

## References

### Aktuell

#### BECERRA-VALDIVIA 2018

Lorena Becerra-Valdivia et al., *Reassessing the chronology of the archaeological site of Anzick*. [PNAS 115 \(2018\), 7000–7003](#).

[pnas115-07000-Supplement.pdf](#)

Lorena Becerra-Valdivia, Michael R. Waters, Thomas W. Stafford Jr., Sarah L. Anzick, Daniel Comeskey, Thibaut Devière & Thomas Higham

Found in 1968, the archaeological site of Anzick, Montana, contains the only known Clovis burial. Here, the partial remains of a male infant, Anzick-1, were found in association with a Clovis assemblage of over 100 lithic and osseous artifacts—all red-stained with ochre. The incomplete, unstained cranium of an unassociated, geologically younger individual, Anzick-2, was also recovered. Previous chronometric work has shown an age difference between Anzick-1 and the Clovis assemblage (represented by dates from two antler rod samples). This discrepancy has led to much speculation, with some discounting Anzick-1 as Clovis. To resolve this issue, we present the results of a comprehensive radiocarbon dating program that utilized different pretreatment methods on osseous material from the site. Through this comparative approach, we obtained a robust chronometric dataset that suggests that Anzick-1 is temporally coeval with the dated antler rods. This implies that the individual is indeed temporally associated with the Clovis assemblage.

**Keywords:** AMS radiocarbon dating | First Americans | Clovis | Anzick | hydroxyproline

**Significance:** The site of Anzick contains the only known Clovis burial. As such, it presents a significant opportunity to explore biocultural processes attributed to a key prehistoric complex within First Americans research. Considering the site's uniqueness and the existing 14C age discrepancy between the human remains (Anzick-1) and the associated Clovis assemblage, obtaining robust chronometric data for this site is crucial. Through the use of different pretreatment methods, this investigation has yielded a comprehensive chronometric dataset that shows, most relevantly, that Anzick-1 is temporally coeval with the Clovis artifacts found at the site.

#### FISHER 2018

Aaron J. Fisher, John D. Medaglia & Bertus F. Jeronimus, *Lack of group-to-individual generalizability is a threat to human subjects research*. [PNAS 115 \(2018\), E6106–E6115](#).

[pnas115-E06106-Supplement.pdf](#)

Only for ergodic processes will inferences based on group-level data generalize to individual experience or behavior. Because human social and psychological processes typically have an individually variable and time-varying nature, they are unlikely to be ergodic. In this paper, six studies with a repeated-measure design were used for symmetric comparisons of interindividual and intraindividual variation. Our results delineate the potential scope and impact of nonergodic data in human subjects research. Analyses across six samples (with 87–94 participants

and an equal number of assessments per participant) showed some degree of agreement in central tendency estimates (mean) between groups and individuals across constructs and data collection paradigms. However, the variance around the expected value was two to four times larger within individuals than within groups. This suggests that literatures in social and medical sciences may overestimate the accuracy of aggregated statistical estimates. This observation could have serious consequences for how we understand the consistency between group and individual correlations, and the generalizability of conclusions between domains. Researchers should explicitly test for equivalence of processes at the individual and group level across the social and medical sciences.

**Keywords:** research methodology | replicability | idiographic science | generalizability | ecological fallacy

**Significance:** The current study quantified the degree to which group data are able to describe individual participants. We utilized intensive repeated-measures data—data that have been collected many times, across many individuals—to compare the distributions of bivariate correlations calculated within subjects vs. those calculated between subjects. Because the vast majority of social and medical science research aggregates across subjects, we aimed to assess how closely such aggregations reflect their constituent individuals. We provide evidence that conclusions drawn from aggregated data may be worryingly imprecise. Specifically, the variance in individuals is up to four times larger than in groups. These data call for a focus on idiography and open science that may substantially alter bestpractice guidelines in the medical and behavioral sciences.

## GARCIA 2018

David Garcia, Yonas Mitike Kassa, Angel Cuevas, Manuel Cebrian, Esteban Moro, Iyad Rahwan & Ruben Cuevas, *Analyzing gender inequality through large-scale Facebook advertising data*. [PNAS 115 \(2018\), 6958–6963](#).

[pnas115-06958-Supplement.pdf](#)

Online social media are information resources that can have a transformative power in society. While the Web was envisioned as an equalizing force that allows everyone to access information, the digital divide prevents large amounts of people from being present online. Online social media, in particular, are prone to gender inequality, an important issue given the link between social media use and employment. Understanding gender inequality in social media is a challenging task due to the necessity of data sources that can provide large-scale measurements across multiple countries. Here, we show how the Facebook Gender Divide (FGD), a metric based on aggregated statistics of more than 1.4 billion users in 217 countries, explains various aspects of worldwide gender inequality. Our analysis shows that the FGD encodes gender equality indices in education, health, and economic opportunity. We find gender differences in network externalities that suggest that using social media has an added value for women. Furthermore, we find that low values of the FGD are associated with increases in economic gender equality. Our results suggest that online social networks, while suffering evident gender imbalance, may lower the barriers that women have to access to informational resources and help to narrow the economic gender gap.

**Keywords:** gender divide | Facebook | social media | inequality | development

**Significance:** We present the Facebook Gender Divide, an inexpensive, realtime instrument for measuring gender differences in Facebook access and activity in 217 countries. The Facebook Gender Divide captures standard indicators of Internet penetration and gender equality indices in education, health, and economic opportunity. We find that the tendency of countries to approach economic gender

equality is negatively associated with a high Facebook Gender Divide. Our results suggest that online social networks, while suffering gender imbalance, may lower information access barriers for women and narrow the economic gender gap.

#### MARTYN 2018

R. E. V. Martyn, P. Garnsey, L. Fattore, P. Petrone, A. Sperduti, L. Bondioli & O. E. Craig, *Capturing Roman dietary variability in the catastrophic death assemblage at Herculaneum*. [Journal of Archaeological Science: Reports](#) **19** (2018), 1023–1029.

Here we present a comparative study of stable carbon (d13C) and nitrogen (d15N) isotope data from 81 individuals from the catastrophic death assemblage at Herculaneum (79 CE) and compare these with the attritional sites of Velia (Salerno, Italy, 1st–2nd century CE) and Isola Sacra (Rome, Italy, 1st–2nd century AD). The instantaneous deposition of the Herculaneum assemblage highlights some interesting differences in our contextual and methodological understanding of stable dietary isotopes, suggesting that isotopic variation between sites may sometimes be a result of greater temporal variability rather than truly comparable differences. Our results suggest that the people of Herculaneum obtained a relatively small proportion (ca. 30 %) of their dietary carbon from marine foods; the majority originating from terrestrial foodstuffs of a similar carbon isotopic composition, most likely cereals. Also observed is a generally greater dietary isotopic enrichment in male individuals than females. We infer that males had greater access to fish which may be reflective, in part, of the sociodemographic framework characteristic of Roman society. Finally, we highlight the methodological challenges which may be faced when undertaking comparisons of d13C and d15N data between the various age-related strata of a population, particularly due to the slow and variable rate of collagen turnover.

Keywords: Herculaneum | Stable isotopes | Palaeodiet | Vesuvius

#### MOROPOULOU 2018

A. Moropoulou, N. Zacharias, E. T. Delegou, M. Apostolopoulou, E. Palamara & A. Kolaiti, *OSL mortar dating to elucidate the construction history of the Tomb Chamber of the Holy Aedicule of the Holy Sepulchre in Jerusalem*. [Journal of Archaeological Science: Reports](#) **19** (2018), 80–91.

Optically Stimulated Luminescence (OSL) was applied on mortar samples, collected from the internal layers of the complex Holy Aedicule structure of the Holy Sepulchre in Jerusalem. OSL was accompanied by X-ray Fluorescence (XRF), Scanning Electron Microscopy with Energy Dispersion X-ray Analysis (SEM-EDS) and X-ray diffraction (XRD), and the resulted data provide new information regarding the construction evolution of the Tomb Chamber of the Holy Aedicule and the Holy Tomb. Four distinct chronological periods, based on the OSL dating, were produced corresponding to important construction and restoration phases of the 4th, 11th, 16th and 19th centuries. These correspond to the Constantinean era Aedicule, the Byzantine reconstruction (1034–1041 CE), the renaissance restoration by Boniface of Ragusa in 1555 and the reconstruction by the architect “Kalfas” Komnenos in 1810. The majority of the historical mortars were gypsum-based, regardless of their use in the structure and construction era, indicating continuity in production technology. Through this study the historical sequence of the Tomb Chamber evolution from the Constantinean era Aedicule to the Aedicule as it stands today is elucidated.

Keywords: Mortar | OSL | XRF | SEM-EDS | XRD | Holy Tomb

ZILKHA 2018

Noga Zilkha & Tali Kimchi, *Social isolation's molecular signature*. [nature](#) **559** (2018), 38–40.

Extended social isolation causes debilitating effects in social mammals such as humans. A study in mice shows that the gene *Tac2* is upregulated throughout the brains of socially isolated animals, driving massive behavioural changes.

Prolonged social isolation and loneliness can lead to many profound physiological and neuropsychiatric conditions, including depression and heart disease, and to increased mortality rates. Compared to control animals, isolated mice showed enhanced aggression and hypersensitivity to diverse stressful stimuli.

To our knowledge, *TAC3* has not yet been directly associated with sociality or social behaviour of any kind in humans. However, it is expressed in the human brain and has shown abnormal gene-expression levels in children with autism-spectrum disorder, which profoundly affects social interaction. The systemic manipulations presented in Zelikowsky and colleagues' paper could be rapidly applied to humans, because osanetant and other NkB inhibitors have already been tested in clinical trials. These drugs could potentially treat antisocial disorders induced by isolation, as well as mood and anxiety disorders.

## Anthropologie

FUENTES 2018

Agustin Fuentes, *How Humans and Apes Are Different, and Why It Matters*, *XLIV JAR Distinguished Lecture*. [Journal of Anthropological Research](#) **74** (2018), 151–167.

Humans are animals, mammals, primates, and hominoids, and thus we share extensive similarities with each of these groups, especially our closest cousins, the apes. But we are also hominins, specifically genus *Homo*, species *sapiens*. Understanding our evolutionary history is understanding both what we have in common with other primates and what happened over the past 7 to 10 million years since our divergence from the other African ape lineages. Or more specifically, what happened in the two-million-year history of our own genus. There is robust evidence that our lineage underwent significant changes in bodies, behavior, and ecologies across the Pleistocene, resulting in the development of a human niche. This essay outlines the deep similarities, and the critical differences, between humans and the apes and offers an anthropological and evolutionary explanation for why we should care.

Keywords: humans | hominins | Hominoidea | evolutionary discontinuities | human niche

## Anthropologie Biologie

HEINRICH 2018

Frits Heinrich & Paul Erdkamp, *The role of modern malnutrition in modelling Roman malnutrition, Aid or anachronism?* [Journal of Archaeological Science: Reports](#) **19** (2018), 1016–1022.

This paper shows how insights pertaining to modern malnutrition may be of use in modelling Roman malnutrition. It also points out some of the dangers and pitfalls of applying modern insights, data and a priori suppositions to the past. We approach this topic from two perspectives that challenge some of the implicit

and explicit assumptions regarding the similarities and dissimilarities between ancient and modern malnutrition. First we argue that a degree of malnutrition is part of the human condition and that economic growth may only limitedly remedy it. Indications of past malnutrition are therefore of limited value in judging economic performance. Secondly we show that the nutritional value of cereals has been underestimated by historians and archaeologists, especially in terms of trace element content (colloquially: ‘minerals’), while their role in the diet has been overestimated. Both aspects have undergone great changes during the Green Revolution of the mid-20th century due to dilution due to extreme yield increases and unforeseen side effects of genetic modification. As neither Roman nor any other pre-20th century cereals could have been subject to such changes, our view on the role of cereals in Roman diet and nutrition needs to be revised.

**Keywords:** Malnutrition | Cereal nutrition | Roman diet | Micronutrient deficiency | Wheat | Green Revolution

## Bibel

### CAMPBELL 2017

Lisa Campbell, *Khirbet Qeiyafa: A Philistine, Canaanite, Judahite, or Israelite City? unveröffentlichter Seminarvortrag, March 31, 2017.* ([Tel Aviv 2017](#)).

Khirbet Qeiyafa shows only three prominent periods of settlement after excavation of the site. The main period of inhabitation was during the late Iron I – Iron IIA based on pottery assemblages, 14C data, and site planning. Determining the inhabitants and territorial affiliation for Khirbet Qeiyafa has proven to be difficult. The probability of the site being a local Canaanite settlement which is proposed by Na’aman holds legitimacy; however, the territorial affiliation presented by Finkelstein and Fantalkin with the northern Israelite Kingdom also shows validity. It is possible the local Canaanite settlement chose to align themselves with the Northern Kingdom which was larger and more powerful to become fortified to protect themselves from the Philistines. The archaeological data contradicts the opinion of Garfinkel et al. that Khirbet Qeiyafa was a Judahite city and held a prominent place in the state formation process of Judah. Garfinkel et al. aligned their findings in order to match the biblical text. Their arguments in support of a Judahite city are to contrast it with the Philistines without the consideration of the local Canaanites material culture and the possibility of the Northern Kingdom’s size and influence.

### YOUNG 2018

Rodger C. Young, *Ussher Explained and Corrected.* [Bible and Spade 31 \(2018\), ii, 47–58.](#)

From the biblical data, Coucke derived the same basic principles that Thiele developed some years later without having read Coucke—coregencies and rival reigns, accession and non-accession years, Nisan regnal years for Israel and Tishri years for Judah, and a switch of Judah to nonaccession years in the ninth century BC. Coucke determined that the kingdom divided in the year beginning in Nisan of 931 BC, in exact agreement with Thiele’s date, although Coucke’s method of determining the date was radically different from Thiele’s. Coucke’s years for Solomon, one year earlier than Thiele’s, have been verified by their agreement with the Jubilee and Sabbatical cycles.<sup>21</sup> His date for the fall of Jerusalem to the Babylonians, summer of 587 BC, is in agreement with all the biblical texts involved,<sup>22</sup> in contrast to the dates of Thiele (586 BC) and Ussher (588 BC).

## Biologie

DOLGIN 2018

Elie Dolgin, *Longevity data hint at no natural limit on lifespan.* [nature 559 \(2018\), 14–15.](#)

Death rates plateau in elderly people, reviving a debate about how long humans can live.

## Judentum

LECKER 1995

Michael Lecker, *The conversion of Ḥimyar to Judaism and the Jewish Banū Ḥadl of Medina.* [Die Welt des Orients 26 \(1995\), 129–136.](#)

The abovementioned report, whatever its historical value, speaks explicitly of conversion to Judaism and not to some obscure form of monotheism.<sup>6</sup>)

6) The connection between Ḥimyar and Judaism was certainly much older; cf. H.Z. Hirschberg, *Yisra'el be-rarav*, Tel-Aviv 1946, 53f. (in Hebrew); idem, “Tombs of Himyarites in Beth Shearim”, in *Bulletin of the Jewish Palestine Exploration Society* 11 (1943-45), 25-34 (in Hebrew); F. Altheim and R. Stiehl, *Die Araber in der alten Welt*, III, Berlin 1966, 16f.; E. Ullendorff, “Hebraic-Jewish elements in Abyssinian (Monophysite) Christianity”, in *JSS*, 1 (1956), 219 f. Cf. on the report in question H.Z. Hirschberg, “The Jewish kingdom of Ḥimyar (Yemen)“, in Y. Yesha'yahu and Y. Tobi (eds.), *The Jews of Yemen*, Jerusalem 1975, 23 (in Hebrew); idem, “Arabic sources for the history of Jews in Arabia (I)“, 82 f. (in Hebrew).

ROBIN 2003

Christian Julien Robin, *Le judaïsme de Ḥimyar.* [Arabia 1 \(2003\), 97–172.](#)

Un judaïsme hétérodoxe?

La communauté juive du royaume himyarite est influente à partir du milieu du IV<sup>e</sup> siècle pour le moins, si l'on en croit les sources externes. Cette influence est confirmée par les inscriptions himyarites qui présentent un nombre important de termes empruntés à l'araméen — plus précisément au judéo-araméen — et accessoirement à l'hébreu.

Pourtant, le judaïsme himyarite, et plus généralement arabe, est totalement ignoré de la littérature rabbinique, comme nous l'avons dit.<sup>277</sup> En stras inverse, il est remarquable que les sources arabes (Coran, hadīth, poésie ou textes historiques) ne connaissent pas la Mishnah et le Talmud.<sup>278</sup> L'explication est-elle à rechercher dans une possible hétérodoxie? Il ne semble pas que ce soit le cas: les hagiographies syriaques relatives à la persécution de Najrân évoquent des relations étroites avec les rabbins de Tibériade.<sup>279</sup> Par ailleurs, le judaïsme yéménite médiéval est parfaitement orthodoxe. Enfin, il ne faut pas oublier le rôle majeur que les Traditionnistes yéménites (comme Wahb b. al-Munabbih ou Ka'b al-Ahbār) ont joué dans la transmission de légendes juives puisées notamment dans la Aggadāh (narrations destinées à l'édification religieuse).<sup>280</sup>

## Keramik

YALÇIN 2016

Ünsal Yalçın, *Beton vor 10.000 Jahren? Zu den neolithischen Fußböden von Aşıklı Höyük und Musular, Kappadokien.* In: ÜNSAL YALÇIN

(Hrsg.), *Anatolian Metal VII, Anatolien und seine Nachbarn vor 10.000 Jahren*. Der Anschnitt, Beiheft 31 ([Bochum 2016](#)), 99–114.

Die naturwissenschaftlichen Untersuchungen der Fußböden aus A<sup>3</sup>ýklý Höyük und Musular haben belegt, dass zur Herstellung der Mörtel Baukalk und Puzzolanerde verwendet wurde, welcher zementähnlichen Eigenschaften besaß und durchaus mit den heutigen modernen Betonarten vergleichbar ist. Es ist wichtig noch einmal anzumerken, dass Baukalk ein Produkt des pyrotechnischen Verfahrens ist. Damit ist der Beweis erbracht, dass in den neolithischen Kulturen pyrotechnische Verfahren, nämlich Kalbrennen, lange vor der Töpferei bekannt waren. Sie gehörten wahrscheinlich zu dem sogenannten “Neolithischen Paket” im gesamten Vorderen Orient.

Zusammenfassend können wir sagen, dass die ältesten bekannten Bodenbeläge in Anatolien und in der Levante auf Kalkbasis, im nördlichen Irak und Westiran auf Gipsbasis entstanden sind. Diese Böden aus Mörtel auf Kalkbasis oder Puzzolanbasis sind als Vorstufe zum opus caementitium anzusehen. Daraus resultiert der Schluss, dass der Beton keine “neue” Erfindung der Römer war. Seine Entdeckung geht auf das Neolithikum zurück. Das Handwerk der Betonherstellung gehörte zum festen Bestandteil der frühneolithischen Kulturen, die wahrscheinlich den Eliten vorbehalten war.

Polierte Fußböden in Sondergebäuden scheinen ein wichtiges Charakteristikum hauptsächlich der Siedlungen der späten PPNA- und frühen PPNB-Perioden zu sein. Die Tradition mit den polierten Böden wird in vielen frühneolithischen Siedlungen der späten PPNB und PN nicht mehr beobachtet. In einigen wenigen keramisch neolithischen Siedlungen in der Levante und in Zentral- und Westanatolien (vgl. Tabelle 1 und 2) findet diese Technik noch Anwendung. In den folgenden Kulturperioden scheint aber diese alte Tradition wieder zu verschwinden.

## Kupfer Energie

PICHLER 2018

Thomas Pichler, Kurt Nicolussi, Jona Schröder, Thomas Stöllner, Peter Thomas & Andrea Thurner, *Tree-ring analyses on Bronze Age mining timber from the Mitterberg Main Lode, Austria, Did the miners lack wood?* [Journal of Archaeological Science: Reports](#) **19** (2018), 701–711.

Wood was an essential raw material for mining maintenance in historic and prehistoric times. During the Bronze Age, the Mitterberg mining region in the Austrian Alps was one of the most important producers of copper and, consequently, a consumer of huge amounts of wood. Since the 1960s, archaeological investigations at the Troiboden dressing site at the Mitterberg main lode have uncovered mining timber both single finds as well as box-shaped wooden constructions like wet-tyes which were used to wash and concentrate crushed copper ore. Dendrochronological analyses on a set of mining timber yield calendar dates for these mining activities: a boom phase from the 14th to the 13th century BC, including two felling phases – one in the 1370s and a second from the 1290s to 1270s BC – are verifiable so far. As a result, the wood supply from nearby forests may have been exhausted rapidly, which is confirmed by palynological records from bogs in the vicinity of the excavation site. By utilising a tree-ring growth–elevation model developed by Dittmar et al. (2012), the elevations of growing sites were estimated to detect where the mining timber might have originated. To examine the model outcomes, we used tree-ring data with known origin, i.e., series from living trees and subfossil samples from the Troiboden and its vicinity. The results for the mining timber suggest that

the prehistoric miners utilised trees from the vicinity of the mining site in the 14th century but at least partly sought wood from growing sites at lower elevations to continue mining during the 13th century BC.

Keywords: Prehistoric copper mining | Wood utilisation | Eastern Alps | Dendrochronology

## Methoden

McFADDEN 2018

Clare McFadden & Marc F. Oxenham, *Rate of natural population increase as a paleodemographic measure of growth*. [Journal of Archaeological Science: Reports](#) **19** (2018), 352–356.

The aim of this study was to provide a verifiable measure of population increase from age-at-death data. It was anticipated that the D0-14/D ratio would be a good predictor of the rate of natural increase (births minus deaths) due to its strong relationship with the total fertility rate. United Nations age-at-death data for 58 countries was used to calculate the rate of natural population increase and evaluate its relationship to the D0-14/D ratio. Additionally, the impact of migration on both the rate and the ratio was measured. A correlation of  $r=0.863$  (95% CI 0.777–0.917) between the D0-14/D ratio and rate of natural population increase was found. Linear regression provided a simple equation for calculating the rate of population increase. The rate of natural population increase accounts for the disparity (or lack of) between births and deaths, and provides a valuable measure for evaluating ancient population variability. While the rate does not factor in migration, we believe migration should be measured independently as it is not always of interest to bioarcheological research questions and has a negligible impact on the rate of natural increase and the D0-14/D ratio. Estimating the rate of natural population increase has the potential to provide significant insights into past populations and the human response to change.

Keywords: Paleodemography | Population growth | Rate of natural increase | Demographic transition | Agricultural transition

## Neolithikum

CHEN 2010

Shanyuan Chen et al., *Zebu Cattle Are an Exclusive Legacy of the South Asia Neolithic*. [Molecular Biology and Evolution](#) **27** (2010), 1–6.

Shanyuan Chen, Bang-Zhong Lin, Mumtaz Baig, Bikash Mitra, Ricardo J. Lopes, António M. Santos, David A. Magee, Marisa Azevedo, Pedro Tarroso, Shinji Sasazaki, Stephane Ostrowski, Osman Mahgoub, Tapas K. Chaudhuri, Yaping Zhang, Vânia Costa, Luis J. Royo, Félix Goyache, Gordon Luikart, Nicole Boivin, Dorian Q. Fuller, Hideyuki Mannen, Daniel G. Bradley & Albano Beja-Pereira

Animal domestication was a major step forward in human prehistory, contributing to the emergence of more complex societies. At the time of the Neolithic transition, zebu cattle (*Bos indicus*) were probably the most abundant and important domestic livestock species in Southern Asia. Although archaeological evidence points toward the domestication of zebu cattle within the Indian subcontinent, the exact geographic origins and phylogenetic history of zebu cattle remains uncertain. Here, we report evidence from 844 zebu mitochondrial DNA (mtDNA) sequences surveyed from 19 Asiatic countries comprising 8 regional groups, which identify 2



distinct mitochondrial haplogroups, termed I1 and I2. The marked increase in nucleotide diversity ( $P < 0.001$ ) for both the I1 and I2 haplogroups within the northern part of the Indian subcontinent is consistent with an origin for all domestic zebu in this area. For haplogroup I1, genetic diversity was highest within the Indus Valley among the three hypothesized domestication centers (Indus Valley, Ganges, and South India). These data support the Indus Valley as the most likely center of origin for the I1 haplogroup and a primary center of zebu domestication. However, for the I2 haplogroup, a complex pattern of diversity is detected, preventing the unambiguous pinpointing of the exact place of origin for this zebu maternal lineage. Our findings are discussed with respect to the archaeological record for zebu domestication within the Indian subcontinent.

**Keywords:** *Bos indicus* | domestication | pastoralism | neolithic | evolution | archaeology | anthropology.

## Politik

KOLODINSKY 2018

Jane Kolodinsky & Jayson L. Lusk, *Mandatory labels can improve attitudes toward genetically engineered food*. [Science Advances](#) **4** (2018), eaaq1413. DOI:10.1126/sciadv.aaq1413.

The prospect of state and federal laws mandating labeling of genetically engineered (GE) food has prompted vigorous debate about the consequences of the policy on consumer attitudes toward these technologies. There has been substantial debate over whether mandated labels might increase or decrease consumer aversion toward genetic engineering. This research aims to help resolve this issue using a data set containing more than 7800 observations that measures levels of opposition in a national control group compared to levels in Vermont, the only U.S. state to have implemented mandatory labeling of GE foods. Difference-in-difference estimates of opposition to GE food before and after mandatory labeling show that the labeling policy led to a 19% reduction in opposition to GE food. The findings help provide insights into the psychology of consumers' risk perceptions that can be used in communicating the benefits and risks of genetic engineering technology to the public.

## Religion

BAADSGAARD 2011

Aubrey Baadsgaard, Janet Monge, Samantha Cox & Richard L. Zettler, *Human sacrifice and intentional corpse preservation in the Royal Cemetery of Ur*. [Antiquity](#) **85** (2011), 27–42.

The Royal Tombs at Ur have been long famous for their chilling scenario of young soldiers and courtesans who loyally took poison to die with their mistress. The authors investigate two of the original skulls with CT scans and propose a procedure no less chilling, but more enforceable. The victims were participants in an elaborate funerary ritual during which they were felled with a sharp instrument, heated, embalmed with mercury, dressed and laid ceremonially in rows.

**Keywords:** Iraq | Ur | Bronze Age | burial rites | inhumation | cremation | ritual | human sacrifice | Menschenopfer | tomb