

Cultural Astronomy: A Conversation about Degree Programs & Research Questions from Both Sides of the Pond

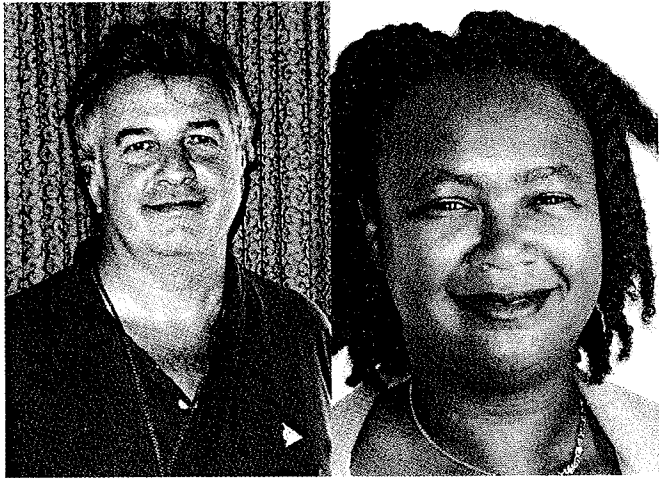
Jarita Holbrook, Univ. of Arizona and Nick Champion, Univ. of Wales, Lampeter

Campion: Tell me Jarita, in your classes at the University of Arizona, how are you defining Cultural Astronomy?

Holbrook: I start my first lecture and all my public talks using your 1997 definition of cultural astronomy: “the use of astronomical knowledge, beliefs or theories to

inspire, inform or influence social forms and ideologies, or any aspect of human behavior. Cultural astronomy also includes the modern disciplines of ethnoastronomy and archaeoastronomy” (Campion 1997).

I always go on to say that this is a great definition, especially if you are writing grants, because it says that astronomy is related to everything and everything is shaped by astronomy! Then I go on to say that this definition does not



Nick Campion

Jarita Holbrook

give much detail as to what we do as cultural astronomers. I then present the *American Heritage Dictionary's* (2004) definitions of archaeoastronomy and ethnoastronomy. These are: "The study of the knowledge, interpretations, and practices of ancient cultures regarding celestial objects or phenomena (*ethnoastronomy*) and "the study of the knowledge, interpretations, and practices of contemporary cultures regarding celestial objects or phenomena" (*archaeoastronomy*).

Thus, broadly: *archaeoastronomy* studies the dead, *ethnoastronomy* studies the living. Archaeoastronomy arose out of archaeology, ethnoastronomy out of cultural anthropology which relies on ethnography. However, these are much confused because for "archaeoastronomy," up until the early 1990s, was the catch all term for the field, now cultural astronomy is. Also, now we do not associate archaeoastronomy only with the dead, but instead with a set of methods for measuring alignments of built and modified structures and landscapes to celestial bodies whether the people are living or dead. So, I summarize to my students that cultural astronomy is the study of people and the sky, leaving out all the qualifiers and sub-definitions. I end with a simple statement, but I think that going through the steps of looking at all these definitions is informative to beginning students. I hope that it isn't simply confusing.

Nick, tell me about the projects that your students are doing and what you see as the core approach towards research and theories that have emerged in your students' work.

Campion: I need to explain first that, as I began as a historian and evolved into an anthropologist, I steer my students naturally into either historical work (which can be contemporary), seeking explanations for current ideas and practices through literary evidence, or conducting fieldwork, which I see as gathering data which will one day be of use to historians. My ethnographic approach is phenomenological

and reflexive, by which I mean that the researcher—my students—is obliged to follow a methodologically-neutral approach, observing the phenomena under investigation as closely as possible, and both being aware of, and "bracketing out" his or her own prejudices. The optional modules (elective courses) allow students to address a variety of areas, astrological, astronomical, and cosmological, from the past and present, investigating mainly religious and scientific culture. The only limitation at present is the emphasis on western culture, which is mainly a result of the expertise of the teaching staff. However, I intend that to change. It also goes without saying that, as we are involved in cultural studies, there can be no question of the "proof" of any particular claim about the cosmos, only an investigation of what it is to be human.

Students begin by taking two compulsory modules in which they encounter key concepts (such as Platonism, Postmodernism, and tackle areas such as magic, enchantment, and divination) and research skills, including ethnographic ones. They then choose four optional modules, at which point they can begin to specialize. The modules are regarded as the *taught* component of the MA, after which the students are ready to undertake a research project. At the dissertation stage, students choose their own research area, in consultation with the course director, and we usually try to help them take on the topic of their choice. Perhaps I should just list a few recent titles, to illustrate the generally favored areas: "An Investigation of the Sky as a Source of Enchantment in the Twentieth and Early Twenty-First Centuries"; "The Astrologer as Magician or Shaman: A Consideration of Astrological Practice within a Cosmological Paradigm of Participation with the Divine"; "Cultural Influences, Changing Perceptions and Links between Astrology and Tarot from the Nineteenth Century to the Present Time"; "Naming the Planets"; "The Celestial Ascent of the Soul: The Morphology of an Enduring Idea"; "Astrology as the Language of the Western Esoteric Tradition"; "The Alchemical Soul of Cinema: Can the Cultural Art Form of Cinema be Informative about the Cosmos?"; "Entering the Matrix: A Contemporary Cosmological Journey". All the work has been fascinating but what attracts me to the last two titles is the investigation of the space conjured up in cinema as a form of cosmology not unlike, perhaps the space created by shamen on their journeys to the stars. How does all this compare to your syllabus?

Holbrook: In contrast to developing a graduate degree program, at the University of Arizona we are building an interdisciplinary graduate minor in cultural astronomy. A graduate minor is three courses and the three we have in mind are in three areas: 1) archaeoastronomy—studying built structures that have been aligned to celestial bodies, 2) cultural astronomy focusing on case studies drawn from anthropology, and 3) history of astronomy. Our first two

courses will be offered during the 2008-9 academic year. Our classes are combined undergraduate and graduate students or 400/500 classes as they are called and listed here at UofA. The first class for Fall 2008 is Dennis Doxtater's class listed in Architecture: Sacred Ritual Process in the context of Landscape, Architecture, and Celestial Phenomena. He focuses on the archaeoastronomy of the Southwest United States in this class. I am planning to teach the Anthropology of Astronomy in Spring 2009. One of the fun books I plan to use is *Bad Astronomy* (Plait 2002). I am interested in general astronomy knowledge in developed nations like the UK and the USA, and I have a five year project to study this, but in the meantime only a few scholars write about what we (Americans) know and don't know about the sky—Plait is one of these. I include Native American, African, and Pacific case studies. Richard Poss is working on the graduate syllabus for the History of Astronomy. He has taught the undergraduate equivalent for several years. In contrast to your degree program our efforts are on a much smaller scale, but our expectation for our graduates is that their first choice is to become research professors. Thus, we want them employable and at this time interdisciplinary is a positive as long as you also fit in a traditional department. There are no cultural astronomy departments in the United States.

My students mainly come from anthropology and education. It seems like there is an endless stream of young women at UofA who want to study gender issues in astronomy! I have supervised three such undergraduate projects. One mapped the usage of the computer room in an astronomy department and found that women used the computers the entire semester, whereas the men only used it near mid-terms and finals. The women also staked out their territory towards the back corner away from the door. The men used the computers closest to the door and towards the center of the room. Another student is doing a comparative study of family life choices in an astronomy department in the US and one in Germany. Hers is based on doing face-to-face interviews. A third began a study of grade discrimination based on gender in an astronomy department but couldn't get access to the records. In order to complete the study she would have to interview all the undergraduate students which she did not have time to do. It is odd that since my area of expertise is Africa that the students I attract really want to study astronomers. Since I was an astronomer I have insights into interpreting their data that they do not. My graduate students are mixed in that some are studying astronomers but others are focused on communities in Africa and other parts of the world. I would say that the core of my teaching is ethnographic interview based with participant observation, I teach some survey and statistical analysis, and I try to teach them what research questions are important to astronomers, cultural astronomers, historians, and just normal folks.

Being in an applied anthropology department has positively impacted my research and the questions I ask. I do more

mapping now, I have created a walking map of the Louvre, and my students have created walking maps of Heidelberg, Germany, and the University of Arizona campus. What are we mapping? Astronomy sites! Our maps take you to planetariums, streets named for celestial bodies, artwork with celestial bodies, pictures of important astronomers, places where astronomy papers are stored, sundials, celestial murals, etc. We are creating something tangible—a map—that we then share with others to highlight the importance of astronomy in popular cultures. This is one of the activities that I am promoting for the 2009 International Year of Astronomy.

Another change since joining my department is that I am much more involved in studying the link between "applied" astronomy knowledge and livelihood systems. This means how people around the world use their knowledge of the sky and celestial motions to aid in making a living such as being an astronomer, navigating to fish, or creating an agricultural calendar. Thus, my work has become grounded in the practical whereas I see your program as building on the esoteric and metaphysical roots of astronomy and astrology.

What may be unique to me as a professor is that I do a lot of K-12 outreach which I also encourage my students to do. Beginning from when I was an astronomy graduate student, I give a lecture to a K-12 audience once a year, sometimes I referee science fairs, and now groups around the US provide me with all expenses paid trips to give inspirational talks to young people to encourage them to study the sciences. One of my graduate students proposed to work with a NASA funded astronomer here at UofA to develop a parent-teacher night activity including the NASA findings, local Native American astronomy, and Arabic astronomy. Unfortunately, he was not funded but we will try again next year. My undergraduate Honor's student is creating a children's book on the Pleiades. She goes into K-12 classrooms, lectures about the Pleiades and legends about the Pleiades, and the children do illustrations. She is picking the best pictures to include in her book. I see these outreach activities as inspiring the next generation of cultural astronomy students.

I think it is clear that our two programs are different, yet, both fit under the rubric of cultural astronomy.

Campion: I agree, Jarita. Thanks for talking with me today. This was fun.

References

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