Before the Presocratics

vols 23-24 (2009-2010), nos 1-2
EDITORIAL

Since early 2009, when the last three annual volumes (XX, XXI, XXII, 2006, 2007, 2008) of Quest: An African Journal of Philosophy / Revue Africaine de Philosophie were published, our journal has gone through a bumpy patch. The same year saw the end of the five-year hospitality agreement between this journal and the African Studies Centre, Leiden, the Netherlands. The Editor had negotiated this agreement in 2004 (as the only successful outcome of a long series of international applications for subsidy), and though it had failed to bring the secretarial and administrative assistance so badly needed, it had at least paid for printing and postage. We take this opportunity to thank the African Studies Centre for its loyal support over these five years. Against the background of the international financial crisis from 2008 onward, revenue from subscriptions, sale of back issues, and reprint fees dwindled, and costs of printing, web design, hosting and postage were mounting. Meanwhile Quest was enjoying ever greater popularity on the part of established and junior contributors, and also the quality of the articles submitted went from strength to strength. Under those circumstances the Editorial Board saw no alternative but to sit back and wait until the financial situation would clear up sufficiently to produce, dispatch and host new annual volumes. In 2012 the felicitous reprint of three Quest articles in the Eboussi Boulaga Festschrift, and the fees secured in that connection through the good services of Professor Valentin Mudimbe (Member of the Advisory Editorial Board) seemed to bode better times for our journal; but then the Editor went down with serious illness (2011-2012). By the end of 2012, these medical hurdles had finally been taken, and three new annual volumes are now lined up for publication before the middle of 2013 – one under the guest editorship of Professor Thaddeus Metz from South Africa. A cheaper production process yet more attractive format were meanwhile initiated, of which the present volume is the first implementation. Rather than already bringing out these three volumes, we decided that we should first devote the present combined annual volume XXIII-XXIV (2009-2010) to a long-standing book project of the Editor, in honour of his 65th birthday, and in recognition of his contributions to Quest and to the sake of African philosophy over the past decade. The book’s anti-hegemonic, anti-Eurocentric approach to long-range transcontinental philosophy from an African perspective is a fitting expression of the spirit of Quest, and a significant contribution to the global history of philosophy.
Before the Presocratics

Cyclicity, transformation, and element cosmology: The case of transcontinental pre- or proto-historic cosmological substrates linking Africa, Eurasia and North America

by Wim M.J. van Binsbergen
Affiliated Researcher, African Studies Centre, Leiden
Emeritus Professor of Foundations of Intercultural Philosophy, Philosophical Faculty, Erasmus University Rotterdam
Life member of the Kwame Legwane Traditional Association of Botswana
© 2012 Wim M.J. van Binsbergen


Quest: An African Journal of Philosophy / Revue Africaine de Philosophie (ISSN 1011-226X)
published by Shikanda Publishing House, Haarlem, the Netherlands

For details on front cover illustration, see Fig. 4.3 below, p. 127; back cover illustration: ‘Man as dwelling at the bottom of the sky’ (thought to represent Empedocles, in an apparent Renaissance print of doubtful authenticity published by Camille Flammarion, late 19th c.)

‘...Alleen die in zijn engte de elementen telde
Buigend bevend als geselslagen geeft het laatste geluid
Het lied heeft het eeuwige leven.’
Lucebert (2002)

[‘Only he who, in his anguish, counted the elements
Like a scourge bending, trembling, offers up the last sound
Song has life eternal’]

To the memory of Douwe G. Jongmans (1922-2011),
my beloved teacher of ethnohistorical and ethnographic field research
Chapter 0. Preface, acknowledgments, and overall orientation

0.1. Background of this book in the context of the author’s research

This argument, while coming from an author who is an Africanist anthropologist by training and an Africanist intercultural philosopher by profession, yet is rooted in my life-long fascination with the Presocratics and with cosmology in general, but was particularly prompted by a number of specific intellectual adventures.¹

In the late 1960s I did my first ethnohistorical and ethnographic fieldwork, on popular religion in the highlands of Northwestern Tunisia – under the greatly inspiring supervision of (among several others to whom I am almost equally indebted) the North Africanist Douwe Jongmans, to whose memory the present book is dedicated; in preparation I studied introductory Arabic with Muḥammad Suʿudi, and sufficiently acquainted myself with the intellectual world of Islam to recognise and track its traces when, much later, I came across the latter in Southern Africa. In 1972, while teaching theoretical sociology at the University of Zambia, South Central Africa, I inherited the Golden Retriever dog Leeza from one of my Indian colleagues departing for Australia; a domestic servant who was conversant with the dog’s ways came with it, and this was the haphazard, in hindsight scandalous, beginning of my productive ethno-

¹ In order not to burden already the beginning of this book with the excessive and regrettable self-referentiality that yet is very difficult to avoid given both the pioneer nature and the sustained, accumulative nature of my research over the past two decades, I have largely refrained from referencing this Preface. The bibliography at the end of this book gives a chronological overview of my publications in question.
graphic and ethnohistorical collaboration, and soon close fictive kin relationship as adoptive brothers, with Mr. Dennis Kawungu Shiyowe of the Nkoya people of Western Zambia. Together we have intensively explored, over the next four decades, the ethnography and history of the Nkoya. Here I came across a complex clan system, whose apparently muddled and contradictory nature presented puzzles which no living Nkoya could elucidate and which only the present book’s argument will solve to at least my own satisfaction. Then again, in 1988, during ethnographic fieldwork on globalisation and culture in the booming town of Francistown, North-eastern Botswana, Southern Africa (but I never gave up on the Nkoya), I was introduced (first as a researching outsider, soon as a practicing insider) to one of Southern Africa’s major divination systems. Known as Dithlaola (Tswana) or Hakata (Shona), it is based on four tablets which, when cast (and given the fact that they are marked to be different from one another, and to have different fronts from backs) can assume $2^4$ different configurations, each named and each to be interpreted by reference to an extensive, multidimensional (but orally memo-
sed) divinatory catalogue. I soon learned that very similar systems existed elsewhere, in West Africa, in Madagascar and the Comoro Islands, throughout the Indian Ocean realm, and in Medieval and Early Modern Europe, while the prototype of this proto-globalised, geomantic family of divination systems appeared to derive, under the names of علم ً علم ‘ilm al-raml (‘Sand Science’) or خط ً الرمل ḥāṭṭ al-raml (‘Sand Line, Sand Calligraphy’) from late first-millennium, Islamic Iraq.2 Early

---

2 In the present study, as in my other recent work, an effort is made to render the world’s specific cultural / intellectual traditions, as much as possible, in their original form including their original script, if any. This is not in order to pretend a philo-
logica/competence I do not possess (in fact, I am aware that my adopted practice is prone to serious error disqualifying the argument in the eyes of regional specialists), but, on the contrary, to remind the reader – in the best anthropological fashion – of the fact that all regional traditions deserve to be met on their own terms; that all transcontinental rendering involves massive translation and interpretation and therefore is inherently uncertain and distortive; and that the habitual equation of global scholarship with a North Atlantic, early-21st-century-CE perspective amounts to a gross error of ethnocentrism. As a rule, the non-European original script will only be given the first time a name or term is being used. In this connection, the rendering of personal proper names from Ancient Egypt, Greece and Rome presents special problems due to the habit, particularly in the Anglo-Saxon contexts, of adopting rather distortive versions of the original names in Modern scholarly and popular discourse; thus Isis instead of ḫst, Chemmis instead of Ḫ-h-bt, Horus instead of Ḥr (Ancient Egyptian); Hephaestus
on, I was struck by the parallels in notational system and internal formal structure, between these systems and the famous, 道 Taoist Chinese 易經 Yi Jing (‘I Ching’) system of wisdom divination, to which my elder sister Else Oeseburg-Broers, an experienced practitioner, had introduced me and which was becoming popular in the North Atlantic region on the wings of the esoteric and New Age movement, from the 1970s CE on. The determination to trace the antecedents of Southern African geomantic divination in space and time was to dominate my empirical research from 1990 on. The 1990s were the time when the Black Athena debate, as initiated by Martin Gardiner Bernal, reached its culmination. By the same time we saw the coming of age of Afrocentrism, which had been among Bernal’s inspirations in addition of the Egyptological fascination he had inherited from his grandfather (i.e. Alan H. Gardiner; along with the latter’s library). Finally, in that decade, globalisation seemed to offer a new paradigm for the re-organisation and rethinking of regional studies which until then has been on a strictly one-continent footing. Having traded my chair in the anthropology of ethnicity (Free University, Amsterdam) for one in the foundations of intercultural philosophy (Erasmus University Rotterdam), I came to focus my attention at the epistemology and global knowledge politics of interculturality, and – repeatedly using the geomantic case as an empirical illustration – at first believed that Strong Afrocentrism could be a leading paradigm in this field; until sustained theoretical and empirical reflection, notably as first co-author of a massive book on Ethnicity in Mediterranean Protohistory (2011), in addition to affording me empirical and methodological experience with genetic and long-range linguistic analysis indispensable for the present book, brought home to me the limitations of the Afrocentrist perspective. The Francistown fieldwork introduced me not only to geomantic divination but also (at the moment of my graduation to the full status of sangoma diviner-healer) to leopard-skin symbolism; the world-wide puzzles this introduction presented to me brought me in close and prolonged contact with the recent movement to revive comparative mythology – initiated by and subsequently led by the prominent Sanskritist Michael Witzel of the Department of Sanskrit and Asian Studies, Harvard Univer-

instead of Hephaistos or better still Hefaistos, Achilles instead of Achilleus (Ancient Greek); Ovid instead of Ovidius, Homer instead of Homerus or Homeros (Latin). The present author is not to be blamed for the gross inconsistencies springing from this cultural practice; further see the Index of Proper Names at the end of this book.
sity, Cambridge MA, USA. It has been in the context of this collaboration, and as a founding member of the International Association for Comparative Mythology, that I came to formulate an Aggregative Diachronic Model of World Mythology, towards whose consolidation my study of Flood myths world-wide has occupied an increasingly central role. It was in this context that I accidentally hit on the indications of a cyclic transformative system contained in North American Flood myths. In 2007 I drafted a first rough version of the present argument, concentrating on cyclic transformative element cosmologies, and attempting to bring together the Nkoya, geomantic, Taoist, Flood-myth, and *Borean, data. In the following years, I sought to complement my study of element cosmologies from Asia, Africa and North America, with a return to Presocratic philosophic texts and their Ancient commentators – in an attempt to lift the present argument above its transcontinental empirical limitations, and make it more directly recognisable as a contribution to the History of Philosophy. Meanwhile my contacts with, and field trips to, East, South East and South Asia greatly intensified, and my ongoing research concentrated on transcontinental continuities in pre- and proto-history, especially those between sub-Saharan Africa, and Asia. As so often in my life as a scholarly author, one additional Chapter (devoted to the transcontinental mechanisms that might have produced the empirical distributions of element cosmologies) tyrannically grew out of its original context and scope, and spawned several major articles, a draft book, an international conference, and another book based on that conference – enough to unburden the present book from that detailed transcontinental argument, to which instead only passing reference is made now. However, a recently drafted Chapter on West Asia and Yi Jing reflects the same research orientation, and was the last to be added to the present book’s argument.

This argument, then, seeks to contribute to the study of the global history of human thought and philosophy. It calls in question the popular, common perception of the Presocratic philosophers as having initiated Western philosophy, and particularly of Empedocles as having initiated the system of four elements as immutable and irreducible parallel components of reality. Our point of departure is the puzzling clan system of the Nkoya people of South Central Africa, which turns out to evoke a cosmology of six basic dimensions, each consisting of a destructor, some-
thing that is being destroyed, and a third, catalytic agent. This is strongly reminiscent of the East Asian correlative systems\(^3\) as in the *Yi Jing* cosmological system of changes based on the 64 combinations of the eight trigrams\(^4\) taken two at a time; and particularly of the five-element cosmology of Taoism in general, in which the basic relations between elements are defined as an unending cycle of transformations by which each element is either destructive or productive of the next. Further explorations into Ancient Egypt, India, sub-Saharan Africa and North America suggest, as a

Working Hypothesis (1) that such a transformation cycle of elements may be considered a prehistoric substrate, possibly as old as dating from the Upper Palaeolithic, informing Eurasian, African and North American cosmologies.

However, immediately an alternative presents itself:

(2) that the transformation cycle of elements is only as recent as the Bronze Age, and was transmitted transcontinentally only in (proto-)historical times.

With our Working Hypothesis (1) and our Alternative Working Hypothesis (2) our argument turns to the Presocratics and especially Empedocles, whose thought is treated in some detail. Here we find that the transformative and cyclic aspects of the putative substrate system also occasionally surface in the work of these philosophers and in that of their commentators (especially Aristotle and Plato), but only to be censored out in later, still dominant, hegemonic and Eurocentric interpretations. This then puts us to a tantalising dilemma: (1) Can we vindicate our Working Hypothesis and argue that the Presocratics have build upon, and transformed (as

---

\(^3\) * Cf.* Fiskejo 2000; Graham 1986. The fundamental idea of a correlative system is that each of its constituent parts can be considered in terms of a *number* of dimensions at the same time (kinship term; direction of the compass; profession; fortune; social status; colour; the animal world, etc.), in such a way that the parts correlate systematically with one another along each of these dimensions, *e.g.* A = brother–northwest–butcher–small misfortune–low status–red–hyena, parallel to B = father–south–priest–great fortune–highest status–golden–lion, etc. (the example is fictitious), etc.

\(^4\) Trigram: in a notational system, an item consisting of three basic graphic elements; thus also hexagram: an item consisting of six basic graphic elements.
well as misunderstood!), a cosmology (revolving on the cyclical transformation of elements) that by their time had already existed for a dozen millennia or (alternatively) at least for several millennia? Or (2) must we altogether reject our Working Hypothesis, give up the idea of very great antiquity and transcontinental distribution of a transformative element system as an Upper Palaeolithic substrate of human thought, even reject our Alternative Working Hypothesis, – and revert to a Eurocentric position, where the attestations of element systems world-wide are primarily seen as the result of the recent transcontinental diffusion of Greek thought? These alternatives will be considered, in the light of an attempt to define important steps in the development of human thought procedures since the Upper Palaeolithic – thus challenging the widespread tacit assumption that these faculties have remained essentially unaltered since the emergence of Anatomically Modern Humans, in Africa, 200 ka BP. Typologically, but with considerable linguistic and comparative mythological support, our argument then identifies essential consecutive steps (from ‘range semantics’ to binary oppositions to cyclical element transformations and dialectical triads), in humankind’s trajectory from Upper Palaeolithic modes of thought towards Modern forms of discursive thought. It is here that the present argument seeks to make a substantial contribution to the theory and method of studying the prehistory of modes of thought worldwide. On the one hand we will present considerable linguistic and mythological arguments for the claim of great antiquity of the most rudimentary forms of element cosmology. On the other hand, we

5 Yet far from universal. Several psychologists and students of literacy (e.g. Jaynes 1990 / 1976; Vroon 1992; Ong 1982) have claimed massive changes in thought processes and even brain structure as a result of literacy and other socio-political conditions emerging during or even after the Bronze Age. However, their time perspective appears to be much too shallow to be credible. In recent decades, the reflection on the long-term evolution of human thought faculties has become a major branch of palaeoanthropology, cf. Aitchison 1996; Anati 1999; Bednarik 1995; Carruthers & Chamberlain 2000; Chase & Dibble 1987; Corbey & Roebroeks 1997; Donald 1991; Harrod 2004; Lewis-Williams 2002; Marshack 1972; Mithen 1996; Noble & Davidson 1996; Oakley 1981; Renfrew & Zubrow 199; Robb 1998.

6 In this book, I use ‘Modern’ (and ‘Early Modern’) in the technical sense of: ‘Enlightenment and post-Enlightenment philosophical, cultural and political expressions in the North Atlantic region and, eventually, world-wide’; and ‘modern’ in the everyday sense of ‘relating to the last few centuries’. Anatomically Modern Humans constitute the sub-species to which all humans now alive belong, and which arose in sub-Saharan Africa c. 200 ka BP (ka = kilo years = millennium; BP = Before Present).
will apply linguistic methods to identify the origin, in West Asia in the Neolithic to Early Bronze Age, not of the postulated substrate system as a whole, but at least of part of the nomenclature of the Chinese Yi Jing system. The region indicated constitutes a likely environment from where the ‘cross model’ as a mechanism of ‘Pelagian expansion’ might allow us to understand subsequent spread over much of the Old World and part of the New World – including the presence of the transformative element cycle among the Nkoya. However, towards the end of the argument a strong alternative case will be presented: that for direct, recent demic diffusion from East or South Asia to sub-Saharan Africa in historical times. We shall argue that this is not a matter of either / or, but that three complementary mechanisms have contributed to the distribution pattern of element cosmologies we are perceiving in historical times: one substrate going back to the Upper Palaeolithic, another, ‘Pelagian’ one to the Bronze Age, while the rest – which is the most conspicuous part – goes back to transcontinental transmissions in recent centuries. Exit, apparently, the Presocratics as unprecedented philosophical innovators of genius.

0.2. Acknowledgements

I am grateful to Quest for celebrating my 65th birthday with the publication of the present book. This book is a greatly revised and expanded version of my paper presented at the Third Annual Meeting of the International Association for Comparative Mythology, 國學院大學 Kokugaku-kuin Shinto University, Tokyo, Japan, 23-24 May 2009 (van Binsbergen 2009). I hope to publish the specific Japanological argument elsewhere (van Binsbergen, forthcoming). I am indebted to Michael Witzel and to

---

7 Cf. van Binsbergen 2010a and in press (a); van Binsbergen & Woudhuizen 2011: 372 f.; and below, p. 36 f., 46 f.

8 The archaeological expression ‘demic diffusion’ designates the common phenomenon in cultural history, that cultural traits may travel as a result of geographical displacement of a population segment possessing these traits. Since culture is not transmitted genetically but is per definition obtained through a learning process based on social communication with other humans, demic diffusion is by no means the only way in which cultural traits may travel – much diffusion of culture has taken place through communication, without any, or hardly any, population movement being involved.
the Harvard Department of Sanskrit and Indian Studies, Harvard University, Cambridge MA, USA, for inviting me to participate in this conference and to a series of related annual events in the USA, Asia and Europe since 2004, without which I would never have been able to expand my Africanist and anthropological specialities into the fields of Asian Studies (even though as a student I extensively studied Modern Asia under Wim Wertheim and his staff) and comparative mythology – Michael Witzel also took me on a tour along major Buddhist shrines in the Chinese interior in 2006; to my Japanese hosts Professors Inoue Nobutaka, Hirafuji Kikuko 弘文堂 and Kazuo Matsumura 渡辺和子, for the charm with which they have accommodated the original, highly deficient version of my argument; to these Japanese colleagues, and moreover to Michael Witzel, Steve Farmer, Klaus Antoni, Nick Allen, Václav Blažek, 李安山 Li Anshan (with whom I have shared over the years an interest in Africa-China relations), 海芳劉 Haifang Lui, Wei Cuiping (who also introduced me to Taoist and Lamaist scenes in Beijing), Shigeru Araki (who with his students introduced me to divination, Zen convents and shrines in Kyoto), Peter van der Mede, Ineke Suijkerbuijk, Hannah van Binsbergen, and Arthur Eaton, for discussions on the topic of this argument; to my first wife, Henny van Rijn, and our daughter Nezjma van Binsbergen, for sharing with me the traumatic first spell of Nkoya fieldwork (with fourteen deaths in our immediate Nkoya network within as many weeks) during which the seeds for the present argument were laid, in the early 1970s; to Patricia van Binsbergen-Saeegerman, my wife since 1984, for creating and sustaining, over the decades, the context of our love and family as the ideal place from which to conduct these researches, and to contribute to the various field trips since 1983 intellectually, socially and financially; to the African Studies Centre (ASC), Leiden, in the person of its Director Ton Dietz, for generous support of my transcontinental explorations over the decades even when the immediate Africanist relevance seemed in doubt – and for providing the financial means and organisational support (through my colleagues Marieke van Winden and Gitty Petit) towards the International Conference ‘Rethinking Africa’s Transcontinental Continuities in Pre- and Protohistory’, thus making that event an unforgettable celebration of my formal retirement from the ASC after 35 years; to the Netherlands Institute for Advanced Study in the Humanities and Social Sciences, Wassenaar, the Netherlands, and to my fellow members of the Study Group on Ancient
Mesopotamian Religion and Magic, 1994-1995 – it is in this context that much of the data, bibliography, readings, ideas and methodologies were explored without which the present study would have been impossible – moreover, this book, although still impossible to conceive on the basis of my limited knowledge and skills at the time, is in fact the end product of the book project I hoped to realise at NIAS within one academic year…; to the Department of Philosophy of Man and Culture, the Philosophical Faculty, Erasmus University Rotterdam, for offering an environment where these explorations, although far removed from the present-day North Atlantic middle-class experience which largely captivates that department’s research and thought, could at least be fertilised by Modern philosophical discourse; to Fred Woudhuizen, with whom I explored – in the context of our massive joint work on Ethnicity in Mediterranean Protohistory (2011) – the theoretical and methodological requirements for the kind of transregional protohistorical analysis as offered in the present study; to my colleagues and friends Richard Werbner, René Devisch and Sjaak van der Geest, who kindled and reinforced my interest in African divination over the years; to Matthew Schoffeleers and Terence Ranger, who greatly stimulated and promoted my long-range explorations into African religion; to Mma Elizabeth Shakayile, Mma Rosi Ndlovu, and Rra Smarts Gumede, my teachers of the Southern African geomantic oracle, and of sangomahood and herbalism in general, in Francistown, Botswana, in 1988-1991; and most of all, to the Nkoya people of Zambia, for welcoming me and making me one of them, and specifically for introducing me, over the decades, to a clan system that had become an enigma even to themselves, and that brought home to me the reality of a transformative element cosmology in other parts of the world than East Asia and Ancient Greece. In connection with my Nkoya research, I am greatly indebted to the University of Zambia and its Institute for African Studies (now Institute for Economic and Social Research), Lusaka. In exploring the Nkoya world, my adoptive elder brother Dennis Shiyowe, my adoptive father his Royal Highness Mwenekahare Kabambi, Davison Kawanga, M.M. Malapa, her Royal Highness Princess Mary Nalishuwa, Stanford Mayowe, the Kazanga Cultural Society and its Executive, and numerous others, made indispensable contributions for which I here express my deepest gratitude. During multiple supervision trips my students Pascal Touyem, Stephanus Djunatan and Pius Mosima extensively introduced me to important sections of the postulated ‘Sunda’
trajectory in Cameroon and Java, Indonesia, and thus inspired my long-range imagination. Earlier I investigated other parts of West Africa with an eye on divination and therapy: the Casamance region of Southern Senegal (intermittently, in the years 1981-1983), the Manjaco people of Guinea-Bissau (during three field trips instigated and facilitated by the psychiatrist Joop de Jong, 1981-1983), and rural and urban Benin (with the aid of the diviner-healer Fagbemissi, and the non-governmental organisation Afrika Cultures et its director Vizir Olofin II Olofindji Akandé). I explored other Sunda-relevant settings in Thailand, Malaysia, Bali, Sri Lanka, India and New Zealand, with emphasis on divination and healing; here special mention should be made of the medium Keerthi, Unawatuna, Sri Lanka, who over a number of days patiently introduced me to his cultic practices. These Asian trips helped create a personal context in which the Hinduist and Buddhist traces in sub-Saharan Africa could be much better appreciated by me. Robert Papstein was a good friend and intellectual sparring partner when we were both engaged in ethnohistorical fieldwork in Zambia in the 1970s, but his main contribution to the present argument lies in the fact that, with his privileged access as a photographer commissioned by the Navaho Nation Health Department, New Mexico / Arizona, USA, he afforded me a first experience of Native American life – later to be augmented by equally short excursions elsewhere in the USA and British Columbia, Canada. Shigeru Araki 荒木しげる and his students of the Graduate School of Asian and African Area Studies, Kyoto University, introduced me to ritual and divinatory aspects of present-day Kyoto, Japan; and Hirafuji Kikuko as well as Kazuo Matsumura did the same for me in regard of Tokyo. The African Studies Centre, in addition to the most generous general support and the specific assistance towards some of these Asian exploratory trips, and other contributions indicated above, financed two trips to Les Eyzies de Tayac, France, in 1999 and 2000, where with the generous help of the staff of the Musée National de la Préhistoire I studied engraved blocks from the Middle and Upper Palaeolithic. I am moreover indebted to the Assyriologist W.W. Hallo, the Semitist Peter Broers and the anthropologist Mary Douglas, for enlightening conversations on the הָעֲרִים הַחֲתַנֹּמִים ‘Urim and Thummim as an Ancient Israelite divinatory device. I am likewise indebted to Michael Rappenglück for stimulating my archaeoastronomical and prehistoric research in various ways over the past decade, with decisive impact on Chapter 7 below. With P. Vérin I had
enlightening conversations, Leiden 1994, on Malagasy sikitidy as a possible link between Asian and African geomancies. Shaul Shaked directed me to Peter Kingsley’s innovative although controversial work when we were colleagues at NIAS, and generously extended to me his own Hebraeist and other philological skills, introducing me to Ibn Ezra’s geomancy as found in the Cairo Geniza. Roughly half a century ago, and to my lasting gratitude, my teachers of Latin, Greek, (introductory) Arabic, Nkoya and General Linguistics equipped me with some of the linguistic skills which, even if demonstrably rusty by now, yet made the present study possible. By roughly the same time, in the 1960s, my brilliant teachers of anthropology / sociology at the University of Amsterdam, and principally André Köbben (who also launched me as a WOTRO Fellow, 1974-1975), throughout the generous seven years full-time which then were required for a complete course of study in that field, instilled in me a disciplinary identity in ethnography, ethnohistory, and cross-cultural studies, even though I have meanwhile played havoc with their presentist, localist and fragmented paradigm of bounded cultures that, allegedly, were only to be approached through a researcher’s personal fieldwork within the most limited horizons of space and time; but also in this book I have taken their lessons to heart, in that the puzzles of Nkoya clan organisation as brought home to me during many years of standard participatory fieldwork, are at the root of the argument, even though my teachers would recognise little else in it, and appreciate even less. Among these teachers, Bonno Thoden van Velzen was only a junior lecturer when he taught me my first anthropology seminar in 1964-1965, but throughout my subsequent career, he was a major positive force behind nearly every decisive move, and a loyal ally in the conflicts which my insistence on independence, quality, unboundedness and originality engendered.

This argument incorporates, and takes further, extensive sections (e.g. the discussion of Nkoya clans) from a 1998 book draft provisionally entitled Global Bee Flight and written in response to Martin Bernal’s Black Athena thesis. The present study thus testifies to the enormous stimulus Bernal has had on my work since the mid-1990s, despite our substantial disagreements on facts, interpretation, and on what constitutes appropriate and ethically supportable strategies in the global politics of knowledge. My elder brother Peter Broers set me on the trail of the Presocratics some 55 years ago when he gave me de Raedemaeker’s (1953) and van
Melsen’s (1949; cf. 1941) books as precocious birthday presents, and a quarter of a century later took the lion’s share in our joint writing of a computer programme that has indexed my books ever since. For more than ten years, my eldest son, Vincent van Binsbergen, managed my computers so as to meet my excessive and ever increasing demands.

The publication of this book sustained a delay of half a year in 2011 and again half a year in 2012 due to the author’s serious illness. I am indebted to my wife and children, to other close relatives and friends, to my family physician Joost Laceulle MD, and to my teachers of the Southern African healing practices, for guiding me, over the decades, to a frame of mind where I could see this period through as another transformation cycle. My thanks are also due to the medical and paramedical staff of the Urology Department, Leiden University Medical Centre, and the Home Health Care services and various pharmacies, Haarlem, the Netherlands, for slowly but surely effecting – both catalytically and directly – the transformation that is now bringing me a new lease on life, and even this new book.

0.3. Afrocentrism: ‘There and Back Again’?9

What is the orientation of the present argument within the global politics of knowledge? This book’s attempt to reach, beyond Eurocentric myth, for global pre- and protohistoric reality is reminiscent of Afrocentrism, and both my Afrocentrist friends, and their intellectual enemies, deserve to know where I currently situate myself. Afrocentrist revisions of mainstream, Eurocentric versions of the history of philosophy have been around for decades, e.g. James’s (1954) with the obsolescent title Stolen Legacy: The Greeks Were Not the Authors of Greek Philosophy, But the People of North Africa, Commonly Called the Egyptians (cf. Lefkowitz’s critique, 1994); another, more mainstream example is Preus 1992. My own position, while invariably sympathetic to Afrocentrism,10 is somewhat different. There cannot be a contradiction between the interest of Africa / Africans and the interest of humankind as a whole, and that

interest is best served, not by ephemeral Political Correctness, but by the determination (even if ultimately failing – as, no doubt, in the present book) to produce good scholarship, by sound methods, using broadly collected, balanced data, and keeping an open mind. This means: taking Afrocentrism seriously where we can, and wholeheartedly pursuing alternatives where the network of facts, methods and theories leads us away from Afrocentrism. When I set out on the intellectual adventure that produced the present book, I honestly believed to have found, with the evidence of a transformative cycle of elements hidden in the clan system of the Nkoya people of South Central Africa, the clues to a prehistoric, substrate cosmological system that originated in sub-Saharan Africa and from there had spawned philosophy world-wide. When in 1997 I drafted my abortive book *Global Bee Flight*, using much the same material, I worked from the same Afrocentrist perspective, with which I was then enamoured. A totally revised version of *Global Bee Flight* has now been cut up into other, published arguments (foremost van Binsbergen 2010a, but also Chapter 3 of the present book) that, for reasons of my increased empirical knowledge and deepened theoretical reflection over the years, no longer bear the hallmarks of Strong Afrocentrism; yet they still come from an Africanist who, as a formula for Weak Afrocentrism, ‘considers Africa, home’ (Robert Sobukwe). The present book’s argument reflects the same process, as I became ever more aware of the impact of West Asia on the course of global cultural history since the Neolithic. But this is not quite the West Asia of Assyriologists, Hebraeist and Biblical scholars, but one that, in its cultural and linguistic diversity, includes ‘uninvited guests’: linguistic, ethnic and cultural traits that, according to current paradigms used by the regional studies concentrated on that region, should not be there. It is a West Asia (*cf.* van Binsbergen & Woudhuizen 2011: 372 ff.) with a high occurrence of the so-called Pelasgian traits which we will discuss below, and which include, among dozens of others, a Sun cult, sea and boat symbolism, male genital mutilation, amphiktyony (a more or less acephalous twelve-league), metal-working, bee and reed symbolism, the spiked wheel trap, the mythical unilateral being, the mythical Cosmic Egg, mankala board games, geomantic divination, etc.; where unexpectedly the oldest attestation of Bantu as a major branch of the Niger-Congo macrophyllum is found; where, among its high genetic diversity, some highly pigmented population segments are found; and from where such impact on sub-Saharan Africa emanated from the Bronze Age on (as part
of the more general Back-to-Africa movement; cf. Fig. 1.1, below) that we may almost speak, paradoxically, of West Asian proto-Africans carrying a proto-African culture into sub-Saharan Africa.

And although not purely and strongly Afrocentrist in method, scope or paradigm, the present book follows in the best Afrocentrist and Black Athena traditions by evoking, beyond the established historic milestones constitutive of European, and by extension North Atlantic, hegemonic identity, the stretches of thousands of years and thousands of miles of indebtedness without which these milestones could never have been erected in the first place. My argument suggests that Presocratic philosophy arose, not as proverbial lightning in a clear sky, not as Fire from Heaven (cf. Renault 1969) in an exclusively Indo-European speaking context, but as the local, radical misinterpretation, in backwaters (Ionia and Graecia Magna) of the great Asian and African civilisations, of a long and widely established system of cosmological thought. This does not diminish the Presocratics’ merits, but puts them in proper transcontinental and historical perspective – just like Western Philosophy at large, which is supposed to start with the Presocratics.

If I have distanced myself in recent years from Strong Afrocentrism (while retaining pet Afrocentrist ideas notably the emphasis on West Asian Blacks), it has been on factual and theoretical grounds, leaving intact my identification with the African continent and its inhabitants. This leaves me with a tantalising dilemma which the present argument scarcely addresses and certainly does not solve. In a transcontinental perspective of global cultural history, Africa is usually presented as showing a tendency to be on the receiving side, even though humankind was born there a few million years ago, while also the cradle of Anatomically Modern Humans is now generally assumed to have stood in Africa, c. 200,000 years ago. The present argument was initiated by the thought – inspired by decades of intimacy with the Nkoya people of South Central Africa – that fundamental cosmologies, with an enormous impact on human society worldwide and on the emergence of the Modern world, may well have had an African origin. However, Modern global culture can no longer, as under Strong Afrocentrism, be claimed to exclusively or primarily derive from sub-Saharan Africa during the Holocene (the last 10 ka). My sustained research ultimately compelled me to revise such
ideas, while leaving a substantial role for West Asian, highly pigmented, proto-Bantu speaking, proto-Africans. Before we start lamenting this outcome and accuse its author of a relapse into Eurocentrism, let us realise that exactly the same claim of indebtedness ought to be made for Europe, and – in the best Black Athena tradition – is in fact made in this book. Yet, more important than the petty book-keeping of gives and takes between continents is our current insight into the genetic, cultural and linguistic unity of Anatomically Modern Humans, – an insight as crucial for the imminent future of humankind as central to the present argument.

The title, though not the contents, of this book has been inspired by famous or notorious, more or less path-breaking examples that promised to disclose hitherto unsuspected secrets:

- Henri Frankfort et al. (1957 / 1946) Before Philosophy, where the main perspective – in continuity with the post-Kantian philosophical foundations laid by Cassirer (1946 / 1925, and 1953-1957 / 1923-1929) – is the supposed transition away from myth, not the rise of element cosmolology; ironically, in this book, following in the wake of Michael Witzel (2001, 2012), I have used myth, in addition to reconstructed prehistoric lexical forms, as our main window on the cosmologies whose reconstruction is at the heart of this book.

- Colin Renfrew’s (1976) Before Civilization, where the West Eurasian Neolithic and Bronze Ages are central, like in the present book, but constituting a classic anti-diffusionist text against such long-range mechanisms of transmission in space and time as are highlighted in the present book;

11 But let us not underplay Africa’s contribution to World culture, not only in our Age of Globalisation (where much of global expressive culture – music, dance, therapy – has a recent African origin), but also in transcontinental cultural exchanges along the multidirectional, multicentred maritime network which, as I propose in Chapter 2, was established in Neolithic times. Since most of Africa went without writing until Early Modern times, our data tend to give far more weight to literate Asia’s impact on Africa, than the other way around. The Egyptologist / Indologist Stricker (1963-1989: V, Conclusion) claims that Hindu culture is simply a continuation of Ancient Egyptian religion, and my own extensive observations in Tamil Nadu temples confirm this. Although in recent centuries cults of affliction tend to have travelled from South and South East Asia to Africa, there are indications that their protoforms travelled in the opposite direction, before the Common Era (cf. van Binsbergen 2012c, 2012d, 2012f).

12 Renfrew, like Gordon, apparently has a predilection for sweeping ‘Before…’ titles, cf. Renfrew 1991, on linguistic diversity – whose emergence, after the Flood, is
• Cyrus Gordon (1962) *Before the Bible: The Common Background of Greek and Hebrew Civilizations* – an exploration of Pelasgian continuities *avant la lettre*;
• Denise Schmandt-Besserat (1992), *Before Writing*;
• Michael A. Hoffman (1991) *Egypt before the Pharaohs*;
• Heidi Knecht *et al.* (1993), *Before Lascaux*;
• numerous are the *‘Before...’* title variants around Columbus’s ‘discovery’ of America (e.g. Gilmore & McElroy 1998; Davies, n.d. [1976]), including an Afrocentrist one: Van Sertima (1976), and another title by Cyrus Gordon (1971), whose well-earned fame as a prominent Semitist never deterred him from undertaking risky explorations beyond his field of established competence – but hear who is talking;
• classics titles playing on commonly accepted historic milestones, e.g.: Cornford (1962), *Before and after Socrates*; Forsdyke (1957), *Greece before Homer*; Scoon (1928), *Greek Philosophy before Plato*.

My hope is not so much to emulate and equal these writers but at least to follow their example in evoking and exploring the unexpectedly rich world that lies behind the unimaginative, established, restrictive canons of mainstream scholarship.

Yet, admittedly, the argument I am presenting here is an impossibly ambitious one. In writing it I am, as so often in recent years, trespassing beyond my areas of competence, into some fields for which I have neither specialist training nor authority. As the massive bibliography, author index and explanatory index of proper names at the end of this book indicate, no single person can confidently command all the specialist fields involved in the present study; therefore, before it was written no team of specialists could possibly be persuaded to take a collective interest and contribute their expertise on a more than incidental basis. While I hope that the specialist feedback I have incessantly sought will prove to have somewhat reduced the extent of my blundering, I am solely respon-

*Interestingly*, a strikingly recurrent theme in Flood myths world-wide. Renfrew’s ‘Before Babel’ title was subsequently picked up in a BBC (1992) broadcast on prehistoric language reconstruction. In this connection I may point out that a boast by an ambitious Assyrian king-scholar may be considered to stand at the cradle of this genre of ‘Before...’ titles – it also yielded the title of a recent scholarly collection *‘I Studied Inscriptions from Before the Flood’: Ancient Near Eastern, Literary, and Linguistic Approaches to Genesis 1-11* (Hess & Tsumura 1994).
sible for such gross errors as my argument will no doubt turn out to contain. I can only plead that the exciting long-range vistas it opens up will somewhat compensate for these manifest shortcomings. If this study has a claim to any saving grace, it would be that it is another attempt to steer away from Eurocentrism, and particularly to study sub-Saharan Africa as an integral part of global intellectual history, while bringing to life the modes of though of pre- and protohistory, worldwide, with imagination wed to careful, transcontinental empirical research, avoiding both consciousness-raising Political Correctness, and hegemonic condescension and exclusion.

In addition to situating the Presocratics, and Western philosophy, in a long-range context of space and time (continents, not regions; and millennia, not decades) that highlights the immense contributions of Africa, Asia, the New World and Oceania to global cultural history, two cardinal lessons are learned:

- yes, we can in principle retrieve the modes of thought of the very distant past – methodically, and thus intersubjectively;
- and yes, the fundamental unity of humankind lies not just in its emergence from a common origin a few million years ago, but particularly, demonstrably, and in ways eminently relevant for our common present and common immediate future (or should I say: short-term chances of survival?), in our intensively shared and interwoven, multicentred and multidirectional transcontinental cultural and philosophical history of the last dozen millennia.

To make these points which are eminently dear to me, I have been prepared to stick my neck out, and to have my head chopped off.
Table of contents

Chapter 0. Preface, acknowledgments, and overall orientation ................................................................. 5
  0.1. Background of this book in the context of the author’s research .......................................................... 5
  0.2. Acknowledgements ................................................................................................................................. 11
  0.3. Afrocentrism: ‘There and Back Again’ ................................................................................................. 16

Table of contents ........................................................................................................................................... 23

List of Figures ................................................................................................................................................. 27

List of Tables .................................................................................................................................................. 30

Chapter 1. Introduction and theoretico-methodological orientation ............................................................... 31

Chapter 2. Inspiring data and transcontinental comparative method: Case study I. The pre- and protohistory of mankala board-games and geomantic divination ............................................................. 41
  2.1. In search of inspiring data and a transcontinental comparative method .................................................. 41
  2.2. Mankala .................................................................................................................................................. 54
  2.3. Geomancy .............................................................................................................................................. 65
    2.3.1. Geomancy: Distribution .................................................................................................................... 65
    2.3.2. Distribution of geomancy: Discussion .............................................................................................. 67
    2.3.3. Geomancy in Africa .......................................................................................................................... 69
  2.4. Where do we go from here? .................................................................................................................... 82

Chapter 3. Case study II. The puzzling clan system of the Nkoya people of South Central Africa: A triadic, catalytic transformation cycle of elements in disguise? ................................................................. 87
3.1. Nkoya clans ........................................................................................................... 87
3.2. Interpreting the array of Nkoya clans: (1) In terms of complementary opposition ........................................... 91
3.3. Interpreting the array of Nkoya clans: (2) As evidence of a cycle of transformations consisting of triads ......................................................... 95

**Chapter 4. Long-range, transcontinental manifestations of a transformation cycle of elements** ................................................................. 109

4.1. Element cosmological systems worldwide ....................................................... 109
4.2. The transformation cycle of elements in East Asia: Two classical Chinese correlative systems ............................................................... 118
4.3. Intermediate forms between the full transformation cycle and the system of four immutable categories ......................................................... 123
   4.3.1. Indications of element systems in sub-Saharan Africa ................. 123
   4.3.2. Indications of an element system in Ancient Egypt ..................... 130
   4.3.3. The recognition of an element system in North America .......................... 142

**Chapter 5. The Presocratics in Western Eurasia: Four immutable elemental categories as the norm throughout Western Eurasia for the last two millennia** ......................................................... 149

5.1. The Presocratics .................................................................................................. 149
5.2. Empedocles ........................................................................................................ 157
   5.2.1. Empedocles: Introduction ...................................................................... 157
   5.2.2. Remarks to Table 5.1 (Empedocles’ doxology).............................. 159
   5.2.3. Empedocles’ evocation of the elements to be interpreted as a transformation cycle ................................................................. 164

**Chapter 6. Exploring the long-range pre- and protohistory of element cosmologies: Steps in the unfolding of human thought faculties** ................................................................................................................. 179

6.1. Explorations into the Middle Palaeolithic prehistory of element cosmologies ......................................................................................... 179
6.2. Indications of a four-element cosmology in the painted cave at Lascaux, France, in the Upper Palaeolithic ................................................................................. 183
   6.2.1. Introduction .............................................................................................. 183
   6.2.2. Analytical step 1. Assuming, for heuristic purposes only, that the Lascaux scene belonged to a *Borean-speaking environment .................................................. 191
   6.2.3. Analytical Step 2. Situating the Lascaux scene in a
proto-Sino-Caucasian environment ................................................................. 197

6.3. Element systems in the African Palaeolithic? ................................. 200

6.4. Between the *Borean-speaking Upper-Palaeolithic and the Late Bronze Age: The transformation cycle of elements as a mode of thought .................................................................................................................. 204

Chapter 7. Yi Jing and West Asia: A partial vindication of Terrien de Lacouperie ................................................................................................. 215

7.1 Introduction .............................................................................................. 215

7.2. The stature of Terrien de Lacouperie’s scholarship .......................... 217

7.3. Terrien de Lacouperie on a wholesale West Asian origin of the Chinese people ........................................................................................ 220

7.4. Recent support for the view of a West Asian origin of Yi Jing .......... 225

7.5. Rashidi’s Afrocentrist perspective concerning the origin of Yi Jing ............................................................................................................. 228

7.6. Trying to identify the cradle of the Old World transformation cycle of elements on the basis of the nomenclature of the *pa gua (eight trigrams) ........................................................................................................ 234

7.6.1. Comparative historical linguistics of the eight-trigrams nomenclature .............................................................................................. 234

7.6.2. Notes to Table 7.2 .............................................................................. 238

7.6.3. Discussion ............................................................................................. 239

7.7. Transcontinental relationships and periodisation: China and West Asia ................................................................................................. 239

Chapter 8. Further discussion of transcontinental relationships with a view of assessing our overall Working Hypothesis ................................................................................................. 255

8.1. Vindicating our two Working Hypotheses ............................................ 255

8.2. Could the transformation cycle of elements be shamanic in origin and thus date back to the Upper Palaeolithic? ................................. 256

8.3. Are the Nkoya-East Asian parallels to be explained by (a) Upper-Palaeolithic Back-to-Africa migration (b) Pelasgian transmission in the Bronze Age (c) East Asian intrusion into Africa during historical times? ........................................................................................................... 260

8.3.1. Upper-Palaeolithic Back-to-Africa migration .................................. 260

8.3.2. Pelasgian transmission in the Bronze Age: Vindicating our Alternative Working Hypothesis .......................................................... 275

8.3.3. East Asian intrusion into Africa during historical times? ................. 278
Chapter 9. Conclusion: Diachronic varieties of the transformation cycle of elements, and their global distribution ..... 285

9.1. Recapitulating our indications of the distribution and history of element systems worldwide since the Middle Palaeolithic................. 285
9.2. Conclusion ........................................................................................................... 290

Bibliography ............................................................................................................. 297

Index of authors cited ............................................................................................... 353

Explanatory index of proper names other than authors cited ........ 363
List of Figures

Fig. 1.1. ‘Back-to-Africa’ movement of specific haplo groups ........................................ 33
Fig. 1.1a. Examples of Pelasgian links between the Mediterranean and sub-Saharan Africa ....................................................................................................................... 37
Fig. 2.1. Diagrammatic representation of the Pelasgian Hypothesis ............................... 48
Fig. 2.2. Global distribution of the spiked wheel trap (as typical of Pelasgian distributions) ...................................................................................................................... 53
Fig. 2.3. Mankala: Distribution of the various types ...................................................... 55
Fig. 2.4. Two-row mankala: Distribution ..................................................................... 56
Fig. 2.5. Two-row mankala: Tentative historical reconstruction ................................. 57
Fig. 2.6. Three-row mankala: Distribution .................................................................. 57
Fig. 2.7. Three-row mankala: Tentative historical reconstruction .............................. 58
Fig. 2.8. Four-row mankala: Distribution .................................................................. 59
Fig. 2.9. Four-row mankala: Tentative historical reconstruction ............................... 59
Fig. 2.10. Kuba carving styles, Congo, 17-19 c. CE .................................................... 61
Fig. 2.11. Distribution of the dara game ...................................................................... 64
Fig. 2.12. Neolithic mankala boards from West Asia ................................................... 65
Fig. 2.13. Geomancy: Distribution .............................................................................. 67
Fig. 2.14. Comparing geomantic notational systems worldwide ............................... 68
Fig. 2.15. Trade routes in West Africa, second half of second millennium CE ............. 71
Fig. 2.16. The distribution of Flood and Tower myths in Africa .................................. 72
Fig. 2.17. A proposed intercontinental, multcentred, multidirectional maritime network from the Early Bronze Age onward ....................................................... 78
Fig. 2.18. Proposed reconstruction of the world history of geomancy ....................... 79
Fig. 3.1. The clan triad: Lavwe, Sheta, and Shikumba[wuyu] illustrated...................... 96
Fig. 3.2. Ancient Egyptian representation of the imi-wt ............................................. 98
Fig. 3.3. The bark hive as a potentially triadic icon .................................................... 103
Fig. 4.1. Basic transformations in the classic Taoist cycle of elements ...................... 120
Fig. 4.2. The Taoist five-element transformation cycle according to Needham with Ling ................................................................. 121
Fig. 4.3. A drawing by the Zulu lightning doctor Laduma Madela .................................. 127
Fig. 4.4. An element system underlying the Heliopolitan cosmogony of Ancient Egypt ............................................................................................................. 130
Fig. 4.5. Indications of a four-element system in Ancient Egypt: Four Sons of Horus ................................................................................................................ 131
Fig. 4.6. The Ancient Egyptian feline goddess Bastet with a foursome of kittens, possibly an evocation of a four-element cycle of transformation, Late Period, c. 664-630 BCE ................................................................. 132
Fig. 4.7. Indications of a four-element system in Ancient Egypt .................................. 132
Fig. 4.8. A rudimentary transformation cycle of elements: Seth and Horus .......... 133
Fig. 4.9. Navajo sand painting arguably suggestive of a four-element transformation cycle ........................................................................................................... 144
Fig. 4.10. Anasazi wall painting from New Mexico, ca. 16th c. CE ...................... 144
Fig. 4.11. Revolution on the celestial axis, or evidence of transformation cycle of elements, as depicted in Lower Pecos River Art, Texas, USA, 3rd-2nd mill. BCE .............................................................................................................. 145
Fig. 5.1. The birth of Athena as an instance of the transformative cycle of elements .................................................................................................................. 154
Fig. 5.2. Distributional aspects of the global comparative mythology of divine tears .................................................................................................................. 162
Fig. 5.3. Campbell’s (2004-2005) rendering of Empedocles’ Cosmic Cycle .......... 168
Fig. 5.4. Global distribution and tentative historical reconstruction of the mytheme of the Cosmic Egg .............................................................................................. 170
Fig. 5.5. Peithinos’ rendering of Thetis’ metamorphoses, *kylix*, 6th c. BCE. .... 172
Fig. 6.1. The famous ‘dead man’ scene from Le Puits, Grotte de Lascaux .......... 184
Fig. 6.2. Analytical Step 1: *Borean applied to Lascaux ........................................ 196
Fig. 6.3. Lascaux ‘unicorn’ (Lucas 2006) ................................................................. 200
Fig. 6.4. Possible candidates from African prehistory for an iconographic analysis in terms of element cosmology ................................................................. 204
Fig. 6.5. Recursion in a Nkoya statuette used in a cult of affliction ...................... 206
Fig. 6.6. Large room-dividing screen from the Tlingit of Alaska ....................... 207
Fig. 6.7. Global distribution of triads in mythology .............................................. 210
Fig. 6.7a. A typical triad: Osiris, Isis and Horus depicted in gold (Osorkon II, first half 9th c. BCE, now at the Louvre, Paris, France) ........................................ 211
Fig. 7.1. An Early Modern representation of Dagon / Oannes, loosely based on Ancient Graeco-Roman and Biblical sources ............................................ 222
Fig. 7.2. Layered ethnico-linguistic complexity of the Bronze Age
Fig. 8.1. Linguistic and comparative-ethnographic reconstruction of the emergence of the ritual use of leopard skins as an aspect of shamanism ................................................................. 233

Fig. 8.2. Dendrogram setting out the relative positions of the *Borean-associated linguistic macro-phyla in relation to Bantu and Khoisan ..................... 257

Fig. 8.3. A cult place for Heitsi Eibib in Namibia ................................. 262

Fig. 8.4. Divination tablets from Western Zambia ................................... 263

Fig. 8.5. A present-day shamanic apron from the Tlingit, North West Coast, Alaska, c. 1860 CE ................................................................. 269

Fig. 8.6. Divination: Continuities in space and time ................................ 271

Fig. 9.1. Diachronic varieties of the transformation cycle of elements: Global distribution ................................................................. 276

Fig. 9.2. Comparing Old World formal systems through cluster analysis, provisionally bringing out the unexpected clustering of African nomenclatural material with Chinese and Babylonian material, clustering away from Ancient Egyptian and Greek material ................... 277

Fig. 9.3. Tentative historical reconstruction for Fig. 9.1 .......................... 280
List of Tables

Table 2.1. Narrative Complexes identified in sub-Saharan African cosmogonies as collected in historical times ......................................................... 50
Table 2.2. ‘Contexts of Intensified Transformation and Innovation’ (CITIs) in the global history of Anatomically Modern Humans’ mythology ........... 52
Table 2.3. Alternative random generators in geomancy ........................................ 66
Table 3.1. Nkoya clans ......................................................................................... 91
Table 3.2. Complementary opposition in the nomenclature of two joking clans in Western Zambia, nineteenth and twentieth century CE .................... 93
Table 3.3. Nkoya clan nomenclature as evocative of a triadic cycle of transformations ......................................................................................... 104
Table 3.4. Nkoya clan nomenclature as evocative of a triadic cycle of transformations, with Nkonze and Mvula accommodated ..................... 104
Table 4.1. Four or more elements in various Eurasian traditions ......................... 118
Table 4.2. General overview of Yi Jing as a correlative system ............................. 122
Table 4.3. The Aristaeus myth analysed as a reflection of Early Dynastic Egyptian history, and as an esoteric text on the transformation cycle of elements ......................................................................................... 139
Table 5.1. The four elements according to Empedocles ...................................... 159
Table 6.1. The divinatory and element-cosmological significance of the reconstructed mythological contents of Pandora’s Box, Africa, 80-60 ka BP and earlier .......................................................... 181
Table 6.2. Example of a global etymology: The complex ‘earth / bottom / human’ ................................................................................................. 187
Table 6.3. Searching for Sino-Caucasian reflexes of the *Borean roots indicated in Fig. 6.2 .................................................................................. 199
Table 7.1. King Wân’s trigrams ............................................................................. 235
Table 7.2. Proposed etymologies of the names of the pa gua (eight trigrams) ....... 237
Table 8.1. Proposed relations between professional castes and their animal ‘totems’ in Vedic India ............................................................................. 282