## CONFERENCES

The International Symposium: 12th International Conference of the UISPP Commission on Flint Mining in Pre- and Protohistoric Times: "Excavating in the Land of the Devil: Past and Current Research on Prehistoric Flint Mines", Worthing (West Sussex), 6–8 May 2025

## Reported by Aleksandra Wołka

On 6–8 May 2025 took place the 12th International Conference of the UISPP Commission on Flint Mining in Pre- and Protohistoric Times titled "Excavating in the Land of the Devil: Past and Current Research on Prehistoric Flint Mines" (see Werra ed. 2025). It was organised by the Institute of Archaeology and Ethnology of the Polish Academy of Sciences (IAE PAN), Worthing Museum and Art Gallery, English Heritage, and the UISPP Commission on Flint Mining in Pre- and Protohistoric Times. The conference was hosted jointly by Worthing Museum and Art Gallery (West Sussex) and English Heritage Grime's Graves and the Grime's Graves Visitors Centre (Norfolk, East of England). The symposium was organised at the initiative of Dagmara H. Werra (IAE PAN), Jon Bączkowski (University of Southampton), and Anne Teather (Past Participate / Bournemouth University).

The UISPP Commission on Flint Mining in Pre- and Protohistoric Times was established on the foundations laid by participants of the flint symposiums organised between 1969 and 1999 by the "Prehistoric Flint Mines Working Group" of the Dutch Geological Society. The "Working Group" carried out excavations at the Rijckholt mine between 1964 and 1972, and later at the Neolithic pits at Grime's Graves and Harrow Hill. Through these efforts, they played a crucial role in developing research on prehistoric flint mining in Europe, notably by organising eight International Flint Symposiums between 1969 and 1999.

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Fig. 1. Dagmara H. Werra (in the middle), Anne Teather (on the right), and Jon Bączkowski (on the left) collectively inaugurating the conference. Photo: M. Jakubczak.

At the beginning of the 21st century, after the "Working Group" had ceased its activities, its members supported the creation of a UISPP Commission dedicated to prehistoric flint mining. Researchers involved in discussions concerning this proposal included former participants of the Flint Symposia, such as Françoise Bostyn, Marjorie de Grooth, Jacek Lech, the late Alan Saville, Andreas Zimmermann, and others. During the XVth UISPP Congress in September 2006, the Commission was officially established. The first conference organised by the newly formed Commission was held in Paris on 3-4 September 2007 (Bostyn et al., 2023: 7-9).

The conference was inaugurated collectively by Dagmara H. Werra, Anne Teather, and Jon Baczkowski. The opening session of the 2025 conference, led by Anne Teather, was dedicated to the history of the Neolithic research in West Sussex. The session was opened with a presentation by James Sainsbury, entitled "John Pull and Worthing's Stone Age Revolution". The speaker introduced the audience to the life and work of the charismatic amateur archaeologist who discovered the flint mining complex at Blackpatch. A permanent display dedicated to his person is located in Worthing Museum, and Worthing Archaeological Society hosts the annual John Pull Memorial Lecture.

The second speaker was Joep Orbons, whose presentation, "1982 Excavation, Harrow Hill", took the form of a personal recollection. He reflected on his experiences as



Fig. 2. Participants standing over remains of an extraction shaft at Cissbury Hill. Photo: E. La O Kirchner.

a teenager accompanying his father during the excavations of the Harrow Hill flint mine. His father, a member of the aforementioned "Working Group", took part in the project when the British Museum commissioned the Dutch team led by Peter Josef (Sjeuf) Felder (1928-2009; Lech 2009). The work and daily life on site were documented by Orbons' father through photography and captured on 8mm film camera by one of the team members.

The final presentation of the first session was a paper titled "A Re-assessment of Prehistoric Flint Extraction in Britain and Ireland" by David Field and Peter Topping. The paper was divided into two parts. Part 1, "Origins", delivered by David Field, presented new data concerning Mesolithic extraction sites, alongside recently obtained radiocarbon dates from major flint mines, which collectively suggest an earlier beginning for the Neolithic flint mining in Britain than previously recognised.

Following the break, Françoise Bostyn assumed the chair for the second session of the conference. Peter Topping then delivered "Part 2" of the paper, presenting a re-examination of flint mines from the Mesolithic/Neolithic transition through the Middle Bronze Age. He highlighted both continuity and change in the use of the flint mines presented. The highlight of the talk was the emphasis on the social and ritual meaning of flint mining sites. Topping pointed out the social-cultural meanings of the phased



Fig. 3. Excursion to Cissbury Hill. Photo: E. La O Kirchner.

filling of the shaft, the presence of flint deposits, animal bone, and human skeletons in the mining shafts, and the graffiti in the underground portion of the mines.

In the next presentation, Jennifer Wexler and Dickon Whitewood, presented "Grime's Graves: the 'Digging Deeper' Project and Re-assembling the Grime's Graves Archaeological Assemblage: Future Scope and Possibilities". This covered the outcomes of English Heritage's "Digging Deeper" project, undertaken to enhance the public presentation of this exceptional site. Recent developments included the construction of a new building over Pit 1, the installation of updated interpretation panels highlighting key landscape features, and the creation of new walking and family-friendly trails, as well as refreshed interpretation within the Visitor Centre. In addition, the speakers introduced a new initiative aimed at reassembling the Grime's Graves artefact collections, currently dispersed across several museums. The project focuses primarily on faunal and skeletal material, which will be studied using advanced analytical techniques, including ancient DNA (aDNA), isotope analysis, and new dating methods.

The third paper, presented by Marie-José Schreurs: "Starting from Scratch, but a Great Experience... Consolidation of the Rijckholt-Sint Geertruid Flint Mines (2021–2022)" outlined the process and results of the consolidation of the Rijckholt mine, where several



Fig. 4. Marie-Jose Schreurs presenting the surface find at Cissbury Hill. Photo: D. H. Werra.

structures had partially collapsed and required urgent maintenance. The consolidation works were supervised by the Cultural Heritage Agency of the Netherlands.

The session ended with a second paper by Joep Orbons: "Rijckholt Flint Mine Restoration 2019–2023". This provided further details on the maintenance carried out at the site. The Rijckholt mine has been managed by a volunteer foundation for nearly ten years. The area accessible to visitors has been considerably expanded, with an additional 30 metres of tunnels opened. A new visitors' centre has also been constructed to enhance public understanding of the site's archaeology and geology.

After the discussion and the break, the third session followed, led by Piotr Włodarczak. The first speaker, Françoise Bostyn, delivered a presentation entitled "Old and New Research on the Flint Mine of Jablines (Seine-et-Marne, France): Rethinking the Organisation of the Exploitation and the Use of Flint in the Lower Marne Valley". The paper discussed recent fieldwork that has provided fresh insights into the mining features of the site, as well as new perspectives on the spatial organisation of flint extraction and distribution within the lower Marne valley.

The second presentation, "Methodological Reflection on the Detection, Excavation and Study of Flint Mines, Based on Neolithic Examples from Normandy", was prepared by François Charraud, Emmanuel Ghesquière, and Cyril Marcigny.



Fig. 5. Thomas Guichet standing inside remains of a shaft at the Grime's Graves mine. Photo: D. H. Werra.

François Charraud, on behalf of the authors, outlined recent methodological advances in the detection, excavation, and study of flint mines in Normandy, where mining sites have been investigated since the mid-19th century. They discussed strategies for site prospection, methods for recording extraction techniques, and approaches to characterising the depositology and petrography of exploited flints.

The next paper, "Poreba Dzierżna, Site 24 - The Prehistoric Mine of Chocolate Flint in the Udorka Valley (Kraków-Częstochowa Upland, Southern Poland): Results of Previous Research, Significance and Prospects", was prepared by Magdalena Sudoł-Procyk, Magdalena Malak, Dagmara H. Werra, Hubert Binnebesel, and Maciej T. Krajcarz. It was presented by Magdalena Sudoł-Procyk who summarised recent research on the discovery and systematic excavation of the "chocolate flint" mine at Poreba Dzierżna, highlighting its distinctive mining features, extraction methods, and the chronology of prehistoric activity. The discovery of multiple "chocolate flint" deposits at this site, together with nearby finds, demonstrates that the Udorka Valley was a source of raw material of at least local importance, redefining previous understandings of the distribution and use of "chocolate flint" in southern Poland. The authors also outlined ongoing research aimed at assessing the wider spatial and cultural importance of the Udorka Valley "chocolate flint" deposits.



Fig. 6. Inside the Grime's Graves mine. Tomasz Oberc and Philip C. LaPorta. Photo: D. H. Werra.

The final paper of the third session, "Picks as a Proxy for Flint Mining? Analysis of Flint Picks and Mining-Related Artefacts from Soke Hill, Hampshire, England", was delivered by Emmanuel La O Kirchner. The study highlighted a substantial Late Neolithic assemblage, suggesting intense localised flint extraction and demonstrating the potential of artefacts as proxies for identifying prehistoric mining sites.

Following the discussion and a break, the proceedings of the fourth session commenced under the chairmanship of Peter Topping. It was opened by a paper by Dagmara H. Werra, Artur Jedynak and Rafał Siuda titled "Underground Art – Graffiti in the Prehistoric Striped Flint Mine in Krzemionki. State of Knowledge and a Little More". Dagmara H. Werra presented the history of the discovery of several dozen rock drawings found in the mine, which are very difficult to interpret.

Then Jean Philippe Collin gave a presentation on "The Making and Purpose of Large Blades in Neolithic Middle Belgium. Insights from Orp and Ottenburg". The speaker highlighted technological parallels between Orp, Spiennes, and Rijckholt-Sint-Geertruid, suggesting a shared expertise within a wider supply network across the Michelsberg area.

The third presentation: "Much Ado About Nothing? New Elements About Pressure Blade Making at Spiennes (Belgium)", was delivered by Thomas Guichet. The



Fig. 7. Sara Mandera and Hubert Binnebesel in one of the corridors at Grime's Graves. Photo: M. Jakubczak.

author presented experimental research aimed at identifying diagnostic criteria for the use of the pressure lever technique in blade production at the Spiennes mines. He discussed the technological and socio-economic implications of this technique, noting the absence of clear functional differences between pressure- and indirect percussion-made blades and raising questions about the reasons for its adoption and possible inter-site connections.

Piotr Włodarczak presented the last paper of the day: "The Ideology of Wandering to Flint in the Funeral Rituals of Final Eneolithic Communities in Western Lesser Poland". The speaker examined a distinctive group of richly furnished adult male burials dating to the Final Eneolithic in south-eastern Poland, whose grave goods, mainly tools for extracting and processing flint, reflect both earthly journeys and the symbolic voyage to the afterlife. The presentation emphasised the ideological and social significance of journeys undertaken to distant flint sources, which appear to have served as important indicators of status alongside hunting and warfare.

The fifth session, opening the second day of proceedings on Wednesday, was led by Jean-Philippe Colin. It started with a paper by Margaret C. Brewer-LaPorta,



Fig. 8. Polish representation at the Avebury Circle. From left to right: Magdalena Sudoł-Procyk, Michał Jakubczak, Dagmara H. Werra, Aleksandra Wołk, Piotr Włodarczak, Sara Mandera, Tomasz Oberc, Hubert Binnebesel and Janusz Budziszewski. Photo: M. Jakubczak.

Philip C. LaPorta, Scott A. Minchak and Saverio A LaPorta: "The Tectonic Style and Setting and its Interregional Scale of Pre-Contact Quarry Development: An Application of the District Concept". Philip C. LaPorta presented the geological characteristics of the eastern Appalachian region. The study demonstrated how large-scale tectonic structures defined outcrop distribution. The research carried out by the Centre for the Investigation of Native and Ancient Quarries suggests that later industrial mining districts directly evolved from pre-Contact quarrying traditions.

The next presentation, "Chert Landscapes: Geoarchaeology, Prehistoric Exploitation, and Historical Use in Sant Martí de Tous (NE Iberian Peninsula)", was delivered by Bruno Gómez de Soler. The speaker discussed the progress of an ongoing geoarchaeological project investigating the chert outcrops of the Sant Genís Formation in north-eastern Spain, with the aim of assessing their variability, abundance, and patterns of prehistoric and historical exploitation. Among the sites discussed were La Guinardera, interpreted as a prehistoric chert workshop; La Guinardera Nord, a 18th–19th-century gunflint production site;



Fig. 9. Approaching Stonehenge. Photo: D. H. Werra.

and Cal Sitjo, which preserves a stratigraphic sequence from the Mesolithic to the Middle Neolithic.

The final paper of the session, "Exploitation and Distribution of Jurassic G Chert in the Regional Range among Funnel Beaker and Baden Cultures' Settlements of Western Lesser Poland", was prepared by Tomasz Oberc and Jakub M. Niebylski. Tomasz Oberc presented the results of an ongoing project from Site 1 in Bronocice, which aims to characterise the Jurassic G variety chert through sampling and comparison of material from natural outcrops and archaeological contexts. The study seeks to clarify the chronological horizons of its use, identify potential prehistoric extraction sites, and investigate the organisation of labour involved in the extraction and transport of this raw material between source areas and settlement zones.

The sixth session, chaired by Dagmara H. Werra, started with a presentation by Hubert Binnebesel, a doctoral student from the Institute of Archaeology of the Nicolaus Copernicus University in Toruń. His paper, "What Happened to the Flint Workshops from the Udorka Valley and Where Are They? Project of Geoarchaeological Research at the Mining Site in Poręba Dzierżna (Site 24, Lesser Poland Voivodeship,



Fig. 10. Inside Stonehenge. Photo: D. H. Werra.

Poland)", presented preliminary results from the ongoing geoarchaeological investigation of a multiphase "chocolate flint" mine dated to the Mesolithic and Neolithic. Through analysing the spatial distribution of artefacts, the study seeks to determine the original positions of workshop materials that were probably displaced by prehistoric alluvial processes. The presentation outlined the applied methodology, initial interpretations from two field seasons, and directions for further research.

The second paper, "Tracing the Provenance of 'Chocolate Flint' Raw Material – Petrographic and Geochemical Methods to Discriminate Between Two Source Regions", was authored by Sara Mandera, Michael Brandl, Magdalena Sudoł-Procyk, Christoph A. Hauzenberger, Dagmara H. Werra, Katarzyna Kerneder-Gubała, and Maciej T. Krajcarz. Sara Mandera presented results of applied petrographic (macroscopic and microscopic) and geochemical (Laser Ablation ICP-MS) analyses to distinguish "chocolate flint" from the Holy Cross Mountains and the Kraków-Częstochowa Upland. By combining these methods, they aimed to establish reliable provenance criteria and apply them to artefacts from various archaeological sites in Poland, providing insights into the distribution and circulation of this raw material in prehistoric societies.

The final presentation, "Survey of Flint Mine Remains in Agrarian Areas: Case Study of the 'Bednarzu' 'Chocolate Flint' Mine in Kotlarka (Central Poland)", was prepared by Janusz Budziszewski, Michał Jakubczak, Dawid Jagłowski, Jakub Karczewski, and Aleksandra Wołk. The authors discussed the challenges of studying prehistoric flint mines, whose surface relief is often completely damaged by modern agriculture. They presented a comprehensive, non-invasive research approach developed for the Bednarzu site, combining LiDAR, UAV and satellite imagery, geophysical methods (especially GPR), precise documentation of artefacts by GPS localisation, and spatial analysis in a GIS environment, providing a model for surveying flint mining remains of a similar state of preservation.

After lunch, before the poster session, the UISPP Commission meeting was held, chaired by Françoise Bostyn. The session opened with information regarding the forthcoming Continental UISPP Inter-Congress Asia, to be held in Salatiga, Sangiran, Yogyakarta (Indonesia), from 27 October to 6 November 2025. Details were also provided about the XXI UISPP World Congress, scheduled to take place in Poznań, Poland, from 31 August to 4 September 2026. The Commission discussed its ongoing publication activities and set out proposals for the next Commission meeting. It will be held in the Netherlands, the Rijckholt flint mine, and hosted by Joep Orbons. During the meeting, elections were held for the new board of our committee. Dagmara H. Werra (Institute of Archaeology and Ethnology, Polish Academy of Sciences, Poland) was elected as the new president, with Francoise Bostyn (Université Paris 1 Panthéon-Sorbonne, France) as vice-president. Jean-Philippe Collin (Université Libre de Bruxelles, Belgium) was elected committee secretary, while Jon Baczkowski (University of Southampton, UK) and Joep Orbons (ArcheoPro, the Netherlands) were elected as board members.

A poster session was held, chaired by Jon Bączkowski. The first two posters focused on similar topics and were authored by the same American researchers: Philip C. LaPorta, Margaret C. Brewer-LaPorta, Scott A. Minchak and Saverio A. LaPorta. Their first poster presented "The Regional Scale of Pre-Contact Quarries: Stratigraphic and Sedimentary Facies Relationships"; immediately followed by one covering "The Chain of Operation Across Three Tectonic Provinces: Quarry and Mine Instrument Types; Half Products and Products". The authors of the posters were represented by Philip C. LaPorta. Then Helena Wehren, on behalf of co-authors Anna Kienholz and Jehanne Affolter, presented a poster entitled "Found in Sursee-Zellmoos (Switzerland), but from Where Did It Come?" Helena Wehren presented recent results from excavations at Sursee-Zellmoos, a prehistoric pile-dwelling settlement and part of the UNESCO World Heritage Prehistoric Pile-Dwellings around the Alps. The presentation has developed into a discussion

of different approaches and possibilities for identifying the provenance of the intriguing siliceous artefacts. The final poster was "Picks as a Proxy for Flint Mining? Analysis of Flint Picks and Mining-Related Artefacts from Soke Hill, Hampshire, England", presented by Emmanuel La O Kirchner, which was a continuation of the author's presentation from the first day.

After the poster session, a flint material workshop and a film screening took place. James Sainsbury presented artefacts from the Worthing Museum collection. Participants of the conference could also watch a film recorded by a member of the Harrow Hill expedition and edited by Joep Orbons, depicting daily life during the 1982 excavations.

The second day of the conference ended with a trip to Cissbury Hill, which is located within a large Iron Age Hillfort near Worthing. James Sainsbury guided participants through the complex, showed them the excavated shafts and introduced them to the history of research.

On the third day, participants travelled by coach to the Late Neolithic Grime's Graves flint mine, which included access to the newly opened Visitor Centre and a guided tour of the underground mine remains led by English Heritage staff Jennifer Wexler and Dickon Whitewood.

After the three-day conference, participants had the opportunity to join an additional excursion to Neolithic Wessex. The full-day trip took them through the Avebury landscape, with its famous henge, followed by Silbury Hill and the West Kennet Long Barrow, guided by Anne Teather and Jon Bączkowski. The group also explored Woodhenge and observed Durrington Walls from a distance. The day ended at Stonehenge, where participants were able to walk inside the monument.

The conference was held in a warm and welcoming atmosphere, which made everyone feel comfortable and at ease. Jessica Butt handled the technical aspects, ensuring smooth presentations and audio quality throughout. The intimate and engaging meeting in Worthing was attended by thirty participants, including academics, postgraduate and undergraduate students, and museum staff from nine countries: Belgium, France, Germany, the Netherlands, Poland, Spain, Switzerland, the United Kingdom, and the United States. This held particular significance for me, as a young student just starting my career. Having the chance to meet scholars from several countries in such a friendly atmosphere was a great introduction to the world of flint mining research. In addition, the unique opportunity to visit so many important and iconic British archaeological sites within such a short period of time was an invaluable experience, and I am deeply grateful to the organisers and all those involved in making it possible. The materials from the symposium will be published in the next volume of the journal *Archaeologia Polona*.

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