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Karima Bennoune
Special Rapporteur in the field of cultural rights
United Nations
c/o Office of the High Commissioner for Human Rights
By Email: srculturalrights@ohchr.org

Dear Ms. Bennoune,

On behalf of the American Association for the Advancement of Science (AAAS), I am pleased to write in response to your request for comments regarding the intentional destruction of cultural heritage. AAAS is the world's largest multi-disciplinary scientific society with approximately 100,000 individual members and 252 affiliated societies, and the publisher of the leading peer-reviewed journal, *Science*. AAAS has established a global reputation as a pioneer in the application of science and technology for chronicling, protecting and advancing human rights for many decades.

Since 2014, AAAS has conducted research into the destruction of cultural heritage in armed conflict as part of its Geospatial Technologies Project and in partnership with the Smithsonian Institution and the University of Pennsylvania's Penn Museum. Specifically, AAAS has used satellite imagery and remote sensing to document the destruction of numerous sites of cultural heritage in Syria and Iraq. These are not only globally recognized sites, such as the UNESCO World Heritage and Tentative World Heritage Sites, but also a myriad of lesser-known sites in both countries. In defining cultural property, we have adopted a broad definition, encompassing archaeological sites, cemeteries, cultural centers, historic structures, libraries, monuments, museums, religious sites, and other types of sites (e.g., zoos). In addition to our documentation efforts, which have revealed multiple examples of cultural property destruction of archaeological and religious sites, our collaborators have led efforts to teach best practices to prevent damage and provide protection against destruction of sites in Syria and Iraq.

The conflicts in Syria and Iraq have resulted in damage to many sites of cultural importance. Some of this damage is a by-product of the conduct of hostilities. However, cultural heritage is also being deliberately targeted as a tactic of war. In our work, it is evident that the intentional destruction of cultural heritage generally falls into three categories: destruction during military action, targeted

destructive acts of cultural erasure, and looting of cultural sites due to both opportunistic and organized looting.

Many acts of targeted destruction may be considered legal within the conduct of armed conflict. An example was the destruction of the Carlton Citadel Hotel, located within the UNESCO World Heritage Site of Aleppo alongside the Aleppo Citadel. The 150 year-old hotel was completely levelled in 2014 when Syrian opposition fighters detonated tunnel bombs below the hotel. The hotel was believed to be in use by the Assad government's forces as a military barracks at the time, making the bombing permissible under some interpretations, as the hotel had become a legitimate military target. AAAS documented the destruction of the Carlton Citadel Hotel and many other buildings within the UNESCO World Heritage Site of Aleppo in a report, *Ancient History, Modern Destruction: Assessing the Current Status of Syria's World Heritage Sites Using High-Resolution Satellite Imagery* (2014).

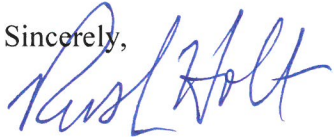
AAAS has documented cultural erasure by the group ISIS in several locations in Syria and Iraq. This erasure has been a performative act of destruction on many occasions, wherein the destruction of the site is advertised in online videos for propaganda purposes and later followed by erasure of the remains of the site by removing the rubble from the vicinity. One such example comes from Raqqa, Syria, a UNESCO Tentative World Heritage Site. The shrine tombs of Uwais al-Qarani, Obay ibn Qays, and Ammar ibn Yasir were destroyed with explosives by ISIS in 2013. This destruction and the subsequent methodical clearing of the site were documented by AAAS using satellite imagery (*Ancient History, Modern Destruction: Assessing the Status of Syria's Tentative World Heritage Sites Using High-Resolution Satellite Imagery*, 2014—here called AAAS TWHS Report). Another such destructive act occurred in Mosul, Iraq. ISIS destroyed Nebi Yunis, also known as the Tomb of the Prophet Jonah, in July 2014. AAAS was able to show not just the demolition of the site using satellite imagery, but continued monitoring of the location revealed systematic clearing of all traces of the rubble on the site using heavy equipment.

Looting of archaeological and other sites often occurs as a result of the instability of armed conflict. Security may be difficult or impossible to maintain at sites due to a breakdown of government services, leading to opportunistic looting by the local population. Other looting in the Syrian conflict has been attributed to armed actors on all sides of the conflict, particularly ISIS. In Syria, AAAS has seen looting at numerous sites, from a handful of looters' pits to many thousands on a single site. The site that has experienced the most intense looting is the site of Dura Europos in Syria, a UNESCO Tentative World Heritage Site. As we note in our report, "Inside the ancient city wall the disruption was so extensive that counting of individual looting pits was impractical; the pits overlap so that it is impossible to distinguish one unique pit from another" (AAAS TWHS Report). AAAS has also published findings on looting at the UNESCO Tentative World Heritage Sites of Ebla and Mari. AAAS is part of a consortium of research groups, known as Safeguarding the Heritage of Syria and Iraq. Partners in this group are working to understand the targeting of cultural property, teach on-the-ground professionals to respond to emergency situations, and conduct site preservation activities. The Smithsonian Institution and the University of Pennsylvania are spearheading these efforts. For example, an emergency workshop was held in 2014 with Syrians working at the Mar'arra Mosaic Museum, an important repository for Roman and Byzantine mosaics. Due to their efforts, conservators were able to implement emergency protective measures that largely protected the mosaics when the site was bombed in 2015. Other on-the-ground intervention and capacity-building activities are underway, including courses at the Iraqi Institute for the Conservation of Antiquities and Heritage in Erbil, Iraq.

We hope that our comments on this topic are useful as you proceed with your consultation to address the destruction of cultural heritage as a human rights violation. We are continuing to do work in this area, including upcoming examination into the historical and religious significance of sites that have been damaged. Should you have any questions about our comments or seek further elaboration on our research, please contact Dr. Susan Wolfenbarger, Senior Project Director of the AAAS Geospatial Technologies Project, at swolfenb@aaas.org. All of the research mentioned in this report can be accessed via our website: aaas.org/geotech/culturalheritage.

We wish you much success with your efforts.

Sincerely,

A handwritten signature in blue ink that reads "Rush Holt". The signature is written in a cursive style with a large initial "R" and "H".

Rush D. Holt, Jr.