# References

## Altpaläolithikum

## Milks 2023

Annemieke Milks, Jens Lehmann, Dirk Leder, Michael Sietz, Tim Koddenberg, Utz Böhner, Volker Wachtendorf & Thomas Terberger, A double-pointed wooden throwing stick from Schöningen, Germany, Results and new insights from a multianalytical study. PLoS ONE 18 (2023), e287719. DOI:10.1371/journal.pone.0287719.

The site of Schoringen (Germany), dated to ca. 300,000 years ago, yielded the earliest large-scale record of humanly-made wooden tools. These include wooden spears and shorter double-pointed sticks, discovered in association with herbivores that were hunted and butchered along a lakeshore. Wooden tools have not been systematically analysed to the same standard as other Palaeolithic technologies, such as lithic or bone tools. Our multianalytical study includes micro-CT scanning, 3-dimensional microscopy, and Fourier transform infrared spectroscopy, supporting a systematic technological and taphonomic analysis, thus setting a new standard for wooden tool analysis. In illustrating the biography of one of Scholingen's double-pointed sticks, we demonstrate new human behaviours for this time period, including sophisticated woodworking techniques. The hominins selected a spruce branch which they then debarked and shaped into an aerodynamic and ergonomic tool. They likely seasoned the wood to avoid cracking and warping. After a long period of use, it was probably lost while hunting, and was then rapidly buried in mud. Taphonomic alterations include damage from trampling, fungal attack, root damage and compression. Through our detailed analysis we show that Middle Pleistocene humans had a rich awareness of raw material properties, and possessed sophisticated woodworking skills. Alongside new detailed morphometrics of the object, an ethnographic review supports a primary function as a throwing stick for hunting, indicating potential hunting strategies and social contexts including for communal hunts involving children. The Schojningen throwing sticks may have been used to strategically disadvantage larger ungulates, potentially from distances of up to 30 metres. They also demonstrate that the hominins were technologically capable of capturing smaller fast prey and avian fauna, a behaviour evidenced at contemporaneous Middle Pleistocene archaeological sites.

## Anthropologie

### Ammar 2023

Madeleine Ammar, Laurel Fogarty & Anne Kandler, *Social learning* and memory. PNAS **120** (2023), e2310033120.

pnas120-e2310033120-Supplement.pdf

The adaptability of human populations to changing environments is often attributed to the human capacity for social learning, innovation, and culture. In rapidly changing environments, it has been shown that maintaining high levels of cultural variation is beneficial because it allows for efficient adaptation. However, in many theoretical models, a high level of cultural variation also implies that a large amount of useless and perhaps detrimental information must be maintained and used, leading to lower population fitness in general. Here, we begin to investigate this often conflicting relationship between adaptation and cultural variation. We explicitly allow for the interplay between social learning and environmental variability, alongside the capacity for "memory," i.e., the storage, retrieval, and forgetting of information. Here, memory allows individuals to retain unexpressed cultural variation, which does not directly impact adaptation. We show that this capacity for memory facilitates the evolution of social learning across a broader range of circumstances than previously thought. Results from this analysis may help to establish whether and when memory should be incorporated into cultural evolutionary models focused on questions of adaptation.

Keywords: social learning | memory | cultural variation | adaptation

Significance: One of the most actively debated questions about human and nonhuman culture is this: Under what circumstances might we expect culture, and the ability to learn socially, to be favored by selection? Social learning is thought to be most beneficial when environments change slowly, and innovation when environments change rapidly. We develop a simulation model of social learning incorporating crucial but previously absent aspects of cognition—memory and forgetting. These shape information into useful cultural corpora which, together with high rates of social learning, facilitate rapid adaptation regardless of the rate of environmental change. In summary, we show that the interplay between learning, memory, and forgetting allows the evolution of social learning under conditions where it was previously considered disadvantageous.

#### BEVERLY 2023

Emily J. Beverly, Using climate to model ancient human migration. science **381** (2023), 605–606.

Modeling fills gaps in the fossil record of early hominin movement from Africa.

#### Margari 2023

Vasiliki Margari & Polychronis C. Tzedakis et al., Extreme glacial cooling likely led to hominin depopulation of Europe in the Early Pleistocene. science **381** (2023), 693–699.

s381-0693-Supplement.pdf

The oldest known hominin remains in Europe [ $\approx 1.5$  to  $\approx 1.1$  million years ago (Ma)] have been recovered from Iberia, where paleoenvironmental reconstructions have indicated warm and wet interglacials and mild glacials, supporting the view that once established, hominin populations persisted continuously. We report analyses of marine and terrestrial proxies from a deep-sea core on the Portugese margin that show the presence of pronounced millennial-scale climate variability during a glacial period  $\approx 1.154$  to  $\approx 1.123$  Ma, culminating in a terminal stadial cooling comparable to the most extreme events of the last 400,000 years. Climate envelope-model simulations reveal a drastic decrease in early hominin habitat suitability around the Mediterranean during the terminal stadial. We suggest that these extreme conditions led to the depopulation of Europe, perhaps lasting for several successive glacial-interglacial cycles.

Vasiliki Margari, David A. Hodell, Simon A. Parfitt, Nick M. Ashton, Joan O. Grimalt, Hyuna Kim, Kyung-Sook Yun, Philip L. Gibbard, Chris B. Stringer, Axel Timmermann & Polychronis C. Tzedakis

#### Pennisi 2023

Elizabeth Pennisi, Wandering Seeds. science **381** (2023), 598–601. Millennia before Europeans arrived in Australia, humans helped shape the distribution of the continent's plants.

### Penske 2023

Sandra Penske, Adam B. Rohrlach, Igor Manzura, Philipp W. Stockhammer, Svend Hansen & Wolfgang Haak et al., *Early contact between late farming and pastoralist societies in southeastern Europe*. nature **620** (2023), 358–365.

n620-0358-Supplement.pdf

Archaeogenetic studies have described two main genetic turnover events in prehistoric western Eurasia: one associated with the spread of farming and a sedentary lifestyle starting around 7000-6000 bc (refs. 1-3) and a second with the expansion of pastoralist groups from the Eurasian steppes starting around 3300 bc (refs. 4.5). The period between these events saw new economies emerging on the basis of key innovations, including metallurgy, wheel and wagon and horse domestication6-9. However, what happened between the demise of the Copper Age settlements around 4250 bc and the expansion of pastoralists remains poorly understood. To address this question, we analysed genome-wide data from 135 ancient individuals from the contact zone between southeastern Europe and the northwestern Black Sea region spanning this critical time period. While we observe genetic continuity between Neolithic and Copper Age groups from major sites in the same region, from around 4500 bc on, groups from the northwestern Black Sea region carried varying amounts of mixed ancestries derived from Copper Age groups and those from the forest/steppe zones, indicating genetic and cultural contact over a period of around 1,000 years earlier than anticipated. We propose that the transfer of critical innovations between farmers and transitional foragers/herders from different ecogeographic zones during this early contact was integral to the formation, rise and expansion of pastoralist groups around 3300 bc.

Sandra Penske, Adam B. Rohrlach, Ainash Childebayeva, Guido Gnecchi-Ruscone, Clemens Schmid, Maria A. Spyrou, Gunnar U. Neumann, Nadezhda Atanassova, Katrin Beutler, Kamen Boyadzhiev, Yavor Boyadzhiev, Igor Bruyako, Alexander Chohadzhiev, Blagoje Govedarica, Mehmet Karaucak, Raiko Krauss, Maleen Leppek, Igor Manzura, Karen Privat, Shawn Ross, Vladimir Slavchev, Adéla Sobotkova, Meda Todera', Todor Valchev, Harald Ringbauer, Philipp W. Stockhammer, Svend Hansen, Johannes Krause & Wolfgang Haak

#### Ruan 2023

Jiaoyang Ruan, Axel Timmermann, Pasquale Raia, Kyung-Sook Yun, Elke Zeller & Danielle Lemmon et al., *Climate shifts orchestrated hominin interbreeding events across Eurasia.* science **381** (2023), 699–704.

s381-0699-Supplement1.pdf, s381-0699-Supplement2.mp4, s381-0699-Supplement3.mp4

When, where, and how often hominin interbreeding happened is largely unknown. We study the potential for Neanderthal-Denisovan admixture using species distribution models that integrate extensive fossil, archaeological, and genetic data with transient coupled general circulation model simulations of global climate and biomes. Our Pleistocene hindcast of past hominins' habitat suitability reveals pronounced climate-driven zonal shifts in the main overlap region of Denisovans and Neanderthals in central Eurasia. These shifts, which influenced the timing and intensity of potential interbreeding events, can be attributed to the response of climate and vegetation to past variations in atmospheric carbon dioxide and Northern Hemisphere ice-sheet volume. Therefore, glacial-interglacial climate swings likely played an important role in favoring gene flow between archaic humans. Jiaoyang Ruan, Axel Timmermann, Pasquale Raia, Kyung-Sook Yun, Elke Zeller, Alessandro Mondanaro, Mirko Di Febbraro, Danielle Lemmon, Silvia Castiglione & Marina Melchionna

## Klima

## BAXTER 2023

A. J. Baxter, D. Verschuren, F. Peterse, D. G. Miralles & J. S. Sinninghe Damsté et al., *Reversed Holocene temperature–moisture relationship in the Horn of Africa.* nature **620** (2023), 336–343.

Anthropogenic climate change is predicted to severely impact the global hydrological cycle1, particularly in tropical regions where agriculture-based economies depend on monsoon rainfall2. In the Horn of Africa, more frequent drought conditions in recent decades 3,4 contrast with climate models projecting precipitation to increase with rising temperature5. Here we use organic geochemical climate-proxy data from the sediment record of Lake Chala (Kenya and Tanzania) to probe the stability of the link between hydroclimate and temperature over approximately the past 75,000 years, hence encompassing a suiciently wide range of temperatures to test the 'dry gets drier, wet gets wetter' paradigm6 of anthropogenic climate change in the time domain. We show that the positive relationship between effective moisture and temperature in easternmost Africa during the cooler last glacial period shifted to negative around the onset of the Holocene 11,700 years ago, when the atmospheric carbon dioxide concentration exceeded 250 parts per million and mean annual temperature approached modern-day values. Thus, at that time, the budget between monsoonal precipitation and continental evaporation7 crossed a tipping point such that the positive inluence of temperature on evaporation became greater than its positive inluence on precipitation. Our results imply that under continued anthropogenic warming, the Horn of Africa will probably experience further drying, and they highlight the need for improved simulation of both dynamic and thermodynamic processes in the tropical hydrological cycle.

A. J. Baxter, D. Verschuren, F. Peterse, D. G. Miralles, C. M. Martin-Jones, A. Maitituerdi, T. Van der Meeren, M. Van Daele, C. S. Lane, G. H. Haug, D. O. Olago & J. S. Sinninghe Damsté

### Lupien 2023

Rachel L. Lupien, Past climate unravels eastern African paradox. nature **620** (2023), 279–280.

Analyses of sediment from a lake in eastern Africa reveal the relationship between temperature and moisture over the past 75,000 years, and hint at why climate-model projections in the Horn of Africa are at odds with modern trends.

## O'KEEFE 2023

F. Robin O'Keefe, Regan E. Dunn, Michael R. Waters & Emily L. Lindsey et al., Pre–Younger Dryas megafaunal extirpation at Rancho La Brea linked to fire-driven state shift. science **381** (2023), 746. s381-0746-Supplement.pdf

The cause, or causes, of the Pleistocene megafaunal extinctions have been difficult to establish, in part because poor spatiotemporal resolution in the fossil record hinders alignment of species disappearances with archeological and environmental data. We obtained 172 new radiocarbon dates on megafauna from Rancho La Brea in California spanning 15.6 to 10.0 thousand calendar years before present (ka). Seven species of extinct megafauna disappeared by 12.9 ka, before the onset of the Younger Dryas. Comparison with high-resolution regional datasets revealed that these disappearances coincided with an ecological state shift that followed aridification and vegetation changes during the Bølling-Allerød (14.69 to 12.89 ka). Time-series modeling implicates large-scale fires as the primary cause of the extirpations, and the catalyst of this state shift may have been mounting human impacts in a drying, warming, and increasingly fire-prone ecosystem.

F. Robin O'Keefe, Regan E. Dunn, Elic M. Weitzel, Michael R. Waters, Lisa N. Martinez, Wendy J. Binder, John R. Southon, Joshua E. Cohen, Julie A. Meachen, Larisa R. G. DeSantis, Matthew E. Kirby, Elena Ghezzo, Joan B. Coltrain, Benjamin T. Fuller, Aisling B. Farrell, Gary T. Takeuchi, Glen MacDonald, Edward B. Davis & Emily L. Lindsey

Our data document a transition from a postglacial megafaunal woodland to a human-mediated chaparral ecosystem in Southern California before the onset of the Younger Dryas. This transition beganwith gradual opening and drying of the landscape over two millennia, and terminated in an abrupt (300-year) regime shift characterized by the complete extirpation of megafauna and unprecedented fire activity. This state shift appears to have been triggered by human-ignited fires in an ecosystemstressed by rapidwarming, amegadrought, and a millennial-scale trend toward the loss of large herbivores from the landscape. This event parallels processes occurring in Mediterranean ecosystems today.

#### Price 2023

Michael Price, Death By Fire. science **381** (2023), 724–727.

Wildfires, intensified by climate change and perhaps human activity, may have doomed Southern California's big mammals 13,000 years ago.

And where humans go, fire follows. "Fire is a great tool," says Dunn, who studies how fire has shaped human and plant communities. "Humans are very adept at using fire for land management ... to create mosaic habitats, to create the right kinds of materials for basketry, for harvesting grasshoppers, for hunting strategies."

In the hands of Indigenous Americans, cultural burning techniques—also known as fire-stick farming—actually prevented the fuel buildup that causes large, outofcontrol wildfires, like those that followed the arrival of European settlers, says Watkins, who is a member of the Choctaw Nation of Oklahoma. Europeans suppressed fires and introduced cattle ranching, allowing more fuel to build up and creating larger and larger combustible grasslands. In recent years, Indigenous communities and fire scientists have called for land managers to employ more of the time-tested cultural management techniques to prevent forest fires.

Previously published models of population growth based on archaeological and genetic evidence suggest a demographic explosion in North America between about 15,000 and 13,000 years ago. If that held true for Southern California—a big "if," the researchers admit—it means populations were booming just as the Bølling-Allerød began and the climate turned hotter and drier.

The climate change would have made human-caused fires more likely to burn out of control, the researchers argue. The burning turned the landscape from woodland to chaparral, dooming most of the region's megafauna by 13,000 years ago.

#### Rains 2023

Molly Rains, Maui's deadly blazes reveal a fire-prone Hawaii. science **381** (2023), 718–719.

Flammable, invasive grasses have changed the island landscape, say its shaken scientists.

[G]eological evidence suggests major fires were uncommon in Maui's past. But they have become an increasingly recurrent—and worsening—threat in recent decades, especially as nonnative, highly flammable grasses invade the island's large, abandoned plantations and previously burned landscapes. "Every fire it just gets worse," says Fisher.

European colonization of Hawaii 2 centuries ago accelerated introductions of invasive species. Many of the foreign plants, such as fountain grass (Pennisetum setaceum) and haole koa (Leucaena leucocephala), are firetolerant. They grow quickly, serving as fodder for blazes when they ignite and reestablishing rapidly on burned areas, crowding out native species. In particular, various species of African pasture grasses now dominate large areas, D'Antonio says. Droughts can drive their desiccation, creating large amounts of ignitable fuel. "This sort of calamity has been a long time coming," she says.

One reason these foreign grasses have room to expand, researchers say, is that Maui's native plant life is voraciously consumed by the thousands of feral goats and other nonnative hoofed creatures (including deer, hogs, and sheep) that run wild in the island's forests. Invasive species—both plant and animal—also pose a barrier to reestablishing native forests that scientists believe are essential to Maui's environmental health and fire-resilience.

#### STRANDBERG 2023

Gustav Strandberg, Jie Chen, Ralph Fyfe, Erik Kjellström, Johan Lindström, Anneli Poska, Qiong Zhang & Marie-José Gaillard, Did the Bronze Age deforestation of Europe affect its climate? A regional climate model study using pollen-based land cover reconstructions. Climate of the Past **19** (2023), 1507–1530.

This paper studies the impact of land use and land cover change (LULCC) on the climate around 2500 years ago (2.5 ka), a period of rapid transitions across the European landscape. One global climate model was used to force two regional climate models (RCMs). The RCMs used two land cover descriptions. The first was from a dynamical vegetation model representing potential land cover, and the second was from a land cover description reconstructed from pollen data by statistical interpolation. The two different land covers enable us to study the impact of land cover on climate conditions. Since the difference in landscape openness between potential and reconstructed land cover is mostly due to LULCC, this can be taken as a measure of early anthropogenic effects on climate. Since the sensitivity to LULCC is dependent on the choice of climate model, we also use two RCMs.

The results show that the simulated 2.5 ka climate was warmer than the simulated pre-industrial (PI, 1850 CE) climate. The largest differences are seen in northern Europe, where the 2.5 ka climate is 2-4 C warmer than the PI period. In summer, the difference between the simulated 2.5 ka and PI climates is smaller (0-3 C), with the smallest differences in southern Europe. Differences in seasonal precipitation are mostly within  $\pm 10$  %. In parts of northern Europe, the 2.5 ka climate is up to 30% wetter in winter than that of the PI climate. In summer there is a tendency for the 2.5 ka climate to be drier than the PI climate in the Mediterranean region.

The results also suggest that LULCC at 2.5 ka impacted the climate in parts of Europe. Simulations including reconstructed LULCC (i.e. those using pollenderived land cover descriptions) give up to 1 C higher temperature in parts of northern Europe in winter and up to 1.5 C warmer in southern Europe in summer than simulations with potential land cover. Although the results are model dependent, the relatively strong response implies that anthropogenic land cover changes

that had occurred during the Neolithic and Bronze Age could have affected the European climate by 2.5 ka.

## Kultur

#### Schweinsberg 2023

Martin Schweinsberg, Hannes M. Petrowsky, Burkhardt Funk & David D. Loschelder, Understanding the first-offer conundrum, How buyer offers impact sale price and impasse risk in 26 million eBay negotiations. PNAS **120** (2023), e2218582120.

pnas 120-e 2218582120-Supplement.pdf

How low is the ideal first offer? Prior to any negotiation, decision- makers must balance a crucial tradeoff between two opposing effects. While lower first offers benefit buyers by anchoring the price in their favor, an overly ambitious offer increases the impasse risk, thus potentially precluding an agreement altogether. Past research with simulated laboratory or classroom exercises has demonstrated either a first offer's anchoring benefits or its impasse risk detriments, while largely ignoring the other effect. In short, there is no empirical answer to the conundrum of how low an ideal first offer should be. Our Results from over 26 million incentivized real- world negotiations on eBay document (a) a linear anchoring effect of buyer offers on sales price, (b) a nonlinear, quartic effect on impasse risk, and (c) specific offer values with particularly low impasse risks but high anchoring benefits. Integrating these findings suggests that the ideal buyer offer lies at 80% of the seller's list price across all products—although this value ranges from 33% to 95%depending on the type of product, demand, and buyers' weighting of price versus impasse risk. We empirically amend the well- known midpoint bias, the assumption that buyer and seller eventually meet in the middle of their opening offers, and find evidence for a "buyer bias." Product demand moderates the (non)linear effects, the ideal buyer offer, and the buyer bias. Finally, we apply machine learning analyses to predict impasses and present a website with customizable first- offer advice configured to different products, prices, and buyers' risk preferences.

Keywords: negotiation | first ofer | impasses | anchoring | machine learning Significance: Negotiations are omnipresent. People negotiate salaries, the price of a house, car, or anything for sale at an antique store, bazaar, or online marketplace. In price negotiations, a vexing question plagues buyers everywhere. How ambitious is the ideal irst ofer? While more ambitious ofers lower the price, they also risk nonagreement. The literatures in psychology, management, and data science have yet to ofer an empirical answer to this irst- ofer conundrum. Based on over 26 million eBay negotiations, we generate an answer that integrates a linear anchoring effect on price and nonlinear effects on impasse risk. We ofer applied, machine learning–based recommendations and contribute to the scholarly debate by establishing irst- ofer effects and nonlinear relationships that are incompatible with

#### STAGNARO 2023

current theorizing.

Michael N. Stagnaro, Ben M. Tappin & David G. Rand, No association between numerical ability and politically motivated reasoning in a large US probability sample. PNAS **120** (2023), e2301491120.

pnas120-e2301491120-Supplement1.pdf, pnas120-e2301491120-Supplement2.csv The highly influential theory of "Motivated System 2 Reasoning" argues that analytical, deliberative ("System 2") reasoning is hijacked by identity when considering ideologically charged issues—leading people who are more likely to engage in such reasoning to be more polarized, rather than more accurate. Here, we fail to replicate the key empirical support for this theory across ive contentious issues, using a large gold- standard nationally representative probability sample of Americans. While participants were more accurate in evaluating a contingency table when the outcome aligned with their politics (even when controlling for prior beliefs), we ind that participants with higher numeracy were more accurate in evaluating the contingency table, regardless of whether or not the table's outcome aligned with their politics. These indings call for a reconsideration of the effect of identity on analytical reasoning.

Keywords: motivated reasoning | polarization | decision- making | political psychology

## Neolithikum

## RIVOLLAT 2023

Maïté Rivollat & Wolfgang Haak et al., *Extensive pedigrees reveal* the social organization of a Neolithic community. nature **620** (2023), 600–606.

Social anthropology and ethnographic studies have described kinship systems and networks of contact and exchange in extant populations1–4. However, for prehistoric societies, these systems can be studied only indirectly from biological and cultural remains. Stable isotope data, sex and age at death can provide insights into the demographic structure of a burial community and identify local versus non-local childhood signatures, archaeogenetic data can reconstruct the biological relationships between individuals, which enables the reconstruction of pedigrees, and combined evidence informs on kinship practices and residence patterns in prehistoric societies. Here we report ancient DNA, strontium isotope and contextual data from more than 100 individuals from the site Gurgy 'les Noisats' (France), dated to the western European Neolithic around 4850–4500 bc. We ind that this burial community was genetically connected by two main pedigrees, spanning seven generations, that were patrilocal and patrilineal, with evidence for female exogamy and exchange with genetically close neighbouring groups. The microdemographic structure of individuals linked and unlinked to the pedigrees reveals additional information about the social structure, living conditions and site occupation. The absence of half-siblings and the high number of adult full siblings suggest that there were stable health conditions and a supportive social network, facilitating high fertility and low mortality5. Age-structure differences and strontium isotope results by generation indicate that the site was used for just a few decades, providing new insights into shifting sedentary farming practices during the European Neolithic.

Maïté Rivollat, Adam Benjamin Rohrlach, Harald Ringbauer, Ainash Childebayeva, Fanny Mendisco, Rodrigo Barquera, András Szolek, Mélie Le Roy, Heidi Colleran, Jonathan Tuke, Franziska Aron, Marie-Hélène Pemonge, Ellen Späth, Philippe Télouk, Léonie Rey, Gwenaëlle Goude, Vincent Balter, Johannes Krause, Stéphane Rottier, Marie-France Deguilloux & Wolfgang Haak

## Politik

## Bertrams 2023

Alex Bertrams & Ann Krispenz, Dark-ego-vehicle principle, Narcissism as a predictor of anti-sexual assault activism. Current Psychology (2023), preprint, 1–14. DOI:10.1007/s12144-023-04591-4.

In this preregistered study, we tested the dark-ego-vehicle principle. This principle states that individuals with dark personalities, such as high narcissistic traits, are inclined to become involved in certain kinds of ideologies and political activism. We argue that narcissistic individuals can be attracted to anti-sexual assault activism because this form of activism may provide them with opportunities to obtain positive self-presentation (e.g., virtue signaling), gain status, dominate others, and engage in social conflicts to get their thrills. A diverse US sample (N = 313) completed online measures of narcissistic traits and involvement in anti-sexual assault activism. In addition, relevant covariates were assessed (i.e., age, gender, adult sexual assault history, sexual harassment myth acceptance, and altruism), and the interaction between narcissistic traits and gender was considered. The results of the multiple regression analysis showed that higher narcissistic traits predicted an individual's higher involvement in anti-sexual assault activism over and above the covariates. However, this relationship was evident only for the women in this sample. Notably, a higher level of altruism in an individual was also substantially associated with higher involvement in anti-sexual assault activism. We discuss how the narcissism-by-gender interaction may be in line with the dark-ego-vehicle principle.

Keywords: Activism | Altruism | Narcissism | Sexual assault | Sexual harassment

### KRISPENZ 2023

Ann Krispenz & Alex Bertrams, Understanding left-wing authoritarianism, Relations to the dark personality traits, altruism, and social justice commitment. Current Psychology (2023), preprint, 1–17. DOI:10.1007/s12144-023-04463-x.

In two pre-registered studies, we investigated the relationship of left-wing authoritarianism with the ego-focused trait of narcissism. Based on existing research, we expected individuals with higher levels of left-wing authoritarianism to also report higher levels of narcissism. Further, as individuals with leftist political attitudes can be assumed to be striving for social equality, we expected left-wing authoritarianism to also be positively related to prosocial traits, but narcissism to remain a significant predictor of left-wing authoritarianism above and beyond those prosocial dispositions. We investigated our hypotheses in two studies using cross-sectional correlational designs. Two nearly representative US samples (Study 1: N = 391; Study 2: N = 377) completed online measures of left-wing authoritarianism, the Dark Triad personality traits, and two variables with a prosocial focus (i.e., altruism and social justice commitment). In addition, we assessed relevant covariates (i.e., age, gender, socially desirable responding, and virtue signaling). The results of multiple regression analyses showed that a strong ideological view, according to which a violent revolution against existing societal structures is legitimate (i.e., anti-hierarchical aggression), was associated with antagonistic narcissism (Study 1) and psychopathy (Study 2). However, neither dispositional altruism nor social justice commitment was related to left-wing anti-hierarchical aggression. Considering these results, we assume that some leftist political activists do not actually strive for social justice and equality but rather use political activism to endorse or exercise violence against others to satisfy their own ego-focused needs. We discuss these results in relation to the dark-ego-vehicle principle.

 $\label{eq:Keywords: Altruism | Dark triad | Left-wing authoritarianism | Social justice commitment$ 

### YATES 2023

Donna Yates & Neil Brodie, The illicit trade in antiquities is not the world's third-largest illicit trade, A critical evaluation of a factoid.

### Antiquity 97 (2023), 991–1003.

The claim that the illicit trade in antiquities is the third largest, second only to arms and narcotics, is widely repeated. But where does this claim originate and what is the evidence for its veracity? The authors present a 'stratigraphic excavation' of the claim by systematically searching through academic articles, popular press and policy literature to reveal the factoid's use and reuse over the past five decades. The authors find that the claim is not based on any original research or statistics, and it does not originate with any competent authorities. The analysis demonstrates how the uncritical repetition of unsubstantiated 'facts' can undermine legitimate efforts to prevent looting, trafficking and illicit sale of antiquities.

Keywords: antiquities trade | cultural heritage | factoids | intellectual genealogy