Review

Maya: revelation and re-evaluation

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Maya archaeology is flourishing; across three millennia, four countries and an impressive range of intellectual and practical approaches, the eight books under review here make that point well. One is the ninth edition of a deservedly successful book for a general readership, one the catalogue of the first Maya exhibition to be held in Britain in nearly half a century. A further volume deals with sites in the northern Maya lowlands of the Yucatan Peninsula, another with those in the eastern lowlands, the former British colony of Belize. Two are site-specific: the major city of El Perú-Waka' in the southern lowland Maya heartland of El Petén, Guatemala, and the idiosyncratic élite centre of Cacaxtla in central highland Mexico where Maya influence on the famous murals is both striking and puzzling. Finally, two have a scientific bent: collections of papers on bioarchaeology/population studies and archaeoastronomy respectively. All draw their evidence, and their illustrations, largely from the Classic Period (AD 250-900), although there are forays into both the Preclassic (1200 BC-AD 250) and Postclassic (AD 900-1500+).

Classic textbook and new exhibition

MICHAEL D. COE & STEPHEN HOUSTON. *The Maya*. 2015. (Ninth edition; first published 1966). 320 pages, 213 colour and b&w illustrations. London: Thames & Hudson; 978-0-500-29188-7 paperback £16.95.

INSTITUTO NACIONAL DE ANTROPOLOGIA E HISTORIA DE MÉXICO. *Mayas: revelation of an endless time*. 2015. 239 pages, 353 colour illustrations, 2 maps, 1 chart. Mexico City: Instituto Nacional de Antropología e Historia; 978-607-484-651-5 hardback £25. (Handlist of exhibits: *Mayas: révélation d'un temps sans fin/Mayas: revelation of an endless time*. 2014. French & English, numerous illustrations.

Paris: Musée du quai Branly; 978-2-7118-6230-6 paperback €18.50.)



Michael Coe's *The Maya* first appeared in 1966 as part of Thames & Hudson's 'Ancient Peoples and Places' series (along with Coe's *Mexico*,

1962), and he has revised it at roughly six-year intervals since the 1980 second edition. I endorsed the 1987 fourth edition as "One of the best short studies of an ancient civilization yet written", and have not changed my mind; Coe also has not changed his mind on a lot of things, although new discoveries are worked in assiduously. Most striking of these holdovers is the continued proclamation of a Toltec invasion of northern Yucatan and the establishment of an alien régime at Chichén Itzá at the beginning of the Postclassic in the late ninth/early tenth century AD. The addition of Stephen Houston as co-author has not served to change this stance, so that Houston here implicitly adopts Coe's view; while in another book (Houston & Inomata 2009: 314, 319) he has taken the much more nuanced stance that "it is safe to say that Chichén Itzá was a multiethnic community, potentially including multiple non-local groups from Mexico and other parts of the Maya lowlands, as well as a large number of the local Maya" and "contacts most probably involved bidirectional movements of people and ideas rather than a unidirectional conquest". With luck, the tenth edition will move towards this generally accepted position and also modify the chronological chart on p. 10, which has maintained a "Toltec hegemony in Yucatan" since the fifth edition of 1993.

Coe has his fixed and favourite ideas, and, like many of us, defends them long after they have been overtaken by events (Houston does not demur, although I would be loath to deduce *qui tacet*

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consentire videtur). Coe's Olmec-centric views on the origins of Mesoamerican civilisation, stemming partly from his own distinguished work at the Olmec site of San Lorenzo several decades ago, remain unaffected by evidence that the Maya were doing many things (although not massive stone sculpture) coevally with the Olmec floruit in the early first millennium BC, but were interdependent rather than dependent. Tres Zapotes Stela C of 31 BC, at the "famous Olmec site" in Veracruz (p. 68), is not an Olmec monument as might be supposed—or at least not the dated side of it (the recycling of a late Olmec piece's blank verso face is, on the other hand, distinctly possible); Tres Zapotes is also a noted post-Olmec site.

Houston was Coe's student at Yale, and the work, and names, of Yale Mayanists are emphasised: one receives 15 name-checks. The H-word (Harvard) appears but once and its distinguished Maya archaeology tradition is barely identified (the late Gordon R. Willey does not appear in the index, although three of his monographs are in the bibliography). There are other odd omissions: William R. Coe, who directed the massive Tikal Project, and most of those who worked there, remain unmentioned beyond the bibliography. On the subject of this site, the striking sculpture from the Mundo Perdido at Tikal, with a vertical disc atop a sphere mounted on a shaft with hieroglyphic panels, is described by Coe and Houston as a "ballcourt marker" in Teotihuacan style (fig. 49). It is not: the similar La Ventilla sculpture from Teotihuacan is not associated with any ballcourt (surprisingly absent from the whole city, in fact), and was only designated as a 'marcador' because a similar object on the Tepantitla Tlalocan mural is shown close to (but not in) a scene in which a ball game is played between two ruled lines (akin to the surviving game in north-western Mexico). It is not Coe's fault that this spurious chain of false identity has developed, but it would be good if he and Houston dropped the 'ballcourt' label and discussed what this fascinating piece, found in an élite courtyard platform, is in actuality.

There are a few other errors of fact and discussions where relevant material has been missed: the artist on Del Río's 1787 expedition to Palenque is still cited as 'Ricardo Almendariz', despite George Stuart's demonstration that it was in fact Ignacio Armendáriz (Stuart & Stuart 2008). The palace at Palenque is by no means "a veritable labyrinth" (p. 151), although its courtyard-and-gallery plan (with some subterranean galleries at the south end) has been modified and in places infilled. The plan of Uxmal

(fig. 112) is over-simplified, missing many of the important structures on Ian Graham's (1992) map. Copan temple 26 is said wrongly (p. 132) to be temple 25, the putative dance/feasting platform nearby. The Xinka territory in south-east Guatemala is claimed to be "an archaeological and ethnological blank" (p. 31), despite the 1999 monograph by Estrada-Belli; François Gendron's discovery of the Motagua bluejade source in 1996 (misdated on p. 23 as 1998) is later ascribed to a 2001 expedition (p. 60).

New discoveries—the Sufricaya 'map'-mural (fig. 57), one of several in hybrid Maya-Teotihuacan style; the nearby Holmul frieze (fig. 82); the burial 39 figurines from El Perú-Waka' (figs 65–66, colour plates XXII–XXIV); and the LiDAR map of Caracol (fig. 52)—are blended with numerous recent high-quality illustrations, some in colour, to rejuvenate this war-horse of a popular/text book and make it once again useful in the classroom.

From a classic textbook to a new exhibition and its catalogue: *Mayas: revelation of an endless time*. This is an odd title, but a literal translation from the original Paris catalogue of this splendid Maya archaeology exhibition. Drawing entirely on artefacts from Mexican museum collections, this is one of the best Maya shows in many years. It is also the first in Britain since the British Museum put some of its superb, but largely unseen, Maya collection on temporary exhibit in the new Museum of Mankind in 1973–1974.

The exhibition at Liverpool's World Museum has now finished: it was the only British venue. The 400 pieces (approximately), ranging from major sculpture to the miniature golden frog with turquoise eyes that Liverpool used as its logo, were shown in themed galleries. Major ideas—'The spirit of places' and 'Revelation of an endless time'-were subdivided; each topic is then introduced in the catalogue by a short essay by one of Mexico's many distinguished Mayanists, under the overall direction of Mercedes de la Garza. In the Paris catalogue there were more essays by some of the French mission's archaeologists who have worked at Tonina and Balamku (there has never been a British presence in Mexico, despite attempts some years ago to launch a British School); these essays and their useful illustrations are omitted from the Liverpool catalogue.

Nonetheless, the objects are all splendidly presented in this volume, with excellent photographs: there are newer finds, including tomb groups from Calakmul

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and Jaina, as well as Balamku; and there are old friends, such as the 'Queen of Uxmal' and 'King of Kabah' sculptures, one of Chichén Itzá's Chac Mools, Tonina's famous depiction of Joy Chitam of Palenque as a bound captive; and the Chinkultic ballcourt marker. It is impressive how many other truly iconic Maya pieces have been sent on tour: one of the turquoise-mosaic discs from Chichén Itzá; the 'Blom Plate' from the Mérida museum, with its blowgunning Hero Twins from the Quiché Maya epic, the *Popol Vuh*, assaulting the poseur Vucub Caquix; the 'Pellicer Vase' from Villahermosa, with its scene of courtly life; and a swathe of pieces from the National Museum of Anthropology in Mexico City, including Yaxchilan lintel 48 and many Jaina figurines.

The unfamiliar are here too: sculptures from Tonina, known mainly from the excavation monographs; jade-mosaic masks from royal tombs at Calakmul; and graffito-incised bricks from Comalcalco, showing Maya artists off-duty. Every object has its museum accession number but not its size: as a result, the Jonuta hand-drum (item 249) proves a real surprise in the exhibit, being only a few centimetres high (and probably a toy; if you want dimensions, the Paris exhibition handlist is what you need). Nonetheless, *Revelation of an endless time* is just that for many of us—a worthy addition to the dozen or so major Maya exhibition catalogues of the past three decades.

Yucatan and Belize

TRACI ARDREN. Social identities in the Classic Maya northern lowlands: gender, age, memory, and place. 2015. ix+210 pages, 19 b&w illustrations. Austin: University of Texas Press; 978-0-292-76811-6 hardback £38 & \$55.

BRETT A. HOUK. *Ancient Maya cities of the eastern lowlands*. 2015. xvii+343 pages, 66 b&w illustrations, 10 tables. Gainesville: University Press of Florida; 978-0-8130-6063–7 hardback \$79.95.



Traci Ardren's Social identities in the Classic Maya northern lowlands is subtitled "gender, age, memory, and place". The cover illustration (also fig. 5.4) shows a plump Maya

woman in *huipil* (blouse) and skirt grinding maize on a *metate*, while a companion of indeterminate gender (wearing either just a *huipil* or dark body paint) squats in front of her smoking a thin cigar; both are embraced within the tondo of a polychrome plate. Ardren uses this to illustrate that "gendered tasks such as food preparation were rituals of inclusion that circulated ideas of shared membership" (p. 144). Whether the painter intended this, or just a genre scene, is unclear, but it usefully shows how Henrietta Moore's (1986) ideas of gendered space can be used to analyse Classic art and architecture.

Ardren's other theoretical anchor is Benedict Anderson's (1991) and Charles Taylor's (2002) notions of the 'social imaginary', "the ways in which people imagine their social existence, how they fit together with others [...] the expectations that are normally met, and the deeper normative notions and images" underlying them (Taylor 2002: 106). Ardren wants to explore "the use of material objects to help create and reinforce the meaning of key behaviours and relations" because "social relationships [...] leave a material residue" (p. 3).

The material residues that Ardren considers are primarily from Yucatan sites where she has worked: the mercantile city of Chunchucmil, close to the salt beds of the Gulf Coast; the Postclassic reuse of Classic structures at Yaxuna, near Chichén Itzá; and child burials at Yaxuna and Xuenkal, and at the previously studied large centres of Chichén and Dzibilchaltun. She also feels it useful to present her own social identity—"queer (not strictly heterosexual) and pagan (not of a monotheistic faith)" (p. 6)—to illuminate her stance.

At Chunchucmil, Ardren focuses on one residential house-lot, the Lool Group, and the more impressive Pich quadrangle for warehousing trade goods. Each is synecdochic of a similar overall pattern that may "reflect part of Chunchucmil's social organization of labor and trade" and "constitute a [...] sociological 'house' or extended network of family members who shared land, resources, and memories", so that "the individualized experiences and expectations of citizens [...] created the cooperative mechanisms we see materialized today as raised roads, house-lots, and quadrangle groups. At Chunchucmil, the social imaginary allowed for and protected a larger conceptualization of connection and interdependence" (pp. 45-46), something key for a community where commerce outranked kinship.

At Yaxuna, Ardren looks at Postclassic shrines and Chen Mul Modeled incensarios, perceiving a link to the social imaginary of Mayapan, the dominant city of the period in northern Yucatan and the assertion of a shared identity (which might actually reflect the enforced residence of the local lord in the capital). Juvenile burials are used to establish the Maya concept of childhood, and how material culture was used "to naturalize childhood as a social identity" and how children "held key roles in social networks that cemented and affirmed kin relations" (p. 84). Ardren employs later Classic-period data from Yaxuna, from her own work at the smaller site of Xuenkal north of Chichén Itzá and from the large extant sample excavated at Dzibilchaltun farther west several decades ago, which bulk out her sample from 16 to 41. She finds that many were buried in stone crypts, with modest grave goods, below the floors of their homes, and in a manner consistent with adult burials of the time. Some babies and toddlers were buried in urns, often in construction fill, and may have had a spiritual potency outgrown with survival to the age of transition into being an economically useful member of the family. Ardren sees children as the intersection of lineages, and their funerals as times "for heightened discourse about the maintenance of corporate groups"

Gender also structured Maya society and the architectural matrix within which it functioned, and Ardren here yokes Moore's (1986) ideas with those of Julia Hendon (2010), on memory communities, and Patricia McAnany (2010), on multiple social identities and the meshing of economy with ritual practice in the long-term perpetuation of the Maya social imaginary. Data are cherry-picked to make particular points and not everybody will accept all of Ardren's assertions, but this book will stimulate discussion.

Brett Houk's Ancient Maya cities of the eastern lowlands deals with Belize, formerly British Honduras, where the trajectory of research was for decades different from that in Spanish-speaking Mexico and Guatemala. Belize lacks—apart from a few sites on the Guatemalan border such as Caracol and Xunantunich that fit better into the Petén cultural tradition—both spectacular ruins and impressive sculptures with informative texts. The largest cities, Lamanai and La Milpa, are otherwise idiosyncratic, both in their histories—the former occupied from the Middle Preclassic through to the eighteenth century, with both massive Late Preclassic temples and Spanish

churches, the latter with a florescence of less than two centuries of the Late Classic—and in their layout. Other Belizean sites such as Nohmul in the far north (many of its structures bulldozed for road fill, as with those of its now vanished neighbour San Estevan) and Lubaantun, Uxbenka, Nim li Punit and Pusilhà in the far south are different in their own ways. Lubaantun, although quite large, has a dearth of monuments; the tiny Nim Li Punit nearby, a plethora, including the second-tallest Maya stela known (and in 2015 an impressive inscribed jade pectoral was excavated). Pusilhà has a pair of bridge abutments and urban architecture on both sides of the river; most of its legible stelae were taken to the British Museum during 1928–1929.

Houk's book is a solid, workmanlike and badlyneeded general account of Belize's under-valued sites—some of them excavated by this reviewer, who gets fair treatment, although he did not, as claimed (pp. 9, 69), discover or explore the important Preclassic site of Cerros. There are useful introductory chapters on the nature of Maya cities and their chronology (although Houk's publishers have imposed the rather silly BCE/CE nomenclature instead of the BC/AD used throughout Maya archaeology and by all the other books reviewed here). Important Preclassic sites (Cahal Pech, Blackman Eddy, Cuello, Colha, Cerros) occupy a separate chapter before Houk deals with the Classic centres in five regions, working from Pusilhà in the south to Altun Ha in the north (but omitting Santa Rita).

These accounts are informative, with neat plans, and it is good to see Houk's own work at Dos Hombres, Chan Chich and Kaxal Uinic included. There are occasional odd errors: Frederick Mitchell-Hedges (1882–1959) did *not* adopt the married Lady Richmond-Brown (1885–1946), his mistress, as his daughter (p. 103), whereas the settlement around the core of Lubaantun *has* been mapped (p. 111; see Hammond 1975: fig. 20). Lowry's Bight (p. 202) is, as its name suggests, a marine embayment on the Belize coast, not "a narrow peninsula of land". The impressive restorations of the Caana acropolis and other structures at Caracol deserve to be credited to Jaime Awe.

Houk ends with two chapters on 'Comparisons and urban planning' and 'Deciphering meaning in Maya cities', in which he looks "through the lenses of the built environment and ancient urban planning" to "highlight important concepts related to the development of Maya urbanism" (pp. 249, 283)

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from the Late Preclassic onwards. He takes Michael Smith's (2007) schema for assessing the degree of purposeful planning in pre-industrial cities, and Wendy Ashmore's (1991) study of Maya site-planning principles and directionality (Coggins (1980) is here an important influence uncited by Houk). A series of comparative plans and tables draws out regularities: one striking exception is Altun Ha, lacking a ballcourt, acropolis or palace. Here the parallel that strikes me is Chunchucmil in western Yucatan (examined in Ardren's Social identities in the Classic Maya northern lowlands), another acephalous city in an unpromising environment where rich natural resources existed: chert for Altun Ha, salt for Chunchucmil. The rulers of Altun Ha may have been less divine kings than merchant princes.

El Perú-Waka' and Cacaxtla

OLIVIA C. NAVARRO-FARR & MICHELLE RICH (ed.). Archaeology at El Perú-Waka': ancient Maya performances of ritual, memory, and power. 2014. viii+278 pages, 67 figures. Tucson: University of Arizona Press; 978-0-8165-3096-0 hardback \$65.

CLAUDIA LOZOFF BRITTENHAM. The murals of Cacaxtla: the power of painting in ancient Central Mexico. 2015. xvii+295 pages, 310 colour and b&w illustrations, 3 tables. Austin: University of Texas Press; 978-0-292-76089-9 hardback \$70.



Archaeology at El Perú-Waka' is the outcome of a 2007 Society for American Archaeology symposium, and reports work from 2003 onwards at a major Maya city in north-western

Petén, directed initially by David A. Freidel (to whom the volume is dedicated) and Héctor L. Escobedo. They contribute an initial chapter on 'Reflections on ritual in the archaeological record' and an epilogue reporting discoveries since the SAA meeting, mainly connected with the powerful ruler K'inich Bahlam II's actions in the decades on either side of AD 700 and with further evidence for an earlier fire shrine.

El Perú-Waka' is positioned strategically between the Usumacinta kingdoms, Tikal, and Calakmul, and seems to have been under the suzerainty of the latter in the mid to late Classic period. The site core covers around a square kilometre, and the map by Ian Graham, El Perú's first explorer, shows several large and impressive temple complexes on rises around a series of interconnected plazas. (Waka', seemingly the ancient name, has been added by the present project.) Much of the work reported here was in the north-west palace area and its adjacent ballcourt; at the eastern ends of plazas 1 and 2, dominated by temples M12-32 and M13-1, with the smaller M12-35 between them; and in the south-east on the high Mirador ridge where temple O14-4 overlooks the bajo (low-lying) wetlands that separate it from the central area. Although illustrations are limited, it is surprising that they omit the astonishing assemblage of pottery figurines from burial 39 in O14-4, excavated in 2006 and as good as those from Jaina (for illustrations of finds from this tomb, see Coe & Houston's The Maya figs 65 & 66, colour plates XXIII-XXIV), especially as the overall thrust of the book is "the critical role ritual and memory play in the archaeological record, and the way memory was used to portray the aspirations of the royal elite" (p. vii). More than 40 inscribed stone stelae document those aspirations and the shifts of inter-dynastic power plays. (One of the project's online reports quoted on page vii hints also at wooden stelae—"slabs of stone or wood with inscriptions"-but this enticing possibility is not mentioned elsewhere.) The contributors show how burials as conjunctions of gender and power, buildings as overt proclamations of such power, and commemorative monuments were used to maintain dynastic social memory. The book is not just an essay in model-building: it also provides a lot of data on epigraphy, palaeopathology, royal alliances, ritual narratives, the spatial matrix of performance, and lithic production as part of mortuary rites.

Next, we move from the Maya lowlands to the Mexican highlands, to Cacaxtla. This is not a Maya site, but when it was first excavated four decades ago, plenty of people saw in its stunning murals a distinctly Maya influence. Claudia Brittenham, who has worked on the Maya murals of Bonampak and on Maya use of colour, is well placed to evaluate these claims, concluding that the murals are "the result of a complex process of interpretation, adaptation and assimilation of materials, techniques, themes, and aesthetics of different Mesoamerican painting traditions that created an innovative and distinctive tradition" (p. xiii).

Cacaxtla lies in Central Mexico, south-east of Teotihuacan and overlooking the valley of Tlaxcala. The site is, we now know, the ceremonial acropolis of a larger city spread around the surrounding hills and valleys. Its succession of courts and buildings ascend from south to north, where the initial discovery was made in 1975. Local legend told of a great serpent coiled around its treasure inside the hill of Cerro la Frontera, where a subterranean bell tolled at midsummer on St John's Eve. Local farmers, with temerity and curiosity, uncovered what we now call structure A, decorated with life-size paintings of men dressed in eagle and jaguar costumes, with features and costumes unmistakably influenced by coeval Maya art, but with a Disney-esque clarity of outlining that spoke of Teotihuacan and Cholula.

As exploration continued, building B appeared at right angles to and partly blocking structure A. On its battered frontage descending to the Great Plaza was a scene of bloody conflict, including spouting blood and eviscerated guts, between two forces in jaguar and bird costumes, the former clearly winning, the sides distinguished also by visage, body-paint and accoutrements. Some prominent victors seem to be intentionally recognisable individuals (such as the one named '3 Deer'), set against the mainly generic and more 'Maya' losers. A collision of Mesoamerican cultures and their arts is a natural explanation.

But there is more than this: south from the great plaza is a complex of corridors, smaller open spaces and rooms dubbed 'the palace', south-west and down from which lie the next sets of impressive but contrasting murals. These include the 'Temple of Venus' with two blue-skinned figures on jambs, one of each sex, both wearing jaguar-skin mini-kilts, paper anklets and giant Venus signs at waist level. More such star signs border them and are also found on the Battle Mural. From here a stair leads up to the Great Plaza, with etiolated captives on the treads, and side walls depicting paracrified mains cabe growing an add

From here a stair leads up to the Great Plaza, with etiolated captives on the treads, and side walls depicting personified maize cobs growing, an old merchant god, monstrous toads and species-fusing serpents similar to those of structure A. Brittenham's comparanda show how the Cacaxtla murals emerge from a broad Mesoamerican tradition based on widespread interaction, from the Maya lowlands in the east to the Valley of Mexico north-west of Cacaxtla. Modifications over several centuries make unscrambling their messages more difficult, but radiocarbon dating places the apogee of Cacaxtla from the late eighth into the early ninth century AD, more or less coeval with Bonampak but later than

Teotihuacan. Their technical vocabulary is cohesive, their sources diverse, their intention still enigmatic. Brittenham's exhaustive study (building on the magnificent documentation of Uriarte's two-volume *Cacaxtla Estudios*) is a foundation for all future enquiry.

Population movement and archaeoastronomy

ANDREA CUCINA (ed.). Archaeology and bioarchaeology of population movement among the pre-Hispanic Maya. 2015. xiii+159 pages, numerous colour and b&w illustrations. Cham: Springer; 978-3-319-10857-5 paperback \$39.99 & £35.99.

GERARDO ALDANA Y VILLALOBOS & EDWIN L. BARNHART (ed.). *Archaeoastronomy and the Maya*. viii+165 pages, numerous colour and b&w illustrations. 2014. Oxford & Philadelphia (PA): Oxbow; 978-1-78297-643-1 paperback £45.



Andrea Cucina's collection, edited Archaeology and bioarchaeology of population movement among the pre-Hispanic Maya, is a symposium volume from the 'First International Congress

of Bioarchaeology in the Maya Area', held at the Universidad Autónoma de Yucatán in 2010. A Spanish edition was published there in 2013; this pricey English translation has an additional chapter by William Duncan and Jon Hageman on intracemetery kinship analysis. All the papers are short, averaging 12 pages including extensive (and useful) references: five are pretty much purely archaeological, with a nod to demography; one presents hardcore demographic statistics, using Maya data; and seven are bioarchaeological, with an emphasis on dental traits. There is little linkage between the chapters and no discussion by the editor. The book is essentially the printed record of the conference session, within which the chapters on strontium-isotope analysis and on dental morphology will be of most general interest. Archaeoastronomy and the Maya is another 2007 SAA symposium book, introduced by Aldana y Villalobos with an informal and rather self-indulgent history of Maya astronomical studies (that misses some references and believes that the first man on the

Moon was 'Neil Anderson'). Aldana y Villalobos's most interesting point appears only at the end of his last footnote: "new evidence has arisen recently that challenges the accuracy of the GMT [the standard correlation of Maya and Christian calendars]. If the GMT is incorrect by more than a few days, then any work dependent on it will be called into question" (p. 14). There is no further exegesis anywhere in the book, although he hints at it in his chapter on the Dresden Codex Venus Table, which he says "we cannot hope to place [...] in real time by judging its accuracy" (p. 94) and which he regards as oracular rather than astronomical.

Susan Milbrath regards a concern with Venus as originating in Central Mexico and spreading to the Maya area, where the planet's cult and warrior symbolism are prominent at Chichén Itzá: it is this tradition that later imbues the Dresden Venus Table with its warlike Morning Star smiting the world.

There are several solar-oriented papers: Harold Green argues that the Mesoamerican 260-day (13 numbers × 20 day names) sacred cycle originated at the Middle Preclassic site of Chocolá on the Pacific slope of Guatemala, where "the horizon is unique in marking significant events in the solar cycle" (p. 34). Other sites in the region (Izapa, Tak'alik Ab'aj) have been advanced in the past: Green would take things earlier, and there is no reason why he should not be right, on that point at least. Michael Grofe takes the 260-day cycle, correlates it with the lunar series that follows it in Maya Initial Series dates and suggests that the nine states of Glyph G could be used "to track the eclipse year and the position of the moon relative to the nodes in the draconic month" (p. 153). Alonso Mendez and colleagues suggest that Palenque's Temple of the Sun "was used to track major stations of the Sun as well as to mark important dates in the reign of Kan B'ahlam" (p. 72), the ruler who built it as part of the Cross Group. The long inscriptions in the Temples of the Cross, Foliated Cross, and Sun deal inter alia with the birth of gods (nicknamed GI, GII and GIII), and Mendez's group argue for correlated alignments between the temples, solar hierophanies and these deities. In a second paper, Mendez and Carol Karasik use Palenque again, examining zenith and nadir solar passages and the establishment of an axis mundi personified by the seventh-century kings. Ivan Šprajc identifies 'Teotihuacan' architectural alignments for sunrise orientations on February 12 and October 30 at Preclassic Maya sites in Campeche, matching those in Central Mexico but somewhat earlier. While the impact of Teotihuacan on the lowland Maya in the fourth century AD and thereafter is well documented, this earlier apparent reverse flow around the turn of the first century BC/AD is a revelation (as are the sites, for which Šprajc provides very nice plans).

If the number of monographs and edited volumes on the Maya recently received for review by Antiquity is any measure, then Maya archaeology is in good health. Even so, there is a lot that is not seen in this journal: two major edited volumes (Braswell 2012, 2014, from a 2010 SAA session honouring E. Wyllys Andrews V) were not even received for review. The books discussed here are a fair conspectus of the output of the USbased corps of Mayanists, but there is almost nothing by the lively European community (Šprajc in Slovenia excepted) who by agreement publish (and confer) in English, and the work of our hispanophone colleagues in Mexico and Guatemala is represented only in the English-language catalogue of the Liverpool exhibit, by the welcome translation of Cucina's symposium, and by five of the contributors to the El Perú-Waka' volume.

A great deal of important Maya research is published in Spanish, and a substantial amount of it remains under-appreciated outside the specialist circle, although the Asociación Tikal has now made available online the first 25 years (1987-2011) of the annual (and compulsory for those digging in the country) Simposio de Investigaciones Arqueológicas en Guatemala. In Mexico, discoveries tend to surface very quickly in the semi-official magazine-journal Arqueología Mexicana, although finding the detailed subsequent publications can be a problem. In the anglophone outpost of Belize, the annual symposium (modelled on that in Guatemala) is also now published within the year, and the University of Florida Library has put online the entire set of Research Reports in Belizean Archaeology (up to volume 12, the 2014 meeting published in 2015). We have no excuse for not knowing what is emerging from the tropical forest, and we would all benefit from finding out: ex Maya semper aliquid novi.

References

Anderson, B. 1991. *Imagined communities: reflections on the origin and spread of nationalism.* London: Verso.

ASHMORE, W.A. 1991. Site-planning principles and concepts of directionality among the ancient Maya. *Latin American Antiquity* 2: 199–226. http://dx.doi.org/10.2307/972169

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- Braswell, G. 2012. The ancient Maya of Mexico: reinterpreting the past of the northern Maya lowlands. Sheffield: Equinox.
- 2014. The Maya and their Central American neighbors: settlement patterns, architecture, hieroglyphic texts, and ceramics. London & New York: Routledge.
- COE, M.D. 1962. Mexico. London: Thames & Hudson.
- COGGINS, C.C. 1980. The shape of time: some political implications of a four-part figure. *American Antiquity* 45: 729–39. http://dx.doi.org/10.2307/280144
- ESTRADA-BELLI, F. 1999. The archaeology of complex societies in southeastern Pacific coastal Guatemala: a regional GIS approach (British Archaeological Reports International series 820). Oxford: Archaeopress.
- GRAHAM, I. 1992. Corpus of Maya hieroglyphic inscriptions. Volume 4, part 2: Uxmal. Cambridge (MA): Peabody Museum, Harvard University.
- HAMMOND, N. 1975. *Lubaantun: a Classic Maya realm* (Museum Monograph 2). Cambridge (MA): Peabody Museum, Harvard University.
- HENDON, J.A. 2010. Houses in a landscape: memory and everyday life in Mesoamerica. Durham (NC): Duke University Press.
- HOUSTON, S.D. & T. INOMATA. 2009. *The Classic Maya*. Cambridge: Cambridge University Press.

- MCANANY, P.A. 2010. Ancestral Maya economics in archaeological perspective. Cambridge: Cambridge University Press.
- MOORE, H. 1986. Space, text and gender: an anthropological study of the Marakwet of Kenya. Cambridge: Cambridge University Press.
- Research Reports in Belizean Archaeology n.d. University of Florida Library. Available at: http://ufdc.ufl.edu (accessed 14 September 2015).
- Simposio de Investigaciones Arqueológicas en Guatemala n.d. Asociación Tikal. Available at: http://www.asociaciontikal.com/ (accessed 14 September 2015).
- SMITH, M. 2007. Form and meaning in the earliest cities: a new approach to ancient urban planning. *Journal of Planning History* 6: 3–47. http://dx.doi.org/10.1177/1538513206293713
- STUART, D. & G. STUART. 2008. *Palenque: eternal city of the Maya*. London: Thames & Hudson.
- Taylor, C. 2002. Modern social imaginaries. *Public Culture* 14: 91–124. http://dx.doi.org/10.1215/08992363-14-1-91
- URIARTE CASTANEDA, M.T. 2013. La pintura mural prehispánica en México, V: Cacaxtla Estudios (2 volumes). México: Universidad Nacional Autónoma de México, Instituto de Investigacions Estéticas.