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#### **Reinhard Mussik**

Abstract: The sun, moon, stars and planets have been worshipped in many cultures in different historical periods. At the beginning of the seventeenth century in the German region of Upper Lusatia some people were caught 'red-handed' by their parish priest praying to the sun at rock formations at sunrise and sunset. At the summer solstice 2012 a group of hobbyist archaeoastronomers established an Internet interconnection between similar rock formations in the same region. All the rock formations involved were mooted to have been sacred sites of a prehistoric sun cult. Could this phenomenon be a revival of a long-forgotten cult? This article explores the motivation of the organisers of and participants in the virtual interconnections at the summer solstice 2014. Surprisingly, these people were mainly interested in archaeoastronomy and local history, not in New Age spiritual ideas. Furthermore, they felt connected to an assumed pan-European sun cult which could have been ubiquitous at a time when borders between the European countries did not exist.

The illustrated edition of *Das Buoch Der Tugend (The Book of Virtue)* by Hans Vintler, published in 1486 contains a wood cut (figure 1) portraying people worshipping the sun, the stars and the moon whilst kneeling at a rock formation. <sup>1</sup>

Reinhard Mussik, 'An Investigation of Internet Solstice Celebrations of Supposed Prehistoric Sacred Places', *Culture and Cosmos* Vol. 22 no 1, Spring/Summer 2018, pp. 65-88.

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<sup>&</sup>lt;sup>1</sup> Hans Vintler, *Das Buoch Der Tugend* (Augsburg: Johann Blaubirer, 1486) image 312.



**Fig. 1.** Hans Vintler, *Das Buoch Der Tugend* (Augsburg: Johann Blaubirer, 1486) image 312. Avialable under Public Licence: Bayerische Staatsbibliothek [BSB-Ink V-219 - GW M50692] http://daten.digitale-sammlungen.de/bsb00032399/image\_312

Vintler, who died in 1419, became famous for a poem in which he castigated beside the vanity, pride, meanness, squalidness and particularly – from lines 7595-8497 - the superstition of his time.<sup>2</sup> In his poem, Vintler considered the worshipping of cosmical objects as a problem of his time, similar to the adoration of the devil.<sup>3</sup> The Sun, the Moon, stars and planets had been worshipped in many cultures in different historical periods. We might expect that the Christianisation of Europe would have removed such practices, so it should have no longer been a problem any more. But as we can see in this wood engraving, such practices were still

<sup>&</sup>lt;sup>2</sup> Ignaz v. Zingerle, ed. *Die Pluemen Der Tugent Des Hans Vintler*, Aeltere Tirolische Dichter (Innsbruck: Verlag der Wagner'schen Universitätsbibliothek,1874), vol. 1, p. XXIX.

<sup>&</sup>lt;sup>3</sup> 'Und etlich leut hond die tick/Das sy den teuffel petten an/Sterne sonnen und auch den man', Hans Vintler, *Das Buoch Der Tugend*, image 312.

known at the end of the fifteenth century. And just at the beginning of the seventeenth century in the German region of Upper Lusatia some people were caught 'red-handed' by their parish priest praying to the sun at rock formations at sunrise and sunset.<sup>4</sup>

In the same Upper Lusatian region, but four centuries later, fifty people gathered at a rock formation near Neusalza-Spremberg to watch the sunset at the summer solstice 2012. But they could watch the sunset not only at the rock formation itself, but elsewhere too. Hobbyist-archaeoastronomers from the nearby Sohland/Spree observatory established an Internet interconnection between the rock formation in Neusalza-Spremberg and two similar rock formations in Austria and Bavaria. They argued that the three rock formations in question could have been sacred sites of a prehistoric sun cult.<sup>5</sup>

The Archaeoastronomy department of the Sohland/Spree Observatory repeated this event on 22 June 2013. The 2013 event differed from the 2012 event in involving and connecting six, rather than three, sites in different countries. The rock formations and archaeological sites chosen for the 2013 event were the Kogelsteine near Eggenburg in Austria, the Teufelsbutterfass near Leuchtenberg in Bavaria, the Sybillenstein near Bischofswerda in Saxony, the Germanic Longhouse near Miltitz in Saxony, the Nebra Arche and the Mittelberg in Saxony-Anhalt, Stonehenge in England, and a rock formation near Neusalza-Spremberg in Saxony.<sup>6</sup> I took part in this event at the Mittelberg near Nebra. The Nebra sky disk was found at the top of this mountain in 1999.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> Karl Preusker, *Blicke in Die Vaterländische Vorzeit. Sitten, Sagen, Bauwerke Und Geräthe*, 3 vols. (Leipzig: Verlag der J. C. Hinrichs'schen Buchhandlung, 1841), 1:14.

<sup>&</sup>lt;sup>5</sup> Ralf Herold, 'Sommersonnenwende 1. Internationale Vernetzung Prähistorischer Sonnenheiligtümer,' https://youtu.be/SI2bb89y0zY; Fachgruppe Archäoastronomie Sternwarte 'Bruno-H.-Bürgel' Sohland/Spree e.V., *1. Internationale Vernetztung Prähistorischer Sonnenheiligtümer* (2012).

<sup>&</sup>lt;sup>6</sup> Ralf Herold, *Dokumentation. 1. Tag Der Archäoastronomie. 50 Jahre Sternwarte Sohland/Spree* (2013); Dirk Irrgang, 'Tag Der Archäo-Astronomie: Rückblick,' Sternwarte Sohland/Spree, http://www.sternwarte-sohland.de/index.php/sternwarte/archaeo-astronomie; Ralf Herold, 'Sommersonnenwende 1. Tag Der Archäoastronomie 2013', https://youtu.be/BlM2RUqBcCU.

Saale-Unstrut-Tourismus e.V., 'Skydisc of Nebra', http://saale-unstrut-tourismus.de/web/en/content/content.php?areaID=9&menuID=34&contentID=1 27&active\_menu=0&vhm=; Wolfhard Schlosser, 'Astronomische Analyse Der

I had experienced the beginning of this interconnection project in 2012. Now I saw the increasing interest in the event in different countries and I wanted to understand the extent of its popularity. So, I determined to explore the motivation of the organisers of and participants in the following event in 2014. The organisers no longer called the event 'Internet interconnection between sacred sites of a prehistoric sun cult' but the 'Third Day of Archaeoastronomy'. <sup>8</sup>

My interest is in the people who connect with supposed prehistoric sacred places in virtual space at the summer solstice today. Are these people worshipping the stars or other celestial objects at presumed prehistoric cult places, and could this be a revival of a long-forgotten cult? This article explores the motivation of the organisers of and participants in the virtual interconnection at the summer solstice 2014. It consists of the following parts: I will start with my research questions, then describe the methods I used, document the results of my study, and finally, will give a conclusion with an outlook on future developments.

I will explain the character of the sites involved in the project using one example. Figures 2 and 3 are photos taken by Enrico Calzolari, showing a site called 'Gilded Butterfly'. Both photos were taken near San Lorenzo al Caprione in Italy, where visitors attended the summer solstice of 2013. They show the function of this site. Figure 2 shows a rock formation which functioned as a 'window' for the sun at the time around the summer solstice sunset and figure 3 depicts the projection of a 'Gilded Butterfly' on a rock formation opposite the 'window'.

Himmelsscheibe Von Nebra Und Des Kreisgrabens Von Goseck: Gemeinsamkeiten Und Unterschiede', in *Acta Praehistorica Et Archaeologica*, ed. Wilfried Menghin (Berlin: Staatliche Museen zu berlin: Preußischer Kulturbesitz, 2008); Rahlf; Rink Hansen, Christine, 'Himmelsscheibe, Sonnenwagen Und Kalenderhüte: Ein Versuch Zur Bronzezeitlichen Astronomie', in *Acta Praehistorica Et Archaeologica*, ed. Wilfried Menghin (Berlin: Staatliche Musen zu Berlin - Preußischer Kulturbesitz, 2008).

<sup>&</sup>lt;sup>8</sup> Ralf Herold, 'Tag Der Archäoastronomie 2014', https://youtu.be/nF7Q2a-7pTA.

<sup>&</sup>lt;sup>9</sup> Enrico Calzolari, *La Preistoria Del Caprione*, La Nuova Cultura (MARNA, 2006); Enrico Calzolari, 'Per Un Progetto Di Parco Di Paleo-Archeoastronomia Nel Promontorio Del Caprione (Sp)', in *15° Seminario di Archeoastronomia* ed. Osservatorio Astronomico di Genova (Genoa: Osservatorio Astronomico di Genova, 2013).



**Fig. 2.** Rock formation near San Lorenzo al Caprione in Italy which functioned as a 'window', photo: Enrico Calzolari



**Fig. 3.** Rock formation near San Lorenzo al Caprione in Italy, light form a 'Gilded Butterfly', photo: Enrico Calzolari

The idea of connecting sites with proven or alleged archaeoastronomical relevance via the Internet is a new phenomenon, which seems to be ubiquitous. It arose nearly simultaneously at different places at the beginning of the second decade of the twenty-first century. Nevertheless, there are currently no anthropological studies of this phenomenon, at least not in German or English. Therefore, the following questions were proposed:

Why do people visit such sites and try to connect them during the summer solstice?

Why do they use the Internet for this purpose?

What does this interconnection mean for the participants?

To find out, I sent to twenty-four participants sixteen questionnaires in German and eight in English in preparation for the event. The participants were from ten countries: Austria, Bulgaria, Czech Republic, France, Germany, Great Britain, Ireland, Italy, Spain, and Switzerland. Eleven completed questionnaires were returned. Furthermore, I carried out participant observation during the event itself, conducted interviews after the fact and analysed the related literature and documents.

Eight of the survey participants were willing to be interviewed. The motivation described by both participants in and organisers of the event was confirmed by the survey interviews. The interviewees were selected from among questionnaire respondents. Research involving event participants without prior registration was necessarily confined to participant observation.

Raymund Arnold, 'Secular Solstice 2014', Kickstarter, https://www.kickstarter.com/projects/244974495/secular-solstice-2014; Christian Antz, 'Handbuch Tourismus in Sachsen-Anhalt', ed. Referat Tourismus (Magdeburg, Wernigerode: Ministerium für Wirtschaft und Arbeit des Landes Sachsen-Anhalt und Hochschule Harz, Bereich Tourismuswirtschaft, 2005); Robert Datzer, 'Handbuch Kulturtourismus in Sachsen Anhalt', ed. Referat Tourismus (Magdeburg, Potsdam, Köln: Ministerium für Wirtschaft und Arbeit des Landes Sachsen-Anhalt, 2006); Saale-Unstrut-Tourismus, e.V., 'Himmelswege: Die Archäologische Tourismusroute in Sachsen-Anhalt', http://www.himmelswege.de/de/tourismusroute.html; Reinhard Mussik, 'Could the New Tourist Route "Sky Paths" in Saxony-Anhalt with Its Archaeological Sites Be Considered as Sacred Space?', Spica: Postgraduate Journal for Cosmology in Culture 1, no. 2 (2013); 'Empire of the Sun', European Heritage, http://www.empireofthesun.eu/front/en.

The submitted questionnaires had shown that the respondents were quite diverse from the demographic point of view. The participants ranged in age from 26 to 76, but nine respondents were between 40 and 59 years old. Ten of the respondents had a secondary education, a university degree or a PhD, and one respondent was a gardener and landscape designer. Two of the eleven respondents were female. Six of the eleven survey respondents answered the questions in English and five in German. This shows that the interest in places which could be archaeoastronomical sites with a relation to the summer solstice is not solely a German, Austrian or Swiss phenomenon.

The questionnaires were sent to the event organisers and participants who had registered in advance. Hence, it was not surprising that nine of the eleven respondents were active at the different sites and that five were organisers of the event. Three respondents had participated in the 2012 interconnection and five in the interconnection in 2013. These numbers could be taken to indicate an increasing interest in such interconnection projects, although the numbers are still small. Four respondents had previously participated in similar events. Therefore, they were generally interested either in archaeoastronomy or in celebrating the summer solstice. The majority of the participants knew each other before the event.

Why are you interested in participation at the Day of Archaeoastronomy?						
	% of respondents			# of respondents		
Item	Yes	A little but not particularly	No	Yes	A little but not particularly	No
Interest in archaeology	63.6%	27.3%	9.1%	7	3	1
Interest in cosmology	72.7%	27.3%	0.0%	8	3	0
Interest in archaeoastronomy	100.0%	0.0%	0.0%	11	0	0
Interest in ancient religions	45.5%	36.4%	18.2%	5	4	2
Other reasons	27.3%	27.3%	455%	3	3	5

**Table 1.** Answers to the question 'Why are you interested in participation at the Day of Archaeoastronomy?'

The answers to the question 'Why are you interested in participation at the Day of Archaeoastronomy?' showed that the main motivation was an interest in archaeoastronomy (Table 1 and Figs. 4-8). While interest in archaeology and cosmology were also common motives, an interest in ancient religions was important to only five respondents. More than half of the respondents were not (or not particularly) interested in ancient religions and two respondents were not interested in ancient religions at all. Four of the survey participants explained their special and additional reasons for participation at the event in a user-defined text field. To protect the anonymity of the survey participants and my interviewees I used pseudonyms. Daniel, a participant from Ireland, was interested in what he termed 'archaeocosmology', which he defined as how 'people incorporated their living, religion, science, astronomy, geodetics, folklore, acoustics, etc.' Another respondent, Bernd, one of the German event organisers, took part in the event out of curiosity and fun; for him, contact with friends and like-minded people were very important. The interest of Francisco, a Spanish respondent, was 'to check and see how people can sacralise regular places throughout archaeoastronomy'. For Emanuele, an Italian respondent, quantum physics was an important reason for taking part in the event. Last but not least, Kate, an Irish respondent, wished to represent the Sophia Centre at the University of Wales Trinity Saint David at the event.

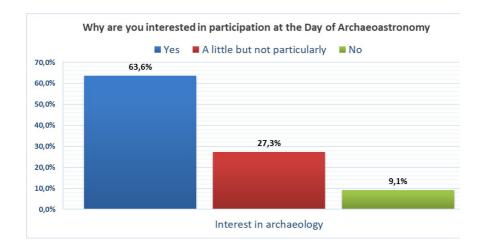


Fig. 4. Interest in archaeology

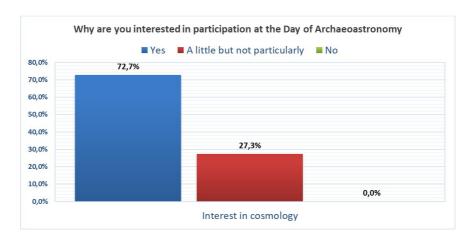


Fig. 5. Interest in cosmology

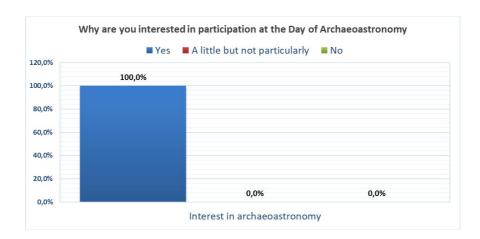


Fig. 6. Interest in archaeoastronomy

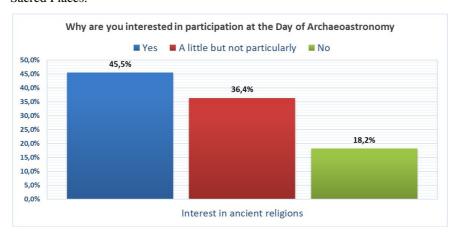


Fig. 7. Interest in ancient religions

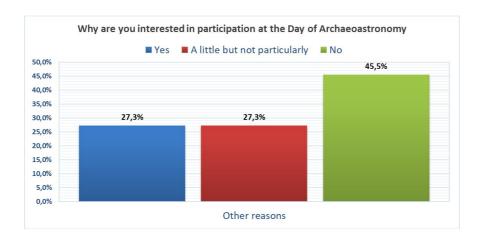


Fig. 8. Other reasons

In the follow-up interviews these respondents got the possibility to explain their motivations more profoundly. Francisco stated in the interview that he took part in this project because he knew me through our MA studies and he knew that we were studying something very similar. He thought it was a good idea to take part after I told him that this day of archaeoastronomy was related to a kind of phenomenon that he also studied. Kate told me that she simply wanted to support this

project. She has been very interested in megalithic sites and passage tombs but knows very little about the stone circles or the standing stones in Ireland. So she felt there was an opportunity to get one of the standing stones into the project and hoped it would spark the interest of other people who would maybe start looking at it. Another of her reasons for taking part was the fact that no Irish sites were involved in the events in 2012 and 2013: 'I wanted Ireland involved in this project. That was it for me really. ... Look I mean Ireland is the biggest place in Europe for this. You have to include us. I really wanted that'. The other Irish respondent, Daniel, took part because he had previously organised Internet connections with references to archaeoastronomical objects and events. For him, the virtual connectivity with all the people doing this kind of thing was very important.

Bernd was an initiator of all the three events in 2012, 2013 and 2014. He told me that he conceived the idea to interconnect some sites at the summer solstice when he saw one colleague working with his iPad. Firstly, he wanted to establish a live Internet connection between three sites in Germany and Austria at the summer solstice sunset because it seemed to be technically possible and he knew some people at these sites. With the second event, he wanted to make the Internet connection at summer solstice sunset more international and recognized, incorporating well-known archaeoastronomical sites like Stonehenge, Goseck and Nebra. He hoped to start a new tradition and that this tradition would not fall into oblivion in the ensuing years. A similar motivation was expressed by Walther, an Austrian organiser of all three events.

Stepan, an interviewee from the Czech Republic, took part in this project because he was invited by the organisers of the event. He heads a small astronomy group in his village and teaches children in a small astronomy hobby group. He is a member of the Czech Astronomical Society and his family has a great astronomical tradition. Hence, he told me playfully that he could have a genetic disposition for participating in this project.

Ute, a German participant with an astronomical background, worked in a planetarium. She took part in this project because she thought that archaeoastronomy was insufficiently recognized by the public. Ute told me that people should remember wherefrom our holidays come and how our calendar developed. She told me that adolescents have no

<sup>&</sup>lt;sup>11</sup> 'Vielleicht irgendwann einmal ist es so, dass sich überall, hier und da, immer mal ein paar Leute einfinden und dass sie beobachten und das am Leben halten. ... wichtig ist, dass es nicht wieder in Vergessenheit gerät.'

imagination about these things. They play with their mobile phones and get there the information they want but they do not know how this information comes to be known at all. For her an important motivation to take part in this project is to bring back some knowledge to the public consciousness – something that is lost in our everyday life. Emanuele, an Italian participant, stated that 'Italian archaeological authorities do not like to recognize archaeoastronomy'. Hence, he took part at the Third Day of Archaeoastronomy to convince them of the importance of this subject.

The event took part at the summer solstice sunset. Hence, to understand the motivation of the organisers and participants, it was important to explore the meaning of the summer solstice for them. Surprisingly, the interviews showed that the summer solstice itself was not as important for them as expected. Only two of the interviewees, Kate and Emanuele, celebrated the summer solstice regularly. Kate told me:

I usually do something. Sometimes just making a point of maybe meeting people that might have gone out, and maybe just talking about it. Or sometimes I do something like visit Newgrange that day even though Newgrange is winter solstice or visit one of the sites. I try to do something in some way. Sometimes I do it on my own. Sometimes I'll do it with someone else. If there is something else happening I will take part. Even there is a friend of mine who frequently tries to have a BBQ on the night that the summer solstice is. Whether its 20<sup>th</sup>, 21<sup>st</sup>, 22<sup>nd</sup>. It doesn't always work out because sometimes it rains, but I'll do something like that as long as somehow, it's marked. I don't mind how we do it, fact we are doing it in a very modern way but that's fine. We are still doing it. We are incorporating the solstice into our own culture which I am fine, I am happy with.

Emanuele felt that it was important to explain to other people at the site he visited at the summer solstice 'the shamanism that is how ancient

<sup>&</sup>lt;sup>12</sup> Die jetzt heranwachsende Generation hat von solchen Dingen gar keine Vorstellung mehr. Sie spielen mit ihrem Handy herum und bekommen die Information, aber wie es zu dieser Information überhaupt kommt, was da eigentlich dahintersteckt, da gerät immer so ein bissl in Vergessenheit. Das ist auch für mich der Reiz, bei so etwas mitzumachen: die Leute erfahren etwas, das aus unserem Alltag bereits verschwunden ist. Das Erinnern daran, dass es da eine Geschichte gibt, dass find ich spannend.

people made the "sacrum facere" at the summer solstice. Furthermore, he wanted to help the 'most sensitive persons' to 'appreciate the energy of the place and also receive energy or peacefulness'.

From all the sites included in the Third Day of Archaeoastronomy only two were places where people really celebrated the summer solstice on 21 June 2014. But my interviewees at these sites, Daniel and Francisco, were interested only in the cultural phenomenon of summer solstice celebration at these specific places and did not want to celebrate the solstice for themselves. I asked why it was important for them to go to a place for the summer solstice. Francisco answered that he:

... went for astronomical reasons. But also, I wanted to take part in this festival. I wanted to be involved. I didn't want to say: 'No, you are wrong!' I wanted to be involved because I think what people are doing is not something wrong but something good. Just something that is happening. I love to see this phenomenon. I was there for astronomical reasons but also to see the festival and how people are involved.

Daniel visited a site in Ireland at the summer solstice sunrise 2014. But the Third Day of Archaeoastronomy was a summer solstice sunset event. Hence, he could not be involved in the live interconnection in the evening, but he sent photographs to the event's organisers. For Daniel was it important to observe the increasing importance of the summer solstice in the public consciousness:

I think it's a special day, so opening it up to other people making them aware that these kinds of things exist. I think that is important. I think summer solstice is quite a modern time. I think 10 years ago people didn't know it. Nowadays, I think people know what summer solstice is. They know about Stonehenge. So, I think there is an awareness coming up that grows very fast in my opinion. I don't think that this would have been possible 20 years ago or 30 years ago. Nobody referred to it almost. But, yeah, I liked the idea; this is why I wanted to participate.

Daniel told me that he took part in the event only for what he termed 'scientific reasons' and not to celebrate at his chosen object. He studied the visitors at this site who really celebrated the summer solstice sunset, finding it interesting to observe how they invented new ceremonies. According to him, they started walking at sunset the day before. They had scones and tea and sang. So, they were making their own ceremonies

around it. To my question, if he himself ever celebrated the summer solstice, he answered: 'No, no. Perhaps I'm too technical; too scientific. But I'm glad that people do it.'

Bernd told me that the summer solstice was celebrated regularly in his region, Upper Lusatia in Germany, but only up to the end of WWII. Regardless of the fact that the rural areas in Upper Lusatia had a mainly Slavonic population who naturally practised Slavonic and not Germanic traditions, the summer solstice celebration was prohibited there after 1945 as a Nazi tradition. Like most of my interviewees, Bernd wanted not so much to celebrate the summer solstice but to make public the sites in his region which could have been cult places where people could have celebrated the summer solstice in prehistoric times. As an organiser of all three interconnection events from 2012 to 2014 he had to search for a punchy name for this kind of event. His first attempt invited people in 2012, with posters, to a 'Sonnwendfeier' (midsummer festival) - a correct German term for summer solstice celebration. But Bernd was criticized by his friends because this term was used in Nazi Germany to name the summer solstice celebration, organised regularly by the Hitler Youth. Hence, he decided, in accord with the other organisers, to call this event Day of Archaeoastronomy in 2014.

Walther came from Lower Austria and told me that in this region it is traditional to celebrate at the summer solstice sunset. He told me that every year 50,000-100,000 people come to the Danube banks to celebrate the summer solstice sunset with bonfires and fireworks. As Walther told me, the tradition to celebrate the summer solstice with bonfires is traceable to the beginning of written records. Hence, a summer solstice event was nothing new for him and the other visitors at his site. Nevertheless, the people who accompanied him to the rock formation he visited at the 2014 summer solstice sunset did not want to celebrate, but to observe how this site could have been used to determine the summer solstice in prehistoric times.

Ute guided tours to the Goseck sun observatory at the summer solstice 2014. The main gates of the wooden circle are aligned to the summer and the winter solstices. Other gates and sight openings are aligned with the equinoxes and Beltane. For her, the summer solstice is a welcome opportunity to conduct guided tours, combining astronomy with archaeology and the technology of our predecessors. Apart from that, Ute had no reason to celebrate the summer solstice. It was only an astronomical date for her.

The research has shown that for the organisers of and participants in the Third Day of Archaeoastronomy the summer solstice was mainly interesting from an archaeoastronomical point of view. It was in this spirit that Francisco answered my question: 'Did you ever celebrate the summer solstice? No, no, no, I didn't celebrate it. It always was for me only astronomical event and contact with historical civilization'. This answer expresses quite well the general attitude of most of my interviewees. Celebrating the summer solstice was important for only two respondents. The people in Ireland and Spain who really celebrated the summer solstice at sites involved in this project were not directly involved in the Third Day of Archaeoastronomy but did it independently.

Emanuele had discovered, studied and explained the site he visited at the summer solstice about fifteen years ago. For him, this place has a 'complicated structure in which are present archaeoastronomy, shamanism, interaction between geomasses and biomasses'. Emanuele visited this place at the summer solstice mainly to explain his ideas to the other people who wanted to observe the summer solstice sunset there. Kate celebrates the summer solstice every year. This year she chose the Buncarrick Standing Stone - an Irish megalithic monument - to observe the summer solstice sunset. She chose that specific site for the interconnection project mainly because after more than 4,000 years it is still standing and is left in place, even though it is surrounded by a Christian cemetery. Kate was the only person at this site summer solstice sunset 2014. Thus, that place is no longer a ritual place for other people at summer solstice sunset. However, the fact that the stone was never removed from the Christian cemetery indicates that it could have been considered a sacred object in former times.

Daniel and Francisco visited their sites at the summer solstice because they wanted to study the people who came to these sites to celebrate. Daniel physically visited the Dromberg and the Dromagorteen Stone Circles around the summer solstice on different days. He told me that both stone circles could have had similar functions in the past. Both had an alignment to the summer solstice sunrise and both had what the local people called a 'cooking place' nearby. He interviewed the visitors and wanted to know why they go there. According to Daniel some people think that this site has a solar alignment, some think it is a burial place, that it has to do with fairies, or that if you do something there you can die. For him it was important to study the people at this place celebrating the summer solstice sunrise. But he doubts that the stone circles were built with an intentional alignment to the summer solstice sunrise.

Francisco wanted to study people celebrating the summer solstice, too. He took part in the Third Day of Archaeoastronomy at the rock formation Penas de Rodas in Galicia. He told me that this site is a rock formation formed by massive blocks of stone with a huge gap in the middle. During the summer solstice, the sunset can be observed in this gap, similar to other rock formations incorporated in the project. Francisco told me that once the site was asserted to have been a Roman observatory. Now, some people believe this to have been the case. Since 2010 or 2011 some people are 'celebrating some kinds of festivals there, mainly at the summer and winter solstice'. Francisco is an archaeologist, very interested in the modern use and functions of places like Penas de Rodas and is in the process of writing a dissertation about megalithic archaeoastronomical alignments related to the sun, the moon and the stars. Penas de Rodas is - according to Francisco - a natural rock formation without archaeological evidence of prehistoric or historic use as sacred place or calendar monument.

Bernd observed the summer solstice sunset at the natural arch on the Töpfer Mountain near Oybin in Germany. He remarked that this arch would have been an ideal cult place in prehistoric times. There is an extensive plain on the west side of the arch which could have been a site for gatherings. From this plain the sunrise could be observed through the arch. Bernd observed that the sun rises exactly in the south-eastern corner of the arch at the summer solstice and in the north-eastern corner at the winter solstice. That means that the arch embraces the whole year and could have been used as a calendar. To describe the arrangement on the Töpfer Mountain Bernd coined the term 'aesthetic-functional view'. He uses this term to describe the aesthetic view on the site as well as the best

<sup>&</sup>lt;sup>13</sup> 'Hier hast du so eine herrliche Aussicht. Du hast das gesamte Land vor dir. Du hast den gesamten Horizont vor dir. Hier oben wäre der ideale Kultplatz gewesen. Und diesen Platz hätten bestimmt sich die Leute doch ausgesucht.'
<sup>14</sup> 'Und dieses Tor funktioniert natürlich hervorragend kalendarisch. Von der

<sup>&</sup>lt;sup>14</sup> 'Und dieses Tor funktioniert natürlich hervorragend kalendarisch. Von der Westseite, also wenn du zum Sonnenaufgang blickst, der ja der Überlieferung nach so das Hauptziel gewesen sein sollte, der religiösen Anbetung. Da hast du das Tor genau so groß, wie das Jahr ist. Also du siehst in der linken Sichteinengung, also wenn die Sichteinengung gerade noch so Oberkörpergröße hat, siehst Du den Sonnenaufgang der Sommersonnenwende, und wenn du dich dann in die andere Richtung bewegst, und schaust dann von Nordwest nach Südost, dann hast du dort den Sonnenaufgang der Wintersonnenwende in deiner ähnlich großen Sichtöffnung. ... Ich denke, dass das diese Kalenderbeobachtung ist, dass das Tor, von der Größe her, genau das Jahr fast. Du siehst dort durch das Tor das ganze Jahr die Sonne. Aber eben genau im Jahr.'

possibility to use this site as a calendar. He argues that this 'aesthetic-functional view' could be a central feature of all the sites involved in the interconnection project. The solstice sunsets are also observable from the east site of the arch. Bernd told me that about fifteen bronze axes had been found at the foot of the Töpfer Mountain. Furthermore, the name 'Töpfer' (potter) was used in the region for places where people had found urns and/or potsherds. This suggests that the Töpfer Mountain could have been a ceremonial centre at least in the Bronze Age. For Bernd, the natural arch at the Töpfer Mountain was mainly an archaeoastronomical site, related to local history and with a moderate touristic perspective. The other people who wanted to watch the summer solstice sunset through the natural arch came mainly for archaeoastronomical interest, too. Only the tabloid press reflected this summer solstice event at the Töpfer Mountain as an archaeoastronomical event.

<sup>&</sup>lt;sup>15</sup> 'Dieser ästhetisch-funktionelle Blick – wir haben ja das Phänomen, dass die Objekte immer dort am tollsten funktionieren, wo man sie auch am ästhetischsten wahrnimmt. Nehmen wir mal den Kuckucksstein. Wo er am allerschönsten ist, scheint die Sonne durch. Oder in Neusalza-Spremberg. Wir haben das Objekt rechts und links ausgewogen, und genau in der Mitte kommt dieser Lichtstrahl raus. Und genau denselben Effekt hatte ich da bei diesem Tor auch. als hätte es ein Kulissenbildner für eine Theatershow aufgebaut. So wie die Theatershow Sommersonnenwende.'

<sup>&</sup>lt;sup>16</sup> 'Und wenn diese Menschen tatsächlich die Sonne so verehrt haben, beobachtet haben, verehret haben, dann war doch dieses Ereignis, dass die Sonne dort durch dieses Tor unterging, für die was ganz Besonderes.'

<sup>&</sup>lt;sup>17</sup> 'Zum Felsentor gibt es die Überlegung von dem Alfred Moschkau (1848-1912, German local historian R. M.). ... Da hatten im Preußisch-Österreichischen Erbfolgekrieg hatten da die Österreicher in Olbersdorf, das liegt unterhalb des Felsentores, haben die dort Schanzen ausgehoben für ihre Geschütze. Und bei diesem Erdaushub hat man einen Fund von 50 Bronzeäxten gemacht. Diese 50 Bronzeäxte, so war Moschkaus Überlegung, gehörten natürlich den dortigen Bewohnern. die dortigen Bewohner, so seine Philosophie und auch allgemein anerkannt in der damaligen Zeit, hatten da ihr Heiligtum. Und das Felsentor lag ja oberhalb von Olbersdorf. Da war es für ihn das naheliegendste, dass das Felsentor auf dem Töpfer dieses Heiligtum sein müsste. Also das war seine Überlegung. die 50 Bronzeäxte führten dazu, dass Moschkau diese Überlegung hatte, das Felsentor müsste das dazugehörige Heiligtum sein. Und erst in Ableitung von anderen Namensgebungen von solchen Örtlichkeiten den Töpfer absoziieren mit Töpfen, die man dort oben gefunden hat - Urnen.'

<sup>&</sup>lt;sup>18</sup> Jürgen Helfricht, 'Felsloch Ist Eine Sternwarte: Rätselhaftes Steinzeit-Gerät Erstmals Wieder in Betrieb', *Bild (Regional, Dresden)*, 15.08.2014 2014.

Walther watched the summer solstice sunset at the Kogelsteine in Austria. He researched this rock formation for about twenty years and wrote a book about its possible astronomical function. According to him this rock formation is originally natural but slightly manipulated by humans – but this seems difficult to prove. Nevertheless, it is possible to determine the most important calendar dates such as the solstices, equinoxes, the 1 May and the 1 November (also known as cross-quarter days) using the rock formations at the Kogelsteine as markers. In the surroundings of the site were found a bracelet and a cult axe which means it could have been a place of cult ritual practice in prehistoric times.

Stepan visited the rock formation Pohanske Kameny in the Czech Republic at the summer solstice sunset. He came to this place because he was asked by the people from the Sohland observatory to take some photos there at the summer solstice sunset or to try an Internet connection. He did not know much about this site before, but after the archaeoastronomers from Sohland asked him to go there, he studied many websites about this site. In 1895, Stepan told me, a scientific expedition definitely stated that these stones have natural origin but could have been used to celebrate prehistoric rituals. But no literature mentioned that these stones could have any astronomical function. Nobody celebrates the summer solstice at this place today.

Ute, being at the Goseck Circle at the summer solstice sunset, knows a lot about the archaeoastronomical meaning of this site. As a planetarium worker she uses this place to make archaeoastronomy accessible to a broader public. For her, working in a planetarium means undertaking interdisciplinary work to connect past, present and future. According to her, no myths exist about the Goseck site any more. The site and its function had totally vanished from public awareness, but now the interest in this site is big. Ute led guided tours for about 200 people on the 21 June 2014 – and she was not the only guide on this day.

All survey participants and interviewees visited real sites with an alleged or proven archaeoastronomical significance at the summer solstice 2014. However, with the exception of Emanuele, they did not go to these places for spiritual reasons. They did not want to celebrate the summer solstice themselves. Their main motivation to visit these sites was their interest in astronomy, archaeoastronomy, cultural and/or regional history. For most of them, the sites they visited were mainly objects of archaeoastronomical interest. However, they were convinced that the sites could have been sacred places in prehistoric times.

Despite their common interest in archaeoastronomy, most of my interviewees knew very little about the other sites in the project. To my question: 'And what do you know about the other sites involved in our interconnection project?' three of the interviewees answered simply 'Nothing at all'. Kate told me, for example: 'I don't even know what sites they are to be honest. I didn't recognize any of them-'. Other interviewees knew some of the sites – by literature, Internet research or personal visits – but nobody knew about all the sites included in the project before the Day of Archaeoastronomy. Nevertheless, the interconnection of these sites in different countries was very important for most of them.

My interviewee Daniel told me that the interconnection showed him that 'people are interested in that kind of thing. It is part of the folklore forming around this whole thing. It is still a living thing and a central part of people's thinking'. Furthermore, Daniel likes networking, being an IT specialist, and is keen 'to stimulate people to use networking for this kind of thing'.

Francisco answered this question as follows:

Oh, for me it was important because I thought that it was a very particular phenomenon in these places and I didn't know that it was also happening in other places. So, through this project I realized that this was happening in all, well not in all, but Europe. Maybe yeah, I don't know. That they have taken natural places and reinterpreted for astronomical reasons. I mean they are not taking as usual historical places. They are already taking natural places with no archaeological evidence and referring to them.

The interviews with Bernd and Walther, main initiators and organisers of all the three interconnection events in 2012, 2013 and 2014, showed that they mainly aimed to revitalise ancient calendar traditions and boost tourism in the region. As Bernd told me, they wanted to do this via the Internet for three reasons: 'the coup of being the first to do this, the ambition to involve as many people as possible and to include new sites suggested by new partners in this project'. In the video documentation about the Third Day of Archaeoastronomy the organisers of the event put forward the hypothesis that in prehistoric times there could have existed networks of people who used and built similar calendar monuments all over Europe and they expressed the proposal to reanimate this posited

prehistoric network.<sup>19</sup> Bernd liked the idea of a Europe-wide interconnection, because such interconnection comes close to the sense of community without borders, which the people who erected the prehistoric sites could possibly have experienced.<sup>20</sup>

Walther told me that the idea of the interconnection overcomes the differences between nations and religions and could be a song of peace, because it reminds people of their common roots. He liked to interconnect original tradition and religion with modern technical possibilities. He expressed his hope that these interconnections could be the beginning of a global tradition. Both Walther and Bernd expressed their desire to amplify the meaning of the incorporated sites via the Europe-wide Internet interconnection.

Now let us to return to the main question raised at the beginning: are these people worshipping the stars or other celestial objects at presumed prehistoric cult places, and could this be a revival of a long-forgotten cult? Surprisingly, the organisers of and participants in the Third Day of Archaeoastronomy were mainly driven by an interest in archaeoastronomy, as well as cultural and regional history. This result had not been anticipated since the re-use of ancient archaeoastronomical sites as New Age and pagan cult sites at the solstices has increased in recent years. The spiritual tourism of the 'new age' includes Goddess tours opportunities for Druid worship.<sup>22</sup> For example, in 2014 an estimated 37,000 people gathered at Stonehenge to watch the summer solstice sunrise.<sup>23</sup> However, unlike many of these visitors of Stonehenge the organisers of and participants in the 'Third Day of Archaeoastronomy' were scarcely interested in spiritual ideas. In fact, they were interested in archaeoastronomy, along with cultural and

<sup>&</sup>lt;sup>19</sup> Ralf Herold, '20.06.2015 Tag Der Archäoastronomie', ed. Stermwarte Sohland/Spree Sektion Archäoastronomie (Sohland/Spree2015).

<sup>&</sup>lt;sup>20</sup> 'Europaweite Vernetzung – das ist ein ganz schöner Gedanke, kommt dem Zusammengehörigkeitsgefühl der Leute nahe, die das errichtet haben. Da gab es keine Grenzen.'

<sup>&</sup>lt;sup>21</sup> 'Wenn man das Vernetzen kann (Urtradition, Urglaube), Denkmuster, die wir eingeprägt haben. Mit dem eine weltüberbrückende Tradition aufleben zu lassen, das gefällt mir gut'.

<sup>&</sup>lt;sup>22</sup> Robert J. Wallis and Jenny Blain, 'Sites, Sacredness, and Stories: Interactions of Archaeology and Contemporary Paganism', *Folklore* 114, no. 3 (2003): p. 309.

<sup>&</sup>lt;sup>23</sup> Scott Ellis, 'Stonehenge Summer Solstice Celebrations See Thousands Gather', BBC News UK, http://www.bbc.com/news/uk-england-wiltshire-27954267.

regional history. Many of them wanted to boost tourism in their region, were interested in spreading astronomical knowledge, were driven by scientific interest, and some intended to publish their books or research results.

Furthermore, I thought that the organisers of and participants in the Third Day of Archaeoastronomy would see themselves as members of a virtual group like the online gamers. This research has shown that this was not the case. The participants decided to use the Internet because it is affordable, accessible, and convenient. Without the Internet, such a project could not have been organised by a group of enthusiastic hobbyist archaeoastronomers.

The next surprising result concerns the general meaning of the interconnection for its organisers and participants. They felt connected to an assumed Pan-European sun-cult which could have been seen as a predecessor of a unified Europe without borders. As a result, the organisers and participants wanted to connect sites which could have been cult places of a hypothetical, prehistoric, pan-European culture. Most respondents felt connected to this culture, which they assumed could have been ubiquitous in Europe at a time when borders between countries did not exist. According to the participants and event organisers, this culture could have been aligned with a cult which included the celebration of the summer solstice anywhere in Europe. They interpreted this assumed prehistoric cult as a predecessor of a unified Europe without borders.

The growing awareness of being Europeans, combined with the technical possibilities of the Internet and mobile networks, provided an important impulse to connect different sites with an assumed prehistoric background in different countries at the summer solstice. This phenomenon could be explained with Benedict R. Anderson's theory about 'imagined communities'. Anderson coined the term 'imagined communities' as an explanation for the growth in popularity of nationalism but his concept could similarly explain the formation of groups such as the one under review in this project. For Anderson, a society is *imagined* if their members 'never know most of their fellowmembers, meet them, or even hear of them, yet in the minds of each lives the image of their communion'. Furthermore, Anderson stated that every imagined community, as a necessary consequence of its 'novelty',

<sup>25</sup> Anderson, *Imagined Communities*, p. 6.

<sup>&</sup>lt;sup>24</sup> Benedict R. O'G Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, rev. ed. (London: Verso, 2006).

is forced to show its 'antiquity'. 26 These two central points of Anderson's analysis of nations were critical to the analysis of the researched community. The people researched in this project acted and interacted in a very complex way. Most members of the researched group never met each other in reality, but all felt as if they were a part of a bigger project. These are characteristics of an 'imagined community'.27 The idea of connecting alleged prehistoric cult places on a date with ritual significance could express the desire of the research subjects to 'prove' the 'antiquity' of their own pan-Europeanism. Regardless of the fact that most of the sites involved were not proven prehistoric cult places, the organisers of and participants in the 'Third Day of Archaeoastronomy' felt themselves to be part of a network of prehistoric calendar monuments. This pan-European group credited itself with an 'antiquity' which preceded the history of all European states. Being a Europe-wide phenomenon, the Third Day of Archaeoastronomy seems to be important for the relatively new 'imagined community' of Europe – not only as a continent but as a political construct populated with 'EU citizens'.

To sum up, the organisers of and participants in the 'Third Day of Archaeoastronomy' did not want to worship celestial objects at rock formations, as did the man in figure 9, who Vintler claimed was worshipping Venus.<sup>28</sup> My research has demonstrated that as of 2014, the summer solstice was considered a welcome opportunity to publicise the sites involved in the project and to bring the ideas held by the participants and organisers about these sites to a broader audience. My original hypothesis that the participants wanted to celebrate a 'prehistoric holiday' with 'quasi-religious' meaning was not supported by the research results. After the end of this research project we had 'Days of Archaeoastronomy' every year.<sup>29</sup> The next 'Day of Archaeoastronomy' is planned for 2019. The development of the Europe-wide Day of

<sup>&</sup>lt;sup>26</sup> Anderson, *Imagined Communities*, p. xiv.

<sup>&</sup>lt;sup>27</sup> Anderson, *Imagined Communities*, p. 6.

<sup>&</sup>lt;sup>28</sup> Hans Vintler, *Das Buoch Der Tugend*, 'Und etlich zauberer die wachen/Dem stern venus umb die mynn', image 313.

<sup>&</sup>lt;sup>29</sup> Ralf Herold, 'Sommersonnenwende Tag Der Archaeoastronomie 2015', https://youtu.be/DDuElXioD\_s; Sohland/Spree Sternwarte 'Bruno-H.-Bürgel', e.V., 'Öffentliche Vorträge Und Veranstaltungen 2016', (2016); Ralf Herold, 'Tag Der Archaeoastronomie 2016', https://youtu.be/2o3XCJg\_xX4; Sternwarte 'Bruno H. Bürgel' Sohland/Spree e.V., 'Astronomisches Sommerfest – Tag Der Archäoastronomie', http://www.sternwarte-sohland.de/veranstaltungendetails/astronomisches-sommerfest-18.html.

Archaeoastronomy project could warrant both further anthropological and archaeological studies.



**Fig. 9.** Hans Vintler, *Das Buoch Der Tugend* (Augsburg: Johann Blaubirer, 1486), image 313, Medieval man worshipping the 'star Venus', available under Public License: Bayerische Staatsbibliothek [BSB-Ink V-219 - GW M50692] http://daten.digitale-sammlungen.de/bsb00032399/image\_313