NOTICE

PUBLICATION ALERTS

SCIENCE NEWS – Humans may have developed flat foreheads to communicate with eyebrows ........................................... 2
SCIENCE NEWS – Dogs lived and died with humans 10,000 years ago in the Americas ......................................................... 2
SCIAM NEWS – What the Cottingley Fairies Can Teach Us about Belief ................................................................................. 2
SCI-NEWS.COM – Study: Natural Selection Still at Work in Humans ....................................................................................... 2
SCIENCE DAILY – Men willing to punish more than women to get ahead .................................................................................... 2
SCIENCE DAILY – Modeling prosocial behavior increases helping in 16-month-olds .................................................................... 2
SCIENCE DAILY – Unprecedented wave of large-mammal extinctions linked to prehistoric humans ........................................ 2
SCIENCE DAILY – Ramped up fight-or-flight response points to history of warfare for humans and chimps ................................... 2
SAPIENS – What the Archaeology of Night Reveals ................................................................................................................ 3
ACADEMIA.EDU – Evolution, lineages and human language ...................................................................................................... 3

STEPHEN J. COWLEY & ANTON MARKO – Evolution, lineages and human language ............................................................. 3

THE CONVERSATION – The way you see colour depends on what language you speak ............................................................. 3

THE CONVERSATION – The way you see colour depends on what language you speak ............................................................. 3

OTHER NEWS – Death of Michael Halliday ............................................................................................................................ 3

PUBLICATIONS

American Journal of Physical Anthropology .......................................................................................................................... 3

PAPERS....................................................................................................................................................................................... 3

RACHAEL C. BIBLE & A. TOWNSEND PETERSON – Compatible ecological niche signals between biological and archaeological datasets for late-surviving Neandertals .................................................................................................................................. 3
EMMA M. FINESTONE et al – Great ape walking kinematics: Implications for hominoid evolution ...................................................................... 4
NATHAN E. THOMPSON et al – Unexpected terrestrial hand posture diversity in wild mountain gorillas ............................................................ 4
JOHN H. KEELTFORD & FRED H. SMITH – Cranial measures and ancient DNA both show greater similarity of Neandertals to recent modern Eurasians than to recent modern sub-Saharan Africans ........................................................................................................... 4
PETER S. UNGAR & LEE R. BERGER – Brief communication: Dental microwear and diet of Homo naledi ................................................................ 4

Frontiers in Ecology and Evolution .................................................................................................................................................. 4

PAPERS....................................................................................................................................................................................... 4

HOPE KLUG – Why Monogamy? A Review of Potential Ultimate Drivers ....................................................................................... 4

General Anthropology .................................................................................................................................................................... 5

NEWS.......................................................................................................................................................................................... 5

PALEOANTHROPOLOGY 2018, Part 1 .................................................................................................................................................. 5

ARTICLES.......................................................................................................................................................................................... 5

SUSAN C. ANTÓN – The Many Faces of Early Homo ......................................................................................................................... 5

Mind & Language ............................................................................................................................................................................ 5

PAPERS....................................................................................................................................................................................... 5

BART GEURTS – Convention and common ground ....................................................................................................................... 5
PETER CARRUTHERS – Basic questions ........................................................................................................................................ 5
CHRISTOPH HOERL – Episodic memory and theory of mind: A connection reconsidered ........................................................................ 5
RYAN COX – Knowing why ........................................................................................................................................................... 5

Nature Scientific Reports.................................................................................................................................................................... 6

PAPERS....................................................................................................................................................................................... 6

ADWAIT DESHPANDE, SHREEJATA GUPTA & ANINDYA SINHA – Intentional communication between wild bonnet macaques and humans ................. 6

PLoS Biology .................................................................................................................................................................................. 6

PAPERS....................................................................................................................................................................................... 6

FATEMEH KHAHATAMI et al – Origins of scale invariance in vocalization sequences and speech ........................................................................ 6

PLoS Genetics ................................................................................................................................................................................ 6

PAPERS....................................................................................................................................................................................... 6

KANG SEON LEE et al – Selection on the regulation of sympathetic nervous activity in humans and chimpanzees .................................................. 6

PLoS One ......................................................................................................................................................................................... 6

PAPERS....................................................................................................................................................................................... 6

ANA B. MARÍN-ARROYO et al – Chronological reassessment of the Middle to Upper Paleolithic transition and Early Upper Paleolithic cultures in Cantabrian Spain ................................................................. 6
NOTICES

PUBLICATION ALERTS
If you have had a paper or book published, or you see something which would be of interest to the group, do please send me a publication alert so that I can include it in the newsletter. Many thanks to those who have already sent in alerts.
If there is a journal you feel I should be tracking on a regular basis, do let me know.
And if you have any other ideas for extending the “EAORC experience”, please contact me.

SCIENCE NEWS – Humans may have developed flat foreheads to communicate with eyebrows
Our ancient ancestors had a prominent ridge of bone above their eyes, but scientists are not sure of its purpose—or why it disappeared.

SCIENCENEWS.ORG – Dogs lived and died with humans 10,000 years ago in the Americas
Dogs unearthed at sites in Illinois were older than originally thought.
http://click.societyforscience-email.com/?qs=575aa1651b8392e093c86a5791ef67b427bd48b3f7fe1e9ae064ab243fc769dadaa300605e378c0dc38f9e4df171414badaae621c429b74622d2d0f384f86e7d92

SCIAM NEWS – What the Cottingley Fairies Can Teach Us about Belief
Why do false beliefs persist in the face of facts?

SCI-NEWS.COM – Study: Natural Selection Still at Work in Humans
An international team of scientists from Australia, the Netherlands, Estonia and the United States has detected significant signatures of natural selection in the human genome that influence traits associated with fertility and heart function.

SCIENCE DAILY – Men willing to punish more than women to get ahead
Researchers have measured gender differences in cooperation and punishment behavior. Results showed that men punish more than women, men obtain higher rank, and punishment by males decreases payoffs for both sexes. Furthermore, men are willing to punish people who have done nothing wrong, except cooperate to the fullest extent possible.

SCIENCE DAILY – Modeling prosocial behavior increases helping in 16-month-olds
Shortly after they turn 1, most babies begin to help others, whether by handing their mother an object out of her reach or giving a sibling a toy that has fallen. Researchers have long studied how this helping behavior develops, but why it develops has been examined less. A new study looked at the role of imitation to find that when 16-month-olds observe others' helping behavior, they're more likely to be helpful themselves.

SCIENCE DAILY – Unprecedented wave of large-mammal extinctions linked to prehistoric humans
Homo sapiens, Neanderthals and other recent human relatives may have begun hunting large mammal species down to size - - by way of extinction -- at least 90,000 years earlier than previously thought, according to a new study. The magnitude and scale of the extinction wave surpassed any other recorded during the last 66 million years, according to the study.

SCIENCE DAILY – Ramped up fight-or-flight response points to history of warfare for humans and chimps
Humans and chimpanzees recently evolved a more active fight-or-flight response compared to other primates, possibly in response to the threat of warfare.
SAPIENS – What the Archaeology of Night Reveals
Studying ancient people’s nocturnal lives shows us why we should begin working to reclaim the darkness.
https://sapiens.us11.list-manage.com/track/click?u=80f6cf678900daf984bf763b7&id=34a871a78f&e=dc0eff6180

ACADEMIA.EDU – Evolution, lineages and human language
STEVEN J. COWLEY & ANTON MARKO – Evolution, lineages and human language
In life as in language, living beings act in ways that are multiply constrained as history works through them both directly and as mediated by what we identify as structures (e.g. genes or words). Emphasising direct effects, we replace the ‘language metaphor of life’ with the view that language extends the domain of the living. Just as a living proteome system manages without central control, so does language. Both life and language enable living beings to expand into – and create – new domains or Umwelten. Pursuing the parallel, we link emphasis on fitness with Berthoz’s notion of simplexity and the distributed view of life/language/cognition. The semiosphere evolved, we suggest, as systems found novel ways of tapping into the bio-ecology’s energetics. Accordingly, there are striking parallels between how regulatory genes influence body structures and how, in humans, community histories re-echo during conversation. In both cases, cross-talk prompts living systems to re-enact a lineage/community’s music (or ‘worldviews’). While rejecting Berthoz’s residual neuro-centrism, we find ‘simplexity’ to be a powerful heuristic. Instead of proposing a single explanatory principle (e.g. computation, autonomy), lineages and communities build on meaning by altering ways of coordinating/cooperating. In all cases, life and language cooperate to bring forth new possibilities.
https://www.academia.edu/36405085/Evolution_lineages_and_human_language?auto=download&campaign=weekly_digest

THE CONVERSATION – The way you see colour depends on what language you speak
How our life experiences change the way we perceive colours.
https://theconversationuk.cmail19.com/t/r-l-juhlyk-khhilahh-k/

THE CONVERSATION – The way you see colour depends on what language you speak
How our life experiences change the way we perceive colours.
https://theconversationuk.cmail19.com/t/r-l-juhkurjy-khhilahh-q/

OTHER NEWS – Death of Michael Halliday
Michael Alexander Kirkwood Halliday, usually M.A.K. Halliday; passed away peacefully yesterday 15th April 2018 at the Uniting Wesley Heights Nursing Home in Manly, Sydney, Australia, aged 93. He was Director of the Communication Research Centre at UCL from 1963 to 1965 and was Professor of Linguistics at UCL from 1965 to 1971. Following various posts in the US and Britain (He held posts in Cambridge, Edinburgh and Essex), he moved to Australia in 1976 as foundation professor of linguistics at the University of Sydney, where he remained until he retired in 1987.

Michael Halliday did his BA in modern Chinese (Mandarin) at the University of London as an external student as he lived and studied in China. Amongst his teachers were well-known Chinese philologists Luo Changpei and Wang Li. He did his PhD in Chinese linguistics at Cambridge under the supervision of Gustav Hallam and then J.R. Firth. He was best known for developing Systemic Functional Linguistics, which sees language as a semiotic system, not in the sense of a system of signs, but a systemic resource for meaning. For Halliday, language is a ‘meaning potential’, and he defined linguistics as the study of how people exchange meanings by ‘languaging’. His work has had a fundamental impact on sociolinguistics, applied linguistics, and language teaching and learning.

Michael Halliday did his BA in modern Chinese (Mandarin) at the University of London as an external student as he lived and studied in China. Amongst his teachers were well-known Chinese philologists Luo Changpei and Wang Li. He did his PhD in Chinese linguistics at Cambridge under the supervision of Gustav Hallam and then J.R. Firth. He was best known for developing Systemic Functional Linguistics, which sees language as a semiotic system, not in the sense of a system of signs, but a systemic resource for meaning. For Halliday, language is a ‘meaning potential’, and he defined linguistics as the study of how people exchange meanings by ‘languaging’. His work has had a fundamental impact on sociolinguistics, applied linguistics, and language teaching and learning.

Michael Halliday received honorary degrees from Birmingham and York in Britain, Athens in Greece, Macquarie in Australia, British Columbia in Canada, Lingnan and Education University in Hong Kong. He was Foreign Fellow of the Academia Europaea and Corresponding Fellow of the British Academy.
Professor Li Wei, PhD, FACSS, FRSA (Originally published in BAALMail)

PUBLICATIONS
American Journal of Physical Anthropology
PAPERS
RACHAEL C. BIBLE & A. TOWNSEND PETERSON – Compatible ecological niche signals between biological and archaeological datasets for late-surviving Neandertals
Tests of niche conservatism were used to assess niche similarity and niche identity of samples of morphologically diagnostic Neandertal remains and Middle Paleolithic (MP) archaeological sites dating to the time period leading up to Neandertal extinction. Paleoenvironmental reconstructions for the Pre-H4 (43.3–40.2 ky cal BP) were used as environmental space
analyses. As primary and secondary evidence of Neandertal occurrence during the Pre-H4 show high levels of niche similarity and identity, combining the two types of occurrence data to create larger samples for niche analyses is justified without the concern that different environmental signals could complicate future research.


EMMA M. FINESTONE et al – Great ape walking kinematics: Implications for hominoid evolution
Great apes provide a point of reference for understanding the evolution of locomotion in hominoids and early hominins. We assessed (1) the extent to which great apes use diagonal sequence, diagonal couplet gaits, like other primates, (2) the extent to which gait and posture vary across great apes, and (3) the role of body mass and limb proportions on ape quadrupedal kinematics. The great apes in our study showed broad kinematic and spatiotemporal similarity in quadrupedal walking. Size-adjusted walking speed was the strongest predictor of gait variables. Body mass had a negligible effect on variation in joint and segment angles, but stride frequency did trend higher among larger apes in analyses including size-adjusted speed. In contrast to most other primates, great apes did not favor diagonal sequence footfall patterns, but exhibited variable gait patterns that frequently shifted between diagonal and lateral sequences.


NATHAN E. THOMPSON et al – Unexpected terrestrial hand posture diversity in wild mountain gorillas
Gorillas, along with chimpanzees and bonobos, are ubiquitously described as ‘knuckle-walkers.’ Consequently, knuckle-walking (KW) has been featured pre-eminently in hypotheses of the pre-bipedal locomotor behavior of hominins and in the evolution of locomotor behavior in apes. However, anecdotal and behavioral accounts suggest that mountain gorillas may utilize a more complex repertoire of hand postures, which could alter current interpretations of African ape locomotion and its role in the emergence of human bipedalism. Here we documented hand postures during terrestrial locomotion in wild mountain gorillas to investigate the frequency with which KW and other hand postures are utilized in the wild. Results highlight a previously unrecognized level of hand postural diversity in gorillas, and perhaps great apes generally. Although present at lower frequencies than KW, we suggest that the possession of multiple, versatile hand postures present in wild mountain gorillas may represent a shared feature of the African ape and human clade (or even great ape clade) rather than KW per se.


JOHN H. RELETHFORD & FRED H. SMITH – Cranial measures and ancient DNA both show greater similarity of Neandertals to recent modern Eurasians than to recent modern sub-Saharan Africans
Ancient DNA analysis has shown that present-day humans of Eurasian ancestry are more similar to Neandertals than are present-day humans of sub-Saharan African ancestry, reflecting interbreeding after modern humans first left Africa. We use craniometric data to test the hypothesis that the crania of recent modern humans show the same pattern. Our results show that the genetic difference in Neandertal ancestry seen in the DNA of present-day sub-Saharan Africans and Eurasians is also found in patterns of recent modern human craniometric variation.


PETER S. UNGAR & LEE R. BERGER – Brief communication: Dental microwear and diet of Homo naledi
A recent study of dental chipping suggested that Homo naledi teeth were exposed to “acute trauma” on a regular basis during life, presumably from the consumption of grit-laden foods. This follows debate concerning the etiology of dental chips in South African hominin teeth that dates back more than half a century. Some have argued that antemortem chips result from consumption of hard foods, such as nuts and seeds or bone, whereas others have claimed that exogenous grit on roots and tubers are responsible. Here we examine the dental microwear textures of H. naledi, both to reconstruct aspects of diet of these hominins and to assess the possibility that hard foods (gritty or otherwise) are the culprits for the unusually high antemortem chip incidence reported. This study suggests that H. naledi likely consumed hard and abrasive foods, such as nuts or tubers, at least on occasion, and that these might well be responsible for the pattern of chipping observed on their teeth.


Frontiers in Ecology and Evolution

PAPERS

HOPE KLUG – Why Monogamy? A Review of Potential Ultimate Drivers
The existence of monogamy in animals is perplexing from an evolutionary perspective. If individuals: (1) have the opportunity to mate with more than one individual and (2) doing so provides fitness benefits (e.g., indirect benefits, increased mating success or fecundity), why does monogamy ever occur in animals? To address this question, we must examine how the potential benefits and costs of monogamy differ between the sexes and how such costs and benefits interact with factors including resource availability, offspring need, parental care, and mating dynamics (i.e., the costs and benefits associated with acquiring mates and mate availability). In this review, I examine the interplay between parental and offspring dynamics, resource availability and mate distribution, and mating dynamics. In doing so, I highlight the life history and ecological conditions under which monogamy is expected vs. not. I then discuss areas of research that are needed to enhance our
evolutionary understanding of monogamy. In particular, enhanced understanding of monogamy will come from: (1) more explicit consideration that the factors that lead to the origin of monogamy vs. the maintenance of monogamy might differ and (2) identifying how potential interactions among factors influence the origin and/or maintenance of monogamy.


General Anthropology

NEWS

PALEOANTHROPOLOGY 2018, Part 1

ARTICLES

SUSAN C. ANTÓN – The Many Faces of Early Homo

Mind & Language

PAPERS

BART GEURTS – Convention and common ground
Conventions are regularities in social behaviour of the past that enable us to coordinate our actions. Some conventions are lawlike: they are expected to be observed always or nearly always. However, in order to coordinate our actions, it may suffice that a precedent has occurred often enough, and sometimes even a single precedent will do. So, in general, conventions merely enable us to solve our coordination problems; lawlike conventions are a special case. Grammatical conventions are often lawlike; sense conventions are typically enabling. In order to resolve the indeterminacies that sense conventions give rise to, interlocutors must rely on the common ground. In this and other ways, common ground is a prerequisite for convention-based communication.

PETER CARRUTHERS – Basic questions
This paper argues that a set of questioning attitudes are among the foundations of human and animal minds. While both verbal questioning and states of curiosity are generally explained in terms of metacognitive desires for knowledge or true belief, I argue (following Whitcomb and Friedman) that each is better explained by a prelinguistic sui generis type of mental attitude of questioning. I review a range of considerations in support of such a proposal and improve on previous characterizations of the nature of these attitudes. I then broaden their explanatory scope to include a number of forms of exploratory search. The paper has three main goals: (a) to characterize the nature of the questioning attitudes, outlining their causal role and type of content; (b) to argue that they are fundamental components of the mind, being widespread among animals and not constructed during ontogeny out of other attitudes; and (c) to suggest that they explain a great deal more behavior (among both humans and animals) than one might think.

CHRISTOPH HOERL – Episodic memory and theory of mind: A connection reconsidered
A familiar claim in the literature on episodic memory in both psychology and philosophy is that engaging in episodic recollection requires grasp of a theory of mind. In this paper, I re-examine what connection, if any, there is between episodic memory and theory of mind. I first criticize the dominant way in which this connection has been construed theoretically, which has sought to link the possession of episodic memory with a grasp of the idea of representation, or the idea of informational access. I then argue for a novel, alternative, way of connecting episodic memory and theory of mind, which focuses on the role a grasp of the category of an experience might be seen to play in episodic recollection. In doing so, I also draw attention to a dimension of our understanding of the mental which is as yet underexplored in the literature on theory of mind.

RYAN COX – Knowing why
In this essay, I argue that we have a non-inferential way of knowing particular explanations of our own actions and attitudes. I begin by explicating and evaluating Nisbett and Wilson’s influential argument to the contrary. I argue that Nisbett and Wilson’s claim that we arrive at such explanations of our own actions and attitudes by inference is not adequately supported by their findings because they overlook an important alternative explanation of those findings. I explicate and defend such an alternative explanation of how we can know such explanations in a non-inferential way, drawing on recent work in the philosophy of self-knowledge.
Nature Scientific Reports
PAPERS
ADWAIT DESHPANDE, SHREEJATA GUPTA & ANINDYA SINHA – Intentional communication between wild bonnet macaques and humans
Comparative studies of nonhuman communication systems could provide insights into the origins and evolution of a distinct dimension of human language: intentionality. Recent studies have provided evidence for intentional communication in different species but generally in captive settings. We report here a novel behaviour of food requesting from humans displayed by wild bonnet macaques Macaca radiata, an Old World cercopithecine primate, in the Bandipur National Park of southern India. Using both natural observations and field experiments, we examined four different behavioural components—coo-calls, hand-extension gesture, orientation, and monitoring behaviour—of food requesting for their conformity with the established criteria of intentional communication. Our results suggest that food requesting by bonnet macaques is potentially an intentionally produced behavioural strategy as all the food requesting behaviours except coo-calls qualify the criteria for intentionality. We comment on plausible hypotheses for the origin and spread of this novel behavioural strategy in the study macaque population and speculate that the cognitive precursors for language production may be manifest in the usage of combination of signals of different modalities in communication, which could have emerged in simians earlier than in the anthropoid apes.
https://www.nature.com/articles/s41598-018-22928-z

PLoS Biology
PAPERS
FATEMEH KHATAMI et al – Origins of scale invariance in vocalization sequences and speech
To communicate effectively animals need to detect temporal vocalization cues that vary over several orders of magnitude in their amplitude and frequency content. This large range of temporal cues is evident in the power-law scale-invariant relationship between the power of temporal fluctuations in sounds and the sound modulation frequency (f). Though various forms of scale invariance have been described for natural sounds, the origins and implications of scale invariant phenomenon remain unknown. Using animal vocalization sequences, including continuous human speech, and a stochastic model of temporal amplitude fluctuations we demonstrate that temporal acoustic edges are the primary acoustic cue accounting for the scale invariant phenomenon. The modulation spectrum of vocalization sequences and the model both exhibit a dual regime lowpass structure with a flat region at low modulation frequencies and scale invariant 1/f² trend for high modulation frequencies. Moreover, we find a time-frequency tradeoff between the average vocalization duration of each vocalization sequence and the cutoff frequency beyond which scale invariant behavior is observed. These results indicate that temporal edges are universal features responsible for scale invariance in vocalized sounds. This is significant since temporal acoustic edges are salient perceptually and the auditory system could exploit such statistical regularities to minimize redundancies and generate compact neural representations of vocalized sounds.
http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1005996

PLoS Genetics
PAPERS
KANG SEON LEE et al – Selection on the regulation of sympathetic nervous activity in humans and chimpanzees
Adrenergic α2C receptor (ADRA2C) is an inhibitory modulator of the sympathetic nervous system. Knockout mice for this gene show physiological and behavioural alterations that are associated with the fight-or-flight response. There is evidence of positive selection on the regulation of this gene during chicken domestication. Here, we find that the neuronal expression of ADRA2C is lower in human and chimpanzee than in other primates. On the basis of three-dimensional chromatin structure, we identified a cis-regulatory region whose DNA sequences have been significantly accelerated in human and chimpanzee. Active histone modification marks this region in rhesus macaque but not in human and chimpanzee; instead, repressive marks are enriched in various human brain samples. This region contains two neuron-restrictive silencer factor (NRSF) binding motifs, each of which harbours a polymorphism. Our genotyping and analysis of population genome data indicate that at both polymorphic sites, the derived allele has reached fixation in humans and chimpanzees but not in bonobos, whereas only the ancestral allele is present among macaques. Our CRISPR/Cas9 genome editing and reporter assays show that both derived nucleotides repress ADRA2C, most likely by increasing NRSF binding. In addition, we detected signatures of recent positive selection for lower neuronal ADRA2C expression in humans. Our findings indicate that there has been selective pressure for enhanced sympathetic nervous activity in the evolution of humans and chimpanzees.
http://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1007311

PLoS One
PAPERS
ANA B. MARÍN-ARROYO et al – Chronological reassessment of the Middle to Upper Paleolithic transition and Early Upper Paleolithic cultures In Cantabrian Spain
Methodological advances in dating the Middle to Upper Paleolithic transition provide a better understanding of the replacement of local Neanderthal populations by Anatomically Modern Humans. Today we know that this replacement was
not a single, pan-European event, but rather it took place at different times in different regions. Thus, local conditions could have played a role. Iberia represents a significant macro-region to study this process. Northern Atlantic Spain contains evidence of both Mousterian and Early Upper Paleolithic occupations, although most of them are not properly dated, thus hindering the chances of an adequate interpretation. Here we present 46 new radiocarbon dates conducted using ultrafiltration pre-treatment method of anthropogenically manipulated bones from 13 sites in the Cantabrian region containing Mousterian, Aurignacian and Gravettian levels, of which 30 are considered relevant. These dates, alongside previously reported ones, were integrated into a Bayesian age model to reconstruct an absolute timescale for the transitional period. According to it, the Mousterian disappeared in the region by 47.9–45.1ka cal BP, while the Châtelperronian lasted between 42.6k and 41.5ka cal BP. The Mousterian and Châtelperronian did not overlap, indicating that the latter might be either intrusive or an offshoot of the Mousterian. The new chronology also suggests that the Aurignacian appears between 43.3–40.5ka cal BP overlapping with the Châtelperronian, and ended around 34.6–33.1ka cal BP, after the Gravettian had already been established in the region. This evidence indicates that Neanderthals and AMH co-existed <1,000 years, with the caveat that no diagnostic human remains have been found with the latest Mousterian, Châtelperronian or earliest Aurignacian in Cantabrian Spain. 

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194708

To unsubscribe from the EAORC Bulletin
Send an email to martin.edwardes@btopenworld.com with the subject "EAORC unsubscribe".
EAORC website information is at http://martinedwardes.webplus.net/eaorc/

Produced by and for the EAORC email group
EAORC is a fee-free academic internet news service and has no commercial sponsorship or other commercial interests. If you have received this email and are not subscribed to EAORC then contact martin.edwardes@btopenworld.com immediately.