EAORC BULLETIN 741 – 27 August 2017

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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.

SAPIENS – Primate Vocalizations Are Much More Than Gibberish

Nonhuman primates clearly do more than just screech meaningless sounds at each other, but what are the limits of their communication?

https://www.sapiens.org/language/primate-
vocalizations/?utm_source=SAPIENS.org+Subscribers&utm_campaign=a26ca4d511-
Email+Blast+8.25.2017&utm_medium=email&utm_term=0_18b7e41cd8-a26ca4d511-201933693

ACADEMIA.EDU – Intersubjectivity and psychopathology

SHAUN GALLAGHER – Intersubjectivity and psychopathology

Psychiatrists and psychopathologists sometimes look to psychology, neuroscience, and/or philosophy of mind for concepts useful in understanding the specific pathologies with which they deal. In regard to intersubjectivity or social cognition, what they find when they look to current discussions in these fields, is, for the most part, an emphasis on theory of mind (ToM). ToM characterizes intersubjective relations in terms of the cognitive practice of mindreading (sometimes called mentalizing). There are two dominant models for ToM. The first, "theory theory" (TT), claims that one's understanding of the other person is a matter of theoretical inference to that person's mental states. That is, if one wants to understand another's behavior, one needs to infer the mental states (beliefs, desires, intentions, etc.) that may be motivating that behavior. Such inferences are based upon an appeal to a general and common sense theory of behavior and motivation—folk psychology. The second model, simulation theory (ST), claims that rather than appealing to folk psychological theory to understand others, we make use of our own mind by running a simulation routine. That is, we put ourselves in the other person's shoes and ask what we would do in their circumstances. We simulate a set of beliefs and desires, specifically pretend or "as if" beliefs and desires that would explain the observed behavior, and then project these into the mind of the other person.

https://mg.mail.yahoo.com/neo/launch?.partner=bt-1&.rand=dmba6lsgd07h8

ACADEMIA.EDU – Space Competition and Time Delays in Human Range Expansions

NEUS ISERN, JOAQUIM FORT & MARC VANDER LINDEN – Space Competition and Time Delays in Human Range Expansions. Application to the Neolithic Transition

Space competition effects are well-known in many microbiological and ecological systems. Here we analyze such an effect in human populations. The Neolithic transition (change from foraging to farming) was mainly the outcome of a demographic process that spread gradually throughout Europe from the Near East. In Northern Europe, archaeological data show a slowdown on the Neolithic rate of spread that can be related to a high indigenous (Mesolithic) population density hindering the advance as a result of the space competition between the two populations. We measure this slowdown from a database of 902 Early Neolithic sites and develop a time-delayed reaction-diffusion model with space competition between Neolithic and Mesolithic populations, to predict the observed speeds. The comparison of the predicted speed with the observations and with a previous non-delayed model show that both effects, the time delay effect due to the generation lag and the space competition between populations, are crucial in order to understand the observations.

https://www.academia.edu/2284159/Space_Competition_and_Time_Delays_in_Human_Range_Expansions

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ACADEMIA.EDU – Mechanistic View of Human Nature Reduces Retribution

AZIM F. SHARIFF et al with ROY F. BAUMEISTER & KATHLEEN D. VOHS – Free Will and Punishment: A Mechanistic View of Human Nature Reduces Retribution

If free-will beliefs support attributions of moral responsibility, then reducing these beliefs should make people less retributive in their attitudes about punishment. Four studies tested this prediction using both measured and manipulated free-will beliefs. Study 1 found that people with weaker free-will beliefs endorsed less retributive, but not consequentialist, attitudes regarding punishment of criminals. Subsequent studies showed that learning about the neural bases of human behavior, through either lab-based manipulations or attendance at an undergraduate neuroscience course, reduced people's support

for retributive punishment (Studies 2–4). These results illustrate that exposure to debates about free will and to scientific research on the neural basis of behavior may have consequences for attributions of moral responsibility
https://www.academia.edu/34103482/Free_Will_and_Punishment_A_Mechanistic_View_of_Human_Nature_Reduces_Retribution

ACADEMIA.EDU – A higher-order theory of emotional consciousness

JOSEPH E. LEDOUX & RICHARD BROWN – A higher-order theory of emotional consciousness

Emotional states of consciousness, or what are typically called emotional feelings, are traditionally viewed as being innately programmed in subcortical areas of the brain, and are often treated as different from cognitive states of consciousness, such as those related to the perception of external stimuli. We argue that conscious experiences, regardless of their content, arise from one system in the brain. In this view, what differs in emotional and nonemotional states are the kinds of inputs that are processed by a general cortical network of cognition, a network essential for conscious experiences. Although subcortical circuits are not directly responsible for conscious feelings, they provide nonconscious inputs that coalesce with other kinds of neural signals in the cognitive assembly of conscious emotional experiences. In building the case for this proposal, we defend a modified version of what is known as the higher-order theory of consciousness.
https://www.academia.edu/34303140/A_higher-order_theory_of_emotional_consciousness?auto=download&campaign=weekly_digest

PUBLICATIONS

New Scientist

ARTICLES

COLIN BARRAS – Who are you? How the story of human origins is being rewritten

The past 15 years have called into question every assumption about who we are and where we came from. Turns out our evolution is more baffling than we thought.
https://www.newscientist.com/article/mg23531400-500-who-are-you-how-the-story-of-human-origins-is-being-rewritten/?cmpid=NLC%7CNSNS%7C2017-2408-GLOBAL&utm_medium=NLC&utm_source=NSNS

Nature

ARTICLES

KEVIN N. LALAND – Obituary: Patrick Bateson (1938–2017)

Rarely a day goes by without extravagant claims being made about whether some human characteristic — be it intelligence, violence or sporting prowess — is explained by genes or environment, biology or upbringing, 'nature or nurture'. Patrick Bateson exposed the folly of such false dichotomies. In a 50-year career, he made seminal contributions to almost every topic in the science of animal behaviour, becoming a leading authority on behavioural development.
http://www.nature.com/nature/journal/v548/n7668/full/548394a.html?WT.ec_id=NATURE-20170824&spMailingID=54768018&spUserID=MjA1NTkxNTc2NAS2&spJobID=1224039369&spReportId=MTIyNDAzOTM2OQS2

Nature Communications

PAPERS

CHRISTINE E. WEBB et al with FRANS B. M. DE WAAL – Long-term consistency in chimpanzee consolation behaviour reflects empathetic personalities

In contrast to a wealth of human studies, little is known about the ontogeny and consistency of empathy-related capacities in other species. Consolation—post-conflict affiliation from uninvolved bystanders to distressed others—is a suggested marker of empathetic concern in non-human animals. Using longitudinal data comprising nearly a decade of observations on over 3000 conflict interactions in 44 chimpanzees (Pan troglodytes), we provide evidence for relatively stable individual differences in consolation behaviour. Across development, individuals consistently differ from one another in this trait, with higher consolatory tendencies predicting better social integration, a sign of social competence. Further, similar to recent results in other ape species, but in contrast to many human self-reported findings, older chimpanzees are less likely to console than are younger individuals. Overall, given the link between consolation and empathy, these findings help elucidate the development of individual socio-cognitive and -emotional abilities in one of our closest relatives.
https://www.nature.com/articles/s41467-017-00360-7?WT.ec_id=NCOMMS-20170823&spMailingID=54774159&spUserID=MTA5NjM3MTAyODYxS0&spJobID=1224187019&spReportId=MTIyNDE4NzAxOQS2

ARTICLES

HEIDE CASTAÑEDA – Migration is part of the human experience but is far from natural

Although migration has always been part of human behaviour, it isn't natural; rather, it is a necessary response to various forms of violence and adversity.

https://www.nature.com/articles/s41562-017-0147

MORTEN H. CHRISTIANSEN & NICK CHATER – Towards an integrated science of language

It has long been assumed that grammar is a system of abstract rules, that the world's languages follow universal patterns, and that we are born with a 'language instinct'. But an alternative paradigm that focuses on how we learn and use language is emerging, overturning these assumptions and many more.

https://www.nature.com/articles/s41562-017-0163

ADAM BEAR & DAVID G. RAND – Evolution: The value of information

Modelling and experiments have shown that strategic information can undermine 'altruistic' cooperation. Using a model that varies the distribution of costs for finding out, it is now shown that information can also promote self-interested 'strategic' cooperation.

https://www.nature.com/articles/s41562-017-0156

ADAM B. COHEN & JORDAN W. MOON – Psychology: Atheism and moral intuitions

How robust is the perceived association between immorality and atheism? Studies across 13 countries demonstrate that immoral behaviour is intuitively associated with atheism: people routinely assume that an immoral person is likely to be an atheist, and this effect is consistent across a wide range of societies, though with notable variation.

https://www.nature.com/articles/s41562-017-0157

ROGIER A. KIEVIT – Cognitive neuroscience: More is different

Combining numerical information on-the-fly is crucial for making advantageous decisions, but precisely how humans are able to track and compare magnitudes is unclear. Experiments now suggest that when it comes to performing such tasks, not all numbers are created equal.

https://www.nature.com/articles/s41562-017-0162

PAPERS

STEPHAN JAGAU & MATTHIJS VAN VEELEN – A general evolutionary framework for the role of intuition and deliberation in cooperation

In the experimental and theoretical literature on social heuristics, the case has been made for dual-process cooperation. Empirical evidence is thought to be consistent with the idea that people tend to be nice before thinking twice. A recent theoretical paper moreover suggests that this is also the type of dual process one would expect from evolution. In 'Intuition, deliberation, and the evolution of cooperation' by Bear and Rand[1], natural selection never favours agents who use deliberation to override the impulse to defect, while deliberation can be favoured if it serves to undermine cooperation in interactions without future repercussions. Here we show that this conclusion depends on a seemingly innocuous assumption about the distribution of the costs of deliberation, and that with different distributions, dual-process defectors can also evolve. Dual-process defectors intuitively defect, but use deliberation to switch to cooperation when it is in their self-interest to do so (that is, when future repercussions exist). The more general model also shows that there is a variety of strategies that combine intuition and deliberation with Bayesian learning and strategic ignorance. Our results thereby unify and generalize findings from different, seemingly unrelated parts of the literature.

https://www.nature.com/articles/s41562-017-0152

WILL M. GERVAIS et al – Global evidence of extreme intuitive moral prejudice against atheists

Mounting evidence supports long-standing claims that religions can extend cooperative networks. However, religious prosociality may have a strongly parochial component. Moreover, aspects of religion may promote or exacerbate conflict with those outside a given religious group, promoting regional violence, intergroup conflict and tacit prejudice against non-believers. Anti-atheist prejudice—a growing concern in increasingly secular societies —affects employment, elections, family life and broader social inclusion. Preliminary work in the United States suggests that anti-atheist prejudice stems, in part, from deeply rooted intuitions about religion's putatively necessary role in morality. However, the cross-cultural prevalence and magnitude—as well as intracultural demographic stability—of such intuitions, as manifested in intuitive associations of immorality with atheists, remain unclear. Here, we quantify moral distrust of atheists by applying well-tested measures in a large global sample (N = 3,256; 13 diverse countries). Consistent with cultural evolutionary theories of religion and morality, people in most—but not all— of these countries viewed extreme moral violations as representative of atheists. Notably, anti-atheist prejudice was even evident among atheist participants around the world. The results contrast with recent polls that do not find self-reported moral prejudice against atheists in highly secular countries, and imply that the recent rise in

secularism in Western countries has not overwritten intuitive anti-atheist prejudice. Entrenched moral suspicion of atheists suggests that religion's powerful influence on moral judgements persists, even among non-believers in secular societies.
https://www.nature.com/articles/s41562-017-0151

PLoS One

PAPERS

NICOLAS ROBINSON-GARCIA et al – The unbearable emptiness of tweeting—About journal articles

Enthusiasm for using Twitter as a source of data in the social sciences extends to measuring the impact of research with Twitter data being a key component in the new altmetrics approach. In this paper, we examine tweets containing links to research articles in the field of dentistry to assess the extent to which tweeting about scientific papers signifies engagement with, attention to, or consumption of scientific literature. The main goal is to better comprehend the role Twitter plays in scholarly communication and the potential value of tweet counts as traces of broader engagement with scientific literature. In particular, the pattern of tweeting to the top ten most tweeted scientific dental articles and of tweeting by accounts is examined. The ideal that tweeting about scholarly articles represents curating and informing about state-of-the-art appears not to be realized in practice. We see much presumably human tweeting almost entirely mechanical and devoid of original thought, no evidence of conversation, tweets generated by monomania, duplicate tweeting from many accounts under centralized professional management and tweets generated by bots. Some accounts exemplify the ideal, but they represent less than 10% of tweets. Therefore, any conclusions drawn from twitter data is swamped by the mechanical nature of the bulk of tweeting behavior. In light of these results, we discuss the compatibility of Twitter with the research enterprise as well as some of the financial incentives behind these patterns.
{Included because it supports my prejudices and will receive a lot of citations by me in an I-told-you-so role.}
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183551

MARK C. LONG & ELEANOR KRAUSE – Altruism by age and social proximity

This study evaluates the extent to which an individual's stated altruistic sentiments can be influenced by context–most importantly, by the age and social proximity of the other person and by the nature of what is being sacrificed. We measure willingness to sacrifice own health for another person's health and willingness to sacrifice own wealth for another person's wealth. To evaluate these sentiments, two surveys were administered to representative samples of Americans which contained hypothetical scenarios with context randomly assigned; the first survey posed a dictator game question and the second survey was designed to elicit marginal rates of substitution between own and other's health/wealth. As expected, we find less altruism towards those who are more socially distant (e.g., strangers relative to family). We find individuals are more health altruistic towards young children and more wealth altruistic towards adults, and health altruism tends to be lowest for survey respondents near retirement age. We find no relationship between levels of altruism and the distance between the respondent's state of birth and state of current residence. These findings improve society's understanding of situational altruism and kinship and reciprocity as motivations for altruism, and they have practical implications concerning the economic valuation of human lives used to guide public policy-making.
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0180411

YE YUAN et al – Analysis of topological relationships and network properties in the interactions of human beings

In the animal world, various kinds of collective motions have been found and proven to be efficient ways of carrying out some activities such as searching for food and avoiding predators. Many scholars research the interactions of collective behaviors of human beings according to the rules of collective behaviors of animals. Based on the Lennard-Jones potential function and a self-organization process, our paper proposes a topological communication model to simulate the collective behaviors of human beings. In the results of simulations, we find various types of collective behavior and fission behavior and discover the threshold for the emergence of collective behavior, which is the range five to seven for the number of topology K. According to the analysis of network properties of the model, the in-degree of individuals is always equal to the number of topology. In the stable state, the out-degrees of individuals distribute around the value of the number of topology K, except that the out-degree of a single individual is approximately double the out-degrees of the other individuals. In addition, under different initial conditions, some features of different kinds of networks emerge from the model. We also find the leader and herd mentality effects in the characteristics of the behaviors of human beings in our model. Thus, this work could be used to discover how to promote the emergence of beneficial group behaviors and prevent the emergence of harmful behaviors.
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183686

SHIRI LEV-ARI – Talking to fewer people leads to having more malleable linguistic representations

We learn language from our social environment. In general, the more sources we have, the less informative each of them is, and the less weight we should assign it. If this is the case, people who interact with fewer others should be more susceptible to the influence of each of their interlocutors. This paper tests whether indeed people who interact with fewer other people have more malleable phonological representations. Using a perceptual learning paradigm, this paper shows that individuals who regularly interact with fewer others are more likely to change their boundary between /d/ and /t/ following exposure to an atypical speaker. It further shows that the effect of number of interlocutors is not due to differences in ability to learn the

speaker's speech patterns, but specific to likelihood of generalizing the learned pattern. These results have implications for both language learning and language change, as they suggest that individuals with smaller social networks might play an important role in propagating linguistic changes.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183593

LLUÍS BARCELÓ-COBLIJN et al – Netlang: A software for the linguistic analysis of corpora by means of complex networks

To date there is no software that directly connects the linguistic analysis of a conversation to a network program. Networks programs are able to extract statistical information from data basis with information about systems of interacting elements. Language has also been conceived and studied as a complex system. However, most proposals do not analyze language according to linguistic theory, but use instead computational systems that should save time at the price of leaving aside many crucial aspects for linguistic theory. Some approaches to network studies on language do apply precise linguistic analyses, made by a linguist. The problem until now has been the lack of interface between the analysis of a sentence and its integration into the network that could be managed by a linguist and that could save the analysis of any language. Previous works have used old software that was not created for these purposes and that often produced problems with some idiosyncrasies of the target language. The desired interface should be able to deal with the syntactic peculiarities of a particular language, the options of linguistic theory preferred by the user and the preservation of morpho-syntactic information (lexical categories and syntactic relations between items). Netlang is the first program able to do that. Recently, a new kind of linguistic analysis has been developed, which is able to extract a complexity pattern from the speaker's linguistic production which is depicted as a network where words are inside nodes, and these nodes connect each other by means of edges or links (the information inside the edge can be syntactic, semantic, etc.). The Netlang software has become the bridge between rough linguistic data and the network program. Netlang has integrated and improved the functions of programs used in the past, namely the DGA annotator and two scripts (ToXML.pl and Xml2Pairs.py) used for transforming and pruning data. Netlang allows the researcher to make accurate linguistic analysis by means of syntactic dependency relations between words, while tracking record of the nature of such syntactic relationships (subject, object, etc). The Netlang software is presented as a new tool that solve many problems detected in the past. The most important improvement is that Netlang integrates three past applications into one program, and is able to produce a series of file formats that can be read by a network program. Through the Netlang software, the linguistic network analysis based on syntactic analyses, characterized for its low cost and the completely non-invasive procedure aims to evolve into a sufficiently fine grained tool for clinical diagnosis in potential cases of language disorders.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0181341

TUONG-VAN VU et al – Do individualism and collectivism on three levels (country, individual, and situation) influence theory-of-mind efficiency? A cross-country study

This study investigated whether individualism and collectivism (IC) at country, individual, and situational level influence how quickly and accurately people can infer mental states (i.e. theory of mind, or ToM), indexed by accuracy and reaction time in a ToM task. We hypothesized that collectivism (having an interdependent self and valuing group concerns), compared to individualism (having an independent self and valuing personal concerns), is associated with greater accuracy and speed in recognizing and understanding the thoughts and feelings of others. Students (N = 207) from individualism-representative (the Netherlands) and collectivism-representative (Vietnam) countries (Country IC) answered an individualism-collectivism questionnaire (Individual IC) and were randomly assigned to an individualism-primed, collectivism-primed, or no-prime task (Situational IC) before performing a ToM task. The data showed vast differences between the Dutch and Vietnamese groups that might not be attributable to experimental manipulation. Therefore, we analyzed the data for the groups separately and found that Individual IC did not predict ToM accuracy or reaction time performance. Regarding Situational IC, when primed with individualism, the accuracy performance of Vietnamese participants in affective ToM trials decreased compared to when primed with collectivism and when no prime was used. However, an interesting pattern emerged: Dutch participants were least accurate in affective ToM trials, while Vietnamese participants were quickest in affective ToM trials. Our research also highlights a dilemma faced by cross-cultural researchers who use hard-to-reach populations but face the challenge of disentangling experimental effects from biases that might emerge due to an interaction between cultural differences and experimental settings. We propose suggestions for overcoming such challenges.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0183011

JULIAN ZUBEK et al – Social adaptation in multi-agent model of linguistic categorization is affected by network information flow

This paper explores how information flow properties of a network affect the formation of categories shared between individuals, who are communicating through that network. Our work is based on the established multi-agent model of the emergence of linguistic categories grounded in external environment. We study how network information propagation efficiency and the direction of information flow affect categorization by performing simulations with idealized network topologies optimizing certain network centrality measures. We measure dynamic social adaptation when either network topology or environment is subject to change during the experiment, and the system has to adapt to new conditions. We find that both decentralized network topology efficient in information propagation and the presence of central authority

(information flow from the center to peripheries) are beneficial for the formation of global agreement between agents. Systems with central authority cope well with network topology change, but are less robust in the case of environment change. These findings help to understand which network properties affect processes of social adaptation. They are important to inform the debate on the advantages and disadvantages of centralized systems.
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0182490

Scientific American Mind

ARTICLES

ALISON GOPNIK – An AI That Knows the World Like Children Do

How do young children know what they know? That question has long preoccupied philosophers and psychologists—and now computer scientists. Specialists in artificial intelligence are studying the mental reasoning powers of preschoolers to develop ways to teach machines about the world. Two rival machine-learning strategies—both halting attempts to mimic what children do naturally—have begun to transform AI as a discipline.
http://www.nature.com/scientificamericanmind/journal/v28/n5/full/scientificamericanmind0917-21.html?WT.ec_id=SCIENTIFICAMERICANMIND-201709&spMailingID=54750139&spUserID=MjQ1ODIzOTc2NTA2S0&spJobID=1223647293&spReportId=MTIyMzY0NzI5MwS2

SEBASTIAN DIEGUEZ – Post-Truth: The Dark Side of the Brain

Many political leaders have recently taken to making fanciful statements. These assertions combine with the mass of false information circulating on the Internet and influence public opinion. People no longer seem to care about objective reality. We have gotten to the point where experts now refer to the era of post-truth. Although "truth" is discussed all the time, it has never had as little currency as it does now. Researchers explain this development as the product of our ancestral brain encountering modern individualism and new technologies. Studies show that what we find interesting about information is not so much its veracity as the social prestige it brings, especially on social networks. The phenomenon is difficult to control because it is armed with formidable mechanisms of self-defense. But fact-checking and education in critical thinking initiatives must continue to develop. We may also need to rehabilitate fiction, emphasizing its capacity to give us pleasure without needing to make it into reality.
http://www.nature.com/scientificamericanmind/journal/v28/n5/full/scientificamericanmind0917-43.html?WT.ec_id=SCIENTIFICAMERICANMIND-201709&spMailingID=54750139&spUserID=MjQ1ODIzOTc2NTA2S0&spJobID=1223647293&spReportId=MTIyMzY0NzI5MwS2

Quarterly Review of Biology

REVIEWS

CAREL P. VAN SCHAIK – Evolution

Review of 'Human Evolution: Our Brains and Behavior' by Robin Dunbar.
http://www.journals.uchicago.edu/doi/abs/10.1086/693598

MICHAEL D. D'EMIC – Paleontology

Review of 'Origins: The Search for Our Prehistoric Past' by Frank H. T. Rhodes.
http://www.journals.uchicago.edu/doi/abs/10.1086/693584

MICHAEL RUSE – Evolution

Review of 'Costly and Cute: Helpless Infants and Human Evolution' edited Wenda R. Trevathan and Karen R. Rosenberg.
http://www.journals.uchicago.edu/doi/abs/10.1086/693600

American Journal of Physical Anthropology

PAPERS

NICHOLAS B. HOLOWKA et al – Chimpanzee ankle and foot joint kinematics: Arboreal versus terrestrial locomotion

Many aspects of chimpanzee ankle and midfoot joint morphology are believed to reflect adaptations for arboreal locomotion. However, terrestrial travel also constitutes a significant component of chimpanzee locomotion, complicating functional interpretations of chimpanzee and fossil hominin foot morphology. Here we tested hypotheses of foot motion and, in keeping with general assumptions, we predicted that chimpanzees would use greater ankle and midfoot joint ranges of motion during travel on arboreal supports than on the ground.
Chimpanzees used relatively high ankle joint dorsiflexion angles during all three locomotor modes, although dorsiflexion was greatest in arboreal modes. They used higher subtalar joint coronal plane ranges of motion during terrestrial and arboreal quadrupedalism than during climbing, due in part to their use of high eversion angles in the former. Finally, they used high midfoot inversion angles during arboreal locomotor modes, but used similar midfoot sagittal plane kinematics across all locomotor modes.

The results indicate that chimpanzees use large ranges of motion at their various ankle and midfoot joints during both terrestrial and arboreal locomotion. Therefore, we argue that chimpanzee foot anatomy enables a versatile locomotor repertoire, and urge caution when using foot joint morphology to reconstruct arboreal behavior in fossil hominins.
http://onlinelibrary.wiley.com/doi/10.1002/ajpa.23262/abstract?campaign=woletoc

IAN TOWLE, JOEL D. IRISH & ISABELLE DE GROOTE – Behavioral inferences from the high levels of dental chipping in Homo naledi

With 44% of teeth affected, H. naledi exhibits far higher rates of chipping than the other fossil hominin samples. Specifically, 50% of posterior teeth and 31% of anterior teeth display at least one chip. The maxillary teeth are more affected than the mandibular teeth (45% vs 43%, respectively), 73% of molar chipping occurs on interproximal surfaces, and right teeth are more often affected than left teeth (50% vs 38%).
Results indicate that the teeth of H. naledi were exposed to acute trauma on a regular basis. Because interproximal areas are more affected than buccal and posterior teeth more than anterior, it is unlikely that nonmasticatory cultural behavior was the cause. A diet containing hard and resistant food, or contaminants such as grit, is more likely. The small chip size, and steep occlusal wear and cupped dentine on some molars are supportive of the latter possibility. This pattern of chipping suggests that H. naledi differed considerably—in terms of diet, environment, and/or specialized masticatory processing—relative to other African fossil hominins.
http://onlinelibrary.wiley.com/doi/10.1002/ajpa.23250/abstract?campaign=woletoc

MICHEL TOUSSAINT et al – The Late Neandertal permanent lower left third premolar from Walou Cave (Trooz, Belgium) and its context

The Walou P3 plots within the Neandertal range of variation and is significantly different from recent modern humans in all morphometric assessments. The isotope data showed that like other Neandertals, the Walou individual acquired its dietary proteins primarily from terrestrial food sources.
http://onlinelibrary.wiley.com/doi/10.1002/ajpa.23252/abstract?campaign=woletoc

M VIDAL-CORDASCO et al – Energetic cost of walking in fossil hominins

We show that a broader false pelvis is substantially more efficient for locomotion than a narrower one and that the influence of false pelvis width on the energetic cost is similar to the influence of leg length. Two models integrating body mass, femur length and bi-iliac breadth are used to estimate the net and gross energetic costs of locomotion in a number of extinct hominins. The results presented here show that the locomotion of Homo was not energetically more efficient than that of Australopithecus and that the locomotion of extinct Homo species was not less efficient than that of modern Homo sapiens. The changes in the anatomy of the pelvis and lower limb observed with the appearance of Homo ergaster probably did not fully offset the increased expenditure resulting from a larger body mass. Moreover, the narrow pelvis in modern humans does not contribute to greater efficiency of locomotion.
http://onlinelibrary.wiley.com/doi/10.1002/ajpa.23301/abstract?campaign=wolearlyview