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Online Journal in Public Archaeology

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FORUM The limits of collaboration. Osmanagić in the campus

This forum responds to the controversy generated after the invitation of Semir Osmanagić to give a lecture at Linnaeus University last autumn. Was it convenient? Did it 'hurt' in some way archaeology? Could it be helpful to understand certain alternative approaches? And social perspectives towards the past? What is our role towards these issues? After a contextualization of the topic by Tera Pruitt, four professionals will raise their opinions about the event. Finally, Cornelius Holtorf and Jacob Hilton analyze the consequences of the lecture.

INVITATION

Dr. Semir Osmanagić (Houston, Texas)

The Bosnian Valley of the Pyramids in Context

Time: 18 October 2011, 2.00 – 4.00 pm

Venue: Linnaeus University, Kalmar, University Library, Studio 1 The lecture will also be broadcast from Room Plato, Campus Vaxjo

Semir Osmanagić is best known for his controversial work on the Bosnian pyramids at Visiko. In this lecture (with discussion) he will contextualize his work in Bosnia both in relation to other pyramids around the world and in relation to tourism and heritage in Bosnia. Although most scholars dispute the existence of any such pyramids in Bosnia, Osmanagić continues to investigate what he believes are the oldest pyramids in Europe and the largest pyramids in the world in Visoko. After the lecture, we will critically discuss the way in which the Bosnian pyramids received global media coverage and the relations among the media, archaeological research and cultural heritage in Bosnia and beyond.

More information at

- www.samosmanagich.com
- www.bosnianpyramidofthesun.com
- http://irna.lautre.net

Free entry! All welcome!

ASSOCIATED PRESS RELEASE

An internationally known and highly controversial guest will be presenting at Linnaeus University next Tuesday. All welcome!

Background: most archaeologists consider Semir Osmanagić a pseudo-archaeologist since the pyramids he claimed to have found in Bosnia are, in all probability, natural, geological formations. In spite of that, he has received large attention in the global media, and his activities in Bosnia have attracted many tourists to a poor country that has obviously had a strong own need, and also a demand by tourists, for a sensational cultural heritage.

(See also here: http://sv.wikipedia.org/wiki/Bosniska_pyramider.)

Professor Cornelius Holtorf is responsible for Linnaeus University's programme in Heritage Studies (for more information about the programme see: http://lnu.se/utbildning/program/kgkum):

"We invited him not because we take his interpretations scientifically serious, but because we think we have to discuss his activities and its outcomes. The Bosnian pyramids have affected not only tourism and the perception of cultural heritage in Bosnia, but also how we see the cultural heritage in society more generally. Can invented heritage have the same (or greater) power than genuine cultural heritage? What are tourists really looking for when they visit cultural heritage sites? How does one present archaeology and heritage to the global media so that they will be covering it? How does Osmanagić himself see his critics among academic archeologists and specifically among the archaeologists working in Bosnia?"

BLOGS (Where the discussion first started)

Aardvarchaeology:

http://scienceblogs.com/aardvarchaeology/2011/10/swedish_university_invites_ima.php

Archaeological Haecceities:

http://haecceities.wordpress.com/2011/10/13/2012-osmanagich-will-speak-at-a-swedish-university/

Introduction

Tera PRUITT

Pyramids, Performance and Pseudoscience in Visoko, Bosnia

A Valley and A Man: The Story Behind the Bosnian Pyramids

The story is quite simple: an alternative archaeologist in Bosnia-Herzegovina claims that he has discovered the oldest and largest manmade pyramids in the world. Most professional archaeologists strongly disagree; they call his project pseudoscience, arguing that the 'pyramids' are simply straight-edged mountains, in a naturally hilly landscape formed by glacial movements and natural erosion. Despite this seductively simple narrative, the socio-political tale behind the Bosnian Pyramids project, which has held a great deal of power and influence in Bosnia, is a much more complex story.

In April 2005, a man named Semir Osmanagić announced that he had discovered five Palaeolithic pyramids in the small Bosnian town of Visoko, located 15 miles northwest of Sarajevo. Osmanagić was not an archaeologist; he was a business owner and alternative historian, author of books on alien encounters and mysticism in the ancient Maya civilisation (Osmanagic 2004). According to Osmanagić's new claims, the hilly Visočica river valley in Bosnia is actually a rich archaeological landscape, full of megalithic pyramids, ancient rock quarry sites, riverbeds full of 'mysterious stone balls', an a labyrinth of underground tunnels, and includes the largest and oldest manmade pyramid in the world (which the locals call 'Visočica Hill' and Osmanagić renamed 'Pyramid of the Sun').

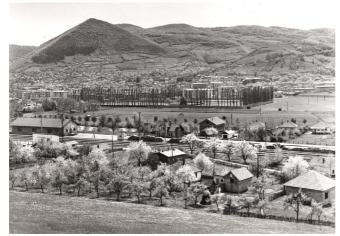


Figure 1.Visočica Hill (Pyramid of the Sun) above the small town of Visoko, Bosnia-Herzegovina.

(This is a freely distributed image)

To this day, Semir Osmanagić manages large-scale amateur excavations in Visoko. Along with a core team of amateur enthusiasts and volunteers, Osmanagić has enlisted the help of credentialed historians, geologists, Egyptologists and archaeologists, as well as an eclectic mix of alternative historians and paranormal energy specialists (ICBP 2008). Each summer, his employed team and hundreds of community volunteers excavate the site. During winter, Osmanagić runs a circuit of media performances and institutional presentations to promote the site and its importance. Previous stops on this circuit include academic presentations in places like the Bosnian Embassy in London and the Society of Alexandria in Egypt, as well as presentations at fringe and paranormal history conferences like 'Megalithomania' in Glastonbury and the 'Histories & Mysteries' conference in Edinburgh, which featured crystal skulls.

The Bosnian Pyramids project has a strange dynamic between a 'hard scientific' and a 'fringe' identity. Semir Osmanagić first and foremost promotes the project as a genuine scientific enterprise, where 'proofs' are collected through scientific methodologies like radiocarbon dating (ICBP 2008), geothermal and radar analysis, core sampling, and scientific excavation (Osmanagic 2007a). According to Osmanagić: "The Archaeological Park Foundation believes that only a multi-disciplinary approach, with serious scientific argumentation on internationally recognized level will yield a successful realization of the Bosnian Pyramids project" (Osmanagic 2007a).

However, hidden underneath the project's veneer of science is an equally intense New Age sensationalism and endorsement of 'mysterious energies' that drive the pyramid mythology. Many, if not most, of Osmanagić's core supporters have backgrounds endorsing fringe, supernatural, extraterrestrial and conspiratorial theories in their own books and research (ICBP 2008; Coppens 2009). As his project has matured, Osmanagić has become more comfortable promoting the pyramids' esoteric side. For example, the headlining picture on the most recent official Bosnian Pyramids website sports a picture of a pyramid with an energy beam coming out of the top (Fondacija 2011).

Reaction and Reception: A Positive Welcome for Pyramids

After headlines broke in 2005, pyramid frenzy swept Bosnia and Semir Osmanagić became an overnight celebrity. Television media depicted Osmanagić as a khaki-wearing adventurer — a "Bosnian Indiana Jones"— come to help Bosnia's economy in recession by boosting

tourism and by giving the country a positive and sensational past worth international notice (ABC 2006; Foer 2007; Woodard 2007).

Osmanagić promotes his project as a grassroots movement, where the discipline of archaeology is democratized, and where any person can be involved in a positive message and positive economic change. According to Osmanagić:

Our wish is that Bosnia and Herzegowina [sic] becomes a lively place where explorers, students, professors, volunteers of lightened faces exchange their international scientific knowledge. Tourism will develop the market, the economy will raise and infrastructures will be built. (Osmanagic 2006).

He has often implied that the discipline of archaeology, as it is professionally practised now, is an undemocratic and exclusive operation, bordering on a conspiracy, which 'hides the truth' about the real past from the public.

The project's sudden popularity has certainly had an impact on the local economy. Visitors to Visoko rocketed from a mere 10,000 visitors a year before the pyramid story, to 250,000 visitors in the peak year of 2006 (Foer 2007). In a recession economy, still recovering from a recent civil war (1991-1995), the pyramids have given Visoko a much-needed economic boost. The region has bloomed with new stores selling handmade pyramid souvenirs, new paved roads, new jobs as tour guides and new restaurants (Sito-Sucic 2006). The project has undeniably been a great stimulus and inspiration to the Bosnian people.



Figure 2.

New businesses, like this one, were built in Visoko to accommodate the influx of tourists.

This restaurant advertises with a large brick pyramid on its front lawn. (Photo by Tera Pruitt)

The project has also created a much-desired new history: a Bosnian 'Golden Age'. In a politically disjointed country, which experienced a great deal of suffering in its recent civil war, "nostalgia for the lost native places and homes, shattered dreams, insecurity, disappointment, pessimism are continuing to haunt everybody" (Zhelyazkova 2004: 17). According to many, many Bosnians are divided over whether or not Bosnia should even consider itself a unified 'nation'. Bruce Trigger writes of nationalistic archaeology: "The primary function...is to bolster the pride and morale of nations or ethnic groups. It is probably strongest amongst peoples who feel politically threatened, insecure or deprived of their collective rights by more powerful nations" (Trigger 1984: 360). In such a context, the story of Bosnia as a 'source of world civilisation' provides a positive symbol for a country still divided over its own national identity. It provides a town in recession with a much-needed economic boost.

The only problem, one might argue, is that the 'pyramids' are completely invented.

The Science, Pseudoscience, and Performance of Pyramids

Mainstream professional scientists have been quick to dismiss the Bosnian Pyramids. In many ways, the project is 'classic' pseudoscience; it blurs the line between material reality and wishful thinking, maintaining 'truth' only through a thin, fragile performance of science (Pruitt 2011). Semir Osmanagić and his team run the gamut on pseudoscientific methods: huge claims and overly ambitious promises, disparaging academia while, simultaneously, appealing to academic authority, a dogged adherence to outdated theoretical models, presenting selective and distorted images of the site, basing interpretations on logical fallacies and inconsistencies, and having an obsession with esoteric and supernatural mysteries (c.f. Fagan 2006).

Archaeologists, like Paul Heinrich at Louisiana State University, argue that "The landform [that Osmanagić] is calling a pyramid is actually quite common. They're called 'flatirons' in the United States and you see a lot of them out West...[and] "hundreds around the world," including the "Russian Twin Pyramids" in Vladivostok (qtd. in Woodard 2009). This assessment was confirmed in a local study by a team of Bosnian geologists led by professor Sejfudin Vrabac at the University of Tuzla. In 2006, they collected core samples from the 'pyramids' and confirmed that the hills in the Visočica river valley are

simply natural geological formations made of clastic layered sediments (Vrabac 2006).

No genuine, uncontested 'pyramid' archaeology has been found at the site. No archaeological tools or any clear signs of settlement for building pyramids have been identified (Rose 2006b). The only human alterations of the landscape date from much later periods of time: some evidence of nomadic Neolithic activity, some Iron Age settlements, but most archaeology in the region dates from the Medieval to the present (Malcom 2002), not from the Palaeolithic, as Osmanagic has dated the pyramids (ICBP 2008). The artefacts that Osmanagić has attributed to 'pyramid builders' are controversial at best, dubious at worst. Most 'pyramid artefacts' that I have personally seen have been simply rocks; other objects, like metal moulds and grindstones, were attributed, even by the employed site archaeologist, to the Iron Age or later (Pruitt 2011).



Figure 3.

Project volunteer proudly showing off a 'pyramid artefact' marked with a record number.

In reality, this is not an artefact, just a rock.

(Photo by Tera Pruitt)

Osmanagić, like most pseudoarchaeologists, does not rigorously test his own assumptions or build explanations based on found evidence, but rather he constructs 'proofs' of monumental architecture after the fact to verify his pre-established theories. His excavations look like he is carving pyramidal steps out of the hills, and his site photographs and reports carefully angle and construct a reality that looks very different from the one a visitor sees when they actually walk through the site (Foer 2007). Osmanagić simply performs the activities we come to associate with scientific archaeology, such as digging up things and collecting radiocarbon results, but it is a performance with no substantive evidence.

A good example is the way Osmanagić used radiocarbon analysis to date his pyramids to the Palaeolithic (ICBP 2008; Pruitt 2011). In 2008, genuine samples of carbonized material were taken by a credentialed archaeologist employed by the pyramid team. These samples were carefully packed and shipped to reputable radiocarbon laboratories, such as the Gilwice Radiocarbon Laboratory in Poland, which then delivered genuine radiocarbon results back to the pyramid team. These results were then presented at the project-funded "1st International Scientific Conference of the Bosnian Pyramids" by a member of the Gilwice Radiocarbon Laboratory. So far, this is a structured and scientific series of events.

The problems emerge in Osmanagić's interpretation. There was no evidence to suggest humans ever came in contact with the carbonized material found in the tunnels and radiocarbon dated. Even the trained archaeologist who took the samples argued at the conference that the tunnels were likely natural formations, and there was little to suggest the carbon was anything other than a tree root (Lawler 2008). Osmanagić's final interpretation of "Aha! Radiocarbon dates means a Bosnian supercivilisation built pyramids in 34,000 BC!" was a fallacious leap of logic. To the public, however, the series of events seemed legitimate, since radiocarbon analysis and other scientific methods are often thought to simply 'reveal truth', even though they require constant human input and interpretation to construct facts (Pruitt 2011).

Despite the project's invented results, their activities —like the radiocarbon dating, academic conferences, publishing scientific reports—look enormously convincing to the general public. Osmanagić is a master at drawing on reputable institutions and credentialed people to bolster his site's profile and claims. To further his own credibility, in 2010 Osmanagić successfully completed a PhD at the University of Sarajevo.

Incredibly, he also obtained a lecturing post at the American University in Sarajevo in 2011. Despite the fact that most of Osmanagić's work is 'smoke-and-mirrors science', his project now has all the appearance of authority and all the credentials to back his claims. Archaeologists around the world wonder, how did this happen?

Professional Archaeology and the Bosnian Pyramids

Since the beginning of the project, many professional archaeologists have responded critically, even hostilely, to both the creators and the supporters of the Bosnian Pyramids. Professional archaeologists, with genuine concern for Bosnia's heritage, have called the Bosnian Pyramids a "danger to European Archaeology" (Harding 2006). Somber conference sessions and talks have been called to rebuke the project, such as the Ficticious Pasts: A Danger for European Archaeology session at the European Association of Archaeologists meeting in Malta in 2008. Pleading media and academic reports have been published, criticisms have been lodged in Bosnian television, and frustrated articles have appeared in major publications like Archaeology Magazine (Kampschror 2006; Rose 2006a; Rose 2006b), Science Magazine (Bohannon 2006a; Bohannon 2006b), British Archaeology (Harding 2007), Discover Magazine (Bohannon 2008) and Smithsonian Magazine (Woodard 2009) —but to no avail. The Bosnian Pyramid project continues to operate, and for a while it even received government funding despite academic opposition in Bosnia.

Archaeologists are genuinely concerned about the implications of allowing pseudoarchaeology to thrive. The Bosnian Pyramids team is rewriting history with an invented past, and for many people in Bosnia this has become a preferred account of history. Worse still, the amateur team has undeniably destroyed genuine archaeological material, plowing right through layers of history-rich stratigraphy, in their quest to reveal pyramid 'proofs' in the ground bedrock (Rose 2006b). Archaeologists, like Richard Carlton at the University of Newcastle, reflects the despairing attitude of many academics when he says "I have no idea what to do other than to continue to present reasonably argued opposition" (qtd. in Bohannon 2006b).

However, archaeologists desperately trying to 'knock sense' into the supportive Bosnian public have seemed unmindful of the heavy, complex socio-politics that sustain the Bosnian Pyramids narrative.

It is a fact that the project has brought real economic change to

Visoko. A booming new tourism industry has given new purpose to a post-war town. Reporters have found local Visoko residents saying: "If they don't find the pyramid, we're going to make it during the night. But we're not even thinking about that. There are pyramids and there will be pyramids" (qtd. in Foer 2007, emphasis in original). Other residents were quoted as saying: ""Please God, let them find a pyramid", [while] rushing to serve crowded tables" (qtd. in Sito-Sucic 2006). Such public support does not arise from concern over what 'is' or 'is not' archaeology, but rather results from complex social processes: positive impact on economics, social welfare, pride in the past and nationalism. When people feel it necessary to pray for pyramids, when they have a stake in making sure the notion of pyramids survives, then something like the Bosnian Pyramids is bigger than simple fact or fiction.

Where Do We Go From Here?

In some ways, Semir Osmanagić is arguably having greater success than real archaeologists and scientists who are desperate to reclaim factual history in Bosnia. Osmanagić has brought money, media interest, positive feelings for cultural heritage and national pride back to the country through his own ingenuity and design. However, it is also a fact that the Bosnian Pyramid project is pseudoscience. Osmanagić and his team have constructed a theatre and performance of science —amassing academic credentials and drawing on the authority of institutions, presenting and publishing technical reports, conducting excavations and recording numbers on artefact bags— but their interpretations blur fiction with reality. This might be harmless, except that the pyramid project has already destroyed genuine archaeological remains in Visoko in their pursuit of an alternative past.

So far, archaeologists have tried to approach alternative history like the Bosnian Pyramids in at least three different ways. One approach has been to scoff and rebuke pseudoscientific behaviour. In the early days of the Bosnian Pyramids case, this was a common gut reaction, as shocked archaeologists realised that public support was not subsiding, but rather growing (Harding 2006). A second approach that archaeologists have taken has been to simply ignore the alternative archaeology and hope it goes away. Many professional archaeologists in Bosnia have taken this line; for example, after initially speaking out against the project but then receiving harsh reactions and even threats from the public, many archaeologists from the National Museum at Sarajevo have decided to keep quiet and wait out the storm, feeling

that Osmanagić's interpretations will not be sustainable in the long run (Pruitt 2011).

A third approach, which is the most complex and multifaceted, has been to actively engage with and study pseudoarchaeology so that we can better understand why such cases persist. In the case of the Bosnian Pyramids, a few researchers, like myself, have actively engaged with members of the project and with the public in the region, trying to better understand how alternative history like the Bosnian Pyramids can become so accepted and influential in such a short period of time (Pruitt 2009, 2011). Another example is professor Cornelius Holtorf's invitation to Semir Osmanagić to come and speak at Linneaus University in Sweden. This event has triggered a reaction from the archaeological community and is the reason we are talking about the Bosnian Pyramids today.

The questions around Holtorf's invitation are complex. By inviting Semir Osmanagić to speak, did Holtorf unnecessarily give Osmanagić a platform to speak about his project, giving him future leverage and influence to support his alternative claims? But on the other hand, if we, as archaeologists, do not engage with alternative archaeologists —if we do not actively interact with them and understand why they do the things they do— how else can we understand why such projects accumulate so much influence?

This journal issue opens up a much-needed debate in the archaeological profession. It allows us to ask: where do we go from here?



Figure 4.
Semir Osmanagic during a press release.
(Photo by Tera Pruitt)

Responses

Johan NORMARK Osmanagić and Mayanism

Semir Osmanagić has a peripheral connection to the 2012 phenomenon, which relates to the supposed "end-date" of the Maya Long Count calendar on December 21, 2012 (according to the so-called GMT-correlation). He has written a couple of books that have dealt with Mayanism, a pseudoscientific and New Age version of the ancient Maya of which the 2012 phenomenon is a major part (Hoopes 2011). In the conclusion of Osmanagić's book The World of the Maya, he speculates that "as we approach December 21, 2012 and the end of the significant 5200-years cycle in the Mayan calendar, as well as the completion of the longer cycle of 26,000 years we should ask ourselves about the changes foreseen by the Maya. Today's age of transition and chaos spoken of in the wisdom of the Maya will be replaced by "the world of the Fifth Sun"" (Osmanagic 2004:70). He is here referring to the Aztec myth of five creations/Suns, mixed with the Maya Long Count calendar of 13 Baktuns (5126 years), in order to reach the length of the precession of the equinoxes of almost 26,000 years when a supposed alignment between the earth, the sun and the galactic center occurs on the winter solstice of 2012 (Jenkins 2009). This mixture of myths and astronomy is common in the 2012 phenomenon and Osmanagić has made his own contribution by inventing pyramids in Bosnia through what can best be described as terraforming.

Similar to other 2012ers, he is very eclectic and connects dots that cannot be connected in any scientific way. He writes that "Maya is a key Hindu philosophical term meaning "creation of the world" and "the world of illusion". In Sanskrit "Maya" is connected with the concepts of "great", "measure", "mind" and "mother". For this reason, it may not surprise us to learn that Maya was the name of Buddha's mother. The Veda tells us that Maya was the name of a great astronomer and architect. In Egyptian philosophy the term Maya means "universal world order". In Greek mythology Maya is the brightest of the seven stars of the Pleiades constellation. Mayab is also the name of the seat of the Mayan civilization-the Yucatan peninsula" (Osmanagic 2004:5). What we have here is a mixture of Hindu, Buddhist, Egyptian, Greek and Maya words and concepts that ultimately are used to show that the ancestors of the Maya actually were aliens and that they came from the Pleiades.

Hence, the pyramids in the Maya area (and in Bosnia) are believed to be part of a greater complex that originated from outer space. According to him, "the Mayan hieroglyphics tell us that their ancestors came from the Pleiades [...] first arriving at Atlantis where they created an advanced civilization. The building of temples in the shape of pyramids enabled the Maya to obtain more energy [...] from the interior of the Earth, because the pyramids were erected on energy potent points [...] and from the cosmos, because the energy coming from outside the Earth was maintained longer and was more intense in the pyramids" (Osmanagic 2004:69-70). The references to the Pleiades may sound "innocent." However, the "Pleiadeans" are more or less "Aryans" from outer space. They are described as white-skinned, blueeyed, blond, and "physically attractive" in literature about alternative history and galactic influences. Atlantis or the Pleiades are simply new versions of diffusionism, which is the dominant explanation for cultural similarities within Mayanism. The aliens have taken on the "white man's burden" to spread civilization.

Osmanagić's "dissertation thesis" Non-technological Civilization of Mayas versus Modern Technological Civilizations (2007b) is basically a reproduced and partly expanded version of The World of the Maya. He must have been asked to add some sociological literature in order to get his degree. According to Osmanagić himself, the thesis is "a novelty in regards to the official and sanctioned knowledge about the Maya culture". One of these supposedly sanctioned facts is that the Maya were a "Neolithic culture". No contemporary academic scholar claims this. The Neolithic is a time period based upon the prevalence of stone tools and an agricultural and sedentary life-style in Europe. It no longer implies a certain "cultural stage" throughout the world as Osmanagic believes.

Without any archaeological support Osmanagić denies the existence of the Maya after the 10th century AD. This goes against the massive amount of archaeological, ethnohistorical, and linguistic data that we do have. Today roughly 7 million people speak several Maya languages.

Osmanagić makes use of a vocabulary that in itself indicates that he has not studied the Maya in any great detail. Only if one has a limited view of a complex scenario can one claim that there are "indisputable examples" where "scientific evidence speaks for itself". Such an example is his claim that the Maya had a quartz skull technology. These skulls are far from indisputable examples. The quartz heads were made in Germany during the 19th century, not by ancient aliens.

His final "analysis" in his thesis consists of a comparison between the Maya and the "West." The comparison emphasizes "achieved levels of knowledge", parameters apparently dependent upon what Osmanagić himself finds to be important. First there is a set of primary comparative parameters such as civilizing goals, wisdom, love as a model of behavior (!), harmony with nature, spirituality, and art. This is followed by several parameters related to territory. His goal is to compare the Maya and the West by determining if they had or have reached the desired level of civilization, were or are on the path to the desired level of civilization, or if they are or were on the negative level of civilization. This teleological view of cultural evolution is not exactly at the cutting edge of social science. One wonders how Osmanagić received a PhD for this "thesis" which has a scientific quality lower than most BA-theses.

Lorna RICHARDSON Comment on Osmanagić's visit

Osmanagić's visit to the Linneaus University in 2012 highlights some of the many contradictions facing those of us engaged in research in the field of Public Archaeology. The difficulty of conceptualisation of Public Archaeology has tended to stagnate around issues of definition and application. The 'outreach' approach needs the qualified, respected and scientific expert voice to communicate archaeological information to non-archaeologists. Final authority resides with the professional archaeologist who, in possession of knowledge dominance, can act as gatekeeper between archaeological knowledge, data and resources, and the general, non-archaeological, public. The 'multi-vocal' approach, in contrast, acknowledges the differences in the interactions between humans and material culture, and the subjectivity involved in these differing interactions between material culture, groups and individuals that is both historically situated and in the present. This critical approach firmly emphasises the importance of wider discourse between the socio-economically and politically marginalised and archaeological knowledge and resources as part of the achievement of wider cultural meaning. This is the approach that Holtorf, and myself, amongst many other Public Archaeology researchers worldwide, have adopted.

Copeland (2004) and Smith (2006, 125) emphasise the need for, and ethical responsibility of, archaeologists involved in the presentation

of their work in the public realm to understand, respect and value the interpretations of the past by non-professionals, without the imposition of 'correct' interpretational methods. Archaeology is also a subject that is in a constant process of negotiating dialogue with itself, and the past. The gathering, processing and re-examination of old and new data means that, as archaeologists, we cannot honestly claim to know the final 'truths' about human pasts. Therefore, Public Archaeology as a discipline examines the relationship between these past human activities and contemporary society. It critiques the process and means through which the archaeological sector influences, facilitates, limits and exposes the relationships between the past, present and future. It must be politically engaged to understand the creation and application of associated theory and the examination and analysis of Public Archaeology in practice. The conceptual and ethical paradigm of Public Archaeology is, therefore, the renegotiation of power and control through communication, dialogue and participation between archaeological professionals and non-professional members of the general public.

Semir "Sam" Osmanagić is a charlatan, and a wealthy and powerful one at that. His apparently valid doctorate from the University of Sarajevo, and the Bosnian Government's approval and financial support of the work of the 'Bosnian Pyramid of the Sun Foundation' have already lent him legitimacy in his homeland. The financial situation for cultural heritage in Bosnia is desperate, with museums closed, staff unpaid and the National Museum about to have its electricity cut off due to unpaid bills (BBC website 2012). Support for pseudo-archaeology in the face of this cultural crisis is disastrous. Why is it acceptable to offer a platform to a man who is so clearly deluded and dangerously wrong? Is it right for a respected Swedish institution to concern themselves with someone who will, on past record, milk that association to its last drop? Should funding be made available to support this kind of 'sociological' research, when archaeological funding is so scarce? Or does Holtorf, by not inviting Osmanagić and his ilk into the wider debate, simply confirm public perceptions of academic elitism, and create a self-fulfilling prophecy for conspiracy theorists?

Archaeology contains deep intra-disciplinary divisions alongside social stratification, and, as Henson (2009, 118) has argued, it is a porous subject, with a wide variety of disciplinary 'leakage' along the edges, working with theory and practice from disciplines such as sociology, anthropology, forensic science, geography and geology, amongst others. The emphasis within this elitist discipline is, as Henson

interprets it, "on exclusive rights to validate, conserve and study the archaeological resource" (ibid. 119). Public Archaeology is part of this porous subject. Its role is to question the dominant position of the heritage professional and to shine a light in the dark corners of both archaeology and its pseudo-archaeology, which can be an uncomfortable business for those in the trades. When archaeology (or pseudo-archaeology) is used to create conceptual narratives that are not sanctioned by the profession, it meets understandable hostility, anger and condemnation from professional archaeologists. But we, as Public Archaeologists, want to understand how 'expert-amateur' discourse is constructed and legitimised, how we regulate, maintain and assert authority over wider archaeological narratives, indeed, how the impact of heritage tourism can develop and sustain nations and communities with entrenched poverty and mass unemployment. A conversation is unavoidable - let's at least take that conversation out of Twitter, off the comments thread, down from the blog, and out of the pages of the obscure mind-body-spirit magazine. Let's air this conversation in a public arena, face-to-face. To understand these issues, we have to get our hands dirty.

Beatriz COMENDADOR REY Comment to Osmanagić's conference

If we cast our eye over the social success of Semir Osmaganić's pyromania, we can identify the following features:

- To begin with, he has created his own character. He introduces himself as Houston's answer to Indiana Jones, searching for the Great Bosnian Valley of the Pyramids. He is the great Bosnian hero... "all Bosnia loves you", he is told. He portrays a typical, charismatic role.
- He projects himself as revealing to the world what official science refuses to recognise: that Bosnia was the cradle of the oldest of the ancient high civilizations, with the greatest technological achievements. He presents a glorious past for Bosnia, stressing time and again the unique nature of the Moon Pyramid, a world leader "the biggest in the world", "the highest pyramid ever built".

- He uses the media to convert the pyramid set into, simultaneously, a mass phenomenon and a collective business.
- The Bosnians are presented as the heirs of this "constructed heritage." This past represents them in the present, becoming an element of identity. The denial of this past implies the denial of the role of Bosnia in the global stage, a national minimalisation.
- The denial and radical opposition of official science, dismissing him as an "amateur, swashbuckler, dreamer", is counterproductive. With even more rejection and denial, and the absence of dialogue, Osmaganic's popularity increases.
- Currently, diverse financial interests underlie the phenomenon, which has attracted mass tourism to Visoko and generated merchandising.

The following two passages from a video on this topic are enlightening:

(http://youtu.be/UszvJ3yANnc) *Need latest Acrobat to watch Why on earth in Bosnia? Because we deserve it...

In the end, those stones are interesting... People believe in God and no one has ever seen Him. Here we have three or four stones placed together. Why not believe in the pyramids?! If Semir says so...

I would ask Mr. Osmaganić what the objectives of his research are, from a historical and a social perspective. I believe that the key factor is his own personal gain, although I imagine that the feeling of being a national hero is also far from unwelcome.

Diverse "pasts" coexist, just as "diverse" archaeologies do.

Because... Is archaeology which lacks impact of social interest? Has "official" archaeology ever fulfilled any of the social and economic functions of "Orgasmanić archaeology"? What is "official" archaeology for?

Cornelius Holtorf's proposal seems to me not only appropriate, but also necessary and brave. Looking the other way does not stop "other archaeologies" existing. Inviting a "pseudoscientist" to an archaeology forum, with the objectives of social analysis which have been presented, allows a direct and unmanipulated dialogue.

Geoff CARVER

Beyond belief: Making mountains out of molehills, or pyramids out of...

When I saw Cornelius's post on Facebook, my first reaction was to contrast this approach to that taken by Deborah Lipstadt when invited to "debate" Holocaust Deniers, or by people like Richard Dawkins when invited to "debate" "Scientific Creationism" (now called "Intelligent Design"), etc. They just do not do it.

On the one hand, a public stage – where rhetorical tricks and emotion can often win out over reason, facts and the complex arguments that constitute "proof" in science – is not necessarily the best place to debate serious issues. One only needs to think of the large number of false convictions in any justice system. Science should not be a circus, or a popularity contest.

Lipstadt and Dawkins also argue that there really is not anything to debate. In Cornelius's defence, it is worth emphasising that Osmanagić was not invited to either present or "debate" his "pyramids." But, in some sense, it does not really matter what he speaks about. He could show slides of his last vacation, for all it matters, because he could go away and use the fact of the event – the fact that he had been invited to address academic archaeologists in another country – as providing proof that he is respected by his peers and has a standing within the academic community (i.e. scholarly support for his views): veni vedi vici.

So my response was based on an assumption that – no matter what the reasons, whatever the results – Osmanagić would use the attention to his advantage. It would be naïve on Cornelius's part to think otherwise; not to realise that Osmanagić would go to Kalmar, speak, go home, and then not use this to his advantage somehow. This may be unfair on my part – a reflection of my own prejudice against anything that smacks of pseudo-science – but it might also be a fair inference based on Osmanagić's record. Those he has duped by taking their statements out of context include Zahi Hawass (which is somewhat ironic given his political acumen). Since Ezra Zubrow, a mutual acquaintance of Cornelius and myself, suffered the same treatment, it is not as though Cornelius should not know better.

Some may try to frame this as an issue of free speech. This is a false analogy. No one is denying Osmanagić the right to air his views. He has a website and he publishes his own work. So far as I know, no one has stopped him from publishing in established journals (assuming he can pass the peer-review process). That does not mean that archaeologists are under any obligation to give him a platform, just as Osmanagić is under no obligation to return the favour if we do. I may be cynical, but I somehow do not expect he will convene an international conference any time soon, or open his site up to international oversight. This would be the scientific approach, of course, but I do not expect it to happen.

And in a way maybe issues such as "fairness" and having well-meaning and well-intentioned people talk about Osmanagić's right to free speech are what annoy me, because there is that sort of naïve belief that if we play fair with him, he will play fair with us, or that the truth will all out in the end, etc. But that belief seems to be based on an assumption that Osmanagić is interested in a dialogue; that he is playing the same game, by the same rules. It may even be that any press – however negative – that draws attention to Osmanagić will simply make him stronger in the eyes of his faithful followers and his financial backers.

In that sense, perhaps it is worth asking why Cornelius courts controversy by inviting someone like Osmanagić to present his views?

So maybe the problem is that some archaeologists are too honest, too trusting, too optimistic and naïve. After all, it is only relatively recently that we have started to become more serious and effective in using the press to our own advantage. Every large excavation seems to have a press release linked to the publication of significant results,

for example. But that does not mean we are able to go up against big investors who still reap a lot of political support by claiming that we are hindering progress or blocking job creation. And we still do not earn anywhere near as much attention as the von Dänikens, Dan Browns, Indiana Joneses and others of their ilk who capitalize on misrepresentations derived from our work.

To some degree I would like to frame this discussion in terms of naivety on the part of some of our post-modern/post-processual colleagues. It Could be argued to what degree they represent academic navel-gazing, a clear manifestation of ivory tower elites out-of-touch with the real world, playing games with relativism and so on. Whereas we cynics out here in "the real world" we have to deal with such pressing issues as budgets and timetables and database design, or negotiations with companies and even state services that flaunt health and safety regulations because they can: the regulatory agencies are not interested in protecting – and no one wants to stir up trouble for – just a few archaeologists.

And I figure that nothing is going to change: archaeologists will always be weak, so long as we fail to learn from the past or naively believe that the Osmanagićs of this world are interested in participating in a dialogue. I find this especially depressing and ironic, given that "learning from the past" is supposed to be one of the reasons for doing archaeology or for studying history. Yet, despite such clear examples as the many conferences which have examined archaeology and politics by looking at archaeology in the 3rd Reich, we still do not seem to have learned some of the basic lessons about Realpolitik, and the media, and how easy it is to manipulate the well-intentioned who fail – or refuse – to take a stand or draw a line in the sand.

The history of archaeology shows a general move away from being a hobby enjoyed by a small elite towards attempting to be a serious science. The fact that we are not there yet is highlighted by the fact that archaeology continues to be under-funded, and developers can continue to get away with flaunting not only health and safety legislation but also laws intended to protect heritage. In that context, giving a platform to someone like Osmanagić to start talking about Bosnian pyramids, or Eric von Däniken, or the late Barry Fell, or someone regurgitating Kossina's more racist theories, etc., represents a great leap backwards.

Obviously there is a role for the public in archaeology, and obviously science thrives on discourse and informed, critical debate. But that

does not mean that all opinions are equally valid, or that we need to give them all equal airtime. Think about whether you would rather receive heart surgery from a surgeon or a plumber, for example; or whether you want to elect a pilot form amongst the passengers next time you fly somewhere.

Before archaeologists can attain the professional status of heart surgeons or airline pilots, we need to be serious and present a more unified face to the public. Otherwise, I am worried that the next time I try to argue that my workers need to have water on site (so that, after digging through mediaeval latrines all morning, they can at least wash their hands before lunch), the investor will turn around and claim our work is not serious, because we spend all our time discussing such non-issues as the Pyramids in Bosnia; or that this flint scatter or that bronze age burial mound or late stone age settlement is nowhere near as important as... the Pyramids in Bosnia.

A final response

Cornelius HOLTORF and Jacob HILTON Learning about the past from the Bosnian pyramids?

Semir Osmanagić's public lecture at Linnaeus University on 18 October 2011 was no big event, although one of us (Holtorf) had announced it through all channels available through the University, and the local radio station had reported about it a few days in advance. The lecture was simultaneously broadcast to the University's second campus at Växjö (but not recorded), and there were only about 12 in the audience at Kalmar and another 10 at Växjö. Maybe this low attendance was one reason why the controversy on the internet that had ensued in advance of the lecture (and which is reflected in the present discussion) was not matched within the University, either before or after the event. Indeed, not all of the colleagues at the University thought it had been a good idea to invite Osmanagić to speak at all.

Two days after the lecture, a letter to the editor appeared in Barometern, a local newspaper, in which the author criticized the University for allowing the lecture to happen. We chose not to respond, and there was no subsequent debate we know of, either within or outside the University. However, the debate is an important one if conducted in

an open-minded academic fashion, and that is why we were more than happy to promote and contribute to the present exchange of views in this international journal.

An interesting question to consider initially is why was there not more interest in the lecture? Osmanagić and the Bosnian pyramids have in recent years been something of an international media phenomenon, yet it appeared that in Sweden few current students and generally few non-archaeologists had ever heard of the controversy around these astonishing revelations from Bosnia. On the same trip to Sweden, Osmanagić had even lined up a number of other public lectures in connection with the local Bosnian communities, and among these audiences, perhaps understandably, his work appears to have attracted bigger attention.

While Osmanagić came to Linnaeus University to speak about the Bosnian pyramids and to persuade the students of their merit, the University had other reasons for extending the invitation. The aim of the lecture was to investigate the role of alternative archaeologies and invented heritage. When a project such as this one has garnered such a wide response of criticism and support from all over the world despite the evidence against it, it is worthwhile to consider how it can be sustained. Semir Osmanagić was invited to Linnaeus University not in support of his claims, but as an opportunity for the students of archaeology (or indeed other disciplines) to be confronted with alternative discourses and practices that do not follow all existing academic conventions. It was a chance for them to engage and to communicate with somebody so discredited and yet so influential. It was an opportunity to explore one particular aspect of the relationship between archaeology, cultural heritage, contemporary society and their influence upon one another. While it may be bad science, there may be something to learn from Semir Osmanagić, if only his success in involving the public.

The lecture which Osmanagić presented at Kalmar appeared to be his standard one. It consisted of the astonishing number of 201 PowerPoint slides. After more than an hour of presentation, when he was gently reminded to come to the end, it became clear that he had believed that the entire two-hour slot was for him to present (admittedly, Holtorf had failed to remind him of the customary schedule for events like this including time for both presentation and discussion). He managed however to flick through the remaining slides relatively quickly, and there was still some time for discussion at the end.

During the hour and a half presentation, Osmanagić spent a significant amount of time discussing other pyramids around the world rather than the ones he claims to have discovered. In fact, his lecture was largely a criticism against the current academic understanding of the history of the pyramids, their construction, their structural aspects and their meaning and function.

The lecture followed in some way a narrative which the infamous alternative archaeologist and writer Erich von Däniken may have chosen as well. Osmanagić started introducing various kinds of pyramids around the world, some being well known such as those in Egypt and Mexico. He claimed that the conventional knowledge explaining pyramids was wrong and that a "paradigm shift" was occurring that contradicted much of what the mainstream scientists had been arguing thus far. The huge stones of which pyramids have been built, and the sophisticated overall design and architecture, he argued, cannot have been the work of ancient Egyptians or any other ancient people. He pointed to certain contradictions that he had noticed, for example how the Egyptian pyramids could have been built by the pharaohs as their monumental burial sites when in fact they did not contain their mummified corpses; or that ceramics found in the step pyramid of Saggara was dated to 5,700 years ago which predates the conventionally assumed date of construction by approximately one thousand years. Osmanagić concluded that we are still at square one in explaining the pyramids, even though Egyptologists have been around for nearly two hundred years. In his view, the Egyptian pyramids had "nothing to do with pharaohs".

Osmanagić then went on a tour-de-force around the globe discussing pyramids, some being not widely known at all, including those on Tenerife and Mauritius, in Cambodia, Korea, Tahiti, China, USA, Bolivia, Peru, Mexico, and Belize. As his many pictures and anecdotes made plain, he had travelled to many if not all of these places himself – very much in the style of an explorer entering new territory. That territory is new indeed. As Osmanagić pointed out, many of the pyramids he discussed you never read about in the history books or learn about in school, as they are not even all fully acknowledged by the relevant state authorities for heritage. But, as Osmanagić put it in a particularly memorable rhetorical question, "Whom do we trust—our own eyes or the government?" He was confident that all history books will eventually have to be changed, as people will want to know the truth about the pyramids! That pyramidal truth, according to Osmanagić, involves a forgotten, very old civilization stretching across

the globe building the same kind of structures in many different places. After all, the pyramids showed amazing similarities which are plain for all to see with their own eyes. These similarities include four (rather than three) sides of equal size, large steps on their sides, and perfect astronomical orientation (mostly to the north). They feature plateaus on their tops, they contain passageways and underground tunnels, and they are usually part of large sacred geometries within the surrounding landscape. To Osmanagić, these pyramids were consequently all designed and built by the same very knowledgeable architect who knew not only about constructing perfectly geometrical forms but also about phenomena like the difference between cosmic and magnetic north, as both are reflected in the design of the pyramids.

Having established himself as a global pyramid expert pursuing the quest for pyramidal truth with his own eyes, Osmanagić turned to his home country, Bosnia. What are these pyramids that Osmanagic is talking about exactly? Discovered by Osmanagić in 2005, the pyramids are located in Visoko, a small town outside of Sarajevo in central Bosnia and Herzegovina. They are five hills that together comprise what has been called the Bosnian Valley of the Pyramids (Figure 1). Here, Osmanagić set up a big project dedicated to the investigation of these pyramids. The project has been attracting hundreds of volunteers from around the world to assist in the fieldwork, and about five hundred thousand curious visitors have come to visit Visoko (Figure 2).

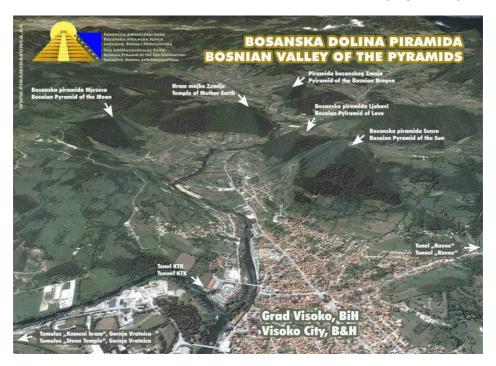




Figure 1. The Bosnian Valley of the Pyramids according to Semir Osmanagić.

Figure 2. Semir Osmanagić guides visitors at the pyramid excavation in Bosnia.

The Bosnian pyramids are supposedly the oldest and largest in the world, and they are placed in the world's biggest Valley of the Pyramids. In fact, the "Pyramid of the Sun" with a height of 220 meters is the largest and oldest among them. It is not only about a third taller than the Cheops pyramids in Egypt, but with a cited age of around 12-15,000 years, it is also a lot older (Figure 3). Material analysis has reportedly revealed that the Bosnian pyramids were constructed of concrete superior in hardness, water absorption and durability to anything we use today. According to the dating methods applied, the use of such materials preceded the invention of concrete by the Romans by many millennia. As for the pyramids' spatial orientation with respect to cardinal directions, they are also remarkably precise. The "Pyramid of the Sun" is said to be oriented due North within only 12 seconds of error. Other structural aspects include passageways and underground tunnels, partly filled with water and containing megalithic blocks, a supposedly 30,000-year-old ceramic sculpture and a block with many carved symbols. Around the site there is what Osmanagic calls a "sacred geometry": geometrical patterns between various sites in the landscape, best studied on maps.



Figure 3. The Bosnian "Pyramid of the Sun". Source: http://www.piramidasunca.ba/eng/photo-gallery.html

The results of this work may be controversial among professional archaeologists, but the rhetoric Osmanagić employs pushes many of the right buttons. He stresses that all the results of his project are openly available to be shared with everybody and that all he wants is the truth to emerge through scientific methods. His team of collaborators investigates everything from building material and soil samples to thermal anomalies and electromagnetic fields. They use all the scientific tools available to them including geomagnetic survey, georadar screening, radiocarbon dating and 3-D trigonometric maps. Much of this work was presented during the "First International Scientific Conference on the Bosnian Valley of the Pyramids" held in Sarajevo, 25-31 August 2008 (for a report see Pruitt 2011: 206-212). Last but not least Osmanagić is proud to use a lot of non-destructive methods, referring to a historical responsibility to preserve the site for future generations.

As the lecture came to an end, the students were welcomed to comment and to ask questions. The audience was, however, relatively small and most of the students were in their first or second year of studies, rather overwhelmed by the long lecture and not too eager to inquire further into Osmanagić's claims or to comment on them at all.

Nevertheless he responded to a few questions. Asked if he would agree that at the end of the day it doesn't really matter if the pyramids were real or not as the project has done so much for the people of Bosnia in terms of tourism, he disagreed: "I am a researcher; I am a scientist.... It is good that the country will benefit... but [this] is secondary." At the same time, although his work has been dismissed by practically all scientists around the world, he stated that he would not accept this as a final no to the hypothesis that the biggest and oldest pyramids of the world can be found in Bosnian Visoko (Figure 4). Having invested so much time and effort already, he was prepared to keep working with the project hoping that he would eventually be proven right. He also made something of a pity appeal to the audience for their support to allow him to continue working to test his hypothesis, obviously frustrated by the considerable opposition he faced by various authorities even within Bosnia and Hercegovina.

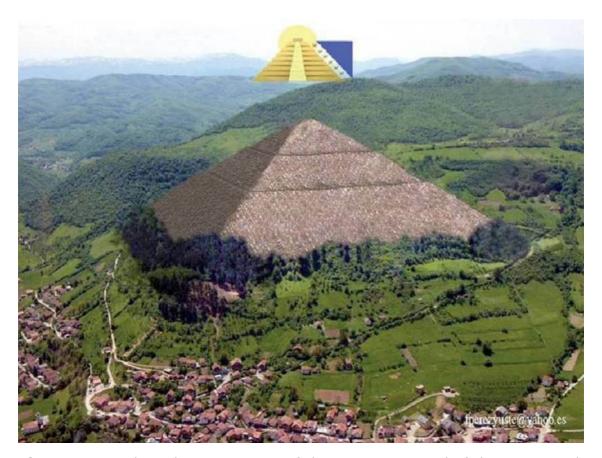


Figure 4. Hypothetical reconstruction of the Bosnian Pyramid of the Sun according to Semir Osmanagić (showing also the logo of the "Bosnian Pyramid of the Sun Foundation").

In sum then, the event itself – although controversial before it happened – did not cause any major splash anywhere. In retrospect, was Holtorf right in inviting him? Given that he was familiar with the issues surrounding alternative archaeology (Holtorf 2005) and that he had made an informed decision in this case based on having read relevant academic studies (Pruitt 2007, 2009, 2011) and that he had also directly consulted some of the relevant experts in advance of the invitation, there is no need for him to have any regrets. The reasoning for the initial invitation still appears as justified (see page 24).

Did Osmanagić himself exploit the lecture to gain undue legitimacy and further momentum for his project? All we know is that the lecture was mentioned on a Bosnian webpage¹ including two photographs showing the poster announcing the lecture and the institutional sign outside our building. Should we be concerned about this? Hardly. Whatever some of our colleagues in their contribution to the present discussion may have expected, we do not see evidence that Osmanagić has milked the event of his lecture "to its last drop", whether for personal gain, a nationalistic agenda or any other discernible purpose. We do not consider having been "duped" by him either. Perhaps it was wise that Holtorf had taken the simple precautionary step not to agree to a joint photograph with Osmanagić.

In welcoming a lecture about the Bosnian pyramids we consider ourselves more in touch with "the real world" than those archaeologists who worry a great deal about recording flint scatters. Although the lecture by Osmanagić was not financially supported by the University or by any other public funds – and all that can be claimed is that Holtorf had the personal pleasure to invite the discoverer of the Bosnian pyramids for lunch – arguably this lecture provided a greater opportunity to learn something about the significance of the past and cultural heritage in present-day society than many other lectures that would not have caused any frowning by anybody.

¹ http://piramidasunca.ba/bs/offline-page/aktuelnosti/vijesti/prezentacije/item/7712-završena-sedmodnevna-turneja-osmanagića-po-švedskoj.html

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