Defining the Ground for Archaeoastronomy

The ways in which societies are engaged with their surroundings are neither absolute nor universally valid. Each society has its own lifeworld which may or may not be different from any other. Not all societies are equally active in constructing their own surroundings, but all acquire some knowledge of the world in the process of dwelling in the world. Phenomenological notions of “being-the-world” advocated by Ingold (2000, p.5, 185-187) imply that celestial lore, like other types of cultural knowledge, is acquired, altered, represented and shared in the process of dwelling in the world. Hence it should be elicited within the context in which it functions. This context has many social, material and symbolic components which should not be separated from each other. Viewed in this way, celestial lore should be conceived as embodied in peoples’ forms of acting in the world rather than as being locked inside peoples’ heads. The advantage of this perspective is that it offers the possibility of studying people’s perceptions of the sky through different expressions embedded in diverse social practices and structures, and in material evidence.

Even if the anthropological and archaeological concepts of culture routinely consider context as a source of knowledge, their contextualizations are not heuristically neutral. While anthropologists and archaeologists may well be aware of their analytical biases, other scientists may not. Archaeological narratives reach diverse audiences and may be worked out in relation to different political, ideological, religious, pseudoscientific, and other agendas. Archaeology attracts different groups who may define themselves through the display of distinctive symbolic forms, including objects and practices used in the past. While archaeology and anthropology use the concept of culture as a means of explaining human difference and attempting to elucidate what is relevant for cultural diversity and what is commonly shared by all humans, modern or marginalized groups may use the cultural (and scientific) legacy of the past for the greater recognition of their cultural ‘authenticity’ or for specific political reasons.

Finally, all our propositions and viewpoints are made within the framework of modern science in which objects of inquiry are removed from the context in which they had functioned and are analyzed in terms of western logic with categories and techniques that are imported from our own societies. The difference between embedded and non-embedded knowledge has long

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1 Briefly, context may be defined as the recognition of the interactive nature of the archaeological record. It refers to the material remains of the past that are created, used, and deposited in a spatial, temporal, typological and functional relationship to other remains. The point here is that the recognition that (specific) context exists depends on the skills of researchers and on the theories they use.
been the basis for neglecting the value of nonwestern types of astronomies (see Rochberg 2004, p.14–43). While the aim of modern science is to offer a type of objective knowledge which by definition is disembedded, archaeology and anthropology recognize that each interpretation is partial and provisional.

**Archaeoastronomy and ‘Alternative’ Archaeoastronomies**

‘Alternative’ archaeologies is a term typically used to describe ‘fringe’, ‘cult’ and ‘pseudo’ archaeologies (Wallis 2003, p.9-12; Bender 1995, p.270) in order to avoid pejorative connotations. Following Trigger (1984) I use this term to embrace a diversity of interpretative narratives affecting local and regional archaeologies.

From its start, archaeoastronomy has served purposes other than scientific (its function has been educational, ideological, and political) and has been exposed to many modern social-cultural phenomena including globalism, multiculturalism, (scientific and cultural) relativism, heritage preservation and management, and astro-tourism. Today, archaeoastronomical narratives may be used to feed the fervor of new-ageism, to revive occultism and hermeticism, to instigate scientific imperialism. Studying ‘alternative’ archaeoastronomies may serve to identify, at least on a descriptive level, the political and ideological motivations affecting ongoing research.

Archaeoastronomy grew out of a romantic commitment that architectural remains of the past possess certain hidden meaning (Wood 1978, p.1–2). In accordance with mythical accounts, old monuments were assumed to be connected to rituals, religious festivities and ceremonies and their forms and structures and locations within particular landscapes were supposed to convey elements of ancient wisdom (e.g. Hirsch 1965). Hence, mathematical and geometrical attributes found in architectural features became indicative of some sort of knowledge of their designers and builders, and astronomical alignments were perceived as elements revealing the celestial knowledge of the ancients.

The idea that the traces of the past contain some hidden meaning is rooted in the concept of “degenerationism” (Whitrow 1990, p.173-175; Gosden 1999, p.23-24) derived from the cyclical-degenerative concept of world history. During the sixteenth and seventeenth centuries European societies saw themselves as directly descending from Classical Antiquity and according to the Classical myth of the Golden Age – the Garden of Eden imagined as the peak epoch of human thought and culture – successive civilizations were seen as having degenerated from a higher to a lower stage.

Because the notion of progress was rejected, the only way to acquire new knowledge was to discover the hidden wisdom of the ancients, which was believed to be encoded in their architecture. The rediscovery of Greek culture in the eighteenth century was very important to the creation of European identity, because the work of Classical artists, especially the canons of aesthetics, quickly became central to European education (the British Great Tour and its regional imitations). After Napoleon’s campaigns, Egypt came to be considered as the cradle of high culture and civilization, and later Egypt was joined by Mesopotamia. Ancient wisdom, thought to be lost, was recovered after the decipherment of ancient documents that revealed the deep interest in astronomy of ancient peoples in the Near East. As all great civilizations of the ancient world (Chinese, Indian, Mayan, Aztec, Inca and druidic) appeared to possess (relatively) advanced knowledge about the sky, ancient large-scale architecture which was traditionally conceived as mysterious and impossible to be adequately comprehended, became quickly conceived as encoding knowledge about cosmic order – the hidden key to understanding how the universe works.

**Occultism and hermeticism**

‘Alternative’ archaeoastronomies share the same attitude with respect to ancient monuments, though they conceive this in a slightly different form. Occultism investigates the spiritual world which is usually hidden from ordinary vision, or exists ‘out there’, beyond the world of human beings (Gettings 1978, p.7). The relations between God, man and the world can adequately be described and studied by individual subjects who perceive them through various spiritual techniques and represent them through hermetic symbolic languages. Occultist (cabalistic, numerological, Rosicrucian, Masonic, hermetic) traditions believe this hidden reality is often encoded in works of art, in a secret symbolism which is intentionally made to be decoded and understood only by the initiated (Gettings 1978, p.7). From the standpoint of occultism, architectural forms and Egyptian hieroglyphic writing are examples of such a symbolic means devised for the transmission of spiritual mysteries to the initiated which are virtually inaccessible to the profane (Ashe 1979; Curl 1982 cited by Trigger 1995, p.267). Egyptian pyramids and western European megaliths were conceived as obvious examples of such architecture and converted into targets of the ongoing research.

Occultists quickly explored the potential significance of the historical and archaeological past. Their ‘recon-
structured' chains of events, individuals and secret societies engaged in the transmission of esoteric knowledge usually began in the ancient civilizations of Egypt and/or India which were themselves regarded as repositories of a millenary tradition left by the survivors of the collapsed Atlantis civilization which had received the knowledge in turn from extraterrestrial beings. Most of the esoteric speculation about Egyptian mysteries is a pure Hellenistic construction well placed within the Greek traditions of alchemy and astrology, and offers no keys to the astronomical knowledge of old Egypt (Jordan 2006, p.110-114).

Astral mythology and astralism

The discovery of the Temple of Isis-Hathor at Dendera with its ceiling depicting the heavens reinforced the idea of the antiquity of Egyptian astronomy. One of the visitors to Dendera was Ch. F. Dupuis, a founder of astralism, the nineteenth-century prototype of archaeoastronomy2. Known as solar or astral mythology (Astralmythologie) or astralism (astralistica), this field of research interpreted religion, myths and rituals almost exclusively in terms of astronomical events. Originally motivated by the antireligious fervor of post-revolutionary France, this approach was later developed by F. M. Müller who conceived mythologies as primitive rationalizations of celestial phenomena. Its extreme manifestations reduced the content of all myths, legends and even fairy-tales to the eternal contest between the sun and night (Dorson 1955, p.406-407), interpreted biblically and early Christian narratives entirely in terms of solar mythology (e.g. E. Stucken), and overemphasized the role of the moon in culture (‘pan-lunarism’ of E. Siecke). These excessive speculations rejected notions of independent or parallel developments of astronomical knowledge and assumed that all mythologies based on astronomical events containing detailed (but hidden) information spread through the world by extraterrestrial beings. Most of the ideas of Eduard Seler, Robert Lehmann-Nitsche, Friedrich Röck, Leo Frobenius, Giorgio de Santillana and Hertha von Dechend, among others, still affect ongoing research.

Cultural diffusionism often reflects power imbalances in the relationships between scientifically and technologically advanced and less developed societies. Following G. Kosinna (1911), the spread of megalithism in western Europe has been associated with the expansion of Aryan peoples bringing higher culture to the primitive indigenous and non-Aryan societies. Imagine, for instance, scores of priests traveling along the coast of Atlantic Europe and diffusing the idea of megalithism (Childe 1929, 209; Hawkes 1934, p.26), advocated the idea that modern astronomy had Egyptian roots.

Archaeoastronomy, Modernity, Ethnic and National Identities

Recognizing that the emergence of archaeology is linked to the rise and spread of nationalism, colonialism and imperialism (Trigger 1984), I propose to see the development of archaeoastronomy as connected to the process of the cultural legitimation of modern science. The aim of archaeology has been to promote fictitious social unity by glorifying the past and the achievements of the indigenous peoples or peasants who constituted part of modern societies, and by asserting cultural distinctiveness from their neighbors. My point is that when science and technology were ideologically equated with the ideas of progress and objectivity (Habermas 1996), astronomy was quickly claimed to be “the oldest science known to human-kind”. In the framework of early positivist models of culture4, all material remains associated with specialized astronomical knowledge (megaliths, pyramids, temples, churches) previously appropriated by ethnic, nationalist and chauvinist discourses, became regarded as proof of the scientific advancement and intellectual superiority of a nation’s ancestors over other peoples and societies.

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2 In his main study entitled Origine de toutes les Cultes, ou la Réligion Universelle (1794), Charles Francois Dupuis proposed a common origin and unity of the astronomical and religious myths of the ancients (Hoffmann 1991, p.11, 15-18).

3 After the discovery of the famous library of Assurbanipal, when tens of clay tablets revealed the antiquity of Babylonian astronomical and mathematical knowledge, heralding the emergence of panbabylonianism, or panbabylonism, a type of pseudo-science emerged within the newly established discipline of Assyriology. While Alfred Jeremias and Hugo Winckler argued that modern (scientific) astronomy derived from the cosmic philosophy of Sumer and Babylon and that all known ancient astronomies diffused from its Sumerian origins, the British school of panegyptism represented by Grafton Elliot Smith and William J. Perry advocated the idea that modern astronomy had Egyptian roots.

4 The ideas of Eduard Seler, Robert Lehmann-Nitsche, Friedrich Röck, Leo Frobenius, Giorgio de Santillana and Hertha von Dechend, among others, still affect ongoing research.

5 Nowadays the concept of culture is usually applied to categorize distinct human groups and to refer to the differences between them. Culture is used as a means of explaining human diversity. The adoption of the monothetic (bounded and homogeneous) model of culture, while at the same time equating of science and technology with “high” culture and with the spread of European colonialism, resulted in the model of cultural diffusion that was projected back into the past.

6 In accordance with the positivist perspective of that epoch, culture was considered an essentialist entity, tied to a spa-
or migrating peoples bringing megalithism to the colonized land (Daniel 1941, p.46-47). A. Baschmakoff (1930) attributed calendars encoded in megalithic astronomical alignments in Brittany to the activity of pre-Aryans and R. Müller (1934, 1936) claimed the Aryan origin of stone circles at Odry. Even today, megaliths are considered as embodying the traditions of Celticity (Dietler 1994; Bender 1995; Ziolkowski and Lebeuf 1991). Chauvinistic arguments over-emphasized the role of western European megaliths and dismissed the importance of the central European Neolithic circular enclosures and earthen long barrows, thus reflecting ideas of the cultural and technological superiority of Western Europe.

Though ancient Maya societies never developed a cohesive collective identity nor built a unified polity, today’s nationalist sentiments often evoke their common fictitious past through the manipulation of emotionally and symbolically charged cultural traditions. A “mystique model” (Webster 2006) representing ancient Maya civilization as a theocracy being ruled by wise priests and astronomers, often finds echo in publications that feed Maya chauvinistic fervor, New-ageism, astro-tourism, and romantic or occultist attitudes to the past. Exaggerated interpretations of Maya astronomical knowledge are endlessly repeated in contemporary scientific and popular literature.

Archaeoastronomy, Neo-Shamanic and Pagan Perspectives: the Reinvention of an Astronomical Tradition

Neo-shamanic and neo-pagan attitudes to the past often make reference to the manipulation of symbols and the invention of tradition already described in anthropological studies of identity and ethnicity. In this respect neo-shamanic and neo-pagan movements appear to be free of the temporal or spatial-territorial constraints that typify all nationalist and ethnic claims, and thus enable their members to construct fictitious narratives (and imagined communities) built upon an eclectic assemblage of past and present religious and spiritual beliefs (Rountree 2002). Since such movements do not insist on presenting proofs of historical continuity, they often defy all traditional conceptualizations of absolute and bounded notions of identity and belonging.

However, beyond simply challenging the rigidity of academic discourse, neo-Shaman and neo-Pagan narratives produce interpretations that reflect the localized socio-political concerns of modern societies.

Conclusions

Celestial knowledge conceived as a type of pre-modern astronomy is conceptually separated from its social-cultural meaning and analyzed in terms of western logic. However, we have seen that all archaeoastronomical interpretations of the past can be regarded as being governed by the particular scientific, political, religious, cultural or even economic agendas of their creators. “Astronomy”, “calendar”, “alignment”, “observatory” and “time” represent concepts by means of which we can describe, analyze and study ancient societies, but these concepts are not neutral research tools; rather, they are cultural products of our epoch. In addition, the conceptual framework through which our own cultures order the social and material world is also changing through time and affects our interpretations of the past. ‘Alternative’ archaeoastronomies remind us that we should be aware of our own prejudices and of the styles of analysis that we may be imposing on the celestial lore of other peoples.

Perhaps it is useful to make a distinction between “celestial lore” as a culturally specific category and “astronomy” understood as an universal phenomenon denoting the multiple ways in which celestial knowledge is made manifest. Celestial lore is acquired through an active engagement with the life world (“dwelling” perspective) while astronomy may refer to culturally paradigmatic levels of abstraction. Hence, we may assume that while all architecture conveys a conception of the world, of time and space, it also reveals the skills and intentions of the designers who conceived them and of the builders and users who constructed or reworked them. The shift of emphasis from the observer’s model to the agent’s model is therefore a logical step in the development of cultural astronomy.

References:


8 See the controversy regarding the legacy of The Bighorn Medicine Wheel as a prehistoric site or a cultural site (Boggs 2002, 503-604). Bender’s (1995) account of the appropriation of Stonehenge by different groups is an excellent example of the functioning of ‘alternative’ archaeologies.


HAWKES, J., 1934. Aspects of the Neolithic and Chalcolithic Periods in Western Europe. Antiquity, 8(29), 24-42


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ALTERNATYVIOJI ARCHEOASTRONOMIJA.

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