reader's report

The re-emergence of astronomy in Africa: a transdisciplinary interface of knowledge systems

assessed at the request of the HSRC, Pretoria, South Africa, 7-2014

by Wim van Binsbergen

1. Introduction and summary

I was requested to review the above MS. As someone who, over the years, has been internationally (also in South Africa) active (see <u>www.shikanda.net</u>) in such fields as African anthropology, protohistory, intercultural philosophy, epistemology, globalisation, local knowledge systems, archaeoastronomy, transcontinental continuities in Africa's cultural history, Ancient Egypt, the Ancient Near East, and the global history of science, I considered myself well placed to honour the request when it was made. My assessment follows below.

The MS was submitted to me under double blind assessment conditions, I am not aware that I personally know any of the contributors (whose identities have remained concealed from me), nor have I been involved in the conference on which this collection is based. (At the time, I showed an interest in attending the conference, but other commitments and ill health prevented me to do so).

This manuscript represents several tantalising dilemmas to the reviewer, and as a result I find it difficult to arrive at an overall recommendation as to the MS's eligibility for publication in book for by, or on behalf of, the HSRC. But I will try.

I have been a specialist on Southern Africa since the early 1970s. In the first half of the 1970s when working in Lusaka, Zambia, I have been deeply influenced by close and sustained contacts with the ANC leaders H.J. Simons and Ray Alexander (in their house I was moreover, over the years, introduced to much of the then ANC leadership). From 1990 I have been closely involved in South African academic life, as visiting professor, giver of seminars, external examiner, and editor. Thus I visited the HSRC in 1999 and delivered seminars there on the politics of identity, ethnicity, and (very topical at the time) reconciliation – the South African Truth and Reconciliation Commission was also the topic of an edited collection I co-published in English in 2004. I am also the author of a well-known study of the South African concept of *ubuntu* – triggering a critical debate in the *South African Journal of Philosophy*. Besides other languages of the Bantu-speaking family, I speak several Southern African languages (English, Afrikaans, Tswana), and I have conducted fieldwork in others (Kalanga, Ndebele). Moreover, I have been an initiated and practicing *sangoma* ever since 1990 and have widely published on that indigenous knowledge system. I believe I

have some understanding of the issues in current South African politics of knowledge and identity, in which indigenous knowledge has rightly gained a central place.

Therefore, if nonetheless I will show myself to be highly critical of the present MS, this is not acase of some outsider ignorantly dismissing an academic product whose value he cannot possibly understand, but the statement of a sympathetic insider in a bid to save the HSRC the disappointment, not to say the disgrace, of publishing *a book that, both in form and in contents, is as yet very far from mature.* I will indicate where some of the MS's shortcomings lie, and indicate ways to remedy them, so that at a later stage the book may be reconsidered (preferably by some other reviewer than myself), and possibly graduate into the splendid book for which it was intended, and which it may yet ultimately become.

1. Presentation, editing, integration as a book

This is an edited collection comprising 13 chapters and an appendix containing a few English-language poems of an astronomical nature. As a book, the collection is still incomplete, for it lacks a Preface, and especially a thematic and theoretical and methodological Introduction - which is usually the place where an edited collection makes, and realises, its claim to lasting value. Most of the chapters have some bibliographical / referential apparatus, but on this point the chapters differ greatly in quality and format, and more editorial unity needs to be enforced. Moreover, a cumulative bibliography at the end of the book would make for greater integration, and (in a future, additional round of editing, consultation, peer interaction and rewriting) would be highly stimulating especially to those of the collection's authors who (to judge by the state of their present contributions) have not normally been dealing with astronomy / archaeoastronomy / ethnoastronomy so far, and have been forced by the conference and the book to go out of their way and address topics they were clearly less than fully familiar with. On this point of presentation, a major weakness of the collection is what also becomes clear when one looks more closely at the contents: the collection has apparently lacked a critical, experienced, and demanding editor or team of editors, who are highly specialised in the main fields touched upon by this book (ethnoastronomy, the politics of knowledge, cultural history and the history of global science). The entire format tends towards the scholarly and the academic, and in that context the poetical appendix seems oddly out of place – all the more so, because rather than confirming the Africanity of the astronomic topics and their handling by using in print any of the hundreds of languages of Africa (perhaps with a facing English translation), an English rendering is all the reader gets.

2. Aim of the book

The aim of the book may be clear from its proposed (if somewhat stilted) title:

'The re-emergence of astronomy in Africa: a transdisciplinary interface of knowledge systems'

Allow me a few critical remarks. The title is predicated on a number of assumptions – some of them implicit and tacit, some to be explicitly addressed in the book, others to be left untouched throughout the book:

1. Africa – as the modern designation of a continental landmass – is a feasible *prima facie* concept for the analysis of cultural history (some would disagree, including I myself and Mudimbe)

- 2. there once was astronomy in Africa
- 3. it became submerged
- 4. but now is in the process of re-emergence
- 5. statements 2, 3 and 4 are to be empirically documented by the present book
- 6. but 4 is also to be furthered by the present book, as a contribution to knowledge politics furthering enhanced global participation in the achievements of humankind, and enhanced and democratised local self-identity,
- 7. the use of the unitary concept 'astronomy' implies the claim that ultimately the format of indigenous, local, historic, transcontinental, global, academic, practical, knowledge systems, in specific relation to celestial / 'meteorological' (Aristotle) phenomena but also in general, despite their indisputable diversity and divergence, may be held to converge to one and the same category, which can be meaningfully designated 'astronomy', and easily identified in the myriad cultural, communicative, historical, academic, practical knowledge in which people in Africa have been dealing with and reflecting on celestial / 'meteorological' phenomena
- 8. despite this implied unity and convergence, the subtitle acknowledges that various academic disciplines are involved in the study of such African astronomy through space and time in acknowledgment of this multidisciplineary context, the book seeks to offer, I suppose, a transdisciplinary interface (it is also possible to read the subtitle as a statement to the effect that not the academic study of African astronomy, but African astronomy itself, constitutes such an interface, but such a reading, however appealing from a postmodern point of view, must be considered far-fetched, in the first place already because no one would readily assume that African astronomy (as distinct from merely <u>the study of African astronomy</u>) is neatly compartmentalised into a plurality of disciplines, recognised by the historic actors, and negotiated by them into a more or less integrated interface...)
- 9. and such an meta-discursive interface on African astronomy as the book proposes to be, situates itself in the field of the study of knowledge systems which over the last few decades has gained academic and political ascendance, especially also in the 'new' (i.e. post-1990) South Africa and as an aspect of the political and societal renewal.

As a project of research, reflection, redaction and publishing, the programme of the book thus contains much that is praiseworthy and deserving of our greatest dedication, loyalty and support. At the same time it should be clear that this is a programme of far too wide a scope to be completed in just one book:

- o involving too many different disciplines
- involving too many authors whose specific speciality is not primarily astronomy-related
- involving assumptions (such as the prior existence and the subsequent submergence of astronomy in Africa) that may exist in the eyes of the present-day beholders as actors in global knowledge politics, rather

than that it has, so far, and in this book, been adequately documented by methodical empirical research

- e.g. in the opening paragraphs of chapter 1, the continued existence of African populations over the millennia is advanced as, in itself, proof that sound astronomical knowledge (allegedly needed to sustain adequate agriculture to feed that population) must have existed in Africa for millennia; however, such an argument rests on far too many assumptions to be able to take the place of direct empirical evidence – populations may be fed and have been fed, especially in Africa, by other forms of production than just agriculture (notably hunting and gathering, and animal husbandry); the proper times for planting and harvesting may be indicated by other signs (e.g. rain, ripening of the crop) than strictly astronomical; local and regional populations are not inherently stable and often have supplanted each other rather than enjoying undisturbed sustained continuity across the centuries even millennia... - to the extent to which this kind of reasoning is characteristic of the book (it is in some chapters), it falls short of international scientific standards
- empirically documenting, theoretically categorising and analytically contrasting the varieties of 'celestial' knowledge in Africa's vast area and across the millennia is not a task to be taken as lightly as it often is in the present MS
 - the core of this book's argument should have been formed by extensive empirical descriptions of African astronomies based not only on ancient iconographies (e.g. in rock art and initiation schools), on ethnographic texts and on texts produced by literate Ancient Egyptian, Islamic, Ethiopian and modern local astronomical specialists, but especially on first-hand knowledge derived from close and prolonged association which living bearers and transmitters of astronomical knowledge in Africa – and represented in a sophisticated specialist way that acknowledges the many methodological, linguistic, textual and political difficulties inherent in representing cultural cosmologies not one's own.
 - The reader somewhat versed in the relevant literature is struck by a number of oddities:
 - Of the considerable ethnographic literature on African astronomies, only a fraction is acknowledged and used in this book (some of the available literature is listed in my Appendix 1 for additional sources, virtually none of which was used in this book)
 - much of the references to African astronomies are at best second-hand, often based on unreliable and unreferenced Internet sources that tend to lack all academic authority

- not even one extensive and specialist, direct ethnographic account of living African astronomical knowledge, its basis in observed celestial phenomena, its transmission, its practical use, etc. is included in this book (all we get is passing references to unspecified and unsubstantiated personal experiences), let alone that such an account is used to demonstrate the varieties, social management, and ancient and newer formats of astronomies in that continent
- one of the principal forms of astronomy in Africa has • been in the literate Ancient Egyptian context, which spans more than three millennia and has been subjected to profound specialist scrutiny; yet the extensive literature on Ancient Egyptian astronomy (see my Appendix 2 for a first and haphazard impression) is virtually absent from this book, and instead the text relies on too facile and unreliable Afrocentrist versions, notably by Obenga, which have never been published and tested in professional Egyptological venues. Instead, the most authoritative scholarly studies on the astronomies of the Ancient Near East and Egypt (e.g. Neugebauer, van Waerden) remain out of the scope of this book, suggesting that most of the contributors to this book are non-specialists entering the field of ancient astronomies for the first time in their career, and without proper preparation, direction, or editorial guidance
- other important forms of astronomy in Africa have been adopted, transmitted, and sometimes produced, in Islamic contexts, which are intrinsically transcontinental since they are in continuity with the entire world of Islam stretching from Dakar to Indonesia and urban Afro-American environments in the New World; however, rather than taking this state of affairs as a reminder that African astronomies need to be appreciated as demonstrations that Africa in its culture history has always been part of the wider world, the dead horse of Orientalism and its defects is kicked into service again (a quarter of a century after Edward Said), as if the achievements of Islamic astronomy have not always been acknowledged and expounded, but on the contrary have been concealed and dissimilated, by North Atlantic specialist scholars - including the point of the indebtedness of European medieval and Renaissance science to these Islamic sources, which in themselves however had little substantial to add to the heritage from the Ancient Near East including Egypt, from Graeco-Roman Antiquity, and more recently from South Asia. Here again, one of the most extensive discussions

of African Islamic astronomy Viviana Pâques *L'Arbre cosmique*, 1964) has remained outside this book's scope.

- One is surprised to find a discussion of the popularity of • astronomy in China in this book with an explicit African focus, without explicitly discussing the very extensive transcontinental continuities between China and sub-Saharan Africa during at least the last two millennia (focus of much of my current research, both recently published and in progress) - but also without focussing on what must be among the most authoritative and extensive Western scholarly statement on this matter, a volume in Joseph Needham's Science and Civilisation in China. And also in this China chapter one seems to miss (perhaps as a result of the hiding of authors' identities for assessment) the elaborate, confident (in this case: Sinological) scholarship that is a sign of careful argument in the history and sociology of science.
- In view of the above, the specialist reader conversant with Ancient and African astronomies turns away in dismay, and does not even stop to wonder why the very elaborate corpus of international literature on archaeoastronomy, with its very relevant methodological and technical astronomical discussions, has remained virtually absent from this collection.

All of the above does not render totally invalid the good intentions and the intellectual efforts that have been made by many of the contributing authors in this book, to explore the intellectual (especially philosophical) challenges and emancipatory promises of astronomy in the present-day Southern African context. These chapters often make a well-worked and rather convincing impression, in line with much of what has been written, in the course of the last few decades, on indigenous knowledge systems and their strategic emancipatory potential. Even so one wonders whether a discussion of Marx's Theses against Feuerbach is quite in place in this collection – their inclusion brings out too clearly that some of the editors have adopted the astronomical framework without really being able to relate to anything but their habitual professional baggage. These chapters should be scrutinised again, and some perhaps be omitted from the final collection.

But these well-intending, reflective, soul-searching and mobilising chapters may be seen as merely the elaborate (and, in its attempts at political correctness, somewhat predictable, and somewhat perfunctory) wrapping around what is now an immense astronomical void: *the lack of empirical documentation and of scholarly handling of African astronomies*. This void is caused, not by absolute and irretrievable lack of primary data (for such data are there for the taking, all over Africa through fieldwork, and in every specialist Africanist library for documentation), but by the peculiar tendency to *virtualisation* that has taken hold of the highly politicised study of indigenous knowledge systems: since the politically correct outcomes of the research and of the argument have already been divided on the basis of first principles of a political and especially ideological nature (hence the recourse of Afrocentricity, African Renaissance, Critique of Orientalism and other facilely counter-hegemonic writing strategies), primary data are being replaced (in other words, virtualised) by predictable templates, not of analysis, but of scholarly myth.

In the present version of the MS, this (too scantily) edited collection of conference papers, to my mind, proves unable to avoid the pitfall of virtualisation, and of preconceived templates, and falls blatantly short of the principal empirical duty of presenting valid, rich, grounded primary empirical data. However, the project's original orientation deserves a much more positive outcome, and so do its determination to vindicate astronomy as a vital aspect of African knowledge systems, and the vindication of Africans' competences to have developed, all across the continent and across the millennia, their own essentially valid and essentially transcontinentally continuous, yet at the same time somewhat local and somewhat original contributions to global knowledges. The baby is about to drown in the bathing water, yet it may yet be rescued and grow up to a healthy and happy adult.

I propose that, on the basis of the present draft MS, a new conference is called, with a strong and vocal input of genuine and authoritative specialists in African, Ancient, Chinese, Islamic, South Asian, and modern global astronomy, under the direction of a competent chair who will also take responsibility for the editorial and intellectual styling of the final book. In this way the considerable effort already manifestly invested in the present manuscript, may be salvaged, and may lead to a result worthy of HSRC and its lofty mission in South Africa today.

I have made some marginal comments to the present MS which may yet serve in this future editorial process, and which I am prepared to share with the editors should that be their wish. Meanwhile I am attaching two Appendices indicative of the rich empirical materials on African astronomies, already there for the taking, but nearly entirely overlooked in the present MS.

Wim van Binsbergen

Appendix 1. SKETCH BIBIOGRAPHY AFRICAN (ARCHAEO-) ASTRONOMY

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Due to the precession of the equinoxes, the location of the northern pole (as well as of the sourthern pole) is not a fixed point in the heavens but describes a circle (in fact, a near-circular spiral) ev ery 25,600 years. About 18,500 years BP the northern pole was in the constellation of Cygnus, whose appearance differed slightly from its present-day appearance due to the proper motion of its constituent stars. The controversial claim has been made (Moglova & Stoev 1994: 36f; Rappenglueck 1999: 291f n. 14) that certain constellations were already distinguished 22,000 BP, and the converging cross-cultural ethnographic evidence (Rappenglueck 1999: passim with very extensive literature) strongly suggests that such was the case towards the end of the Upper Palaeolithic (12,000-10,000 BP). Birds have featured prominently among the nomenclature of constellations world-wide, including aquatic birds, especially the swan. That such bird-like connotations may be of very great antiquity and amazing constancy is brought out by the fact that what is called the constellation Aguila (Eagle) by present-day world-wide scientific nomenclature, is a buzzard for various Amerindian groups throughout North America; an eagle, falcon, or raven in ancient Babylonia; and an eagle, goose, chicken, crane, or schwan on rock art in Karelia (northern Scandinavia) and Siberia (Rappenglueck 1999: 324, n. 409 with extensive references). From the nomenclature to shamanism is only a logical step, because throughout Eurasia and the America shamans have been the specialist in astronomic knowledge throughout historical and protohistorical times, and most probably since at least the Upper Palaeolithic. Birds have of old had strong shamanistic connotation, in the sense that shamans often have staffs topped by a bird-like image (rich bibliography Rappenglueck 1999: 314, n. 110) while often shamans themselves are considered to change into birds in the context of their journeys into the realm of the unknown (Rappenglueck 1999: 248f, 359 n. 179). Among these shaman-associated birds, the swan takes pride of place. It appears among the oldest mobile Upper Palaeolithic art (figure of swanlike bird, one of them speckled, at the Upper Palaeolithic site of Mal'ta, near the Baikal Sea, eastern Siberia (c. 17,000 BCE). In more recent accounts of shamanism, the practitioner may beconsidered to change into a bird, with the swan as one of the preferred species (Rappenglueck 1999: 360 n. 200, based on Ridington 1983: 182). Further comparative and

historical research brings out that this corresponds with a widespread theme, found e.g. in the Americas, ancient Egypt, and China, according to which the shaman or the divine king (who in inchoate political systems, in the very process of state formation, may be indistinguishable) turns into a bird, e.g. a swan; cf. the Egyptian king, to whom the same applies: a divine king, he has had shamanistic connotations from early dynastic times right through to the New Kingdom -- cf. Tut's diadem and leopard-skin attributes; and of course he is Horus, the falcon -- it cannot be an accident, but testifies to the convergent ancient shamanistic roots of this complex, that this bird name (h.r) is one of the very few that could be identified in the reconstructed proto-Nostratic corpus, and that therefore has remained a lexical constant for a dozen millennia or more [give refs] In the Aegean context in classical times, the priests of the very ancient Eleusis mystery cult were considered to be of swan descent or have more general, Orpheus-related swan connotations (Rappenglueck 1999: 360 n. 200, based on Verhagen 1987: 142; cf. Plato, Republic, X). These images are reminiscent of the cross-like basic structure of the constellation Cygnus, however, there is only a remote possibility that it had already its present-day name by those very early times. There are indications (Rappenglueck 1999: 359f n. 84) that our present-day constellation Cygnus had Horus (falcon) connotations in ancient Egyptian times, and was then thought to be a god sacrificing the bull, or the beef legpiece, identified as Ursa Major. Like in the case of the sea people's boats (whose sterns are said to be ornamented with depictions of either ducks or swans) there is a persistent confusion, in the representation of bird-associated constellation, between aquatic birds with long necks and with short necks (Rappenglueck 1999: 325f, n. 450).

Dear

Michael,

Since you never replied to my last mail in German, let us revert to English, at least on my side.

I am now on a short sabbatical, and this has finally given me the opportunity to go twice through your marvellous book. I am very grateful to you for giving me this opportunity to acquaint myself much more systematically with uptodate (i.e. 1999...) archaeoastronomy. I can hardly imagine that my papers have given you a similar inspiration and excitement. The difference, as I already pointed out in my previous mail, is that you are on this full time, and for many years, and for me it is almost an afterthought after, also many years, of looking at divination, myths, cosmologies, games, worldwide. Many things now fall in their proper place for me and I can already see the way towards rewriting my pieces on archaeoastronomy, especially the one on the La Ferrassie block, in a form that makes much more allowance for the current state of scholarship, and that links my own ideas with the growing scholarly consensus -- leaving out that which is probably wrong or unsupported, and stressing where there is a

parallel with other work in this field.

My work on La Ferrassie ended in frustration, because I knew that my attempts to reconstruct the position of the heavens 60,000 BP was clumsy (depending on the blind outcome of algorithms to which I had no direct access), I had been unable to locate and get access to the proper software to make such reconstructions with fair allowance for Eigenbewegung and the varying skewness of the ecliptic, and I was not aware of the extent to which scholarship had already succeeded to produce more or less convincing reconstructions of Upper Palaeolithic astronomy -- which would be a reliable point of departure for any speculations, as in my La Ferrassie study, concerning Middle Palaeolithic, Mousterian astronomy.

So even without us physically meeting within a few weeks or so, some of the things I would like to get from you are very clear now:

1. I would like to get access to the latest Hipparchos software, which would allow me to reconstruct, in detail, the position of the heavens for Mousterien times. If this software can be bought and can run on a reasonably modern computer (Windows Professional 2000, but upgrades possible if needed) I would be delighted. Please enlighten me on this point. Further questions would come after I have tried to install that software and play around with it. Much of the clumsy tables of my La Ferrassie draft could then be replaced by more uptodate and professional approaches.

2. The bibliography of your book is incomparable to anything I know, both as far as archeoastronomy is concerned (where you explicitly claim completeness -- I believe you!) and for wider symbolic and mythical literature. Your incredibly dedicated, full and systematic coverage of this literature in the Notes makes your book a real goldmine, and an incomparable (!) source of inspiration. Now what I have normally done in a case like this, is to spend a day or two (!) scanning and OCR-ing such a useful, extensive bibliography so that I can incorporate it with my own extensive (60,000+ titles) material already on my computer, and begin ordering or locating the books and papers and start on a new trajectory of reading, taking notes, and revising my texts. If I know the author, I usually ask her or him to send me an electronic copy of the bibliography, because usually the book is recent and has been typeset from computer files. So I would like to ask you the same question: can you send me the (TXT format) electronic text of the bibliography of your book? I know this is asking very much, and fears of improper appropriation would immediately hit me if someone would ask me the same question. However, you can rest assured that I will only use your material with very explicit and repeated acknowledgment of you as a source and inspirator. Moreover, I could let you have acccess to my own 60,000+ bibliography in return, much of it rubricised and searchable according to hundreds of topics including astronomical and probably mythical ones, which is a fair deal.

So far about the immediate uses to which I personally can put your marvellouos book. If the answer to my two questions will be affirmative, this means that in the next few months I can work on total revision and extension of my original La Ferrassie paper, in ways that would make simply obsolete most comments you would now be able to make on the basis of the existing version. (However, there are still my other, somewhat shorter papers). When I put my stuff on the internet it was in the hope that I would catch the attention of someone much more knowledgeable about archeoastronomy, and your initiative to contact me has worked out in this way. Earlier I had contacted the Dellucs (who were very kind and helpful), and d'Errico, who was evasive, and the Center for the Study of Archaeoastronomy, who never responded at all. Of course I realised that my draft, being neither archaeologically nor astronomically professional, was a difficult text for anyone professional to relate to, with its strange mixture of sense and obsolete nonsense. Don't waste your time on that earlier text, let me rewrite it, and we will then have a marvellous exchange on my text.

However, if I am not mistaken the idea of our exchange was not only to bring my own dabbling into archeoastronomy up to more professional and publishable standards, but also to bring additional inspiration to your own work. And yes, I have a great deal to say about your book as a commentator or reviewer, regardless even of my own personal interest in and work on Mousterian (La Ferrassie) and post-Upper Palaeolithic (leopard symbolism) astronomy. Not only would I advocate that your book be translated into English and thus become available to the English scholars working in this field (who are the majority), but I would also suggest that you take the opportunity to bring the argument, whenever possible, a bit further; and that in so doing you try to reap, more than you are doing now, the full benefits of all the many implications and interesting vistas which now often remain so-called 'throwaway points' for the notes -- which nobody reads anyway (especially not because they are not at the bottom of the page), which are not integrated parts of the main text, but which i spelled and which i greatly relished. Michael, you emerge from your book as a highly competent and imaginative but also as a somewhat vain and insecure person, who would rather bring in and develop a new viewpoint of your own than to engage deeply and at length with the criticism of others. I may be totally mistaken in this (however, the dozens of times you proclaim your competence at CAD in the captions to your nice diagrams suggest something), but considering the fact that I need some very precious things from you at this stage (points 1 and 2), I do not wish to start or irritate you, at this point already, by giving you, in writing rather than orally, the criticism I have of your book. As an outsider to arcaheoastronomy but with a life-long experience in historical, comparative and ethnographic anthropology and mythology as well as an active philosopher with a passion for epistemological and methodological questions, I am deeply impressed by the full extent to which you state the case for an astronomical reading of the famous Lascaux scene -- one of the most famous of the Franco-Cantabrian material. I see several ways of further supporting your thesis, by reference to

recent genetic and linguistic long-range research, but I also feel that you do not really deliver the methodological argument your subtitle promises. A more specifically archaeological perspective would have brought you not only to develop the riches now buried in your notes, but also to draw the many distribution maps now implied in them, and to seek to interprete these ditributions systematically in a more specifically historical sense than merely by an implicit appeal to the communality of the human astronomical and mythical tradition. In short, although I very greatly benefitted from your book as it now stands, I would suggest a number of specific ways in which it could be improved, and a number of specific questions which you have regrettably (but understandably) skipped. If we could have a further exchange on these points, perhaps you will be rewarded for the initiative you took in contacting me, and for your generosity in sending me your splendid book.

looking forward to hearing from you, an obviously keen to have your answers to my questions 1 and 2,

kindest regards, and thanks again for having written and donated such a wonderful book

wim

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Schaffer, M., & Schaffer , M., 2003, Djinns, Stars and Warriors: Mandinka Senegal Mandinka Legends from Pakao, Legends from Pakao, vernoemt mij in een of ander verband 8 groep van ... Μ Schaffer books.google.com Schaffer, 2003 Μ -... Ralph A. Austen (University of Chicago), Wim van Binsbergen (African Centre Studies Within the villages, individual housing compounds, too, were palisaded: "The ...

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ik heb hierbij nog met postit allerlei aantekeningen gemaakt – dat geldt voor de hele sectie; allemaal nog eens doorlezen

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Wainwright, Gerald., Archaeology,	1936, 'Orion and t Volume	he Great Star. XXII,	' The Journal Pages	of Egyptian 45-46,
Mythology,	Symbolism,	aı	nd	Religion
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Abstract

This paper discusses a single /Xam narrative from the nineteenth-century Bleek and Lloyd archive of Southern African Bushman materials. [1] It delivers a critique of functionalist and structuralist approaches to the materials, as well as of the tendency to characterise the narratives that concern the sun, moon and stars as chiefly aetiological. The paper aims to situate the narrative within a wider /Xam discursive field and to demonstrate something of its protean multivocity. While the paper concentrates on the /Xam materials, it also seeks to address questions that relate to the interpretation of folklore and oral literature in general.

The Discursive Character of the/Xam Texts: A Consideration of the/Xam "Story of the Girl of the Early М Wessels _ Folklore, 2007 _ informaworld.com ... menarcheal stories become cautionary tales designed to inculcate the puberty rites:

"there is ... that will become the moon by /Kaggen, the Mantis protagonist of ...

hier lijkt het door mij gezochte verband zich voor te doen ; is Tai Chi trouwens niet anders dan de baltsbewegingen van de Praying Mantis? de species naam wordt ook voor Tai Chi variant gebruikt

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Appendix 2. ROUGH BIBLIOGRAPHY EGYPTIAN (ARCHAEO-) ASTRONOMY

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dit tijdschrift is geassocieerd met van der Sluijs en Velikowski, en niet serieus te

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[PDF] 10 The Egyptian Morning Star - [Vertaal deze pagina]Bestandsformaat: PDF/Adobe Acrobat - HTML-versie Horus, perhaps reflecting the coercive power of kingship at this early stage of by comparative mythology, Hathor is to be identified with the planet Venus. the youth into a seething kettle of water and leapt into the sea ... www.maverickscience.com/horus.pdf - Vergelijkbaar -

129: Especially significant is the strange scene wherein Isis and Horus are
described as leaping about as if put to fire. We would compare this vignette to
Apollodorus" s account of
"ibid., p. 192.

130

Melikertes* fiery demise, wherein Ino, upon being stricken with a great madness, plunged the youth into a seething kettle of water and leapt into the sea together with the infant.'1' Analogous accounts of a great goddess and her infant son being burned and leaping about together will be found around the globe.

maar	zoek	dus		bij A	pollodorus
de	Melikertes	verhaal	wordt	gevonden	bij:
Euripides Apollodor Ovid		M Bibliotheca Metamorpl	edea nosen	1,9,1f.	1284ff. 3,4,3 4,506-542

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[Note: A discussion of Babylonian and Greek influences on Egyptian zodiacs.] Egyptian

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allegory also applied to Hephaestus: 328 Usener, Goetternamen: Hephaestus ' divinity of the moment' 329: in late Antiquity period, allegorical interpretation applied to Homer -- e.g. Heraclitus [same as philosopher???] , Allegoriae Homericae, 'Thus the chaining of Hera (II. iii, 277) is explained as the union of the elements (23); the hurling of Hephaestus through the air (i. 592) signifies the earthly fire, which is weaker than the heavenly flame (thus Hephaestus is [greek lettering] khoolós (26)

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geschreven

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Gurshtein's gradualist concept of constellation origins and zodiacal development

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bevat nog aardig wat over Hephaestus, zie register bevat vooral veel over Fire, Fire-gods, etc. , zie ook register nog natrekken allemaal met name staat in register iets over hephaestus als momentary god

ik heb het index volume geOCRed, staat in focono 96078 , dwnld archive, en ben begonnen met WATER, maar had gene tijd meer

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Lurker, Manfred,. 1980, Götter und Symbole der alten Ägypter. München: Goldmann Verlag.

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Nut was considered the sky—goddess par excellence in ancient Egypt. Unlike other Mediterranean civilizations the sky was conceived as a female divinity by the Nile dwellers. She was thought of as an amniotic cocoon inside which the pharaohs would regain life and immortality in the hereafter. Hence, being perceived as a Universal Mother archetype, she would bestow rebirth in the afterlife to the dead kings, who were considered her children. In her virtual identification with the sarcophagus, Nut was considered a nursery and nurse, and was depicted inside sarcophagi and anthropoid coffins alike, stretching her body protectively over the corpse of the deceased. Joining with her would mean return to the womb of eternal space—time continuum and passing victoriously through immortality. The mural and ceiling paintings of the sky—goddess Nut in some royal tombs of the NK in the Valley of the Kings are renowned for their chromatic forms (mainly blue for the sky, golden yellow for the stars and red for the solar disc), as well as for their religiously aesthetic conceptions (cosmogony, theogony and their artistic liturgical expression). In this paper we discuss the relation between cosmic space and archetypal time, as those were viewed under the prism of ancient Egyptian mythological perceptions and were represented by the former depictions of Nut. The tombs of Pharaohs Ramesses IV, Ramesses VI and Ramesses IX are examined. The inherent cosmovisi-onal symbolism, together with the mythological background of these paintings are discussed, in order to assess the relation between the creation of sacred space and the imaginary in ancient Egypt. Both of them dwell on the archetypal memories of the collective unconscious. Finally, a brief account is given of the probable identification of Nut with the Galaxy (Milky Way) by the Egyptians, where some points of an older paper by Arielle Kozloff are discussed with the astronomical deserved precision. KEYWORDS: Nut, Sky-Goddess, Late Ramesside Tombs, Ramesses IV, Ramesses VI, Ramesses IX, Books of Heaven {Book of Nut, Books of Day and Conceptions of Night), Time, Jungian Archetypes, (Galaxy). Sky, Milky Way 50798

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Moftah, Ramses Riad, 1960, Die heiligen Bäume im Alten Ägypten. Beiträge zur Religionsgeschichte, Philologie, Archäologie und Botanik. [Dissertation, Masch.]. Göttingen.

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Nagy, I[?]., 1977, 'Remarques sur Quelques Formules Stellaires des Textes Religieux d'Epoque Saïte.' Studia Aegyptiaca, Volume III, Pages 99-117,

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Neugebauer, O., & Parker, R.A., 1960, 1964, 1969. Egyptian Astronomical Texts, 3 [check 4] vols. Providence: Brown University Press.

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ik vermoed dat dit een oudere vorm is van exact sciences in antiquity

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Neugebauer, O., 1969, The exact sciences in Antiquity, New York: Dover, 2nd edition; 1st ed. 1957, Providence (R.I.) [check] : Brown University Press.

[demotische Egyptische astrologie:] [eerste editie Copenhagen 1951?] dit boek bespreekt, p. 107f en 115f, hoe alle ephemeriden vanaf de Seleucidische tijd dezelfde opbouw hebben, waarbij de tijd van eerste visibility, en van overgang in retrograde beweging, cruciaal zijn. dit zijn de met griekse letters gemerkte parameters die een hoofdrol spelen in mijn betoog over de astrologische (eigenlijk astronomische) oorsprng vna de geomantiek. Neugebauer wdijt overigens veel tekst aan de relatie tussen astronomie en astrologie, en meent niet dat astronomie uit astrologie voortkomt, p. 168f

goede behandeling van decanen; het feit dat Tester daarmee geenraad weet laat zien hoe slecht diens boek is

er is een heleboel commentaar van mij in de marge maar dat doet er nu niet meer toe. ik dacht toen nog dat de oorsprong vna de hakata in de mediterrane oudheid kon liggen, en zocht daar dus naar

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[Note: A monumental study and likely to remain the standard work. Does not deal with issues of astronomical alignments in monumental architecture, or astral themes in mythology. For Volume 1: See the English-langauge) book reviews by Olaf Schmidt in Centaurus, Volume 9, 1963-1964, Pages 57-60; C[?]. Spaull in The Journal of Egyptian Archaeology, Volume 48, 1962, Pages 166-168; by Evert Bruins in Isis, Volume 53, 1962, Pages 523-525; by Asger Aaboe in Journal of the History of Medicine and Allied Sciences, Volume XVII, 1962, Pages 204-205; and the German-language) book reviews by Siegfried Schott in Literaturzeitung, Siebenundfünfzigster Orientalistische Jahrgang, 1962, Nummer 11/12, Columns 592-598; and by Kurt Vogel in Archiv für Orientforschung, Einundzwanzigster Band, 1966, Pages 109-111. For Volume 2: See the English-language) book reviews by C[?]. Spaull in The Journal of Egyptian Archaeology, Volume 51, 1965, Pages 217-218; by David Pingree in Isis, Volume 57, 1966, Pages 136-137; and the German-language) book reviews by Erich Lüddeckens in Zeitschrift der Deutschen Morgenländischen Gesellschaft, Band 116, 1966, Pages 181-182; by Kurt Vogel in Archiv für Orientforschung, Einundzwanzigster Band, 1966, Pages 109-111; and Siegfried Schott in Orientalistische Literaturzeitung, Volume 62, 1967, Nummer 5/6, Columns 244-247. For Volume 3: See the English-language) book reviews by C[?]. Spaull in The Journal of Egyptian Archaeology, Volume 57, 1971, Pages 215-217; by Asger Aaboe in Journal of the History of Medicine and Allied sciences, Volume XVII, 1962, Pages 106-107; by Owen Gingerich in Journal for the History of Astronomy, Volume 3, 1972, Page 217; and the German-language) book review by Philippe Derchain in Orientalistische Literaturzeitung, Volume 66, 1971, Nummer 1/2, Columns 22-24. Otto Neugebauer 1899-1990) was a pioneer of studies of ancient mathematical astronomy. For 30 years he was Professor of the History of Mathematics at Brown University. See the Eloge by David Pingree in Isis, Volume 82, Number 1, 1991, Pages 87-88. Richard Parker headed the Department of Egyptology at Brown University from 1949-1972.] Egyptian

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Pogo, Alexa Semut.'	ander., 19 Isis,	30, 'The	e Astr Volur	onomica ne	al Ceilin XIV,	ng-deco	oration in Pages	the Tomb of 301-325,
[Note: The Egyptian	author	was a	profe	essional	astron	omer.	Life date	s: 1893-19??.]
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37f: oppervlakte van de halve bol (struve, 'Korb'), kan echter ook een halve cylinder (Peet) of een bijenkorfvormige graanschuur (Neugebauer) zijn. het is de vraag of hierbij aan bijenkorf gedacht mag worden. het feit dat auteur niet beseft dat bijenkorven cylinders waren, speelt mogelijk parten. niettemin belangrijk voor GLobal bee flight. waarom zou men overigens de oppervlakte uitrekenen, tenzij voor honing of wasbekleding van de 'korf'? is in het duits Korb ook bijenkorf? Zie Neugebauer, Vorgriechische Mathematik

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