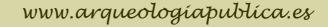


Editors: Jaime Almansa Sánchez & Elena Papagiannopoulou





Online Journal in Public Archaeology

AP: Online Journal in Public Archaeology is edited by JAS Arqueología S.L.U.

INDEX

Editorial	1
Jaime Almansa Sánchez and Elena Papagiannopoulou	
Local Communities' Perceptions of Archaeology and Cultural Heritage Resources in the Mtwara Region of Tanzania	7
Festo W. Gabriel	
Archaeology, Politics, Entertainment and Dialogue: Polish (Digital) Public Archaeology	33
Alicja Piślewska	
Blogging about the End Times: Dealing with the Fringes of Archaeology	67
Johan Normark	
Of Pyramids and Dictators: Memory, Work and the Significance of Communist Heritage in Post-Socialist Albania	97
Francesco Iacono and Klejd L. Këlliçi	
Punk, DIY, and Anarchy in Archaeological Thought and Practice	123
Colleen Morgan	
<i>Points of You</i> Settling the differences and enabling change: toward a more inclusive management of archaeological sites in Athens	147
Helen Stefanopoulos	

Review Faking Ancient Mesoamerica / Faking Ancient Andes	151
David S. Anderson	
Review Where the wind blows us	157
Lisa K. Rankin	
Review Archaeology, Heritage and Civil Engagement	163
Alexandra Ion	
Review Archaeology, the Public and the Recent Past	169
Jaime Almansa Sánchez	
Review Blogging Archaeology	175
David Mennear	
Review Arqueología Pública en España	183
Ana Pastor	
Review The Past in the Present	191
Stelios Lekakis	
Review Cultural Property Crime	203
Ignacio Rodríguez Temiño	

Blogging about the End Times: Dealing with the Fringes of Archaeology

Johan NORMARK University of Gothenburg

Received: 01/11/14 — Accepted: 13/05/15

Abstract

The 2012-phenomenon is based on the idea that something important was expected to occur on December 21, 2012, a date associated with the ancient Maya Long Count calendar. Even though the date has passed, the overall phenomenon is unlikely to disappear because the dominant themes of the end of the world and/or a transformation of consciousness can be found in other 'alternative' histories. These non-academic histories are ultimately apocalyptic in nature. The 2012-phenomenon is also an example of an 'incorporeal hyperobject', i.e. an object widely distributed and repeated. It is not anchored in a specific time-space unit but it is manifested in many different corporeal objects. The 2012-phenomenon is different from the academic Mayanist incorporeal hyperobject because each of them uses different distinctions of what exists or not. These different objects cannot communicate directly in different media ecologies since different distinctions have formed each one. Hence, there can never be a sincere understanding of each camp. Only by perturbing another object can information be translated into meaning. The blog is such a medium that can affect incorporeal hyperobjects. This article discusses the way one blog has interacted with the 2012-phenomenon.

Keywords

2012, Maya calendar, Blogging, Apocalypse, Hyperobject, Incorporeal Machine

Introduction

The public view of the ancient and contemporary Maya in media and at tourist sites is often affected by stereotypes, exoticism, and ethnocentrism (Castañeda 1996; Hervik 1998; Normark 2004). Nowhere is this clearer than in the so-called 2012-phenomenon/2012-meme (Aveni 2009; Boot 2013; Gelfer 2011; Hoopes 2011; Normark 2014; Restall and Solari 2011; Sitler 2012; Stuart 2011; Van Stone 2010; Whitesides 2013; Whitesides and Hoopes 2012). This phenomenon is a mixture of New Age beliefs about a transformation of consciousness, speculations regarding the end of the world through cataclysmic events (e.g. super volcanoes, polar shifts, the fictional planet Nibiru causing massive destruction), Atlantis, creationism, aliens, numerology, conspiracy theories regarding the Illuminati that wants to install a new world order, the US presidential elections in 2008 and 2012, etc. The 2012-phenomenon is also part of 'Mayanism' which is a mixture of ideas that attempt to "marshal scientific evidence for spiritual and religious goals through the invention of sacred tradition" (Hoopes 2011:39).

The distorted view of the Maya and their Long Count calendar entered the greater public awareness through Roland Emmerich's 2009 disaster movie 2012 but the origins of the 2012-phenomenon can be traced back to the publication of Michael Coe's book *The Maya* in 1966 (Whitesides and Hoopes 2012). The market for books, websites, blogs and forums concerning 2012, authored by self-proclaimed prophets and experts, along with the forever popular Nostradamus, increased tremendously, especially in the USA. Some of these '2012ers' searched for the meaning of life or wished for a better world. Ancient cultures were ascribed several noble qualities and primordial wisdom we were supposed to learn from. Other 2012ers focused on people's fear and emphasized the end of the world. But it was a Christian apocalypse these people visualized with little to no connection to the Pre-Columbian Maya. Even though the 'end-date' has passed, the 2012-phenomenon still has an attraction, although it is greatly reduced. It will most likely be absorbed by future 'end of the world' scenarios, New Age mythology, and Mayanism.

The 2012-phenomenon prevailed and to some degree still prevails on internet, blogs, and discussion forums. Dealing with these views was therefore preferably done through social media. While blogging about various parts of this phenomenon, I encountered everything from threats and ad hominem attacks, to dismissals on the grounds that I am biased because I am part of the academia. I have also experienced positive feedback on the attempts to uncover frauds and explain misconceptions. Although my blog, Archaeological Haecceities (www.haecceities.wordpress. com), is primarily dedicated to Mayanist studies and what I term Neorealist Archaeology, the 2012 topic of the blog became the most popular one for several years as it was primarily directed to the public. I began writing about the 2012-phenomenon when Emmerich's movie began to be advertised in 2009. The first post on the topic was written on April 5, 2009. I decided to stop active blogging on December 21, 2013, one year after 'the end'. This article deals with how this blog participated in a media ecology surrounding the 2012-phenomenon up until the passing of the 'end date'. It will partially be based on my personal experiences and some quantitative data from the blog statistics.

The incorporeal hyperobjects

In order to describe this broad phenomenon and how my blog became a minor part of it, I choose not to view '2012' as a discourse or meme since it includes 'physical' objects that play significant roles. The 2012-phenomenon shall be seen as one object

consisting of other objects. In this 'object-oriented' perspective the distinction between subject and object is erased. All objects are 'democratic' because they are not measured from the human subject (Bryant 2011b). Contrary to Latour's Actor Network Theory (ANT), relations are less important than the objects themselves (Harman 2009, 2011a). I shall combine Levi Bryant's (2014) concept of 'incorporeal machines' with Timothy Morton's (2013) 'hyperobject': the 'incorporeal hyperobject'.

Basically, a machine is an entity that operates on inputs and produces outputs. 'Corporeal machines' are made of physical bodies and exist for certain durations (Bryant 2014:23-26). Incorporeal machines, on the other hand, are characterized "by iterability, potential eternity, and the capacity to manifest themselves in a variety of different spatial and temporal locations at once while retaining their identity" (Bryant 2014:26). The contents of a book, a law, an equation, a number or a 'meme' are incorporeal machines. The 2012-phenomenon has been repeated in many different contexts. Potentially it is eternal since it can be repeated for eons in very different contexts that we cannot imagine today. However, all incorporeal machines need a corporeal machine in order to exist among other corporeal machines (Bryant 2014:29). These corporeal machines are not eternal. They are finite.

The 2012-phenomenon exists in brains, books, Facebook, printouts, memory sticks, DVDs, movies, etc. Even the ancient Maya Long Count calendar is an incorporeal machine, being manifested in hundreds of ancient Maya monuments and modern textbooks. The 2012-date derives from one such Long Count date called Thirteen Baktun. Thirteen Baktun has been translated into the Gregorian calendar and when that translation occurred in print the 2012-incorporeal machine was born and began to generate its own outputs. Since the passing of the 'end date', the rate of outputs has drastically decreased, if traffic to my blog is any indicator. Figure 1 shows the number of total visits per month for a two year period

(August 2011 to July 2013). December 2012 stands out followed by a rapid decline in traffic. Note that this figure shows all traffic, including non-2012 related posts. In the post-December 2012 era it is primarily the '2012'-related posts that have decreased in popularity whereas the other posts remain much less affected.

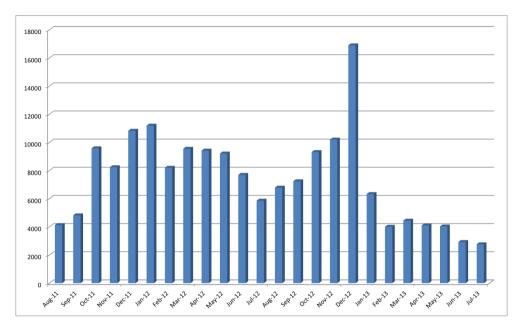


Figure 1. Number of monthly hits on Archaeological Haecceities between August 2011 and July 2013.

The second part of the incorporeal hyperobject concept is an entity that is not occupying a singular time and space unit like an average artefact. You can never hold a hyperobject in your hand. It is everywhere and nowhere at the same time. For example, as a hyperobject '2012' is greater than the single book, article, movie, etc. where each '2012' is locally manifested. The hyperobject is more than the sum of all these manifestations and the objects that these in their turn have affected. As such, the hyperobject also affects its parts because the hyperobject is locally manifested in various objects which have nothing to do with the Gregorian date itself, but which have become incorporated into the hyperobject by

the incorporeal machine. Some of these objects are: Monument 6 at Tortuguero in Mexico, Hieroglyphic Stairway 2 at La Corona in Guatemala, the site of Izapa in Mexico, The Milky Way, the Aztec Calendar Stone, books (The Maya by Michael D. Coe, 2012: Maya Cosmogenesis by John Major Jenkins, etc.), blogs, internet forums, Wikipedia, Facebook, History Channel, blockbuster movies, etc. Here the hyperobject is 'everywhere' but it is not reducible to one single object (it is 'nowhere'). Therefore, Monument 6 at Tortuguero is an object with the same ontological status as one of Jenkins's books. The 2012-hyperobject itself is always 'withdrawn'. We can never reach its 'essence'; only the local manifestation(s) of 2012 can be described (Bryant 2011; Harman 2011a). The '2012-hyperobject' can therefore be inferred, deduced, and abducted, but it cannot be encountered (i.e. Morton 2013). Nevertheless, objects that are part of the 2012-hyperobject are also independent of it. Monument 6 at Tortuguero has many other qualities. It has been and still is part of other entities, such as the Classic period *ajawlel* ('divine kingship'). It is the incorporeal machine that drives the 2012-hyperobject. Without it, the objects would be treated differently and the hyperobject would 'evaporate'.

I shall treat academic Mayanists in a similar way. Here the concept of 'Maya culture' acts as an incorporeal machine, driving a vast hyperobject that includes scholars, students, universities, institutions, sites, monuments, ceramics, books, courses, excavations, etc. Instead of using the burdensome terms 'the 2012 incorporeal hyperobject' and 'the academic Mayanist incorporeal hyperobject' throughout this article, I will simply refer to them as the '2012-object' and the 'academic-object'.

My blog's place in the 2012-object, the academic-object, and the surrounding media ecology, is what is in focus here. The method is simple. After outlining the context of the phenomenon, apocalypticism and media ecology, I shall use examples from my interaction with the objects and people in social media and old media. I do not use quotes from the 3100+ comments made on my blog, only search terms. The only quotes from non-scholars are from my appearance in a TV-show.

2012

This article will not provide a complete coverage of the broad 2012-object. However, a brief summary of the main ideas are in order for the newbie reader. The 2012-object has only superficial connections to the ancient Maya. It is mainly the Long Count date called 13 Baktun (or *Pik* in Classic Maya), commonly believed to correlate with December 21, 2012, which the Maya indirectly has contributed with. The Long Count calendar usually has five units or periods: *kin* (1 day), *winal* (20 days), *tun* (18 winals or 360 days), *katun* (20 tuns), and baktun (20 katuns). In inscriptions a Long Count date is followed by dates in two other calendars; the 260-days long *tzolkin* and the 365-days long *haab* (which actually is 360 days + 5 extra days called *wayeb*).

A Long Count date records the number of days which have passed since the beginning of the calendar (which is transcribed as 0.0.0.0). This occurred on the 11th of August 3114 BC according to the Goodman-Martinez-Thompson (GMT)-correlation constant, which most likely is wrong by at least two or three days (Aldana 2011; Martin and Skidmore 2012). The beginning date coincides with what many people assume is the end of a preceding 'cycle' of 13 baktuns because that particular 0.0.0.0.0 was written in Maya inscriptions as 13.0.0.0.0 4 Ajaw 8 Kumk'u. The 13 Baktun of "2012" is 13.0.0.0.0 4 Ajaw 3 K'ankin. To the ancient Maya this was without a doubt an important 'Period Ending' but there is no indication that it was the last one ever or the last one in a cycle. Stuart (2011) suggests a much more complex system based on Stela 1 at the Mexican site of Coba.

Most 2012ers, as I collectively call them, are not acquainted with the intricacies of the Long Count calendar. The 2012ers link the calendar to other myths, calendars, astrologies and cosmologies from other parts of the world and argue that there is an ancient global and/or extraterrestrial/extradimensional reason why all these calendars and cosmological systems supposedly end or change on the same date. Most 2012ers tend to agree that the established time frame of 13 baktuns, or roughly 5125 years (3114 BC - AD 2012), is significant on a global level. The beginning of the calendar roughly coincides with the first dynasty in Egypt and the early dynasties in Mesopotamia. These are not coincidences according to some 2012ers. The beginning of the calendar is sometimes associated with a cataclysmic event, such as when Plato's imagined island of Atlantis sank and its survivors spread knowledge, including commemoration of this event, to other places. In these Atlantisaffiliated speculations of hyperdiffusion, all civilizations have the same origin (Hoopes 2011).

Another version suggests that alien astronauts from another planet in our solar system (Nibiru), called Annunaki (Sumerian deities according to academics), used humans as slaves and instructed them to build monumental buildings (Sitchin 2007). Another favorite place of extraterrestrial origin is the Pleiades, suggested by Osmanagic, inventor of the Bosnian pyramids (Normark 2012). Calleman (2009) has gone even further and suggests that the whole history of the universe is described by the Long Count calendar. Contrary to most other 2012ers, Jenkins (1998, 2009) has a good understanding of the Maya calendar. Contrary to most academic Mayanists, Jenkins connects the Long Count to the astronomical phenomenon known as the precession of the equinoxes and the Milky Way. According to him, the winter solstice sunrise of 2012 was central to the whole Long Count as the sun rose in the galactic centre and thus initiated a new age according to him. This event occurred on December 21, 11:12 GMT (not 11:11 as is commonly believed).

The first person to mention the 'end date' was an academic Mayanist (a fact first pointed out by the archaeologist John Hoopes). In the first edition of The Maya (1966), Michael Coe related the supposed end date of the Long Count to Armageddon, although he got the date wrong (December 24, 2011). This error was corrected in subsequent editions but unfortunately the association with an apocalypse and/or Armageddon remains in these later editions. The Maya calendar became part of the countercultural milieu of the 1970s and 1980s. Not until Robert Sharer first published a "correct end date" in his revised version of Sylvanus Morley's (1983) The Ancient Maya did '2012'-affiliated people like Terence McKenna and José Argüelles use the date in their work (Whitesides and Hoopes 2012). In 1987, Argüelles urged people to meditate at sacred sites in various parts of the world. This coordinated act, the Harmonic Convergence, was orchestrated to stop Armageddon in 2012 (Whitesides 2013, 81). When the "doomsday" hype surrounding the year 2000, also known as Y2K, declined, the 2012-phenomenon caught momentum (Whitesides 2013, 74).

In short, the 2012-object has only to do with our present or, rather, our recent past. It has nothing to do with an ancient Maya prophecy about the world's end because we know very little of what the Maya thought about 13 Baktun because the Long Count ceased to be used over one millennium ago. Few contemporary Maya were involved in the 2012-phenomenon and only a limited number of Maya Elders had been seduced by non-Maya New Agers who found the Maya worldview of interest (Sitler 2012). These Elders never mentioned December 21, 2012 or the Aztec 5 Suns or the precession of the equinoxes of roughly 26,000 years before they came in contact with New Agers (Jenkins 2009). Even if these Elders often talked about the end of days, one should always keep in mind that the Maya area has been under Christian influence for nearly 500 years. As with many other phenomena, even their view of time has changed to a substantial degree due to the Spanish presence (Hanks 2010).

Symptoms of the 2012-object

If there is something that unites the various 'camps' of the 2012-object it is that they dislike the current state of affairs and they wish to see a radical change. In that sense they are all apocalyptic. Religious apocalyptic narratives dominate as local manifestations of the 2012-object, but there are also secular apocalyptic narratives within this 2012-object. For example, Jenkins (2009) refers to the battle between 'good' (One Hunahpu) and 'evil' (Seven Macaw) forces in the Kiché Maya creation myth Popol Vuh and relates them to Barack Obama and George W Bush. Calleman's (2009) model argues that mass extinctions have preceded transformations in consciousness in Earth's history. Hence, these apocalyptic ideas are versions of a much broader phenomenon.

Levi Bryant, a psychoanalyst and a philosopher, sees apocalypticism in popular culture as a symptom that speaks of a truth in disguised form. The apocalyptic fantasies are nothing but utopian longings for a different order. This new order can only emerge when everything collapses through some divine-like force and brings about the end of the current 'world order'. Bryant suggests that "the sorts of apocalyptic fantasies we encounter in religion and popular culture are *metonymical displacements* or screens of *real* [...] catastrophes that are facing us" (Bryant 2011a, original emphasis). In the years preceding the 2012 date, we saw earthquakes, tsunamis, hurricanes Katrina and Sandy, nuclear disaster in Japan, the economic and political rise of China, economic turmoil in the west, the occupy Wall Street movement, volcanic eruptions, sea-level rising, Arabic revolutions, Al Qaeda, etc. In the post-2012 era, these problems have not disappeared with Russia's expansion into Crimea, the continued rise of rightwing extremism in Europe, IS in Syria and Irag, similar terror groups in Somalia and Nigeria, earthquakes in Nepal, and Ebola in West Africa. These events spread anxiety among people who

seek easy explanations and solutions to what appears to be the beginning of the end of the world (or at least the 'Western civilization'). These ideas are not just harbored by the fringe. Žižek (2011) argues that obscene corruption hides behind liberalism and Western democracy as we head towards 'barbarism'.

From this perspective, the 2012-phenomenon refers to the truth "that we really are facing global catastrophe. *Knowledge* of this truth would entail seeing how this global catastrophe is deeply linked to capitalism, climate change, and the link between the two. Instead, within the popular imaginary, we get a distortion of this link, presenting impending catastrophe as the result of cosmic supernatural forces fighting a battle between good and evil" (Bryant 2011a, original emphasis). What better example than the 'mysterious' calendar in the 2012-object, the political collapse of the Classic Maya, or their said metaphysical departure into space or another dimension can one desire? This is the attraction of the Maya (Hoopes 2011; Normark 2013).

Why is this knowledge disguised this way? Why do people seek far-fetched conspiracy theories and otherworld speculations? Bryant (2011a, original emphasis) states that "apocalyptic fantasies allow those that harbor them to simultaneously acknowledge the truth of the ravages of capitalism and impending environmental disaster, while *simultaneously* continuing to live as they wish, keeping the system in place that is leading in these directions." Few of the online 2012ers are willing to put words into action. They are armchair revolutionaries that want Nature, God, aliens or the Maya Calendar to do the dirty work for them. Hence, '2012' is primarily an apocalyptic phenomenon related to a mixture of Christian end-of-the-world beliefs, New Age, and astrology coupled with pseudoscientific interpretations of current sustainable problems.

Distinctions and indications

Neurologist Steven Novella (2012) discusses a particular kind of pseudoscientist, which is quite common in the 2012-object. This is the 'crank' who does not understand the way science works because he/she does not grasp the communication within the academic-object. A crank "tries very hard to be a real scientist but is hopelessly crippled by a combination of incompetence and a tendency to interpret their own incompetence as overwhelming genius" (Novella 2012). By being 'open-minded' the cranks expand their field of 'distinction' to whatever suits their interest.

When facing a multitude of various real and imaginary objects, we as individuals or the systems/objects we are part of (academia and 2012 in this case) will make a distinction by marking what is of relevance to us or the system. This means that the 2012-object makes other basic distinctions than the academic-object does. Distinctions are *contingent* and they can always be drawn otherwise and therefore produce other objects as effects (Bryant 2011b:139). The academic-object excludes ancient alien spacecraft and instantaneous pole shifts as possible objects and events in their system of knowledge. The 2012-object includes these.

The 2012-object communicates only within itself as all systems/ objects withdraw from each other. Operations of the 2012-object only refer to itself because communication takes place within a system but never between systems. A system cannot communicate with its environment and vice versa (Bryant 2011b). This means that the academic-object never truly communicates with the 2012-object. Even though academics and 2012ers on occasion interact, their distinctions sort the information differently and only indirectly is there communication. Outside objects/systems may perturb and affect the 2012-object, as I constantly tried to do through my blog. However, what I wrote was/is not information for the perturbed 2012-object. Any information that may enter the 2012-object is constituted by the distinctions that belong to the organization of the object itself. The same perturbation can therefore affect different objects and produce different information (Bryant 2011b: 140). For example, in early 2011, I wrote two blog posts about two events with worldwide media coverage (the Japanese tsunami [March 11, 2011] and dead birds falling from the sky [January 5, 2011]) and I connected them to the Maya calendar and the 2012-phenomenon to see if people actually made these connections. It only took a few seconds after posting to attract 2012-related traffic to my blog. Search terms like 'japan tsunami 2012' and '2012 birds' were abundant for a few days onwards.

Other systems/objects make their own interpretation of the 2012-object and they may pick up a part of it and turn it into information for their own system, information that may have a completely different meaning in its new context. For example, John Hoopes points out that the 2012-object interacts with "Anonymous and hacktivism through the Project Mayhem 2012 [...] which makes no use of references to the Maya but does appropriate the 12-21-12 11:11 time as one of its foci" (personal communication 2012).

Media ecology

The medium is not just a container for content because it also influences content (Bryant 2011c; Robbert 2011). This is obvious when we look at how leading Mayanists have confronted the 2012-object. What professional academic Mayanists face are people who believe that they themselves are 'thinking outside the box' and they accuse academics and the public for being trapped within.

Most academic Mayanists that attempted to confront the 2012-phenomenon did it through traditional media, such as peer-reviewed journals and books. Therefore academic Mayanists usually

inhabited different media ecology than the ones they wished to confront or interact with. A perfect example is the 2011 issue of *Archaeoastronomy: The Journal of Astronomy in Culture* that deals with the 2012-phenomenon. This issue cost between \$42 and \$100 (depending on where you live). It was unlikely to be read by many 2012ers. Money sorted people out. Hence, the hierarchical structure of academic Mayanist research was and still is ineffective when it deals with the 2012-object because these two objects cannot really communicate due to the different distinctions they make and the different platforms and ecologies they inhabit. They are parts of two different objects and the only direct communication possible is within the same object, not between different objects.

One early place for academic discussion regarding the 2012-phenomenon was the Aztlan Listserv (http://www.famsi. org/listinfo.html). More recently, John Hoopes has written many Wikipedia entries on Mayanism (http://en.wikipedia.org/wiki/ Mayanism) and the 2012-phenomenon (http://en.wikipedia. org/wiki/2012 phenomenon), Kevin Whitesides maintains а Facebook page called '2012 Research Discussion Group' (https:// www.facebook.com/groups/271177412901852), David Stuart's (http://decipherment.wordpress. Decipherment blog Mava <u>com/</u>) has had some posts mentioning 2012, and YouTube clips by Mark Van Stone are available (https://www.youtube.com/ user/markvanstone2012/videos). There may be more than these examples but compared to the volumes produced by 2012ers, these academic contributions drown in a sea of misinformation (with the exception of the Wikipedia entries that rank high on Google with millions of visitors). Although the 2012ers also published books, their ideas primarily spread on blogs, Facebook, Twitter, forums, and other websites.

The main contrast between the traditional media ecology that most academic Mayanists inhabit and that of the blogosphere, and

other social media, is that the sorting process that selects who gets an opportunity to express oneself is greatly reduced. Blogs work differently than traditional media. Academic texts are presented at conferences and are later published in academic journals and presses. Seldom do they leave the academic-object. Editors of journals, presses, and the organizers of conferences define topics, legitimate thought, content, etc. In this media ecology, one accesses other research through the journal and press. This hierarchical media ecology therefore defines who gets to participate (Bryant 2011c). The 2012ers fall outside this sorting process and some of them feel frustrated about this situation. No clearer is this demonstrated than in John Major Jenkins's review of David Stuart's (2011) book *The Order of Days* on Amazon.com where Jenkins sees leading Mayanists as gatekeepers that define what is accepted knowledge (Normark 2011).

Social media, such as the blog, challenges the academic mode of knowledge-distribution and reproduction. Journals maintain strict disciplinary boundaries targeting specialists in a particular field whereas social media undermine this academic hierarchy (Bryant 2011c). However, it is easy to understand why few Mayanists wrote about the 2012-phenomenon online. When David Stuart (2012) blogged about his discovery of a new reference to 13 Baktun at the site of La Corona in Guatemala, the comment section was soon filled by two fringe researchers and discussion went off topic. Two very different objects attempted to interpret the same monument and it did not turn out well.

Novella's (2012) crank is someone who has created an image of what science is like from popular culture (Hollywood productions, National Geographic, Discovery Channel, History Channel, etc), i.e. from the very media ecology that maintains archaeology as a brand (Holtorf 2007). However, popular media does not communicate with archaeology because it translates archaeological concepts and

results into what can give them good ratings or many readers. In popular media, science is often portrayed as the work of the lone genius that develops ideas on his/her own (i.e. Holtorf 2005). Advances in knowledge are often described as being mocked or ignored by the 'orthodox' scientists. However, this is not how science actually works. All scientific disciplines demand knowledge about a great amount of information before one can make any serious contributions. This means that most of us can only make a small contribution to science and this is after the ideas have been presented at conferences and passed through peer-reviews. This process "weeds out ideas that are fatally flawed or just hopelessly nonsensical. In other words – it weeds out cranks. Of course, cranks don't like this, so they wail against the mainstream" (Novella 2012). Most importantly for this article, cranks use social media to wail against science.

Dealing with the fringe

Thus, there was a great variety of 2012-narratives. Why was this even a problem to an academic blogger like me? The problem was multifaceted but my main concern was that most 2012ers were ethnocentric and hostile towards science. People merged disparate ideas and created ignorance and/or fears among its followers. If the 2012-object contained apocalyptic fantasies and reflected what some people actually feared, how should academics have dealt with these ideas in the media ecology? Some academics, like myself, 'debunked' the various claims made by 2012-proponents and other cranks. When I did this I was not participating in the same incorporeal hyperobject as the one(s) I debunked but the media ecology was one and the same.

Debunking is not popular among relativistic archaeologists. Holtorf (2005) is appalled by the way archaeologists often deal with alternative or fringe 'archaeologies'. Holtorf rejects all universal methodological rules; to him, any interpretation and method is as good as any other and archaeologists should not have the upper hand in interpretation. Instead, he emphasizes "the social and cultural needs that both scientific and alternative archaeologies address and suggest that the main significance of archaeology does not lie in the specific insights gained about the past but in the very process of engaging with the material remains of the past in the present. Critical understanding and dialogue, not dismissive polemics, is the appropriate way to engage with the multiple pasts and alternative archaeologies in contemporary society" (Holtorf 2005:544).

Holtorf exemplifies the attitude some archaeologists have towards 'alternative archaeologists' with Garrett Fagan. Fagan dismisses views that are not in line with his scientific approach "as 'ideologically driven pseudoscience' usually drawing on certain mythic motifs, such as 'The Vindicated Thinker' who embarks on a quest 'tackling some terrific mystery or secret of the past' and finally emerges as the hero that brings sensationalist news that requires 'rewriting the history books from page one''' (Holtorf 2005:545).

For Holtorf this is an opinionated and patronizing view that is damaging for archaeology because he argues that there are mythic overtones in science as well. The Vindicated Thinker is a powerful theme in many popularized accounts of archaeology. However, this is the way media reports, how archaeology appears in the media ecology, not how most archaeologists describe their own work. Holtorf conflates the media ecology with the academic-object, and ignores the very different distinctions that make up different incorporeal hyperobjects. For example, various popular TV-shows on '2012' provide "a purportedly factual depiction of stigmatized readings of ancient cultures and modern science, with the appearance of being sanctioned by expert opinion..." (Whitesides 2013:77). Popular media ecologies tend to emphasize speculative and supposedly 'controversial' ideas.

I do understand what Holtorfs is arguing for and on my blog I have on occasion, sometimes regrettably, used dismissive rhetoric in my dealings with the 2012ers, but I have never claimed that there is one truth or one appropriate method. What I argue for is not a relativistic approach which is at the core of Holtorf's view of archaeology. The object-oriented perspective presented here includes a multitude of various interpretations because each object creates its own manifestation of another object. What Holtorf's view misses, because he conflates all discourses/objects into a seamless relativistic whole, is that, for example, the 2012-object did and still does not communicate with the academic-object. In order to communicate with its parts, you have to strive to become part of it yourself and that can never fully succeed. Through the blog, one can participate in both hyperobjects at the same time but readers of the blog posts will draw different conclusions based on their 'affiliation'.

On October 18, 2011, Holtorf invited Semir Osmanagic to Linnaeus University in Kalmar, Sweden. Osmanagic 'terraforms' Bosnian hills/mountains into pyramids so they suit his claim that they were built by aliens from the Pleiades (among other things) (Holtorf & Hilton 2012; Normark 2012; Pruitt 2012). Osmanagic must be taken seriously or at least be treated respectfully from Holtorf's perspective. To me this is a problematic way of dealing with 'alternative' researchers. It only gives them a degree of credibility which they do not deserve. Osmanagic can only be given credibility in spiritual, religious, and subjective beliefs, but not in the academic-object. Holtorf makes no effort to study the cranks themselves since he takes their side against the 'patronizing' scientists. Kristiansen (2008) also points out that Holtorf sides with the popular view. Holtorf (2008) replies, that we should be openminded to other views. Ironically, being open-minded is not an uncommon self-image among 2012ers commenting on my blog. It is easy to be open-minded when one can expand one's field of distinction to include whatever one wants to believe. Let us take an example occurring in real time.

The academic—and 2012—objects interact in media ecology

My blogging activity led to several appearances in old media the days before the 'end-date' on December 21, 2012. During my appearance in Nyhetsmorgon on TV4 (a Swedish morning live show) on December 20, 2012, I was joined by the Swedish Yogainstructor/celebrity/actress Malin Berghagen (<u>http://www.tv4play.</u> <u>se/program/nyhetsmorgon?video_id=2252815</u>). She had been invited to represent the 'New Age' faction (no 'doomsdayer' was invited). I was there to represent the 'academic expertise'.

The TV-hosts Jenny Strömstedt and Steffo Törnguist began by asking me if there would be a doomsday the following day. I answered them what the academic position was regarding Monument 6 at Tortuguero. I concluded that there is no doomsday. Then the hosts turned their attention to Berghagen who stated that this is not her opinion either. Berghagen replied that religions emphasize doomsday, apocalypse, and fear. She believed we were facing the end of an era and she said that the date 12-12-12 recently had passed and that this will not reappear for a long time. Bear in mind that she made a numerological connection between the 12th day of the 12th month of the year 2012 in the Gregorian calendar and the (then) upcoming end of the 13 Baktun in the Mayan Long Count calendar. These calendars have no connection with each other apart from scholarly attempts to correlate them. They do not even use the same numerical system (we use a decimal system and the Maya used a vigesimal system).

Berghagen also talked about personal observations in her Yoga classes. People who attended her classes had gone through changes like divorces and illnesses in 2010 and 2011. In 2012 these things had become better. She also mentioned that astrologers (and astronomers!) she knew read what is written in the stars. The year 2012 was the era of breakup and she mentioned that 2013 is the number of a goddess so that must be good for some unstated numerological reason.

After this 'clarification' of the New Age standpoint, the TV-hosts asked me why the hieroglyphs at the end of the passage that mention 13 Baktun on Monument 6 are eroded. I told them that this is probably the effects of the monument being old and being buried in the ground. Berghagen added that "we can fill in the blanks ourselves".

This section was followed by a several minutes long clip, shot at the Observatory Museum in Stockholm two weeks earlier. Strömstedt introduced this section with more or less this phrasing: "now we are going to watch a people closely related to the Maya Indians, the Inca Indians". First of all, 'Indian' is usually a derogative term in the Americas. Second of all, indirectly she says that all 'Indians' are related or similar in one way or another, which is a gross generalization. The Observatory Museum had been visited by two pag'os or healers (Don Dante and Don Mariano) from the Q'ero. The Q'ero were said to have lived 'isolated' on mountain peaks for 500 years and they had now left the Andes to tell people in the West about their prophecy. Don Dante and Don Mariano told us that "between December 21 and 24, the energy from four Suns will be united. Great sources of energy will emerge and a portal will be opened. This is a time for reflection". To them there was no doomsday, only an era of positive changes.

After the show I found out that the two paq'os had been on tour visiting New Agers in Sweden and Europe. I have no doubt that the supposed connection between their prophecy and the Maya calendar had been introduced to the paq'os by Western New Agers visiting the Andes. This is one of the reasons Berghagen's point of view was similar to their view. It shows how the 'pizza effect' works, an effect that has driven the whole 2012-object. This is a hermeneutic feedback loop in which the Western invention of the 2012-tradition is falsely claimed to have originated in another culture. However, this invented tradition has filtered back into Maya culture (Whitesides and Hoopes 2012:53), and other indigenous groups by the 'help' from Western New Agers.

The 'Maya doomsday'/New Age point of view structured Nyhetsmorgon that morning. It was brought up at the beginning of the show and it was maintained throughout the whole show. The 2012-phenomenon was a fun curiosity, just as media treated it from the beginning. The producers of the morning show thought that the opinion of a Yoga instructor with no knowledge of the Maya and their calendar(s) was as equally valid as that of an academic Mayanist. There was clearly little to no interest in the academic-object. There was no communication between the objects within this media ecology. The media only focused on the sensational part and that excluded the academic-object.

After being interviewed in several Swedish newspapers, radio, and TV shows during a couple of days I noticed common tendencies. Most news media were surprised that the Maya did not predict anything of what the 2012-phenomenon was about. This means that most news media only repeated what other news media reported. They seldom looked into what the academic object had to say (exceptions were Vetenskapsradion and Kulturnyheterna). This tendency was most clearly seen in the frequent questions I received regarding the various mountains in Europe where people were said to have sought refuge, most commonly Bugarach in France, but also on mountains in Serbia and Turkey. These mountains were virtually nonexistent in the 2012-object. They may have been important in earlier 'doomsday' or New Age mythologies, but not in this one.

Concluding discussion

Most 2012ers lack formal education in archaeology, astronomy, Maya studies, etc. and they usually see this as something positive because they believe they 'think outside the box'. Instead of trying to understand the complexities inherent in all established knowledge, they reject most of it, cherry pick what suits them, and create something that is filled with logical gaps and inconsistency. If we follow Holtorf's suggestions, these 2012 myth-makers must be taken seriously since the scientific view of the Maya and their calendars is also based on myths (the way various epigraphers are idolized for being crackers of codes, archaeologists finding extraordinary tombs or sites with inscriptions, etc.). But this is how others describe the Mayanists, usually not how they describe themselves (although there are exceptions of course).

We find another pattern among major figures in the 2012-object or Mayanism. Calleman (2009) claims that he has discovered that the Long Count reflects the evolution of the universe, life, and consciousness, Osmanagic (2007) claims to have discovered the "mother of all pyramids," and Jenkins (2009) believes his "pioneering research" has found out the truth behind what he sees as the most intriguing date in history. These are their own descriptions of their own feats. Here, the myth-makers' influence on people should be taken seriously because their myths are taken seriously. Should they be taken seriously as an alternative archaeological/Mayanist explanation? Not until their ideas have gone through peer-review and been approved.

One cannot conflate New Age myth-makers with the way an academic Mayanist might appear in popular media. The main difference is that the cranks' whole self-image and commercial and public success rely on emphasizing their self-created myths. That is usually not the case for the academic scholar. We do not debunk or criticize the fringe because we feel threatened by them, as Holtorf argues; we do it because we want research in our discipline to be based on a great body of information that is of relevance to the contexts under discussion. The Big Bang, quantum physics, alien space ships, multi-dimensions, or instantaneous polar shifts are not relevant for understanding the Maya Long Count. In Maya epigraphy and archaeology these things fall outside the distinction of what can be known. Some people also debunk pseudoscience because it has a bad historical reputation. Explanations that seek the origin of Maya civilization to some Aryan Pleiadeans, Annunaki, or the lost tribes of Israel rather than the Maya themselves are ethnocentric at best and racist at worst.

Should we let people live out their fantasies without pointing out what is wrong with the (dis)information they assess? It would be a great mistake not trying to inform people about the intricacies in research. What one cannot stop people from doing is to translate what one says into something different. Academic Maya research will never be able to affect 'Mayanism' into a more realistic view. As an academic blogger, I can only hope to perturb the 2012-object as much as possible, even to implant new ideas which the 2012ers have not thought about themselves, such as a potential new "end date" of October 2, 2027, a date based on the Aztec calendar. Why? If one conducts an internet search for 'Maya calendar', it is the image of the Aztec calendar stone that shows up, not a Maya calendar. The Aztec calendar stone has nothing to do with the Long Count. Maybe, then, it is possible that the year 2027 can be associated with the 'correct' image.

Traffic to some of the earliest 2012-related blog posts I wrote in 2009 shows some interesting trajectories up until the present day (May 12, 2015) (figure 2). Interest in the works of Terence McKenna, Gregg Braden, and Semir Osmanagic remains largely unaffected after 2012 whereas interest in the works of Patrick Geryl and Carl Johan Calleman has dropped considerably. The first three people only included "2012" as a minor part of their own New Age-related work. Geryl's focus on cataclysmic events in 2012 had a 'bestbefore-date' and so did Calleman's focus on October 28, 2011, as the end date (which explains why his popularity began to drop at the end of 2011). As for 2015, the '2027' curve rises steadily. In fact, between May 12, 2014 and May 12, 2015, '2027' has been the most popular search term on my blog (81 hits compared to 10 for 'Osmanagic' and 5 for 'Calleman'). It will be interesting to follow its trajectory for the next 12 years particularly since 2027 is also connected to a Biblical prophecy, a solar eclipse, and the passing of an asteroid.

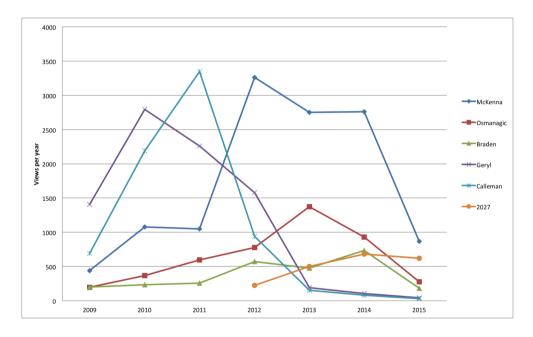


Figure 2. The popularity of a couple of 2012-related posts since 2009.

Despite the claims about being 'open-minded', it is the 2012ers who are orthodox because they and the 2012-object rely on 'necessity'. This is the same underlying assumption in theism and atheism according to Meillassoux (2008). Even instantaneous polar-shifts are by necessity loosely based on the 'laws of nature'. By necessity there is a purpose of the Callemanian universe, etc. So far I have not seen any 2012er go as far as to say something like Meillassoux's (2008) claim that the laws of universe can change at an instant and that there is an inexistent God that may come to exist ex nihilo (Harman 2011b). One could argue, following Bard and Söderqvist (2014), that internet already is this 'God'.

No '2012er' rethinks reality as profoundly provocative as some of the speculative realists. Each 2012er basically creates his/her own subjective universe and seldom do they engage in a critical discussion about each other's work, like academics do with their colleagues' work. Let time tell if Meillassoux's "divine inexistence" becomes part of a possible 2027-object. If so, my blogging perturbations of the 2012-object has succeeded.

Acknowledgements

This article is part of the project *The Necromantic Ordering of Days*, financed by The Swedish Research Council and Birgit och Gad Rausings stiftelse för humanistisk forskning. Thanks to John Hoopes for commenting on an earlier draft of the paper. Any mistake is mine alone.

References

- Aldana, G. 2007. *The Apotheosis of Janaab' Pakal: Science, History, and Religion at Classic Maya* Palenque. Boulder: University Press of Colorado.
- Aldana, G. 2011. The Maya calendar correlation problem. In: J. Steele, ed. Calendars and Years II: Astronomy and Time in the Ancient and Medieval World. Oxbow Books.

- Astor-Aguilera, M. A. 2010. *The Maya World of Communicating Objects: Quadripartite Crosses, Trees, and Stones*. Albuquerque: University of New Mexico Press.
- Aveni, A. F. 2009. *The End of Time: The Maya Mystery of 2012*. Boulder: University Press of Colorado.
- Aveni, A. F. 2011. Maya Numerology. *Cambridge Archaeological Journal*, 21(2), 187-216.
- Bard, A., & Söderqvist, J. 2014. *Syntheism: Creating God in the Internet Age*. Stockholm: Stockholm Text.
- Bast, R. 2012. Survive 2012: A Handbook For Doomsday Preppers. Discover Where and How to be Safe from a Global Cataclysm-CreateSpace Independent Publishing Platform.
- Boot, E. 2013. The 'End' of the Maya Long Count? 2012 and the Classic Maya. *Altre Modernità* 7, 57-73.
- Bryant, L. R. 2011a. Apocalyptic Musings. Larval Subjects [online] [accessed 5 October 2014]. Available at: <u>http://larvalsubjects.</u> wordpress.com/2011/01/04/apocalyptic-musings/
- Bryant, L. R. 2011b. *The Democracy of Objects*. Ann Arbor: Open Humanities Press.
- Bryant, L. R. 2011c. More Media Ecology and Blogging. Larval Subjects [online] [accessed 5 October 2014]. Available at: <u>http://larvalsubjects.wordpress.com/2011/03/21/more-</u> <u>media-ecology-and-blogging/</u>
- Bryant, L.R., 2014. Onto-Cartography: An Ontology of Machines and Media. Edinburgh University Press, Edinburgh.
- Calleman, C. J. 2009. *The Purposeful Universe: How Quantum Theory and Mayan Cosmology Explain the Origin and Evolution of Life*. Rochester: Bear & Company.
- Castañeda, Q. E. 1996. *In the Museum of Maya Culture: Touring Chichen Itzá*. Minneapolis: University of Minnesota Press.

Coe, M. D. 1966. The Maya. New York: Praeger Publishers, Inc.

- Deleuze, G., & Guattari, F. 1987. Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.
 Freidel, D. A., Schele, L., & Parker, J. 1993. Maya Cosmos: Three Thousand Years on the Shaman's Path. New York: Quill William Morrow.
- Gelfer, J., (ed.) 2011. *2012: Decoding the Countercultural Apocalypse*. London: Equinox.
- Geryl, P. 2005. *The World Cataclysm in 2012: The Maya Countdown to the End of Our World*. Adventures Unlimited Press.
- Goodman, J. T. 1897. Appendix: The Archaic Maya inscriptions. In:
 F. D. Goodman and O. Salvin, eds. *Biologia Centrali-Americana* or Contributions to the Knowledge of the Fauna and Flora of Mexico and Central America (Vol. VI). London: R. H. Porter.
- Gronemeyer, S. & MacLeod, B. 2010. What Could Happen in 2012:A Re-Analysis of the 13-Bak'tun Prophecy on Tortuguero Monument 6. *Wayeb Notes*. Vol. 34.
- Hanks, W. F. 2010. *Converting Words: Maya in the Age of the Cross*. Berkeley: University of California Press.
- Harman, G. 2009. *Prince of Networks: Bruno Latour and Metaphysics*. Prahran, Vic.: re.press.
- Harman, G. 2011a. The Quadruple Object. Winchester: Zero.
- Harman, G. 2011b. *Quentin Meillassoux: Philosophy in the Making*. Edinburgh: Edinburgh University Press.
- Hervik, P. 1998. The Mysterious Maya of National Geographic. Journal of Latin American Anthropology, 4(1), 166-197
- Holtorf, C. 2005. Beyond Crusades: How (not) to Engage with Alternative Archaeologies. *World Archaeology*, *37*(4), 544-551.

- Holtorf, C. 2007. *Archaeology is a Brand! The Meaning of Archaeology in Contemporary Popular Culture*. Oxford: Archaeopress.
- Holtorf, C., 2008. Academic critique and the need for an open mind (a response to Kristiansen). Antiquity 82, 490-492.
- Holtorf, C., & Hilton, J. 2012. Learning about the Past from the Bosnian Pyramids? *AP: Online, Journal in Public Archaeology*, 2, 44-51.
- Hoopes, J. W. 2011. Mayanism Comes of (New) Age. In: J. Gelfer, ed. 2012: Decoding the Counterculture Apocalypse. London: Equinox, pp. 38-59.
- Houston, S. D. 2008. What will not Happen in 2012. Maya Decipherment [online] [accessed 5 October 2014]. Available at: <u>http://decipherment.wordpress.com/2008/12/20/whatwill-not-happen-in-2012/</u>
- Jenkins, J. M. 1998. *Maya Cosmogenesis 2012*. Santa Fe: Bear & Company.
- Jenkins, J. M. 2009. *The 2012 Story: The Myths, Fallacies, and Truth Behind the Most Intriguing Date in History*. New York: Jeremy P. Tarcher/Penguin.
- Kristiansen, K., 2008. Should archaeology be in the service of `popular culture'? A theoretical and political critique of Cornelius Holtorf's vision of archaeology. *Antiquity* 82, 488–492.
- Martin, S., & Skidmore, J. 2012. Exploring the 584286 Correlation between the Maya and European Calendars. *The PARI Journal*, *13*(2), 3-16.
- Meillassoux, Q. 2008. Spectral dilemma. In R. Mackay, ed. *Collapse Vol. IV: Concept Horror*.
- Morley, S. 1983. The Ancient Maya. Stanford: Stanford University Press.
- Morton, T., 2013. Hyperobjects: Philosophy and Ecology after the End of the World. University of Minnesota Press, Minneapolis.

- Normark, J. 2004. Discontinuous Maya identities: Culture and Ethnicity in Mayanist Discourse. In: F. Fahlander and T. Oestigaard, eds. *Material Culture and Other Things*. Gothenburg: University of Gothenburg, pp. 109-160.
- Normark, J. 2011. 2012: Comments on a Review of a Book. Archaeological Haecceities. [online] [accessed 5 October 2014]. Available at: <u>http://haecceities.wordpress.</u> <u>com/2011/06/03/2012-comments-on-a-review-of-a-book/</u>
- Normark, J. 2012. Osmanagic and Mayanism. *AP: Online Journal in Public Archaeology*, *2*, 35-37.
- Normark, J. 2013. 2012 and the Maya Collapse: Ecology in the End Times. *O-Zone: A Journal of Object Oriented Studies*, 1(1), 1-10.
- Novella, S. 2012. Cranks and physics. Neurologica. [online] [accessed 5 October 2014]. Available at: <u>http://theness.com/</u> <u>neurologicablog/index.php/cranks-and-physics/</u>
- Osmanagic, S. 2007. *Bosnian Valley of Pyramids: Scientific Evidence About the Existence of Bosnian Pyramids, digital document*. Visoko, The Archaeological Park Bosnian Pyramid of the Sun Foundation.
- Pinchbeck, D. 2007. 2012: The Return of Quetzalcoatl. Tarcher.
- Pruitt, T. 2012. Pyramids, Performance and Pseudoscience in Visoko, Bosnia. *AP: Online Journal in Public Archaeology*, *2*, 26-34.
- Restall, M., & Solari, A. 2011. *2012 and the End of the World*. Lanham: Rowman & Littlefield Publishers.
- Robbert, A. 2011. Media Ecology and Blogging. Knowledge Ecology [online] [accessed 5 December 2012]. Available at:http:// knowledge-ecology.com/2011/03/20/media-ecology-and-blogging
- Saturno, W. A., Stuart, D., Aveni, A., & Rossi, F. 2012. Ancient Maya Astronomical Tables from Xultun, Guatemala. *Science*, 336, 714-717.

- Sitchin, Z. 2007. *The End of Days: Armageddon and Prophecies of the Return*: William Morrow.
- Sitler, R. K. 2012. The 2012 Phenomenon Comes of Age. *Nova Religio: The Journal of Alternative and Emergent Religions*, 16(1), 61-87.
- Stuart, D. 2011. *The Order of Days: The Maya World and the Truth about 2012*. New York: Harmony Books.
- Stuart, D. 2012. Notes on a New Text from La Corona. Maya Decipherment [online] [accessed 5 October 2014]. Available at: <u>http://decipherment.wordpress.com/2012/06/30/noteson-a-new-text-from-la-corona/</u>
- Tedlock, D. 1996. *Popol Vuh: The Definite Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*. New York: Simon & Schuster.
- Van Stone, M. 2010. 2012 Science and Prophecy of the Ancient Maya.Tlacaélel Press.
- Waters, F. 1975. *Mexico Mystique: The Coming Sixth World of Consciousness*. Chicago: Sage Books.
- Whitesides, K. A. 2013. From counterculture to mainstream: 2012 millennialism in your living room. In: J. Aston and J. Walliss, eds. *Small Screen Revelations: Apocalypse in Contemporary Television*. Sheffield: Sheffield Phoenix Press, pp 74-95.
- Whitesides, K. A., & Hoopes, J. W. 2012. Seventies Dreams and 21st Century Realities: The Emergence of 2012 Mythology. *Zeitschrift für Anomalistik*, 12, 50-74.
- Žižek, S. 2011. Living in the End Times. London: Verso.

AP: Online Journal in Public Archaeology

Editors: Jaime Almansa Sánchez & Elena Papagiannopoulou Email: almansasanchez@gmail.com Assistant editors: Amanda Erickson Harvey Kaitlyn T. Goss Reviews editor: Alexandra Ion Assistant production editor: Alejandra Galmés Alba Edited by: JAS Argueología S.L.U. Website: www.jasarqueologia.es Email: jasargueologia@gmail.com Address: Plaza de Mondariz, 6, 28029 - Madrid (Spain) _ _ Cover Image: Makonde women (Festo Gabriel)

Copyright © 2015 JAS Arqueología S.L.U. (edition) & Authors (content)

ISSN: 2171-6315

AP Journal is a peer-reviewed journal devoted exclusively to Public Archaeology. It is freely distributed online on the Website:

www.arqueologiapublica.es

You can also follow us on:

Blogger:



http://arqueologiapublica.blogspot.com/

Twitter:



http://twitter.com/APjournal

Facebook:



http://www.facebook.com/APJournal