Stone structures in the Syrian Desert

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Stone structures in the Syrian Desert - by Amelia Carolina Sparavigna

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An arid land, known as the Syrian Desert, is covering a large part of the Middle East, extending from the northern Arabian Peninsula to the eastern Jordan, southern Syria, and western Iraq. In the past, this harsh environment characterized by huge lava fields, the "harrast" [1], was considered as a formidable barrier between Levant and Mesopotamia. This desert possesses two volcanic regions: one is the Jabal al-Druze in As-Suwayda Governorate, the other is the Harrat Ash Shaam in South Syria, south-east of Damascus [2,3]. When we observe these huge harrast from space, using for instance the Google Maps, we discover that they are crossed by several stone structures, known as "desert kites", which were the Neolithic stone traps for the game. These structures were firstly observed by the pilots of the Royal Air Force in the 1920s, flying over the desert. The pilots nicknamed them "kites", because these lines reminded them the lines of a kite flown by children to play [4]. Beside the kites, many stone circles are visible too, as many Stonehenge sites dispersed in the desert landscape. Probably, this harsh environment was friendlier and then quite populated in ancient times.

We usually imagine our ancestors, before they settle down, as people simply hunting and gathering for food, but this is not true. The "desert kites" are the remains of an ancient hunting technique based on stone-walled traps, the construction of which surely involved several people for long times. The desert kites were used to push large herds of animals into some enclosures, or, in the worse case, to fall off from steep cliff edges [4]. The simplest structure of a desert kite has a triangular shape, consisting of two long, low walls built of stones and arranged in a V-shape, like a funnel, ending as a corral. Hunters pushed the game between the walls, trapping then the animals into the end of the structure. It is usually considered that the animals were there slaughtered "en masse" [4-7]. The faunal remains still found in these burial mounds are more recent than the desert kites [8]. Since the Khaybar area is full with ancient burial structures, linking the "desert kites" with "human villages" could be a fact of some importance, and, northward, as far as Turkey. Over a thousand have been recorded in Jordan alone [4]. The earliest desert kites are dated to the Pre-Pottery Neolithic B period of 9th-11th millennia BP. It is the radiocarbon analysis on charcoal within the kite pits helping to date them [4]. As we discussed in the paper on Arabia [11], an interesting fact is necessary to note [8]. In the Khaybar area, Arabia, there are some remains of Neolithic villages very close to the hunting desert kites. Linking the "desert kites" with "human villages" could be a mistake, because wild animals are avoiding places where people live. Since the Khaybar area is full with ancient burial structures, sometimes placed inside the desert kites, a possible conclusion is that these burial mounds are more recent than the desert kites [8]. Because this conclusion is coming from the observation of satellite images, it seems that the satellites, and in particular the Google Maps, can help the archaeological researches providing a portrait of the human collective activities in the early stages of civilization.

Even the Syrian Desert is dispersed with smaller circular stone structures and mounds, sometimes inside or near the desert kites (see Fig. 2 for instance). On these earlier human settlements, news was
announced last year that Robert Mason, archaeologist of the Royal Ontario Museum, discovered what we can define as a Syrian Stonehenge [12]. The site, near the Deir Mar Musa al-Habashi monastery, is composed by some tombs and stone circles. From the stone tools he found there, it’s likely that the structure dates from the Middle East’s Neolithic Period, roughly ranging from 8500 BC to 4300 BC. In Western Europe, the first structures built of stone date to approximately 4500 BC. The Syrian site is then quite older than the European sites. Edward Banning of the University of Toronto says that more fieldwork is necessary because it is possible that the landscape that Robert Mason has identified could be an example, the Desert Kites, of the Middle East’s Neolithic practice of burial practices out of the settlement, that is, an off-site cemetery [12].

The report in [12] is continuing with a suggestion by Julian Siggers, of the Royal Ontario Museum. Remembering that agriculture spread from the Near East to Europe, he is proposing the possibility that the stone landscapes, that is the creation of stone circles, had travelled with agriculture. On the other hand, Banning is replying that stone structures are found throughout the world and that people in Western Europe could have developed the stone landscapes independently of the people in Middle East. According to Edward Banning, the site studied by Mason is not unique [12,13]. "Archaeologists have detected, via satellite photos, what appear to be cairns and stone circles in other areas, including the deserts of Jordan and Israel. However, he admits that most of these things have not received a lot of archaeological investigation."

It is quite interesting what Ref.12 is telling, that the satellites are revealing so many structures, that probably, it is impossible to study all of them off and then many sites are not receiving specific investigation. We can check by ourselves the dispersion of stone circles in the Syrian Desert, using the Google Maps or Acme Mapper, for instance. Here again, these map services are excellent to reveal the large landscapes of the past. From Fig.4 to Fig.8, I am proposing some images of stone circles, sometimes with radial structures inside. There are also complexes composed by several structures (for a collection of images see [14]). To study and date the site (see [14]), to study and date the site. A huge fieldwork in the desert is necessary, requiring time and financial supports. The satellite imagery, as the Google Maps are clearly demonstrating, is a quite good source of information to locate the sites, propose their preservation and then plan field expeditions, perhaps with the support of contemporarily geophysical researches, which are surely performed in this area full of oil resources.

References
1. In Arabic, the lava fields are the harraat, sing. harrah; before a name, harrat.
13. A web-site, 27 March 2011, http://www.stonepages.com, published the news of a 11,000-year-old settlement unearthed in a Syrian-French archaeological mission unearthed a small village in the archaeological site of Tel Qarasa in the west of Swaïda province dating back to around 11,000 years. The search conducted a year ago, in the Neolithic period, of burial practices out of the settlement, that is, an off-site cemetery.
14. More images at https://sites.google.com/site/syriandesertsatelliteimagery/
15. According to Wikipedia, desert kites and stone circles can be...
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