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## NOTICES

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### 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.

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### SCIENCE NEWS – Study finds some significant differences in brains of men and women

Do the anatomical differences between men and women—sex organs, facial hair, and the like—extend to our brains? The question has been as difficult to answer as it has been controversial. Now, the largest brain-imaging study of its kind indeed finds some sex-specific patterns, but overall more similarities than differences. The work raises new questions about how brain differences between the sexes may influence intelligence and behavior.

[http://www.sciencemag.org/news/2017/04/study-finds-significant-differences-brains-men-and-women?utm\\_campaign=news\\_daily\\_2017-04-11&et rid=17774313&et\\_cid=1268564](http://www.sciencemag.org/news/2017/04/study-finds-significant-differences-brains-men-and-women?utm_campaign=news_daily_2017-04-11&et rid=17774313&et_cid=1268564)

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### SCIENCE DAILY – Prehistoric alpine farming in the Bernese Oberland

The people in Switzerland were on the move in the High Alps and running alpine pastures 7,000 years ago and therefore much earlier than previously assumed. A study that combines archaeological knowledge with findings from palaeoecology comes to this conclusion. Prehistoric finds from the Schnidejoch Pass played a crucial part in this.

<https://www.sciencedaily.com/releases/2017/04/170406152313.htm>

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### SCIENCE DAILY – Scientists make strides explaining how we discern language

Perhaps you have been thinking of taking a foreign language course and are undecided whether to take an evening or morning class. Adding to your indecision: You are concerned about your ability to understand someone speaking another language. That and other findings draw on big strides in a cross-disciplinary effort that is currently advancing understanding of how people derive meaning from sounds.

<https://www.sciencedaily.com/releases/2017/04/170410155003.htm>

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### SCIENCE DAILY – Brain stimulation influences honest behavior

The brain mechanism that governs decisions between honesty and self-interest has been identified by scientists. Using non-invasive brain stimulation, they could even increase honest behavior, outlines a new report.

<https://www.sciencedaily.com/releases/2017/04/170410154808.htm>

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### SCIENCE DAILY – Elephants' 'body awareness' adds to increasing evidence of their intelligence

Asian elephants are able to recognize their bodies as obstacles to success in problem-solving, further strengthening evidence of their intelligence and self-awareness, according to a new study.

<https://www.sciencedaily.com/releases/2017/04/170412085345.htm>

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### SCIENCE DAILY – Biased bots: Human prejudices sneak into artificial intelligence systems

In debates over the future of artificial intelligence, many experts think of the new systems as coldly logical and objectively rational. But in a new study, researchers have demonstrated how machines can be reflections of us, their creators, in potentially problematic ways.

<https://www.sciencedaily.com/releases/2017/04/170413141055.htm>

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### SCIENCE DAILY – World's most spoken language is 'Terpene'

If you're small, smells are a good way to stand out. A team of researchers has demonstrated for the first time that two different types of micro-organisms -- bacteria and fungi -- use fragrances, known as terpenes, to hold conversations. And that's not all. The researchers suggest that terpenes are the most popular chemical medium on our planet to communicate through.

<https://www.sciencedaily.com/releases/2017/04/170413190718.htm>

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### SAPIENS – The Lost City That's Not Lost, Not a City, and Doesn't Need to Be Discovered

Modern explorers can fly over a jungle to “discover” an ancient site, but the people living in those rainforests already have extensive knowledge about their region's history. Here's why researchers should work with residents — not over them.

[http://www.sapiens.org/archaeology/la-ciudad-blanca-indigenous-collaboration/?utm\\_source=SAPIENS.org+Subscribers&utm\\_campaign=8896543790-Email+Blast+4.14.17&utm\\_medium=email&utm\\_term=0\\_18b7e41cd8-8896543790-201933693](http://www.sapiens.org/archaeology/la-ciudad-blanca-indigenous-collaboration/?utm_source=SAPIENS.org+Subscribers&utm_campaign=8896543790-Email+Blast+4.14.17&utm_medium=email&utm_term=0_18b7e41cd8-8896543790-201933693)

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## OTHER NEWS – Engels, Neanderthals and the origins of the family

### MIKE BEAKEN – Engels, Neanderthals and the origins of the family

Karl Marx and Friedrich Engels both took a great interest in early human history and prehistory, and it was Marx's notes on Lewis Henry Morgan's *Ancient Society* that prompted Engels to produce *The Origin of the Family, Private Property and the State* in 1884, a year after Marx's death. It is still important today for socialists to consider questions of the origins of human life and human society. Our rulers are all too ready to assert that human beings are innately greedy and violent, and that society's inequalities and injustices are in some way natural, and have been an essential feature of human life from its very beginnings. To be a socialist is to oppose such views, and that is why it is important to study alternatives to our modern way of life in the history and prehistory of our species. Engels suggested that the modern human family—in particular in the way it subjugates women—is in many ways an aberration, and that earlier forms of the family saw women enjoying much greater freedom and equality with men.

<http://isj.org.uk/engels-neanderthals-and-the-origins-of-the-family/>

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## PUBLICATIONS

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### Science

#### PAPERS

#### AYLIN CALISKAN, JOANNA J. BRYSON & ARVIND NARAYANAN – Semantics derived automatically from language corpora contain human-like biases

Machine learning is a means to derive artificial intelligence by discovering patterns in existing data. Here, we show that applying machine learning to ordinary human language results in human-like semantic biases. We replicated a spectrum of known biases, as measured by the Implicit Association Test, using a widely used, purely statistical machine-learning model trained on a standard corpus of text from the World Wide Web. Our results indicate that text corpora contain recoverable and accurate imprints of our historic biases, whether morally neutral as toward insects or flowers, problematic as toward race or gender, or even simply veridical, reflecting the status quo distribution of gender with respect to careers or first names. Our methods hold promise for identifying and addressing sources of bias in culture, including technology.

<http://science.sciencemag.org/content/356/6334/183>

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### Nature

#### PAPERS

#### RAY TOBLER et al – Aboriginal mitogenomes reveal 50,000 years of regionalism in Australia

Aboriginal Australians represent one of the longest continuous cultural complexes known. Archaeological evidence indicates that Australia and New Guinea were initially settled approximately 50 thousand years ago (ka); however, little is known about the processes underlying the enormous linguistic and phenotypic diversity within Australia. Here we report 111 mitochondrial genomes (mitogenomes) from historical Aboriginal Australian hair samples, whose origins enable us to reconstruct Australian phylogeographic history before European settlement. Marked geographic patterns and deep splits across the major mitochondrial haplogroups imply that the settlement of Australia comprised a single, rapid migration along the east and west coasts that reached southern Australia by 49–45 ka. After continent-wide colonization, strong regional patterns developed and these have survived despite substantial climatic and cultural change during the late Pleistocene and Holocene epochs. Remarkably, we find evidence for the continuous presence of populations in discrete geographic areas dating back to around 50 ka, in agreement with the notable Aboriginal Australian cultural attachment to their country.

<http://www.nature.com/nature/journal/v544/n7649/full/nature21416.html>

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## Nature Scientific Reports

#### PAPERS

#### ROMAIN LIGNEUL, ROMUALD GIRARD & JEAN-CLAUDE DREHER – Social brains and divides: the interplay between social dominance orientation and the neural sensitivity to hierarchical ranks

Ubiquitous in the animal kingdom, dominance hierarchies emerge through social competition and underlie the control of resources. Confronting the disruptive influence of socioeconomic inequalities, human populations tend to split into groups who legitimize existing dominance hierarchies and groups who condemn them. Here, we hypothesized that variations in the neural sensitivity to dominance ranks partly underpins this ideological split, as measured by the social dominance orientation scale (SDO). Following a competitive task used to induce dominance representations about three opponents (superior, equal and inferior), subjects were passively presented the faces of these opponents while undergoing fMRI. Analyses demonstrated that two key brain regions, the superior temporal sulcus (STS) and anterior dorsolateral prefrontal cortex (aDLPFC) were sensitive to social ranks. Confirming our hypothesis, the sensitivity of the right aDLPFC to social ranks correlated positively with the SDO scale, which is known to predict behaviors and political attitudes associated with the legitimization of dominance hierarchies. This study opens new perspectives for the neurosciences of political orientation and social dominance.

[http://www.nature.com/articles/srep45920?WT.ec\\_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2](http://www.nature.com/articles/srep45920?WT.ec_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2)

### **JAMES COLE – Assessing the calorific significance of episodes of human cannibalism in the Palaeolithic**

Episodes of Palaeolithic cannibalism have frequently been defined as ‘nutritional’ in nature, but with little empirical evidence to assess their dietary significance. This paper presents a nutritional template that offers a proxy calorie value for the human body. When applied to the Palaeolithic record, the template provides a framework for assessing the dietary value of prehistoric cannibalistic episodes compared to the faunal record. Results show that humans have a comparable nutritional value to those faunal species that match our typical body weight, but significantly lower than a range of fauna often found in association with anthropogenically modified hominin remains. This could suggest that the motivations behind hominin anthropophagy may not have been purely nutritionally motivated. It is proposed here that the comparatively low nutritional value of hominin cannibalism episodes support more socially or culturally driven narratives in the interpretation of Palaeolithic cannibalism.

[http://www.nature.com/articles/srep44707?WT.ec\\_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2](http://www.nature.com/articles/srep44707?WT.ec_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2)

### **KATIE M. WILLIAMS et al – Phenotypic and genotypic correlation between myopia and intelligence**

Myopia, or near-sightedness, is our most common eye condition and the prevalence is increasing globally. Visual impairment will occur if uncorrected, whilst high myopia causes sight-threatening complications. Myopia is associated with higher intelligence. As both are heritable, we set out to examine whether there is a genetic correlation between myopia and intelligence in over 1,500 subjects (aged 14–18 years) from a twin birth cohort. The phenotypic correlation between refractive error and intelligence was  $-0.116$  ( $p < 0.01$ ) - the inverse correlation due to the fact that myopia is a negative refractive error. Bivariate twin modeling confirmed both traits were heritable (refractive error 85%, intelligence 47%) and the genetic correlation was  $-0.143$  (95% CI  $-0.013$  to  $-0.273$ ). Of the small phenotypic correlation the majority (78%) was explained by genetic factors. Polygenic risk scores were constructed based on common genetic variants identified in previous genome-wide association studies of refractive error and intelligence. Genetic variants for intelligence and refractive error explain some of the reciprocal variance, suggesting genetic pleiotropy; in the best-fit model the polygenic score for intelligence explained 0.99% ( $p = 0.008$ ) of refractive error variance. These novel findings indicate shared genetic factors contribute significantly to the covariance between myopia and intelligence.

*{But have they merely proved the old adage, that reading is bad for the eyes?}*

[http://www.nature.com/articles/srep45977?WT.ec\\_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2](http://www.nature.com/articles/srep45977?WT.ec_id=SREP-20170411&spMailingID=53828186&spUserID=ODY4NjU1NzU3NQs2&spJobID=1141790208&spReportId=MTE0MTc5MDIwOAS2)

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## **PLoS One**

### **PAPERS**

#### **CHUAN HU et al – Disinhibition of negative true self for identity reconstructions in cyberspace: Advancing self-discrepancy theory for virtual setting**

In face-to-face communications, to avoid sanctions and disapproval from others, people are more likely to hide negative aspects of their true self (such as socially undesirable personalities, minds, beliefs and consciousness) to avoid conflict with social norms and laws. The anonymity of cyberspace provides people a unique environment to behave more freely and openly with less restraint from the real world. Existing research related to online true self expression has mainly explored true self as an independent aspect of self. Regarding true self as a two-dimensional concept, this study investigates true self from the perspective of individuals' self-guide and identity reconstruction in both online and offline world. Using qualitative research methods, the current study investigates 57 participants through interviews and questionnaires. Content analysis reveals four factors that motivate people to express more true self (especially negative true self) when reconstructing their online identity and involve true self as a part of their self-guide in anonymous environment. By incorporating true self as an important part of individuals' self-guide and identity online, the current study advances self-discrepancy theory, making it more comprehensive for cyberspace. The results are also interpreted based on self-determination theory. The theoretical contributions of this study are discussed and practical implications are also presented.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175623>

#### **FERNANDO P. SANTOS et al – Structural power and the evolution of collective fairness in social networks**

From work contracts and group buying platforms to political coalitions and international climate and economical summits, often individuals assemble in groups that must collectively reach decisions that may favor each part unequally. Here we quantify to which extent our network ties promote the evolution of collective fairness in group interactions, modeled by means of Multiplayer Ultimatum Games (MUG). We show that a single topological feature of social networks — which we call structural power — has a profound impact on the tendency of individuals to take decisions that favor each part equally. Increased fair outcomes are attained whenever structural power is high, such that the networks that tie individuals allow

them to meet the same partners in different groups, thus providing the opportunity to strongly influence each other. On the other hand, the absence of such close peer-influence relationships dismisses any positive effect created by the network. Interestingly, we show that increasing the structural power of a network leads to the appearance of well-defined modules—as found in human social networks that often exhibit community structure—providing an interaction environment that maximizes collective fairness.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175687>

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## PLOS Biology

### PAPERS

#### **NICOLAS GAUVRIT et al – Human behavioral complexity peaks at age 25**

Random Item Generation tasks (RIG) are commonly used to assess high cognitive abilities such as inhibition or sustained attention. They also draw upon our approximate sense of complexity. A detrimental effect of aging on pseudo-random productions has been demonstrated for some tasks, but little is as yet known about the developmental curve of cognitive complexity over the lifespan. We investigate the complexity trajectory across the lifespan of human responses to five common RIG tasks, using a large sample ( $n = 3429$ ). Our main finding is that the developmental curve of the estimated algorithmic complexity of responses is similar to what may be expected of a measure of higher cognitive abilities, with a performance peak around 25 and a decline starting around 60, suggesting that RIG tasks yield good estimates of such cognitive abilities. Our study illustrates that very short strings of, i.e., 10 items, are sufficient to have their complexity reliably estimated and to allow the documentation of an age-dependent decline in the approximate sense of complexity.

<http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1005408>

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## Frontiers in Psychology

### PAPERS

#### **MICHELLE SCALISE SUGIYAMA – Oral Storytelling as Evidence of Pedagogy in Forager Societies**

Teaching is reportedly rare in hunter-gatherer societies, raising the question of whether it is a species-typical trait in humans. A problem with past studies is that they tend to conceptualize teaching in terms of Western pedagogical practices. In contrast, this study proceeds from the premise that teaching requires the ostensive manifestation of generalizable knowledge: the teacher must signal intent to share information, indicate the intended recipient, and transmit knowledge that is applicable beyond the present context. Certain features of human communication appear to be ostensive in function (e.g., eye contact, pointing, contingency, prosodic variation), and collectively serve as “natural pedagogy.” Tellingly, oral storytelling in forager societies typically employs these and other ostensive behaviors, and is widely reported to be an important source of generalizable ecological and social knowledge. Despite this, oral storytelling has been conspicuously overlooked in studies of teaching in preliterate societies. Accordingly, this study presents evidence that oral storytelling involves the use of ostension and the transmission of generic knowledge, thereby meeting the criteria of pedagogy.

[http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00471/full?utm\\_source=F-AAE&utm\\_medium=EMLF&utm\\_campaign=MRK\\_243180\\_20170411\\_arts](http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00471/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_243180_20170411_arts)

#### **NEHA KHETRAPAL & ROSALIND THORNTON – C-Command in the Grammars of Children with High Functioning Autism**

A recent study questioned the adherence of children with Autism Spectrum Disorders (ASD) to a linguistic constraint on the use of reflexive pronouns (Principle A) in sentences like Bart's dad is touching himself. This led researchers to question whether children with ASD are able to compute the hierarchical structural relationship of c-command, and raised the possibility that the children rely on a linear strategy for reference assignment. The current study investigates the status of c-command in children with ASD by testing their interpretation of sentences like (1) and (2) that tease apart use of c-command and a linear strategy for reference assignment.

(1) The girl who stayed up late will not get a dime or a jewel (C-command)

(2) The girl who didn't go to sleep will get a dime or a jewel (Non C-command)

These examples both contain negation (not or didn't) and disjunction (or). In (1), negation c-commands the disjunction phrase, yielding a conjunctive entailment. This gives rise to the meaning that the girl who stayed up late won't get a dime and she won't get a jewel. In (2), negation is positioned inside a relative clause and it does not c-command disjunction. Therefore, no conjunctive entailment follows. Thus, (2) is true if the girl just gets a dime or just a jewel, or possibly both. If children with ASD lack c-command, then (1) will not give rise to a conjunctive entailment. In this case, children might rely on a linear strategy for reference assignment. Since negation precedes disjunction in both (1) and (2), they might be interpreted in a similar manner. Likewise, children who show knowledge of c-command should perform well on sentences governed by Principle A. These hypotheses were tested in experiments with 12 Australian children with HFA, aged 5;4 to 12;7, and 12 typically-developing controls, matched on non-verbal IQ. There was no significant difference in the pattern of responses by children with HFA and the control children on either (1) and (2) or the Principle A sentences. The findings provide preliminary support for the proposal that knowledge of c-command and Principle A is intact in HFA children.

[http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00402/full?utm\\_source=F-AAE&utm\\_medium=EMLF&utm\\_campaign=MRK\\_243180\\_20170411\\_arts](http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00402/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_243180_20170411_arts)

### **YUNA JHANG & D. KIMBROUGH OLLER – Emergence of Functional Flexibility in Infant Vocalizations of the First 3 Months**

Functional flexibility, as manifest in the use of any word or sentence to express different affective valences on different occasions, is required in linguistic communication and can be said to be an infrastructural property of language. Early infant vocalizations (protophones), believed to be precursors to speech, occur in the first month and are functionally different from non-speech-like signals (e.g., cries and laughs). Oller et al. (2013) showed that infants by 3 months used three different protophone types with a full range of affect as manifest in facial expression, from positive to neutral to negative. These differences in affect were also shown to correspond to different illocutionary functions, unlike fixed signals, or vegetative sounds, which showed functional rigidity. The present study investigated whether infants show functional flexibility in protophones even earlier than the ages studied by Oller et al. (2013). Data were obtained from 6 infants across the first 3 months. Results showed that as early as the first month, infant protophones were already accompanied by variable facial affect valences and continued to be affectively flexible at the later ages. The present study thus documents the very early emergence of an infrastructural property of human communication.

[http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00300/full?utm\\_source=F-AAE&utm\\_medium=EMLF&utm\\_campaign=MRK\\_243180\\_20170411\\_arts](http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00300/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_243180_20170411_arts)

### **NADEZHDA MODYANOVA, ALEXANDRA PEROVIC & KEN WEXLER – Grammar Is Differentially Impaired In Subgroups of Autism Spectrum Disorders: Evidence from an Investigation of Tense Marking and Morphosyntax**

Deficits in the production of verbal inflection (tense marking, or finiteness) are part of the Optional Infinitive (OI) stage of typical grammatical development. They are also a hallmark of language impairment: they have been used as biomarkers in guiding genetic studies of Specific Language Impairment (SLI), and have also been observed in autism spectrum disorders (ASD). To determine the detailed nature of finiteness abilities in subgroups of ASD [autism with impaired language (ALI) vs. autism with normal language (ALN)], we compared tense marking abilities in 46 children with ALI and 37 children with ALN with that of two groups of nonverbal mental age (MA) and verbal MA-matched typically developing (TD) controls, the first such study described in the literature. Our participants' performance on two elicited production tasks, probing third-person-singular -s and past tense -ed, from the Rice/Wexler Test of Early Grammatical Impairment (TEGI, Rice and Wexler, 2001), revealed extensive deficits in the ALI group: their ability to correctly mark tense was significantly worse than their much younger TD controls', and significantly worse than that of the ALN group. In contrast, the ALN group performed similarly to their TD controls. We found good knowledge of the meaning of tense, and of case and agreement, in both ASD groups. Similarly, both ASD groups showed distributions of null or overt subjects with nonfinite and finite verbs in line with those found in young TD children. A key difference, however, was that the ALI group used (rather than simply omitted) the wrong tense in some sentences, a feature not reported in the OI stage for TD or SLI children. Our results confirm a clear distinction in the morphosyntactic abilities of the two subgroups of children with ASD: the language system responsible for finiteness in the ALN group seems to be functioning comparably to that of the TD children, whereas the ALI group, despite showing knowledge of case and agreement, seems to experience an extensive grammatical deficit with respect to finiteness which does not seem to improve with age. Crucially, our ALI group seems to have worse grammatical abilities even than those reported for SLI.

[http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00320/full?utm\\_source=F-AAE&utm\\_medium=EMLF&utm\\_campaign=MRK\\_243180\\_20170411\\_arts](http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00320/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_243180_20170411_arts)

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## **Frontiers in Neuroscience**

### **PAPERS**

#### **PATRICK A. FORCELLI, HANNAH F. WAGUESPACK & LUDISE MALKOVA – Defensive Vocalizations and Motor Asymmetry Triggered by Disinhibition of the Periaqueductal Gray in Non-human Primates**

Rapid and reflexive responses to threats are present across phylogeny. The neural circuitry mediating reflexive defense reactions has been well-characterized in a variety of species, for example, in rodents and cats, the detection of and species-typical response to threats is mediated by a network of structures including the midbrain tectum (deep and intermediate layers of the superior colliculus [DLSC]), periaqueductal gray (PAG), and forebrain structures such as the amygdala and hypothalamus. However, relatively little is known about the functional architecture of defense circuitry in primates. We have previously reported that pharmacological activation of the DLSC evokes locomotor asymmetry, defense-associated vocalizations, cowering behavior, escape responses, and attack of inanimate objects (Holmes et al., 2012; DesJardin et al., 2013; Forcelli et al., 2016). Here, we sought to determine if pharmacological activation of the PAG would induce a similar profile of responses. We activated the PAG in three awake, behaving macaques by microinfusion of GABA-A receptor antagonist, bicuculline methiodide. Activation of PAG evoked defense-associated vocalizations and postural/locomotor asymmetry, but not motor defense responses (e.g., cowering, escape behavior). These data suggest a partial dissociation between the role of the PAG and the DLSC in the defense network of macaques, but a general conservation of the role of PAG in defense responses across species.

[http://journal.frontiersin.org/article/10.3389/fnins.2017.00163/full?utm\\_source=F-AAE&utm\\_medium=EMLF&utm\\_campaign=MRK\\_243180\\_20170411\\_arts](http://journal.frontiersin.org/article/10.3389/fnins.2017.00163/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_243180_20170411_arts)

**JUDITH LITTLETON – Dental wear and age grading at Roonka, South Australia**

In many hunter-gatherer populations, the teeth are used as a third hand or a tool. Much attention has been paid to wear and its relationship to gendered division of labor, but age is also a significant organizing factor in many societies. In this article, I analyze whether the pattern of wear at Roonka, Australia, reflects the age-graded acquisition of tasks.

The pattern of wear is consistent with ethnographic observations, which suggest a degree of latitude in the activities of juveniles and young adults. By middle age variability between individuals declines reflecting shared tasks and more intensive use of the teeth. The pattern of wear amongst old adults, however, is much flatter presumably due to changes in occlusion. While dental wear is informative about the organization of labor there is a need to take into account both patterns of activity and occlusion.

<http://onlinelibrary.wiley.com/doi/10.1002/ajpa.23226/abstract?campaign=wolearlyview>

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