

# Systematics of interpreting cosmic references in sub Saharan Africa

Wade, R P & Broodryk N L 2010

Department of Construction Economics –Engineering, Built Environment & Information Technology – University of Pretoria

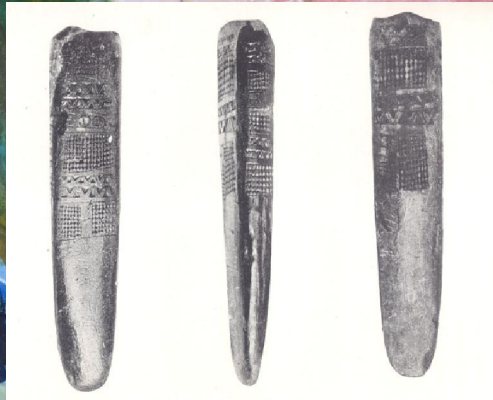
A systematics toward a method of identifying astronomical expressions inherent within the spatial geography, cultural landscapes, and layouts of structures with a view to implementing the systematics in an African context. In determining astronomical codes of the southern African pre-early farmer and metalworking archaeological sites - this review deals with oral tradition, rituals, formative calendars, fertility, meteorites, eclipses, bio-diversity, sustainable agriculture, rainmaking and the general star lore. Conclusions are drawn from the hypothesis that certain structures functioned as astronomical expressions by use of monoliths and other configurations, with specific examples of how these possibilities were drawn from aspects within the Mapungubwe/Zimbabwe Cultural Complex and the preceding riverine cultural formations.

**Aim:** To determine a methodology of identifying the relevant structures and expressions associated with indigenous astronomy and to stress the value of why there should be a need for such a methodology and the possible effects that this may have on present ideologies, leadership, agricultural practice, tourism, historical perspective and socio-cultural identity.

**Method:** to determine or establish astronomical codes that may exist in the settlement layouts of African archaeological sites - this preliminary study attempts to ascertain how to reveal by any means - such as use of alignments by stelae and monoliths, structures, other astronomical tools and practices. Found throughout the various ages, which possibly relate to buildings, rituals, agriculture and habitation. And, whether a traditional astronomical use of might prevail or be reflected in the architecture specifically throughout Southern Africa.

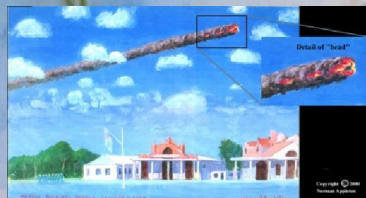
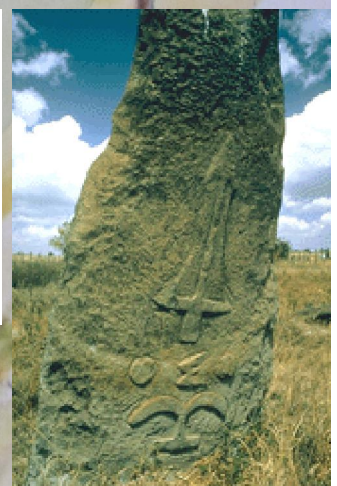
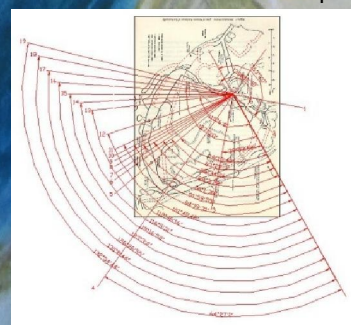
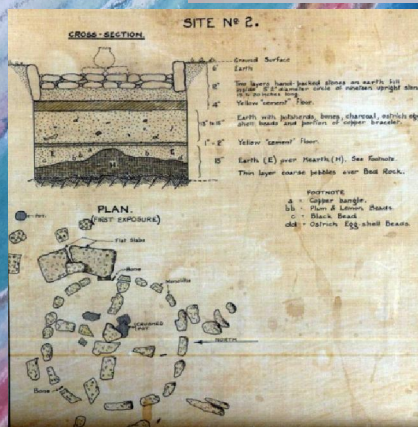
Archaeoastronomical research is rare and scarce architectural remains direct present understanding, with rudimentary cipher search being largely challenged in the subcontinent of Africa. This research is proliferated in the northern hemisphere, South America and Asia. The logical conclusion suggesting that Africans and early humans were not capable of perceiving and recording celestial phenomena, specifically in their expressive use of space.

**Conclusion:** Humans appear to have emerged from Africa and it is therefore pertinent to ascertain when the larger universe became part of the human realm and how these significant attempts can be identified.



Africa has limited written records or solid structures and settlement layouts can only suggest that an astronomical heritage exists, moreover, there are vast resources of cave paintings and petroglyphs and much of the research has yet to be analyzed, for their astronomical content.

In establishing whether astronomical codes exist in the settlement layouts of southern African 'Iron-Age' archaeological sites, a preliminary study has revealed evidence of the use of alignments by means of monoliths and structures, as well as other tools, at Great Zimbabwe and Mapungubwe, which possibly relate to the astronomical use of stelae and monoliths throughout Africa. The Great Enclosure at Great Zimbabwe seems to typify the use of stellar markers and alignments amongst certain structures of the pre-trade and early agrarian era sites of southern Africa. Research into their precursor's trade, as well as distribution and development of sorghum, primitive crops, mortuary practice, calendars, and use of agricultural marker-stars, may lead to understanding archaeoastronomical aspects of certain artifacts and structures and cultures associated with megalithic archives of cosmic references, galactic events and the sub-Saharan conceptions of the Universe.



Madine Jan. 2010

## References –

Figure The Monolith Stone originally found at Dhlo-dhlo now in the Zimbabwe National Museum in Hall, R.N. & Neal, W.G. 1902. *The Ancient Ruins of Rhodesia*. Methuen. Page 236.

Figure Rock Painting found in the Eastern Freestate area of a comet or bolide breaking into two – Sven Ouzman Rock Art Dept. National Museum South Africa. Extracted from Ouzman, Sven. (2008 In Press) *Flashes of Brilliance: San Rock Paintings of heavens things*. Festschrift dedicated to David Lewis-Williams. (Personal Communication Sven Ouzman 14 November 2008).

Figure 'Stonehenge' of Mapungubwe - Reconstruction of arrangement of 'polished-looking' monoliths over the 'Chief's Grave' - that appear to have been fashioned from crystalline dolerite (columnar-jointed basalt) found at a nearby igneous dyke intrusion – by Jan Willem van Bergen and Richard Wade August 2004. Sketch indicating how monoliths are arranged over the grave of the 'King of Mapungubwe', University of Pretoria-Mapungubwe Archives pages titled "UP/AGL/D/68" together with "UP/AGL/D/51 UP/AGL/D/52 and UP/AGL/D/53". Affidavit by Richard Rorke which first mention stone structures in Adams & Adams of Pretoria 1928.

Figure Detail of Site 7 in Plan of excavations titled – Mapungubwe Contoured Plan of Summit by Prof C van Riet Lowe, with details of excavations of sites 1,2,4,5,6 and 7. First record of excavations signed by the archaeologist Van Riet Lowe May, December 1933, held at the office in Mapungubwe Archives at the University of Pretoria.

Figure Detail of Plan of Great Enclosure surveyed and draughtmanship by Franklin White - President of the Rhodesian Scientific Association.. Out of *Braver, R.D. 1906. Medieval Rhodesia*. London: Macmillan. Page 74 plate Reconstruction of alignments – RP Wade

Figure Great Zimbabwe - Acropolis - Western Enclosure Plan of Alignments as Viewed from the Monolith One Platform Area. (Using AutoCAD Version R14.0 - Microsoft Corporation and plan in Summers, R. 1971. *Ancient Ruins and Vanished Civilizations of Southern Africa*. T.V. Bulpin.)

Figure Tiya Monolith. Joussaume, Roger. 1980 (sous la direction de) : *Tiya - l'Ethiopie des mégalithes, Du biface à l'art rupestre dans la Corne de l'Afrique*, publié avec le concours du Ministère des Affaires Etrangères, le Ministère de la Coopération, l'Ambassade de France en Ethiopie, l'U.N.E.S.C.O., l'U.P.R. 311 du CNRS

Figure Broodryk N.L. & Crossland J. 2009. Mobile Planetarium in the Western Cape. *Proceedings of 2009 SAASTEC Conference SAAO, Sutherland, Northern Cape*. Reconstruction of Great Enclosure of Great Zimbabwe - Starry Night Photorealistic Horizon Panorama Landscape by RP Wade and N L Broodryk.

Figure Reconstruction of Great Enclosure at Great Zimbabwe showing extent of monoliths in relation to the platform area and conical towers by Jan-Willem Van Bergen and Richard Peter Wade

Figure Meteor traversing the sky over Bulawayo in December 1944 toward the direction of Polokwane District as seen and painted by Norman Appleton on WW2 military duty. This meteor is possibly the same that made a strewnfield at the Moria City area. Internet October 3rd 2006. [www.astronomypictureoftheday.com](http://www.astronomypictureoftheday.com) NASA

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