketplace. He was referring to the French captain's crater analysis. Divjak hastened to the airport and signed the ceasefire accord -- a response that seemed to Rose to confirm the culpability of the Muslims.

At that time, Akashi sent a coded fax message to U.N. secretary-general Boutros Boutros Ghali saying that although no one could be certain, Bosnian Muslims "most likely" were the perpetrators. On February 10, in a telephone call with
Secretary of State Christopher, the U.N. secretary-general, who had actively supported the creation of a heavy weapons exclusion zone around Sarajevo, passed on the Akashi allegation that the Muslims might have fired the shell. Christopher replied that intelligence reports available to him gave conflicting versions of who was responsible, and in effect he rejected the Akashi allegation, a State Department official said.

At the same time, Major General John MacInnis, the deputy UNPROFOR commander in Zagreb, a Canadian with 30 years of artillery experience, examined the French captain's report from February 5 and concluded, "This is nonsense. There's something wrong here." He proposed a "painstaking" investigation by an international team. Akashi endorsed the idea.

The Final Investigation

The team of UNPROFOR artillery specialists, led by Lieutenant Colonel Miehel Gaudhier of Canada, assembled February 11 in Sarajevo. It included a Pakistani major, a French captain, a Russian lieutenant colonel, and a Spanish captain. Assisted by two technical experts from France and Ireland, they conducted seven more analyses of the marketplace crater and interviewed 13 witnesses over three days.

The team dismissed the initial report by the French lieutenant as flawed because his method of analyzing the crater was "suspect." They also dismissed the French captain's analysis because he had committed a serious "mathematical error" in calculating the direction from which the round came. The international team concluded the shell could have come from anywhere in a cone of two and one-half square kilometers north-northeast of the marketplace that straddled the confrontation line between Bosnian Muslim and Bosnian Serb forces. But they noted that "freshly fallen snow" obscured possible firing sites, and that the investigating team encountered obstruction by both Serb and Muslim authorities.

The team reported that while it was impossible to determine the angle of the shell's descent closer than a span of 45 to 90 degrees, it definitely came from north-northeast. They said the distance, based on the range of the 120 mm mortar, could have been anywhere between 300 and 5,551 meters. They concluded: "The distance of origin of fire clearly overlaps each side of the confrontation line by 2,000 meters."

There was one other indicator of culpability, though it would hardly rate as evidence in a court of law: Bosnian Serb officers confirmed to the team that their Kosevo Brigade had mortar positions in the area of Mrkovici, which lay within the cone determined by UNPROFOR as encompassing the possible firing
On February 5, U.N. monitors (UNMOs) stationed within Serbian lines reported no shots fired from the Serbian mortars. Although the UNMOS stationed near the Muslim side had "no indica- non of the origin of the fire," the fact that U.N. monitors had reported no shelling from Serb-controlled areas led one high-ranking UNPROFOR official to speculate from this "shot report" that the mortar was probably fired from within Muslim lines.

A summary of these findings was made avail- able to the press on February 16, but was generally ignored. UNPROFOR commanders were greatly relieved that their "painstaking" investi- gation, as General Macnis described it, did not turn up clearcut evidence of a culprit on either side of the lines in Sarajevo.

Yet conflicting opinions about the identity of the perperrators of the massacre persist. Top- ranking officials of the United Nations and the European Union have confided to this reporter that they are convinced a Muslim unit fired the mortar. They reason that the Bosnian govern- ment had most to gain from the massacre. Most senior officials of the Clinton administra- tion are equally certain the Bosnian Serbs did it, believing that, given the Serbs' brutal track record, it was a logical conclusion. None of the top officials of the United Nations, European Union, or Clinton administration wished to be quoted on their views.

Unquestionably, the Markale massacre altered the field on which the Bosnian conflict is being played. New players entered as peacemakers on the ground and as combatants in the air. The level of fighting around Sarajevo subsided. Some relief came for the 300,000 civilians of beleaguered Sarajevo as cannons, mortars, and tanks of the Bosnian Serb forces were with- drawn. Serb civilians in the Sarajevo borough of Grbavica also gained some relief from Muslim snipers, machine guns, and mortars. But re- sponsibility for the massacre, notwithstanding the professed certitude of both Muslims and Serbs and some others watching the conflict from afar, remains elusive.