

Finally, A Very Fruitful Interdisciplinary Cooperation...



Michel Cotte

I don't remember exactly the date and circumstances of my first meeting with Clive Ruggles. It was surely during a meeting related to the question of astronomical heritage, where I represented ICOMOS (the International Council of Monuments and Sites). Initially, the World Heritage Centre recommended to the IAU Commission members to meet ICOMOS and to examine a possible joint venture to promote the heritage of astronomy. It seems for me that happened October or November of the year 2008, in the ICOMOS office in Paris, and a working relationship was launched at the end of 2008, that quickly developed early in 2009.¹ Context was the joint UNESCO and IAU international year of Astronomy (2009), which strongly stimulated initiatives and meetings of different bodies and persons.

If I do not remember very well the location and exact topic of this initial meeting, I clearly remember the first impression given by Clive's character. I immediately perceive his Latin volubility and prompt movement of arms and face illustrating his talk; that sounded as something unexpected from a British citizen but very sympathetic. In other words, it is not possible to ignore Clive's personality among a range of experts and scientists drawn from many scholarly fields.

At that time and perhaps even today, ICOMOS and beyond ICOMOS the World Heritage Committee were not very much aware of scientific heritage and didn't pay notable attention to it. As usual, what is not well known by an individual or a community has little importance and value for them. Furthermore, at that time, some notable nomination projects of scientific heritage had met important difficulties

¹The two most ancient joint mutual working documents in my personal archives are: an orientation paper from Clive related to "Astronomy and World Heritage" including a series of comments from I from December 2008, and the first version of the Thematic Study Plan mutually elaborated from January 2009.

M. Cotte (✉)
University of Nantes & ICOMOS, Nantes, France

along ICOMOS evaluation and were recommended as “not inscribed” on the World Heritage List. So the atmosphere was not very positive and not very constructive on the side of the World Heritage Convention. Nevertheless, some astronomers and scientists, as Clive, remained enthusiastic and thought it would be relatively easy to reach the World Heritage List; that what they needed were some good examples supported by committed stakeholders.

For ICOMOS there were notable difficulties with astronomers related to heritage at that time. The first one issued from the marginal status of archaeoastronomy among archaeologists during the 2000s. World Heritage recognition of classical archaeological sites was already very important on the List, coming from every parts of the World and supporting at each time a large set of cultural evidences issued from ancient civilisation perceived as a whole: architecture, urbanism, material life and symbolic associated value. Therefore, archaeologists had long been an important and influential group inside ICOMOS. For them, and consequently for ICOMOS, archaeoastronomy seemed to be a not very important branch in the global field of archaeology. It was perceived as a contextual attribute offering complementary information about the knowledge and beliefs of past civilisations, not more. It could not be a sufficient argument by itself to demonstrate an “outstanding universal value” for a given archaeological site. Furthermore, and to be honest, archaeoastronomy seemed for some of us not totally serious and a bit presumptuous, either related to an excess of hypotheses or to offering not totally convincing interpretations of celestial relationships, dealing with numerology and mania of sky influences on both human beings and nature.

A second matter of discordance was the idea that starlight at night could be a possible World Heritage nomination. It was supported and promoted by an active and enthusiastic group of astronomers. They thought that it was a brilliant idea, totally international and somewhere deeply ecologist; so people that do not understand, especially inside the World Heritage community, had a somewhat rigid brain and a total lack of imagination. Indeed, ICOMOS and other Convention advisory bodies had notable doubts about such an idea and they thought the Convention could not be applied to that question. Other tools were developed at that time as “Starlight Reserves” and seemed both better adapted to the idea and more pertinent. They thought that astronomers, even very sympathetic persons as Clive and some others, were not aware to be totally out the scope of the WH Convention and somewhere dreamers...

An associated question rose spontaneously, as frequently when a new heritage field emerges. Western countries had immediately site examples in their countries related to it and possibly applicant for the WH List ... The study of European astronomical observatories issued from modern science was immediately promoted, both as monuments and evidences of the boom of astronomy in Europe and North America. Of course, it was legitimate to pay attention to nineteenth–twentieth century modern astronomical heritage, but one of the major missions of the Convention is to enlarge the concept of heritage to a large set of geographical areas and large diversity of civilisations and epochs.

The starting point of cooperation did not seem very promising, with notable possibilities of misunderstanding, but different factors played a decisive role; among them, the character of Clive and his open mind related to the World Heritage process played a decisive role. He early understood the existing gap between the willingness of the Astronomy and World Heritage Working Group of IAU Commission 41 on the History of Astronomy and the complex implementation of an international Convention, beyond diplomatic smiles and formal approvals. Consequently, he correctly appreciated the possibility of practical help and cooperation with ICOMOS, even if this body seemed *a priori* the most reluctant to his arguments.

On the side of ICOMOS, the situation related to scientific and technical heritage at that time was a bit controversial but under rapid evolution. On one hand, technical heritage, especially industrial heritage, achieved some notable successes in the listing process during this period. It was perceived as a promising new field of heritage with its monumental and specific architecture bearing a new set of value related to materialism, daily life and visible technology. Science heritage, in general, doesn't offer such range of obvious evidences and values and it was more complex to analyse in heritage terms. The paradigm of science heritage seems more sophisticated, relying upon a larger set of both tangible and intangible values, focusing more on instruments, experiments and scientific way of thinking than impressive architecture or monumental machines. So, the situation for science heritage was not so favourable and rare nominations in the field were matters of important debates inside the ICOMOS panel.

Nevertheless, a short number of ICOMOS advisers, I was among them, were sensitive to the potential and to the need of scientific heritage on the WH List; but for reaching such a goal, a new approach of scientific heritage and a complete work of confrontation for every facet of the heritage had to be launched and studied. Heritage of astronomy and archaeoastronomy offered to us an excellent study situation, with real possibility of interdisciplinary joint works. But human resources seemed largely unequal: on one hand a strong group of astronomers already trained to work together, deeply involved in the subject and willing it success; on the other hand mainly two persons mandated by the ICOMOS board: Mrs. Regina Durighello as director of the international secretary and myself. Regina was a key technical support and organizer for the Thematic Study. I acted as adviser in charge of the conformance of the different issues of the project to the World Heritage Convention implementation, both in text and spirit.

Launching together the Thematic Study was an adventure, a rich and productive adventure, which involved different working meetings with Clive, involvement in conferences and permanent exchanges during 4 or 5 years. Indeed, that is still the case today, but in a post Thematic Study way and more related to projects of nomination to the World Heritage List. An initial big question was to determine the goal and plan of the study, and second to gather a network of authors with sufficient individual competences related to the subject. Ambition was great even perhaps too much, to cover both a geographical and chronological ensemble as larger as possible, without *a priori* limits.

This program aimed to cover different regions and different civilisations of the World with equal treatment, e.g. a same importance for studying each case. In some situations, it was difficult to explain to some astronomers that option because for them astronomy started really with modern observatories and the independence of “true” science from popular beliefs such as astrology. Obviously, many past civilisations, and even European ones, were relied strongly both on rational observation of the sky and irrational beliefs. As we stated in the introduction: Every civilisation looked at the Sky and built a cosmology, and as stated in the conclusion: Astronomy is never alone and pure knowledge, but it must be understood in context.

At this step, archaeoastronomy gave us a pivotal point for credibility in two different ways, and it bore us a practical example of mutual reinforcement of our own requirements. As already stated, at that time, archaeoastronomy needed to be accepted as an autonomous field relying upon clear scientific assessment and methodology. The Thematic Study was a good opportunity to develop it in such a way and to confront it to different specialists from other academic fields, especially to develop structural relationships with other facets of archaeological methods and results. On the other hand, for the acceptance of the Thematic Study programme by a majority of contemporary astronomers we also needed to credibly treat the question of rational observation of the sky by different kinds of civilisations, relying on strong studies in archaeoastronomy.

The Thematic Study of astronomical and archaeoastronomical heritage was also ambitious related to the former ICOMOS Thematic Studies. It aimed to go beyond a simple analysis of categories and subcategories. First thematic studies frequently acted as a kind of pre selection of heritage themes or pre listing of remarkable places, consequently encouraged to prepare a nomination file. We tried to go beyond and to propose a real development of the theme of astronomical and archaeoastronomical heritage, first by a global overview of some major civilisations or epochs or cultural situations of “indigenous people”. This did not forget the aims of the World Heritage Convention, helping to prepare an inventory of attributes, both tangible and intangible, and their understanding in context. It had to help to prepare conservation and valorisation of comprehensive places for visitors. Some examples of site strongly related to the selected themes of Thematic Study were studied in the global point of view of inventory and analysis issued from the experience of Convention implementation. They give examples of applied methodology to astronomical and archaeoastronomical heritage, but they are not a statement of value in anyway. Such ambitious goals have been met, thanks to authors and to the pivotal role of Clive acting as an efficient mediator between ICOMOS guidelines and remarks to individual authors studying field examples, with many back and forth of texts. The introduction and conclusion of the study by Clive and myself offered a wonderful opportunity of a joint work, exerting our mutual criticisms in a positive way and showing progressive convergence and enrichment of our personal ideas and concepts.

The Thematic Study works themselves were developed by a group of 40 authors coming from around 15 different countries including Europe, Middle East, Eastern Asia, India, Pacific, Latin America and North America. They worked during the

years 2009 and early 2010. Volume one includes 16 chapters from early prehistory to space conquest from the end of twentieth Century. An electronic version was ready for June 2010, and it was officially presented to the 2010 plenary session of the World Heritage Committee in Brasilia (Ruggles & Cotte, 2010). The paper version was published in August 2011 (Ruggles & Cotte, 2011). A second volume could be edited some years after as a complement of the first, with some more conceptual point of view, e.g. about the concept of dark sky and its possible use for preparing credible WH nominations (Ruggles & Cotte, 2017). It contains also some important individual case studies in the field of astronomical and archaeoastronomical heritage. It was published in 2017 as joint thematic study by ICOMOS and IAU (Ruggles & Cotte, 2017).

In parallel, we assisted to some nominations of remarkable places illustrating the dynamic of the astronomical heritage, some years after the initiative; that was due to the duration of dossier writing and preparation of a complete management plan for a given site, which is never simple because of numerous stakeholders and variety of interests related to World Heritage sites. We can mention: Risco Caído cultural landscape in Gran Canarias for archaeoastronomy and Jodrell Bank radio astronomical observatory in United Kingdom. Another archaeoastronomical exceptional site is under evaluation for Peru, at Chankillo, with some reasonable hopes to get inscription by the World Heritage Committee of 2020. Finally, I wish to thank warmly Clive for his fine cooperation and permanent involvement even when his life crossed a horrible family drama. Thanks Clive for all you did.

References

- Ruggles, C., Cotte, M. (eds.). (2010). *Heritage sites of astronomy and archaeoastronomy in the context of the UNESCO World Heritage Convention, ICOMOS & IAU Thematic Study. ICOMOS & IAU, e-edition June: 2010.*
- Ruggles, C., & Cotte, M. (Eds.). (2011). *Heritage sites of astronomy and archaeoastronomy in the context of the UNESCO World Heritage Convention, ICOMOS & IAU Thematic Study.* Bognor Regis: Ocarinabooks.
- Ruggles, C., & Cotte, M. (Eds.). (2017). *Heritage sites of astronomy and archaeoastronomy in the context of the UNESCO World Heritage Convention, ICOMOS & IAU Thematic Study* (Vol. 2). Paris: UNESCO.