




PERSPECTIVE

Gendered conflict in the human family

David W. Lawson^a , Sarah Alami^b and Oluwaseyi Dolapo Somefun^c

^aDepartment of Anthropology, University of California Santa Barbara, USA, ^bThe School of Collective Intelligence, Mohammed VI Polytechnic University, Morocco and ^cUniversity of the Western Cape, South Africa

(Received 30 March 2023; accepted 2 April 2023)

Sexual conflict is a thriving area of animal behaviour research. Yet parallel research in the evolutionary human sciences remains underdeveloped and has become mired by controversy. In this special collection, we aim to invigorate the study of fitness-relevant conflicts between women and men, advocating for three synergistic research priorities. First, we argue that a commitment to diversity is required to innovate the field, achieve ethical research practice, and foster fruitful dialogue with neighbouring social sciences. Accordingly, we have prioritised issues of diversity as editors, aiming to stimulate new connections and perspectives. Second, we call for greater recognition that human sex/gender roles and accompanying conflict behaviours are both subject to natural selection and culturally determined. This motivates our shift in terminology from sexual to gendered conflict when addressing human behaviour, countering stubborn tendencies to essentialise differences between women and men and directing attention to the role of cultural practices, normative sanctions and social learning in structuring conflict battlegrounds. Finally, we draw attention to contemporary policy concerns, including the wellbeing consequences of marriage practices and the gendered implications of market integration. Focus on these themes, combined with attendance to the dangers of ethnocentrism, promises to inform culturally sensitive interventions promoting gender equality worldwide.

Keywords: sexual conflict; cultural evolution; social learning; marriage; reproduction

Social media summary: Cultural practices structure gendered conflict in human families.

1. Introduction

1.1. Sexual conflict

For biologists, sexual conflict refers to conflict between the evolutionary interests of females and males, such that the optimal state for one sex imposes fitness costs on the other, often leading to corresponding adaptations and counteradaptations as each sex attempts to gain the upper hand (Parker, 1979, 2006). While early notions of sexual conflict can be found in the writings of Darwin (1871), the concept was not explicitly defined until the behavioural ecology revolution of the 1970s, marking a wider shift away from viewing families as inherently harmonious to being characterised by divergent optima for mating pairs, for parents and offspring, and for siblings competing over parental care and resources (Parker, 1979; Trivers, 1974). These conflicts exist because the fitness implications of alternative phenotypes are frequently distinct for interacting but genetically non-identical individuals. In the case of sexual conflict, there may be differing ideals, for example, about whether two individuals should mate, when they should have offspring and how to care for them. The extent of conflict can be quantified as the difference between female and male optima, what Godfray (1995) refers to as the 'battleground', and may only be minimised by rare scenarios of obligate lifetime monogamy, such that the

© The Author(s), 2023. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

reproductive success of every paired female and male is perfectly aligned. It is also useful to consider the 'conflict load', as the amount by which the fitness of either sex is below its hypothetical optimal value for a trait (Lessells, 2006). The outcome, or 'resolution', of sexual conflict occurs when each sex has no remaining options to manipulate one another, or when what options do remain have their own fitness costs that balance the anticipated reduction in conflict load (Lessells, 2012).

The study of sexual conflict did not fully take off as a dedicated research area in behavioural ecology until the 1990s (for discussion see: Parker, 2006; Tregenza et al., 2006). Over the last few decades theoretical and empirical investigation has expanded, with sexual conflict now studied extensively across the natural world. For example, in a comprehensive review, Palombit (2014) categorises non-human primate sexual conflict into pre-copulatory strategies such as harassment and forced copulation, and post-copulatory behaviours such as infanticide and mate guarding. This work identifies not only coercive tactics of males, but also female (counter)strategies, including soliciting extrapair matings and behaviours that confuse paternity, such that males misdirect paternal care (see also Stumpf et al., 2011). While these studies often document overt behavioural conflict, it is important to emphasise that sexual conflict applies more broadly to accompanying patterns of selection. Put another way, sexual conflict theory can hold explanatory power in the study female and male relationships even when each sex superficially appears content with the status quo.

1.2. Applying the framework to human behaviour

Barbara Smuts, primarily known for her work on non-human animals, was among the first to apply the notion of sexual conflict to human behaviour. In a series of seminal articles, she speculated on the evolutionary origins of patriarchy and the drivers of cultural variability in conflicts between women and men (Smuts, 1992, 1995, see also Hrdy, 1997). Notably, Smuts adopted the terminology of sexual conflict only sparingly, instead referring more generally to patterns of sexual coercion and male aggression to women. A key insight from this pioneering work is that variability in subsistence and residence patterns is highly influential to the expression of conflict. For example, where men control a greater share of resources, such as in transitions from foraging to agriculture, and/or when women are separated from kin by patrilocal post-marital residence, women's ability to counter male coercion may be particularly limited. Furthermore, Smuts recognised the unique impact of culture in humans, an observation she supported by highlighting a long tradition of anthropological scholarship documenting cultural variation in gender ideology. Interpreting such norms as shaped by selection, Smuts hypothesised that our capacity for culture, including language, enables the creation and propagation of ideologies of male dominance and supremacy, allowing men to consolidate their control over women (Smuts, 1992, 1995).

Almost two decades after Smuts, Borgerhoff Mulder and Rauch (2009) reviewed progress in our understanding of conflict between women and men across cultures from an evolutionary perspective, this time more closely following the framework of sexual conflict theory. Here, they highlight research streams addressing divergent optima for marriage practices, including variability in how infidelity and divorce may benefit one sex more than the other, deceptive signalling in mate attraction and differences in ideal family size. For instance, because women typically make greater contributions to parental care than men, and women's desirability on the mating market tends to decrease with age and parity more so than for men, men might be predicted to have a higher optimal number of offspring. Many studies of female vs. male fertility preferences are consistent this notion, but the pattern is far from universal, suggesting important interactions with contextual factors, such as norms about divorce and remarriage that dictate the extent to which wives exhausted by the costs of high fertility may be replaceable. The underlying logic of a hypothesised sexual conflict over family size has since been further questioned by Moya et al. (2016). They conclude that a higher fertility preference for men than women will only be predicted for those men, often in the minority, with sufficiently high mate value to successfully attract sequential mates.

In their review, Borgerhoff Mulder and Rauch (2009) raised two important concerns. First, despite clear indications that sexual conflict is ubiquitous in humans, dedicated evolutionary scholarship remains underdeveloped compared with the flourishing literature on non-human animals. Indeed, many of studies reviewed by Borgerhoff Mulder and Rauch (2009) come from adjacent disciplines like economics (which shares some key assumptions with the behavioural ecological paradigm; Nettle et al., 2013), rather than evolutionary social science *per se*. Here, it might be countered that evolutionary psychologists have developed a robust study of sexual conflict in human mating strategies (Buss, 2017; see also Perry & Chapman, 2023). Yet research in this subfield has, historically at least, been preoccupied with identifying ostensibly species-typical trends, rather than addressing the abundant variation observed in sexual conflict battlegrounds across cultures so strongly emphasised by Smuts (1992, 1995) and Borgerhoff Mulder and Rauch (2009). Recent psychologically orientated research suggests a trend towards investigating context-dependency in strategies of sexual conflict, albeit with focus primarily remaining on high-income nations. Brooks et al. (2022), for example, report that regional signifiers of high male–male competition for mates within the United States, such as male-biased sex ratios, are associated with a greater prevalence of involuntarily celibate, or ‘incel’, men promoting misogyny online.

The complexity of modelling sexual conflict may itself have stalled research developments since it requires measurement of (or at least informed speculation on) the simultaneous costs and benefits of alternative behavioural phenotypes for more than one individual. Illustrating this point, an extensive literature on mating preferences for age is predicated on the notion that men prefer youth as a cue to reproductive value and women prefer seniority as cue to status or wealth. However, research in this area (as recently reviewed by Conroy-Beam & Buss, 2019) has rarely entertained the possibility of a conflict of interest over the magnitude of age gaps between partners. In contrast, across the social sciences, large age gaps are generally assumed to be both a product and determinant of gender inequality, with male seniority encouraging women’s subordination i.e. large husband-older age gaps benefit men at a cost to women (e.g. Carmichael, 2011). Studies examining the fitness battleground of spousal age gaps remain surprisingly rare, and have produced mixed results (see Lawson et al., 2021a; Minocher & Ross, 2022). Additional complexity in modelling sexual conflict is introduced by recognising that kin also have an unusually strong influence on mating arrangements among humans (Borgerhoff Mulder & Rauch 2009). As a consequence, strategic interests and behaviours of parents and in-laws, not just women and men, need to be considered, such as in Baraka et al.’s (2022) analysis of the costs and benefits of early marriage for women, their spouses and their parents.

Borgerhoff Mulder and Rauch’s (2009) second criticism is that recent theoretical developments in sexual selection research originating in the non-human animal literature have been slow to permeate to parallel human-focused research (see also Borgerhoff Mulder, *in press*). Conventional applications of sexual conflict theory emphasise the significance of sex differences in potential reproductive rates, with females committed to larger minimal prezygotic and postzygotic investments per offspring, such that males have more to gain from maximising mating opportunities, while females have more to gain from more selective mating and continued resource allocation to parental care (Clutton-Brock & Vincent, 1991; Trivers, 1972). This framework, referred to as the ‘Darwin–Bateman paradigm’ (Dewsbury, 2005) following Bateman’s (1948) study concluding that males alone are under selection to pursue multiple mating partners in *Drosophila*, has been subject to intense debate in recent years (reviewed in Hoquet, 2020; Morimoto, 2020; Rosenthal & Ryan, 2022).

Questions have been raised about the validity of Bateman’s original data (Hoquet et al., 2020), failures to replicate his findings (Gowaty et al., 2012) and their wider applicability across the animal kingdom (Fromonteil et al., 2023; Janicke et al., 2016; Kokko & Jennions, 2023). Moreover, alternative ecological factors, such as sex-specific patterns of mortality, population density and the local sex ratio, have been demonstrated to be important in determining sexual selection on female and male optima (Kappeler et al., 2022; Kokko & Jennions, 2008; Kokko & Monaghan, 2001). For example, if the sex ratio is male biased, then selection may favour males striving to obtain and maintain access to a singular mate, rather than competing for additional partners (Kokko & Jennions, 2008).

Among humans, despite a large corpus of demographic studies, our evidence base for assessing variability in female and male mating and reproductive success remains surprisingly limited (Borgerhoff Mulder, *in press*; Brown et al., 2009). What data we do have indicate that patterns of selection on competing for, or choosing, mates are far from universal. In particular, the accompanying costs and benefits of multiple mating probably vary in tandem with the cultural acceptability of polygamy, divorce and remarriage, with scope for differential selection by sex limited to those societies characterised by polygyny or serial monogamy and minimal when lifetime monogamy is the norm (Brown et al., 2009).

The relatively small literature on sexual conflict in humans, and its sometimes stubborn adherence to classic, but limited, theoretical models of conflict, arguably reflects a wider tendency of researchers to draw primarily from pioneering research up to the late 1970s, and for human and non-human focused research to develop semi-independently since then, a problem West et al. (2011) refers to as the ‘*disco problem*’ (see also Nettle et al., 2013). Likewise, Perry and Chapman (2023) stress a continuing lack of dialogue across research fields dealing with different taxons, and a wariness of researchers working on non-humans to tackle the complexity of integrating culture into a sexual conflict perspective. Fortunately, however, there is every indication that updated models of sexual selection and sexual conflict are increasingly being applied to humans. Here, for example, we can refer to recent studies examining the payoffs to multiple mating for women (Borgerhoff Mulder, 2009; Scelza, 2013), the dynamics of extra-pair mating and reproduction (Scelza et al., 2020), and the influence of sex ratios on mating and parenting strategies (Schacht & Borgerhoff Mulder, 2015; Uggl & Mace, 2017) and on rates of violent conflict (Schacht et al., 2014). We hope this special collection further stimulates this effort, while also highlighting the potential benefits of improved dialogue with non-evolutionary social scientists studying conflict between women and men.

1.3. Navigating continuing controversy

It is also important to recognise that evolutionary studies of sex and gender have been mired in controversy, perhaps leading some researchers wary to wade into dangerous waters. Infamously, Thornhill and Palmer (2000) drew considerable fire for their book *A natural history of rape*, exploring the idea of rape as an adaptation. A full review of their arguments is beyond our scope, but it is perhaps their encouragement of a false dichotomy between feminist and evolutionary perspectives on intimate partner violence (IPV) that is largely responsible for their legacy of doing more to burn, rather than build, bridges with social scientists working on related themes. Vandermassen (2011) provides a particularly balanced perspective on this controversy, describing the book as a missed opportunity to integrate perspectives, while also arguing that synergistic opportunities will only be gained if more feminists relinquish blanket hostility to evolutionary thinking. Reviewing matters more broadly, Liesen (2007) differentiates between the work of behavioural ecologists and evolutionary psychologists, arguing that the latter have exhibited a consistent ‘chill’ towards feminism (see also Fausto-Sterling et al., 1997). In contrast, human (and non-human primate) behavioural ecologists, via a greater focus on contingency and adaptive plasticity, have done more to explore contextual influences on female–male relationships, effectively opening up opportunities to correct old biases and explore social determinants of behaviour typically emphasised in feminist scholarship.

Subdisciplinary boundaries are of course fuzzy (Sear et al., 2007), and this is not the place to review the history and differing assumptions of evolutionary psychology, behavioural ecology and approaches to cultural evolution (see Laland & Brown, 2011; Smith et al., 2001). Our point here is only to emphasise that a variety of beliefs about the meanings and implications of sex and gender are compatible with an evolutionary perspective, including extensions beyond the sex/gender binary (DuBois & Shattuck-Heidorn, 2021; McLaughlin et al., 2023). Moreover, evolutionary scholarship that is informed by, and contributes to, feminist thought is fully realisable, especially when socioecological contingencies are fully explored. Illustrating this point, Darwin’s early writings, while clearly infused by harmful Victorian gender stereotypes (Fuentes, 2021a; Rosenthal & Ryan, 2022), were heralded by some of his contemporaries as serving a feminist agenda because human nature was presented, not as a

fixed constant, but rather as open to change and environmental influence. In contrast to the prevailing ideas of the time, an evolutionary perspective was therefore interpreted as showing there is in fact nothing permanent or incontrovertible about women's subordinate place in society (Brilmyer, 2017).

Opportunities and best intentions aside, evolutionary studies of sex and gender run a risk of reinforcing harmful gender stereotypes. A typical response to this dilemma is to point to common misunderstandings of the relationship between evolution and behaviour, such as naive portrayals of evolutionary social science as genetic determinism, or false assumptions that humans are predicted to consciously strategise about fitness (see for example, Gibson & Lawson, 2015). While such misunderstandings present an important roadblock, a more proactive stance requires reflecting and acting upon, often implicit, biases in how evolutionary scholarship is conducted and presented (Ah-King, 2022; Karlsson Green & Madjidian, 2011). Ever since *The women that never evolved* (Hrdy, 1981), Sarah Hrdy has been especially instrumental here in highlighting the myriad ways in which gender stereotypes have been indulged and women's evolved strategies have been overlooked by a largely male academy (see also Hrdy, 1999). Decades later, we are still addressing these same issues, and evolutionary studies of sex and gender remain steeped in controversy (Ah-King, 2022; Cooke, 2022; Sani, 2017).

Burch (2020), for example, concludes that evolutionary psychology textbooks routinely discuss the dynamics of female physical attractiveness, while saying little about women's intelligence and resourcefulness, and overemphasising the role of men in provisioning their families. On this same theme, Sear (2021) tackles a widespread myth that a male breadwinner–female homemaker nuclear family is the 'traditional' family structure, arguing that cross-cultural and historical observation reveals remarkable flexibility in childcare responsibilities and the division of labour (see also Bliege Bird & Coddling, 2015; Starkweather et al., 2020). A recent special issue is devoted to women's cooperative relationships, arguing that their importance in the evolution of human sociality has, until recently, been systematically neglected (Fox et al., 2023). Another is devoted to critiquing the idea of any single 'natural' form of masculinity (Gutmann et al., 2021). Here, Fuentes (2021b) argues that pervasive assumptions about the ancient roots of gender differences are poorly supported by contemporary scholarship on primate behaviour and hominin prehistory. Nelson (2021) further proposes that evolutionary anthropologists have to date placed an outsized focus on physical forms of violence (and particularly male-male conflict), leaving questions of structural violence (i.e. the creation of and maintenance of discriminatory and exclusionary social and institutional structures) relatively under-theorised. While it might be countered that evolutionary anthropologists have long studied political and economic inequality, particularly with respect to shifts in subsistence mode (Mattison et al., 2016), we agree that further dedicated research into the (cultural) evolution of relevant complex institutions would be desirable (see also Currie et al., 2021), including their implications for gender differences in social status (see also Smith et al., 2021).

It is clear that we are at an important juncture. We still have much to learn about conflict between women and men, yet we must also tread carefully to avoid past missteps and biases, and misunderstandings and misapplications of our scholarship. To this end, we advocate for three synergetic research priorities, including a strategic change in terminology from *sexual conflict* to *gendered conflict*. In the next sections, we lay out our rationale and supporting arguments for each of these priorities, while weaving in observations from the papers included in this special collection. We then end with some final thoughts on the future of sexual/gendered conflict research.

2. Three priorities for future research

2.1. Prioritising diversity

Our first proposition is a concerted commitment to diversifying perspectives and methods in order to innovate the field, achieve ethical research practice and foster more fruitful dialogue with neighbouring social sciences. It is now widely accepted that improving the representation of minoritised and under-represented groups is not only essential from a social justice perspective, but also leads to critical intellectual shifts that improve scholarship (AlShebli et al., 2018; Bolnick et al., 2019). As we have

highlighted above, the increased representation of women in evolutionary social science illustrates this point well, with women continuing to lead the charge in tackling gender stereotypes and studying women's adaptive strategies (e.g. Borgerhoff Mulder, *in press*; Fox et al., 2023; Mace, 2013; Scelza, 2013; Sear, 2021). Appropriately, this volume is dominated by women authors.

While barriers to gender equality in science remain (e.g. Fox et al., 2019; Heidt, 2023), we must be attentive to inclusion of other underrepresented groups. Here we turn our focus to achieving representation from varied cultural backgrounds, particularly from scholars from outside of Europe, North America and other relatively high-income regions (see also Mughogho et al., 2023; Urassa et al., 2021). This is critical for several reasons. First, there can only be limitations from excluding researchers with a wider array of life experiences. Not least, it limits our collective capacity to avoid ethnocentric bias. Second, while low and middle-income countries (LMICs) by no means have a monopoly on gender inequality, they also experience the greatest disparities in health, education and apparent bargaining power between women and men (Jayachandran, 2015). Gender inequality is now a major focus of global health research and policy. It is only appropriate then that LMIC scholars are represented. Finally, in both global health (The Lancet Global Health, 2018) and cross-cultural social science, including anthropology, psychology and economics (Urassa et al., 2021), 'parachute' and 'parasitic' research practices remain commonplace. Too often, research is conducted in LMICs by visiting researchers (i.e. of a different nationality/cultural background to the study population) without collaboration with local communities, researchers and research institutions, or collaboration occurs but is undervalued and uncredited.

In an effort to address these issues, we purposely sought out contributions led by authors from LMICs (Akurugu et al., 2022; Baraka et al., 2022; He et al., 2022), or where research is conducted in LMICs in collaboration and co-authorship with research institutions and/or scholars of the same nationality/cultural background as the study participants (Agey et al., 2023; Mattison et al., 2023; Schaffnit et al., 2023). We also asked all contributors to consider the criteria they used for authorship decisions, referring them to Morton et al.'s (2022) guidelines on promoting equitable authorship (including avoidance of 'token' authorship). To minimise bias in the review process, we assigned papers to at least one peer reviewer from the same country or world region as the population under study. Nevertheless, inequalities remain apparent. Most notably, in only one paper using data from an LMIC are all authors of the same nationality as the population studied (Akurugu et al., 2022). Diversity was also lost across the development of the special collection; several contributions were rejected after peer review or because invited authors ultimately opted to submit their manuscript elsewhere. These dynamics surely attest to the barriers faced by LMIC scholars and limited incentives for engaging with a field that may not presently share the same priorities. To round out the collection, we then added several previously published papers addressing sexual/gendered conflict (Kerry et al., 2021; Lawson et al., 2021b; Snopkowski & Nelson, 2021; Starkweather et al., 2020).

Akurugu et al. (2022) exemplify the value of diversifying perspectives in their article on bridewealth, i.e. a transfer of capital from the groom's to the bride's family. Bridewealth is typically framed as harmful to women, for which there is solid evidence. For example, using a vignette experiment wherein the completeness of bridewealth payments is manipulated, Horne et al. (2013) convincingly document a link between bridewealth and normative constraints on women's reproductive autonomy. Reviewing the wider literature, Akurugu and colleagues counter that the 'foreign gaze' (see Abimbola, 2019) of most scholarship on bridewealth is characterised by unsettling generalisations and stereotypes, such as labelling bridewealth-practising groups as 'primitive' or assuming *a priori* that bridewealth is inherently harmful to women. Drawing on their ethnographic work in Ghana (Akurugu et al., 2021), they counter that, when considered as part of wider patriarchal context that limits women's empowerment more broadly, bridewealth serves a critical purpose in legitimising relationships and the associated rights of women and children from the marriage. As such, women frequently attest support for bridewealth and abolishing the practice may only worsen their status. Akurugu et al. (2022) also make the novel contribution of suggesting that conflicts of interest over women's

autonomy may be best settled by empowering overlooked indigenous systems, such as the use of traditional courts to address marital disputes.

We also showcase methodological diversity. Several papers utilise qualitative approaches (Agey et al., 2023; Akurugu et al., 2022; Baraka et al., 2022), rarely at the forefront of contemporary evolutionary social science. Baraka et al. (2022) demonstrate the value of mixed methods research in their study of Tanzanian marriages. Global health frameworks characterise marriages under 18 years as harmful ‘child marriages’ serving the interests of parents (e.g. through a larger bridewealth or smaller dowry), and/or husbands who prefer younger wives, while brides pay only costs (e.g. greater risk of pregnancy complications, IPV and school dropout). In earlier work by the same team, testing these assumptions using quantitative data on partner preferences, bridewealth and women’s wellbeing and reproductive success led to only limited support (Lawson et al., 2021a; Schaffnit et al., 2019). In particular, marriage under 18 years held mixed, rather than purely negative, relationships with the well-being of adolescent girls and young women, and was associated with higher reproductive success. Baraka et al. (2022), through analysis of focus groups and in-depth interviews, also reject parent–offspring conflict as a primary driving force behind early marriage. Community members believed that remaining unmarried did not shield adolescent girls from risky sexual behaviour and that early marriage often provides relative social and economic security. However, support for gendered conflict was stronger; some adolescent girls were described as being lured into unstable early marriages by men misrepresenting their long-term intentions. This marital scenario may have been previously overlooked because (a) such ‘trick’ marriages only represent a fraction of marriages in the community, such that their costs are masked when analysed alongside relatively neutral or advantageous marital scenarios, and (b) naive assumptions that a gendered conflict model requires active coercion. Here, adolescent girls entered marriages willingly, sometimes against parental wishes, but later came to regret the decision when the marriage failed to meet their expectations.

Anderson and Bidner (2022) further address what may be gained by embracing the overlapping concerns of economics and evolutionary social science, taking polygynous marriage as a case study. Indeed, it is striking how much recent scholarship in economics addresses cultural variation in conflict between women and men, often drawing heavily on classic anthropological scholarship for theoretical inspiration. For example, recent papers address the role of not only marriage practices (Anderson & Bidner, 2022), but also contemporary and historical modes of subsistence (e.g. Alesina et al., 2013; Becker, 2019; Hansen et al., 2015) and kinship systems (Lowes, 2020) in determining gender inequality. As we argue below, there is also much to gain from boosting engagement with neighbouring research traditions, both non-evolutionary and evolutionary, that emphasise the role of culture in determining behavioural diversity.

2.2. Emphasis on culture

Our second proposition is a more forceful recognition of the role of culture in the expression of human sex/gender roles and accompanying conflict between women and men. This call is not novel, with the importance of integrating cultural forces into evolutionary models emphasised by Smuts (1992, 1995), Borgerhoff Mulder and Rauch (2009) and many others (e.g. Wood & Eagly, 2012). However, we propose that scholarship needs to be much more intentional in addressing the role of inherited cultural practices, normative sanctions and evolved social learning mechanisms in structuring conflict battlegrounds and conflict resolution. To encourage this priority, we propose a strategic shift in terminology from ‘*sexual conflict*’ to ‘*gendered conflict*’ when addressing human behaviour. This corresponds to the common usage of ‘*sex*’ as emphasising differing chromosomes, and external genitals, which typically serve as the basis for sex assignment at birth, and ‘*gender*’ as emphasising societal norms and expectations of behaviour, and personal identification (for a discussion of alternative definitions of sex and gender, and their limitations, see Hyde et al., 2019; Muehlenhard & Peterson, 2011). An emphasis on culture does not negate that conflict at an evolutionary level ultimately plays out via differential selection on biological sexes. However, emphasising gender over sex places appropriate

focus on how the behaviour of women and men is *also* fundamentally socially acquired and transmitted.

More than steer the direction of research, our proposed change in terminology reinforces two foundational points, particularly with respect to how our research is (mis)understood by researchers working outside of the evolutionary human sciences. First, by embracing the term gender, and its connotation with social and cultural influences, we make immediately clear that such influences do not sit outside of the scope of an evolutionary perspective. Likewise, we steer folks away from the stubborn assumption, associated with the connotations of ‘sex’, that an evolutionary perspective dictates that differences between women and men can, or should, be essentialised to chromosomes, hormones or other ‘biological’ essences (for discussions of the false nature-nurture, biological–cultural/social dichotomy see Eagly & Wood, 2013; Nettle, 2009, 2018). Second, adopting a distinct terminology for humans and nonhuman behaviour, we reinforce acknowledgement of fundamental differences between these taxonomic groupings, particularly our propensity for complex cumulative culture (Mesoudi & Thornton, 2018). Making this distinction explicit will hopefully instil appropriate caution in researchers when applying theory based on non-human animals to humans.

To draw greater attention to cultural forces, Table 1 highlights findings from recent and classic scholarship on a range of relevant practices that structure gendered conflict, including articles from this collection and research carried out by scholars working outside of evolutionary social science. Each practice can be considered cultural because associated behaviours are acquired socially, such that women and men’s behaviour in large part reflects a matter of tradition rather than preferences required by individual learning, and the costs and benefits of associated behaviours are modified by normative sanctions, i.e. rewards for compliance and/or punishments for deviation. Note that here we have purposely highlighted potentially contrary findings that could be interpreted as indicating that a practice is, or is not, a site of gendered conflict (and so harmful to one gender or both). In many cases, the impacts on women and men, and the relevant selective forces at stake, remain subject to debate.

In considering these practices, one important goal then is to interrogate alternative hypotheses about who, if anyone, gains (in an ultimate and proximate sense) from relevant practices and how. Howard and Gibson (2023), for example, test hypotheses that IPV, which varies widely in prevalence and has a strong normative component, reflects a male strategy to (a) reduce perceived threats to their paternity certainty, (b) impose a higher fertility optimum than their partners via coercive sexual activity and/or (c) to quell spousal objections to diverting resources outside of the family (see also Stieglitz et al., 2011). Utilising proxies for anticipated levels of paternity certainty, contrasting fertility preferences and extra-marital relationships in African national survey data, they conclude that patterns are most consistent with paternity uncertainty risk and paternal disinvestment hypotheses. They also highlight limitations to their analysis, including ambiguity in causal relationships between covariates included in their models, stifling capacity for causal inference. We suggest that future research must also recognise that an absence of IPV need not equate with a lack of conflict. Indeed, women who do not challenge male dominance (e.g. never oppose men’s investments outside of marriage) because of an anticipated threat of IPV or other harmful consequences may suffer the largest conflict load, with IPV incidence itself consequently more reflective of situations where women have sufficient bargaining power to make challenging male authority a worthwhile risk (see Kilgallen et al., 2022).

A second overarching goal is to understand why relevant cultural practices vary across time and space. This can be considered an exercise in elucidating the ‘*evolutionary and ecological roots*’ of gender inequality (see also Kaplan et al., 2009), as we work to identify legacies of selection and adaptation in response to interrelated socioecological factors such as mode of subsistence, mortality risks, sex ratio, population density and intergroup relationships. It is important to note here that emphasising socioecological contingency in this way does not equate with assuming genetic adaptation to particular socioecological conditions, but rather envisages humans as bestowed with a remarkable capacity for adaptive phenotypic plasticity (Nettle et al., 2013). Indeed, a one-to-one matching between any single socioecological factor and appropriate behavioural response is unlikely, with

Table 1. Cultural practices structure gendered conflict. Conflict between women and men is influenced by cultural context; relevant behaviours are acquired socially and influenced by normative sanctions. However, there remains much debate about the extent to which certain cultural practices impact fitness and wellbeing. Here, we highlight examples of, sometimes contrasting, findings across the literature on the potential costs and/or benefits of a range of cultural practices, including work by both evolutionary and non-evolutionary social scientists. These examples are not intended to be fully representative, but rather illustrative of the diversity of existing scholarship.

| Practice | Example finding(s) | Context | Reference |
|-----------------------------|---|--------------------------------------|-------------------------|
| Arranged or forced marriage | Parents and daughters more often disagree than parents and sons over desired qualities in prospective marriage partners, and marriages with no parental consent or input bear harsher consequences for women than men. | Dhading, Nepal | Agey et al. (2023) |
| | Parents and daughters more often disagree than parents and sons over desired qualities in prospective marriage partners. | Yunnan, China | Bovet et al., (2018) |
| Early marriage | Men lure adolescent girls/young women into unstable marriages with false promise of providing social/economic security. | Sukuma, Tanzania | Baraka et al. (2022) |
| | In contexts where returns to education are low and economic opportunities are limited for young women, early marriage is a desirable option for girls and young women that leads to greater autonomy from parents and higher status within the community. | Sukuma, Tanzania | Schaffnit et al. (2021) |
| Polygynous marriage | The size and composition of polygynous households is associated with greater livelihood resilience compared with monogamous households. | Mali (multiple regions) | Dessy et al. (2021) |
| | Polygynous marriage is associated with a greater degree of emotional distress for women compared to monogamous marriage. | Aleppo, Syria | Maziak et al. (2002) |
| | Children in polygynous families have a higher risk of early death and a slower rate of growth than children in monogamous families. | Dogon, Mali | Strassmann (2011) |
| | Children in male-headed polygynous households (typically first wife households) have equal or better health than children in male-headed monogamous households. | Northern Tanzania (multiple regions) | Lawson et al. (2015) |
| Large spousal age gaps | Women in relationships with men more than 15 years older than themselves are at an increased risk of experiencing spousal violence. | Nigeria, Tanzania (multiple regions) | Izugbara (2018) |
| | Women married to relatively younger men suffer increased risk of spousal violence. | Sukuma, Tanzania | Kilgallen et al. (2022) |

(Continued)

Table 1. (Continued.)

| Practice | Example finding(s) | Context | Reference |
|--|---|--|--|
| Female genital mutilation/ cutting (FGMC) | Cut women have more surviving offspring in regions where FGMC is widespread. | Mali, Nigeria, Senegal, Ivory Coast, Burkina Faso (multiple regions) | Howard and Gibson (2017) |
| | Cut women report more restricted sociosexually than women without FGMC. | Igbo, Nigeria | Onyishi et al. (2016) |
| | FGMC is not associated with women's self-reported engagement in pre-marital sex. | Mali, Nigeria, Senegal, Ivory Coast, Burkina Faso (multiple regions) | Howard and Gibson (2019) |
| Intimate partner violence (IPV) | Patterns of IPV suggest that men resort to violence to limit women's reproductive autonomy and to coerce them into producing more children than they desire. | Tsimane, Bolivia | Stieglitz et al. (2018) |
| | Men use IPV to control their wives' responses to their infidelity and the subsequent diversion of resources away from the family. | Tsimane, Bolivia | Stieglitz et al. (2011) |
| | Indicators of paternity concern and paternal disinvestment are associated with an increased risk of IPV. | Burkina Faso, Chad, Ethiopia, Gambia, Ghana, Ivory Coast, Kenya, Malawi, Mali, Nigeria, Togo, Zambia | Howard and Gibson (2023) |
| Bridewealth | Bridewealth payments strengthen normative constraints on women's reproductive autonomy. | Volta region, Ghana | Horne et al. (2013) |
| | Women concurrently value gender equality and the practice of bridewealth. They associate men's payment of bridewealth with their willingness to support women's autonomy and intimate relationships. | KwaZulu-Natal, South Africa | Yarbrough (2022) |
| Dowry | Overall, dowry payments are associated with a greater risk of IPV. However, the association between dowry payments and IPV risk is inverse V-shaped. Women in marriages where no dowry or very large dowries were paid experience a lower risk of violence. | Chapainawabganj, Chittagong and Sherpur districts, Bangladesh | Suran et al. (2004) |
| | Dowry payments are associated with greater standard of living for women and help to ensure high levels of investment in her future offspring by her spouse and in-laws. | Bangalore, India | Shenk (2007) |
| Menstrual taboos | Menstrual taboos and the use of menstrual huts, which restrict women's freedom of movement, are associated with greater paternity certainty. | Dogon, Mali | Strassmann, (1992), Strassmann et al. (2012) |
| Post-marital residence | Women have a heavier workload in patrilocal compared with matrilineal communities, where men may benefit from their higher bargaining power to do less work. | Mosuo, Han and Yi populations of Southwest China | Chen et al. (2023) |

| | | | |
|-------------------------------------|---|--|-------------------------------|
| | Within matrilineal settings, men are less likely to help on their wife's farm when there are more women reproducing in the wife's household. | Mosuo, southwest China | He et al. (2022) |
| Witchcraft accusations | Husbands accuse their wives of witchcraft if they suspect them to be unfaithful or to gain greater control within the marriage. | Bantu societies in central and southern Africa | Peacey et al. (2022) |
| | Women resort to witchcraft to level intra-household disparities. | Meru district, Kenya | Dolan (2002) |
| Restrictions on women's clothing | In harsh environments that beget high levels of paternal investment, men are relatively more supportive of veiling than women. | 26 nations where restrictive dress is practised. | Pazhoohi and Kingstone (2020) |
| | Wearing the hijab is perceived as a symbol of identity and empowerment by women. | Muslim women in France | Croucher (2008) |
| Widow inheritance/levirate marriage | Automatic marriage of a widow to a patrilineal relative may provide social protection when women lack property rights or means of economic support. | Tanzania | Kudo (2021) |
| | Widow inheritance is associated with cleansing rituals which pose a risk of transmitting HIV. | Nyanza Province, Kenya | Perry et al. (2014) |

adaptive strategies depending on the overall constellation of factors defining a context. Further complicating matters, once a cultural practice becomes entrenched, it may further influence patterns of selection on other behaviours.

Scelza et al. (2021) expertly illustrates this complexity with respect to pastoralism, which typically requires long periods of spousal separation with men transporting livestock to feed away from home. Such absences may ultimately favour social norms that limit women's freedom, so as to ensure confidence of paternity. Supporting this notion, Becker (2019) has documented that women from historically pastoral societies are more likely to have undergone the most invasive forms of female genital mutilation/cutting (FGMC) and adhere to restrictive norms about women's sexual freedom and mobility. However, there are exceptions to this pattern, such as the Himba of Namibia, who combine pastoralism with strong norms promoting women's sexual autonomy. Scelza et al. (2021) speculate that a combination of factors explains Himba exceptionalism, including a history of matrilineal inheritance predating pastoralism, bestowing the Himba with norms favouring sexual freedom for both genders, and both a high reliance on children's labour and a female-biased adult sex ratio, which ultimately allows men to more easily compensate for paternity loss through pursuit of their own extra-marital partnerships.

Modelling the role of cultural history, such as the legacy of matriliney in the above example, presents a particular challenge because it requires more information than can be gained from observing a population at any single time point. Indeed, this challenge applies broadly to optimality models of human behaviour (Barrett & Stulp, 2013). One tool at our disposal is phylogenetic analysis, which can be used to examine how transitions from one cultural state predicts changes in others (Mace & Jordan, 2011). Work in this tradition, for example, has addressed origins and patterns of change in the practice both female and male genital mutilation/cutting (Šaffa et al., 2022), polygynous marriage (Minocher et al., 2019), the direction of marriage payments (Fortunato et al., 2006) and traditions of sex-biased dispersal, i.e. post-marital residence (Ji et al., 2022; Jordan et al., 2009). More generally, these considerations make clear that a robust evolutionary approach to human diversity requires investing in a bedrock of historical and ethnographic knowledge.

At the proximate level, there is also still much to learn about the role of evolved mechanisms of social learning in determining gender ideology (i.e. expectations about appropriate behaviour for each sex/gender). Here, the paucity of evolutionary research is jarring, not least because the notion of socially acquired and 'performed' gender roles has motivated a large body of scholarship in sociology and social psychology (Butler, 1988; Morgenroth & Ryan, 2018). Instead, evolutionary scholars studying social learning strategies have devoted their attention to alternative behavioural domains, most obviously cooperative tendencies (Henrich & Muthukrishna, 2021) and, to a lesser extent, reproductive scheduling (Colleran, 2016). Outside of evolutionary social science, many studies convincingly demonstrate a pivotal role of social learning in gendered conflict. Bursztyn et al. (2020), for instance, demonstrate the power of conformity bias: they find that Saudi men underestimate peer support for women's empowerment and that correcting these misperceptions leads to shifts in gender relations, e.g. men becoming more supportive of their wives working outside the home. Swindle (n.d.) addresses pathways of cultural diffusion in Malawi, linking exposure to journalism critically covering IPV with the probability that surveyed men condemn violence. Cano and Hofmeister (2023) consider the vertical transmission of gender norms, demonstrating that, even when controlling for potential confounders, observation of paternal involvement in domestic labour is predictive of Australian adolescents later adopting more equalitarian gender ideology. These examples also lead into our final proposition: evolutionary studies of gendered conflict have much untapped potential to contribute to areas of contemporary policy concern.

2.3. Tackling areas of policy concern

There is much scope for evolutionary perspectives not only to contribute to our understanding of patriarchy, but also to provide fresh insights into how gendered conflict and its harmful impacts

may be reduced worldwide. As such, our third proposition is that we target topics of contemporary policy concern. There are notable synergies with our first two priorities here. Committing to diversity guards against ethnocentric bias, increasing the likelihood of generating culturally sensitive policy recommendations. Elucidating the role of culture also offers new possibilities for engagement with global health professionals working on gender inequality, whose attention focuses increasingly on tackling inequitable social norms (Jayachandran, 2020). Indeed, the now popular ‘social norms approach’ to behaviour change interventions (see Bicchieri & Mercier, 2014) has much inherent overlap with contemporary approaches to cultural evolution. Most obviously, both share assumptions that behaviour is influenced by perceptions of what others do and believe, and the anticipated rewards or punishments for conforming to, or deviating from, prevailing norms (Eriksson et al., 2021; Kendal et al., 2018).

Several relevant themes emerge in the special collection. The first is the wellbeing consequences of so-called ‘harmful cultural practices’. Since the 1990s, the United Nations and other international development agencies have identified cultural practices as a fundamental determinant of gender inequality, with particular focus on traditions of son preference, IPV, FGMC, polygynous marriage, ‘child marriage’ (<18 years), forced or arranged marriage, bride caputre/kidnapping, bridewealth and dowry (Longman & Bradley, 2016), but also less well-known practices such as ‘breast ironing’ (Amahazion, 2021), and ‘widow cleansing’ (Perry et al., 2014; Manala 2015). However, as several papers in this special collection make clear (see also Table 1), assumptions about the inherent harms of these practices are commonly made with little reference to evidence, opening up much scope for ethnocentric bias (see also Lawson & Gibson, *in press*). In cases such as child marriage (Baraka et al., 2022), bridewealth (Akurugu et al., 2022), arranged marriage (Agey et al., 2023) and polygynous marriage (Anderson & Bidner, 2022; Lawson & Gibson, 2018; Pesando, 2021), careful analyses present a more nuanced picture of the wellbeing (and fitness) implications of each practice. For example, some studies show that polygynous marriage is predictive of relatively poor health for women and their children, implicating resource competition and co-wife conflict (Omariba & Boyle, 2007; Strassmann, 2011), while others highlight apparent benefits for women, including greater access to male owned wealth and associated benefits of greater livelihood resilience which benefits all family members (Dessy et al., 2021; Lawson et al., 2015).

An evidence-based and culturally sensitive approach to behaviours and practices which appear harmful can lead us away from parochial interventions that punish families making difficult decisions with limited choices. For example, Schaffnit et al. (2021) argue that criminalising marriage under 18 years may be damaging for adolescent girls and young women by constraining their options, *unless* such interventions are also effectively combined with policies addressing the vulnerabilities experienced by those delaying marriage, i.e. exposure to risky sexual behaviour, premarital childbearing and negative social judgements of unmarried women. By adding ethnographically grounded and contextually specific analyses, evolutionary social scientists have much to contribute to the difficult task of disentangling to what extent alternative cultural practices are best understood as a root cause of gender inequality or rather a product of constrained options (or both). Women, for example, may accept the apparent costs of bridewealth on their agency, because to fail to do so risks leaving their children illegitimate, but also because a potential spouse’s ability to pay bridewealth is an honest signal of his ultimate ability to provide for her and her future family in contexts where women’s ability to generate wealth independently is limited by wider patriarchal norms (Akurugu et al., 2022).

FGMC provides a particularly interesting case where many evolutionary scientists and global health professionals share similar assumptions about the likely motivations behind the procedure, but where attempts to empirically test these assumptions have revealed mixed results. For example, via analysis of African demographic survey data, Howard and Gibson (2017) present data consistent with the importance of FGMC in marriage markets; cut women achieve higher reproductive success than uncut women in areas where the practice is most common. However, in subsequent analyses they also reject the idea that the practice benefits men (from a fitness perspective) by controlling women’s sexuality, reporting no association with FGMC and women’s reported sexual activity (Howard & Gibson, 2019).

Efferson et al. (2015) also piqued the attention of global health professionals by challenging a popular notion that the maintenance of FGMC in a population depends on a critical number of families who cut their daughters and demand cut daughters-in-law for their sons (see Mackie & LeJeune, 2009). Efferson et al. (2015) found no evidence that cutting was coordinated within a large sample of Sudanese communities, and substantial variation in attitudes and cutting behaviour between individual families. This finding implies that rather than allocating limited resources to mass abandonment ceremonies to force numbers below a tipping-point, any intervention which reduces even small numbers of cutters could contribute to a cumulative reduction in FGMC over time (for further discussion see Lawson & Gibson, *in press*).

A second emergent theme is presented by several papers in the collection addressing how patterns of gendered conflict are being influenced by market integration (Agey et al., 2023; Mattison et al., 2023; Schaffnit et al., 2023). Mattison et al. (2023), for example, incorporate a consideration of matrilineal vs. patrilineal kinship to provide a fresh perspective on long-running debates about the impact of market integration on wealth inequality. They find matrilineal Mosuo in Southwestern China have greater wealth inequality than their patrilineal counterparts, which they attribute to higher levels of market integration among this group. However, within matrilineal communities, greater wealth was associated with lower inequality, highlighting the importance of sharing norms and institutions in counterbalancing inequalities that may otherwise arise. Given the absence of similar redistributive mechanisms in patrilineal groups, they speculate that wealth differences will become relatively more apparent with greater economic development.

Schaffnit et al. (2023) and Agey et al. (2023) address the influence of market integration on patterns of arranged marriage, a site of both potential parent–offspring conflict and gendered conflict (as arranged marriage more often involves coercion of wives and daughters than husbands and sons). Drawing on data from Bangladesh, Schaffnit et al. (2023) find that contrary to their expectations, markers of family market integration do not predict whether women enter an arranged or love marriage. They argue that while access to education and participation in the workforce has opened up more avenues for women to choose their spouse, the adoption of love marriage as an individual practice does not depend solely on socioeconomic factors. Further, they show that dowry payments and gifts continue to be made by parents even when their daughters are the ones who choose their spouse, suggesting parental approval remains an important factor. Agey et al. (2023) highlight the greater potential for disagreement over spouse choice between parents and daughters (relative to sons) in Nepal, where love marriages are on the rise among the younger generation. Parents can choose to withhold dowry payments if they disapprove of the marriage, which can strain daughters' relationship with her new in-laws. Women who elope against their parents' wishes may find themselves socially isolated and at greater risk of domestic abuse. In contrast, men are typically less beholden to their parents and so generally receive less scrutiny about their marital choices. These findings highlight the disparate effects of market integration for women and men, which should be considered by policymakers working in societies experiencing rapid socioeconomic transitions.

Finally, several papers address intracultural variation in gender ideology across time and space. Lawson et al. (2021b) consider women's empowerment from a conflict perspective, exploring the correlates of men's gender ideology in a semi-urban community in Mwanza, Tanzania. They find that men's support for women's empowerment is domain specific, and greatest for domains that do not entail an explicit cost to men. For instance, men were largely in favour of the education of girls and women's participation in the workforce and the community's political life, which were perceived to improve both men and women's socioeconomic standing and quality of life. However, they were far less supportive of women's authority over the household decision-making process and were more likely to agree that husbands have a right to engage in IPV. They also find little evidence that potential demographic indicators of gendered conflict (polygynous marriage, large spousal age gap, high fertility) were predictive of men's beliefs, underscoring the notion that these behaviours have more nuanced relationships with gender relations within communities than often assumed by global health professionals, or implied by crude cross-national analyses.

Kerry et al. (2021) and He et al. (2022) also provide novel investigations into the role of kin in determining gender relations. Using data from an online survey in the United States, Kerry et al. (2021) find those who have more male than female kin hold less favourable views on gender-related political issues, suggesting political attitudes are motivated not only by one's own sex, but also the gender and reproductive opportunities of one's descendants. This may also help explain why women sometimes support policies that limit their autonomy and have the potential to be harmful to their personal wellbeing (see also Brooks & Blake, 2019). He et al. (2022), on the other hand, show that, for the Mosuo of China, while living with matrilineal kin may benefit women in some regards, the more reproducing women in the household the lower the probability is that the husband will help on a wife's farm. The authors suggest that decreases in a man's help on their wife's farm are motivated by potential fitness benefits of such help being diluted by unrelated members of their wife's household. Together these studies highlight the potential for evolutionary perspectives, by uniquely modelling fitness considerations, to provide novel insights into gender relations across and within cultural contexts.

3. Conclusion

We have sketched out the history of sexual/gendered conflict research in humans and proposed three priorities for future research. While we do not regard any proposition to be controversial, we also anticipate (and encourage) some healthy disagreement among scholars about the best means to meet each goal. A variety of actions are possible to diversify our scholarship, to modify conventional articulations of sexual conflict theory to incorporate the unique impacts of complex cumulative culture, and to effectively apply our observations to matters of policy concern. To this end, we conclude with some final reflections, and cautionary points, about the path forward.

First, with respect to diversifying the cultural background of researchers, we recognise that building a more internationally representative research community will take a number of actions beyond our approach to editing. In particular, institutional barriers remain fundamental, including inequitable access to funding streams, including indirect cost rates (i.e. the ability to charge institutional overheads) and limited national research budgets within LMICs (Haberer & Boum, 2023). Appropriate actions will vary by context, and are not limited to questions of authorship, which may be challenging to achieve in some circumstances (Urassa et al., 2021). We also caution that global research partnerships, even if defined by intellectual exchange, equitable authorship and grant sharing, can fail to foster research capacity. Instead they may reinforce dependency on external funding and promote networks through which talented LMIC scholars are recruited to work overseas, subsequently deprioritising independent research agendas and depleting local institutions (Ishengoma, 2011). Indeed, international research partnerships may not be the best answer, with larger gains to be derived from strengthening LMIC institutions in their own right (Sanganyado, 2021). Drawing from our own experience, we highlight the value of mentoring schemes, such as *AuthorAid* and the *Consortium for Advanced Research Training in Africa* (Somefun & Adebayo, 2020). We also encourage researchers to be attentive to how debates about these issues are playing out in parallel disciplines. Evolutionary social scientists are increasingly paying attention to fieldwork ethics (Broesch et al., 2020; McKerracher & Núñez-de la Mora, 2022), but may also have much to gain from further mirroring proactive movements within global health, such as shifts in editorial expectations regarding authorship, and grant regulations that incentivise local institutional and researcher involvement (Boum et al., 2018; Urassa et al., 2021).

Second, with regard to emphasising cultural determinants and expressions of *gendered conflict*, we reiterate that we are not attempting to deny the realities of biological differences between the sexes. We have little doubt that differing chromosomes, hormonal profiles and genitalia, and corresponding capacities for reproduction, have fundamental impacts on the behaviour of women and men. A focus on culture is also not mutually exclusive with the potential for sexual selection to have differential impacts on psychological adaptation. Nevertheless, cultural inheritance of gendered behaviour is undeniable, and a key distinguishing feature of what makes us human. Our call is simply to centralise

acknowledgement of this difference to the study of human sex/gender roles, leaving the door open for alternative perspectives on exactly how best to integrate culture into evolutionary accounts of behavioural diversity (see Brown et al., 2011, Micheletti et al. 2022). Moreover, we encourage researchers to move away from combative narratives about the inherent superiority of evolutionary approaches to the ‘Standard Social Science Model’ (Tooby & Cosmides, 1992), and instead reflect more optimistically on the potential gains of paying greater attention, and respect, to research developments in neighbouring fields where the social learning and performance of gendered behaviour and ideology have been more extensively studied.

Finally, with regard to policy recommendations, it is important to temper vaulting ambition by underscoring that additional skills and considerations are required in moving from purely academic concerns to more applied research. The promise of applied evolutionary social science has been the subject of several perspective pieces in recent years (Alvergne, n.d.; Gibson & Lawson, 2015; Jones et al., 2021; Schimmelpfennig & Muthukrishna, 2023; Tucker & Rende Taylor, 2007), including in reference to the COVID pandemic (Arnot et al., 2020), leading to many recommendations for how we can better communicate our findings to relevant stakeholders. We share this enthusiasm, but emphasise that caution is also needed when making policy recommendations, not least because poorly designed interventions have considerable potential to cause harm. We must critically reflect on the quality of our evidence and the likely generalisability of findings to heterogeneous contexts, and encourage effective use of piloting before making large-scale recommendations (IJzerman et al., 2020). More generally, evolutionary social scientists must keep informed of key critical debates within the global health literature, including for example, critiques of social norm approach to behaviour change (Wazir, 2023), evidence-based evaluation (Ravallion, 2020), the ‘harmful cultural practices’ framework (Winter et al., 2002) and associated tendencies for ‘culturalism’ (Pot, 2019), and the use of popular, but flawed measures of ‘development’ such as national income measures (Jerven, 2013) and common metrics of women’s empowerment (Tavener & Crane, 2022). Only by paying attention to these critical discussions, through our own training and collaborations outside of our field, can we expect to make meaningful contributions to tackling gendered conflict.

Acknowledgements. Thanks to Ruth Mace for providing the opportunity to edit a special collection, and for shaping our perspective on evolution and human behaviour. We also thank Kathrine Starkweather for co-editorial assistance and critical feedback on early versions of this article.

Author contributions. David Lawson conceived of the manuscript and led on writing, with support and critical feedback from Sarah Alami and Oluwaseyi Somefun.

Financial support. None.

Disclosure Statement. No potential conflict of interest was reported by the authors.

Research transparency and reproducibility. n/a

Data availability statement. n/a

References

- Abimbola, S. (2019). The foreign gaze: Authorship in academic global health. *BMJ Global Health*, 4, e002068.
- Agey, E., Crippen, S., Wells, A., & Upreti, P. (2023). Socioeconomic benefits and limited parent–offspring disagreement in arranged marriages in Nepal. *Evolutionary Human Sciences*, 5, e7. <https://doi.org/10.1017/ehs.2023.3>.
- Ah-King, M. (2022). The history of sexual selection research provides insights as to why females are still understudied. *Nature Communications*, 13(1), 1–8. <https://doi.org/10.1038/s41467-022-34770-z>
- Akurugu, C. A., Dery, I., & Bata, P. D. (2022). Marriage, bridewealth and power: Critical reflections on women’s autonomy across settings in Africa. *Evolutionary Human Sciences*, 4, e30. <https://doi.org/10.1017/EHS.2022.27>
- Akurugu, C. A., Domapielle, M. K., & Jatoo, M. M. (2021). Bridewealth, women’s subordination and agency in marriage: An ethnographic critique of gender activism in rural north-western Ghana. <https://doi.org/10.1177/0021909621992783>

- Alesina, A., Giuliano, P., & Nunn, N. (2013). On the origins of gender roles: Women and the plough. *Quarterly Journal of Economics*, 128(2), 469–530. <https://doi.org/10.1093/qje/qjt005>
- AlShebli, B. K., Rahwan, T., & Woon, W. L. (2018). The preeminence of ethnic diversity in scientific collaboration. *Nature Communications*, 9(1), 1–10. <https://doi.org/10.1038/s41467-018-07634-8>
- Alvergne, A. (n.d.). *Cultural evolution and population health interventions*. <https://hal.umontpellier.fr/hal-03798255>
- Amahazion, F. (2021). Breast ironing: A brief overview of an underreported harmful practice. *Journal of Global Health*, 11, 1–4. <https://doi.org/10.7189/JOGH.11.03055>
- Anderson, S., & Bidner, C. (2022). Integrating economic and evolutionary approaches to polygynous marriage. *Evolutionary Human Sciences*, 4, e52. <https://doi.org/10.1017/EHS.2022.49>
- Annot, M., Brandl, E., Campbell, O. L. K., Chen, Y., Du, J., Dyble, M., ... Zhang, H. (2020). How evolutionary behavioural sciences can help us understand behaviour in a pandemic. *Evolution, Medicine, and Public Health*, 2020(1), 264–278. <https://doi.org/10.1093/EMPH/EOAA038>
- Baraka, J., Lawson, D. W., Schaffnit, S. B., Wamoyi, J., & Urassa, M. (2022). Why marry early? Parental influence, agency and gendered conflict in Tanzanian marriages. *Evolutionary Human Sciences*, 4, e49. <https://doi.org/10.1017/EHS.2022.46>
- Barrett, L., & Stulp, G. (2013). The pleasures and pitfalls of studying humans from a behavioral ecological perspective. *Behavioral Ecology*, 24(5), 1045–1046. <https://doi.org/10.1093/BEHECO/ARS231>
- Bateman, A. J. (1948). Intra-sexual selection in *Drosophila*. *Heredity*, 2, 349–386.
- Becker, A. (2019). *On the economic origins of restrictions of women's sexuality*.
- Bicchieri, C., & Mercier, H. (2014). Norms and beliefs: How change occurs. *The Complexity of Social Norms*, 37–54. https://doi.org/10.1007/978-3-319-05308-0_3
- Bliege Bird, R., & Codding, B. (2015). The sexual division of labor. In R. Scott & S. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences* (pp. 1–16). John Wiley and Sons.
- Bolnick, D. A., Smith, R. W. A., & Fuentes, A. (2019). How academic diversity is transforming scientific knowledge in biological anthropology. *American Anthropologist*, 121(2), 464. <https://doi.org/10.1111/AMAN.13212>
- Borgerhoff Mulder, M. (2009). Serial monogamy as polygyny or polyandry? *Human Nature*, 20(2), 130–150. <https://doi.org/10.1007/s12110-009-9060-x>
- Borgerhoff Mulder, M. (in press). Bateman's principles and the study of evolutionary demography. In O. Burger, R. Lee, & R. Sear (Eds.), *Human evolutionary demography*. Open Book Publishers.
- Borgerhoff Mulder, M., & Rauch, K. L. (2009). Sexual conflict in humans: Variations and solutions. *Evolutionary Anthropology: Issues, News, and Reviews*, 18(5), 201–214. <https://doi.org/10.1002/evan.20226>
- Boum, Y., Burns, B. F., Siedner, M., Mburu, Y., Bukusi, E., & Haberler, J. E. (2018). Advancing equitable global health research partnerships in Africa. *BMJ Global Health*, 3(4), 5–8. <https://doi.org/10.1136/bmjgh-2018-000868>
- Bovet, J., Raiber, E., Ren, W., Wang, C., & Seabright, P. (2018). Parent-offspring conflict over mate choice: An experimental study in China. *British Journal of Psychology*, 109(4), 674–693. <https://doi.org/10.1111/BJOP.12319>
- Brilmyer, S. P. (2017). Darwinian feminisms. In S. Alaimo (Ed.), *Gender:Matter* (pp. 19–34). Macmillian.
- Broesch, T., Crittenden, A. N., Beheim, B. A., Blackwell, A. D., Bunce, J. A., Colleran, H., ... Borgerhoff Mulder, M. (2020). Navigating cross-cultural research: Methodological and ethical considerations. *Proceedings of the Royal Society B – Biological Sciences*, 287(1935), 20201245. <https://doi.org/10.31234/osf.io/thqsw>
- Brooks, R., & Blake, K. (2019). Gendered fitness interests: A method partitioning the effects of family composition on socio-political attitudes and behaviors. *BioRxiv*, 847814.
- Brooks, R. C., Russo-Batterham, D., & Blake, K. R. (2022). Intel activity on social media linked to local mating ecology. *Psychological Science*, 33(2), 249–258. <https://doi.org/10.1177/09567976211036065>
- Brown, G. R., Dickins, T. E., Sear, R., & Laland, K. N. (2011). Evolutionary accounts of human behavioural diversity. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 366(1563), 313–324. <https://doi.org/10.1098/rstb.2010.0267>
- Brown, G. R., Laland, K. N., & Borgerhoff Mulder, M. (2009). Bateman's principles and human sex roles. *Trends in Ecology & Evolution*, 24(6), 297–304. <https://doi.org/10.1016/j.tree.2009.02.005>
- Burch, R. L. (2020). More than just a pretty face: The overlooked contributions of women in evolutionary psychology textbooks. *Evolutionary Behavioral Sciences*, 14(1), 100–114. <https://doi.org/10.1037/EBS0000166>
- Bursztyn, L., González, A., & Yanagizawa-Drott, D. (2020). Misperceived social norms: women working outside the home in Saudi Arabia. *American Economic Association*, 110(10), 2997–3029. <https://doi.org/10.1257/aer.20180975>
- Buss, D. M. (2017). Sexual conflict in human mating. *Current Directions in Psychological Science*, 26(4), 307–313. <https://doi.org/10.1177/0963721417695559>
- Butler, J. (1988). Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre Journal*, 40(4), 519. <https://doi.org/10.2307/3207893>
- Cano, T., & Hofmeister, H. (2023). The intergenerational transmission of gender: Paternal influences on children's gender attitudes. *Journal of Marriage and Family*, 85(1), 193–214. <https://doi.org/10.1111/JOMF.12863>
- Carmichael, S. (2011). Marriage and power: Age at first marriage and spousal age gap in lesser developed countries. *History of the Family*, 16(4), 416–436. <https://doi.org/10.1016/j.hisfam.2011.08.002>

- Chen, Y., Ge, E., Zhou, L., Du, J., & Mace, R. (2023). Sex inequality driven by dispersal. *Current Biology*, 33(6), 464–473. <https://doi.org/10.1016/J.CUB.2022.12.027>
- Clutton-Brock, T., & Vincent, A. (1991). Sexual selection and the potential reproductive rates of males and females. *Nature*, 351, 58–60.
- Colleran, H. (2016). The cultural evolution of fertility decline. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 371(1692). <https://doi.org/10.1098/RSTB.2015.0152>
- Conroy-Beam, D., & Buss, D. M. (2019). Why is age so important in human mating? Evolved age preferences and their influences on multiple mating behaviors. *Evolutionary Behavioral Sciences*, 13(2), 127–157.
- Cooke, L. (2022). *Bitch*. Basic Books.
- Croucher, S. M. (2008). French-Muslims and the hijab: An analysis of identity and the Islamic veil in France. *Journal of Intercultural Communication Research*, 37(3), 199–213.
- Currie, T. E., Campenni, M., Flitton, A., Njagi, T., Ontiri, E., Perret, C., & Walker, L. (2021). The cultural evolution and ecology of institutions. *Philosophical Transactions of the Royal Society B*, 376(1828). <https://doi.org/10.1098/RSTB.2020.0047>
- Darwin, C. (1871). *The descent of man and selection in relation to sex*. Murray.
- Dessy, S., Tiberti, L., Tiberti, M., & Zoundi, D. (2021). Polygyny and farm households' resilience to climate shocks. <https://doi.org/10.1596/1813-9450-9663>
- Dewsbury, D. A. (2005). The Darwin–Bateman paradigm in historical context. *Integrative and Comparative Biology*, 45(5), 831–837. <https://doi.org/10.1093/ICB/45.5.831>
- Dolan, C. S. (2002). Gender and witchcraft in agrarian transition: The case of Kenyan horticulture. *Development and Change*, 33(4), 659–681. <https://doi.org/10.1111/1467-7660.00274>
- DuBois, L. Z., & Shattuck-Heidorn, H. (2021). Challenging the binary: Gender/sex and the bio-logics of normalcy. *American Journal of Human Biology*, 33(5), e23623. <https://doi.org/10.1002/AJHB.23623>
- Eagly, A. H., & Wood, W. (2013). The nature–nurture debates: 25 Years of challenges in understanding the psychology of gender. *Perspectives on Psychological Science*, 8(3), 340–357. <https://doi.org/10.1177/1745691613484767>
- Efferson, C., Vogt, S., Elhadi, A., Ahmed, H. E. F., & Fehr, E. (2015). Female genital cutting is not a social coordination norm. *Science*, 349(6255), 1446–1447. <https://doi.org/10.1126/science.aaa7978>
- Eriksson, K., Strimling, P., Gelfand, M., Wu, J., Abernathy, J., Akotia, C. S., ... van Lange, P. A. M. (2021). Perceptions of the appropriate response to norm violation in 57 societies. *Nature Communications*, 12(1). <https://doi.org/10.1038/s41467-021-21602-9>
- Fausto-Sterling, A., Gowaty, P. A., & Zuk, M. (1997). Evolutionary psychology and Darwinian feminism (review essay). *Feminist Studies*, 33, 403–417. <https://www.proquest.com/docview/1295981976/fulltextPDF/A9375D5FF9D541EFPQ/1?accountid=10853>
- Fortunato, L., Holden, C., & Mace, R. (2006). From bridewealth to dowry? A Bayesian estimation of ancestral states of marriage transfers in Indo-European groups. *Human Nature – An Interdisciplinary Biosocial Perspective*, 17 (4), 355–376.
- Fox, C. W., Duffy, M. A., Fairbairn, D. J., & Meyer, J. A. (2019). Gender diversity of editorial boards and gender differences in the peer review process at six journals of ecology and evolution. *Ecology and Evolution*, 9(24), 13636–13649. <https://doi.org/10.1002/ECE3.5794>
- Fox, S. A., Scelza, B., Silk, J., & Kramer, K. L. (2023). New perspectives on the evolution of women's cooperation. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 378(1868). <https://doi.org/10.1098/RSTB.2021.0424>
- Fromonteil, S., Marie-Orleach, L., Winkler, L., & Janicke, T. (2023). Sexual selection in females and the evolution of polyandry. *PLOS Biology*, 21(1), e3001916. <https://doi.org/10.1371/JOURNAL.PBIO.3001916>
- Fuentes, A. (2021a). Searching for the 'roots' of masculinity in primates and the human evolutionary past. *Current Anthropology*, 62(S23), S13–S25. <https://doi.org/10.1086/711582/ASSET/IMAGES/LARGE/FG1.JPEG>
- Fuentes, A. (2021b). 'The descent of man,' 150 years on. *Science*, 372(6544), 769. https://doi.org/10.1126/SCIENCE.ABJ4606/ASSET/351C2879-8B5E-46E3-8F38-B858DB21ED48/ASSETS/GRAPHIC/372_769_F1.JPEG
- Gibson, M. A., & Lawson, D. W. (2015). Applying evolutionary anthropology. *Evolutionary Anthropology: Issues, News, and Reviews*, 24(1), 3–14. <https://doi.org/10.1002/evan.21432>
- Godfray, H. C. (1995). Evolutionary theory of parent–offspring conflict. *Nature*, 376, 133–138.
- Gowaty, P. A., Kim, Y. K., & Anderson, W. W. (2012). No evidence of sexual selection in a repetition of Bateman's classic study of *Drosophila melanogaster*. *Proceedings of the National Academy of Sciences of the United States of America*, 109(29), 11740–11745. https://doi.org/10.1073/PNAS.1207851109/SUPPL_FILE/PNAS.201207851SI.PDF
- Gutmann, M., Nelson, R. G., & Fuentes, A. (2021). Epidemic errors in understanding masculinity, maleness and violence. *Current Anthropology*, 62(S23), S5–S12. <https://doi.org/10.1086/712485>
- Haberer, J. E., & Boum, Y. (2023). Behind-the-scenes investment for equity in global health research. *New England Journal of Medicine*, 399, 387–390. https://doi.org/10.1056/NEJMP2213809/SUPPL_FILE/NEJMP2213809_DISCLOSURES.PDF
- Hansen, C. W., Jensen, P. S., & Skovsgaard, C. V. (2015). Modern gender roles and agricultural history: The Neolithic inheritance. *Journal of Economic Growth*, 20, 365–404.
- He, Q. Q., Rui, J. W., Zhang, L., Tao, Y., Wu, J. J., Mace, R., & Ji, T. (2022). Communal breeding by women is associated with lower investment from husbands. *Evolutionary Human Sciences*, 4, e50. <https://doi.org/10.1017/EHS.2022.47>

- Heidt, A. (2023). A call to create funding equity for researcher-mums. *Nature*. <https://doi.org/10.1038/D41586-023-00252-5>
- Henrich, J., & Muthukrishna, M. (2021). The origins and psychology of human cooperation. *Annual Review of Psychology*, 72, 207–240. <https://doi.org/10.1146/ANNUREV-PSYCH-081920-042106>
- Hoquet, T. (2020). Bateman (1948): Rise and fall of a paradigm? *Animal Behaviour*, 164, 223–231. <https://doi.org/10.1016/j.ANBEHAV.2019.12.008>
- Hoquet, T., Bridges, W. C., & Gowaty, P. A. (2020). Bateman's data: Inconsistent with 'Bateman's principles.' *Ecology and Evolution*, 10(19), 10325–10342. <https://doi.org/10.1002/ECE3.6420>
- Horne, C., Dodo, F. N. A., & Dodo, N. D. (2013). The shadow of indebtedness: Bridewealth and norms constraining female reproductive autonomy. *American Sociological Review*, 78(3), 503–520. <https://doi.org/10.1177/0003122413484923>
- Howard, J. A., & Gibson, M. A. (2017). Frequency-dependent female genital cutting behaviour confers evolutionary fitness benefits. *Nature Ecology & Evolution*, 1(3), 0049. <https://doi.org/10.1038/s41559-016-0049>
- Howard, J. A., & Gibson, M. A. (2019). Is there a link between paternity concern and female genital cutting in West Africa? *Evolution and Human Behavior*, 40(1), 1–11. <https://doi.org/10.1016/j.EVOLHUMBHAV.2018.06.011>
- Howard, J. A., & Gibson, M. A. (2023). Testing evolutionary conflict theories for sexual and physical intimate partner violence in Sub-Saharan Africa. *Evolutionary Human Sciences*, 5, e6. <https://doi.org/10.1017/EHS.2022.58>
- Hrdy, S. B. (1981). *The woman that never evolved*.
- Hrdy, S. B. (1997). Raising Darwin's consciousness. *Human Nature*, 8(1), 1–49.
- Hrdy, S. B. (1999). *Mother Nature: A history of mothers, infants and natural selection*.
- Hyde, J. S., Bigler, R. S., Joel, D., Tate, C. C., & van Anders, S. M. (2019). The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist*, 74(2), 171–193. <https://doi.org/10.1037/AMP0000307>
- Ijzerman, H., Lewis, N. A., Przybylski, A. K., Weinstein, N., DeBruine, L., Ritchie, S. J., ... Anvari, F. (2020). Use caution when applying behavioural science to policy. *Nature Human Behaviour*, 4(11), 1092–1094. <https://doi.org/10.1038/s41562-020-00990-w>
- Ishengoma, J. (2011). *North–South partnerships are not the answer*. <https://www.scidev.net/global/opinions/north-south-partnerships-are-not-the-answer-1/>
- Izugbara, C. (2018). Spousal age differences and violence against women in Nigeria and Tanzania. *Health Care for Women International*, 39(8), 872–887. <https://doi.org/10.1080/07399332.2018.1426001>
- Janicke, T., Häderer, I. K., Lajeunesse, M. J., & Anthes, N. (2016). Darwinian sex roles confirmed across the animal kingdom. *Science Advances*, 2(2). https://doi.org/10.1126/SCIADV.1500983/SUPPL_FILE/1500983_SM.PDF
- Jayachandran, S. (2015). The roots of gender inequality in developing countries. *Economics*, 7(1), 63–88. <https://doi.org/10.1146/ANNUREV-ECONOMICS-080614-115404>
- Jayachandran, S. (2020). Social norms as a barrier to women's employment in developing countries. *National Bureau of Economic Research*, no. w27449.
- Jerven, M. (2013). *Poor numbers: How we are misled by African development statistics and what to do about it*. Google Books. https://books.google.com/books?hl=en&lr=&id=_aqdDgAAQBAJ&oi=fnd&pg=PR5&dq=poor+number+jerven&ots=MCKQqiCzFN&sig=zZls2JqdU_FTQAJM5Df0nWCiRXM#v=onepage&q=poor%20number%20jerven&f=false
- Ji, T., Zhang, H., Pagel, M., & Mace, R. (2022). A phylogenetic analysis of dispersal norms, descent and subsistence in Sino-Tibetans. *Evolution and Human Behavior*, 43(2), 147–154. <https://doi.org/10.1016/j.EVOLHUMBHAV.2021.12.002>
- Jones, J. H., Pisor, A. C., Douglass, K. G., Bird, R. B., Ready, E., Hazel, A., ... Townner, M. C. (2021). How can evolutionary and biological anthropologists engage broader audiences? *American Journal of Human Biology*, 33(4), e23592. <https://doi.org/10.1002/AJHB.23592>
- Jordan, F. M., Gray, R. D., Greenhill, S. J., & Mace, R. (2009). Matrilineal residence is ancestral in Austronesian societies. *Proceedings of the Royal Society B: Biological Sciences*, 276(1664), 1957–1964. <https://doi.org/10.1098/RSPB.2009.0088>
- Kaplan, H. S., Hooper, P. L., & Gurven, M. (2009). The evolutionary and ecological roots of human social organization. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 364(1533), 3289–3299. <https://doi.org/10.1098/rstb.2009.0115>
- Kappeler, P. M., Benhaïem, S., Fichtel, C., Fromhage, L., Höner, O. P., Jennions, M. D., ... Goymann, W. (2022). Sex roles and sex ratios in animals. *Biological Reviews*. <https://doi.org/10.1111/BRV.12915>
- Karlsson Green, K., & Madjidian, J. A. (2011). Active males, reactive females: Stereotypic sex roles in sexual conflict research? *Animal Behaviour*, 81(5), 901–907. <https://doi.org/10.1016/j.ANBEHAV.2011.01.033>
- Kendal, R. L., Boogert, N. J., Rendell, L., Laland, K. N., Webster, M., & Jones, P. L. (2018). Social learning strategies: Bridge-building between fields. In *Trends in Cognitive Sciences*, 22(7), 651–665. <https://doi.org/10.1016/j.tics.2018.04.003>
- Kerry, N., Blake, K. R., Murray, D. R., & Brooks, R. C. (2021). Male descendant kin promote conservative views on gender issues and conformity to traditional norms. *Evolutionary Human Sciences*, 3, e34. <https://doi.org/10.1017/EHS.2021.29>
- Kilgallen, J. A., Schaffnit, S. B., Kumogola, Y., Galura, A., Urassa, M., & Lawson, D. W. (2022). Positive correlation between women's status and intimate partner violence suggests violence backlash in Mwanza, Tanzania. *Journal of Interpersonal Violence*, 37(21–22), NP20331–NP20360.
- Kokko, H., & Jennions, M. D. (2008). Parental investment, sexual selection and sex ratios. *Journal of Evolutionary Biology*, 21, 919–948.

- Kokko, H., & Jennions, M. D. (2023). Is more always better when it comes to mating? *PLOS Biology*, 21(1), e3001955. <https://doi.org/10.1371/JOURNAL.PBIO.3001955>
- Kokko, H., & Monaghan, P. (2001). Predicting the direction of sexual selection. *Ecology Letters*, 4(2), 159–165.
- Kudo, Y. (2021). Does criminalizing discriminatory cultural practices improve women's welfare? A simple model of Levirate marriage in Africa. *Economics Letters*, 199, 109728
- Laland, K., & Brown, G. (2011). *Sense and nonsense*. Oxford University Press.
- Lawson, D. W., & Gibson, M. (in press). Evolutionary approaches to population health: Insights on polygynous marriage, 'child marriage' and female genital mutilation/cutting. In O. Burger, R. Lee, & R. Sear (Eds.), *Human Evolutionary Demography*. OpenBook Publishers.
- Lawson, D. W., & Gibson, M. A. (2018). Polygynous marriage and child health in sub-Saharan Africa: What is the evidence for harm? *Demographic Research*, 39, 177–208. <https://doi.org/10.4054/DemRes.2018.39.6>
- Lawson, D., Schaffnit, S., Hassan, A., & Urassa, M. (2021a). Shared interest or sexual conflict? Spousal age gap, women's wellbeing and fertility in rural Tanzania. *Evolution and Human Behavior*, 42, 165–175.
- Lawson, D. W., James, S., Ngadaya, E., Ngowi, B., Mfinanga, S. G. M., & Mulder, M. B. (2015). No evidence that polygynous marriage is a harmful cultural practice in northern Tanzania. *Proceedings of the National Academy of Sciences of the United States of America*, 112(45), 13827–13832.
- Lawson, D. W., Schaffnit, S. B., Kilgallen, J. A., Kumogola, Y., Galura, A., & Urassa, M. (2021b). He for she? Variation and exaggeration in men's support for women's empowerment in northern Tanzania. *Evolutionary Human Sciences*, 3, e27. <https://doi.org/10.1017/EHS.2021.23>
- Lessells, C. M. (2006). The evolutionary outcome of sexual conflict. *Philosophical Transactions of the Royal Society, Series B*, 361, 301–317.
- Lessells, C. M. (2012). Sexual conflict. In N. J. Royle, P. T. Smiseth, & M. Kölliker (Eds.), *The evolution of parental care* (pp. 150–170). Oxford University Press.
- Liesen, L. T. (2007). Women, behavior, and evolution: Understanding the debate between feminist evolutionists and evolutionary psychologists. *Politics and the Life Sciences*, 26, 51–69. <https://about.jstor.org/terms>
- Longman, C., & Bradley, T. (2016). *Interrogating the concept of 'harmful cultural practices'*. *Gender, culture and coercion*. Routledge.
- Lowes, S. (2020). Kinship structure & women: Evidence from economics. *Daedalus*, 149(1), 119–133. https://doi.org/10.1162/DAED_A_01777
- Mace, R. (2013). Cooperation and conflict between women in the family. *Evolutionary Anthropology*, 22(5), 251–258. <https://doi.org/10.1002/evan.21374>
- Mace, R., & Jordan, F. M. (2011). Macro-evolutionary studies of cultural diversity: A review of empirical studies of cultural transmission and cultural adaptation. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366(1563), 402–411. <https://doi.org/10.1098/RSTB.2010.0238>
- Mackie, G., & LeJeune, J. (2009). *Social dynamics of abandonment of harmful cultural practices: A new look at the theory*. Innocenti Working Paper No. 2009-06 ed. UNICEF Innocenti Research Centre.
- Manala, M. (2015). African traditional widowhood rites and their benefits and/or detrimental effects on widows in a context of African Christianity. *HTS: Theological Studies*, 71(3), 1–9.
- Mattison, S. M., MacLaren, N., Sum, C. Y., Mattison, P. M., Liu, R., Shenk, M. K., ... Wander, K. (2023). Market integration, income inequality, and kinship system among the Mosuo of China. *Evolutionary Human Sciences*, 5, e4. <https://doi.org/10.1017/EHS.2022.52>
- Mattison, S. M., Smith, E. A., Shenk, M. K., & Cochrane, E. E. (2016). The evolution of inequality. *Evolutionary Anthropology: Issues, News, and Reviews*, 25(4), 184–199. <https://doi.org/10.1002/EVAN.21491>
- Maziak, W., Asfar, T., Mzayek, F., Fouad, F. M., & Kilzieh, N. (2002). Socio-demographic correlates of psychiatric morbidity among low-income women in Aleppo, Syria. *Social Science & Medicine*, 54(9), 1419–1427. [https://doi.org/10.1016/S0277-9536\(01\)00123-X](https://doi.org/10.1016/S0277-9536(01)00123-X)
- McKerracher, L., & Núñez-de la Mora, A. (2022). More voices are always better: Tackling power differentials in knowledge production and access in human biology. *American Journal of Human Biology*, 34(S1), e23712. <https://doi.org/10.1002/AJHB.23712>
- McLaughlin, J. F., Brock, K. M., Gates, I., Pethkar, A., Piattoni, M., Rossi, A., & Lipshutz, S. E. (2023). Multimodal models of animal sex: Breaking binaries leads to a better understanding of ecology and evolution. *BioRxiv*, 2023.01.26.525769. <https://doi.org/10.1101/2023.01.26.525769>
- Mesoudi, A., & Thornton, A. (2018). What is cumulative cultural evolution? *Proceedings of the Royal Society B*, 285(1880). <https://doi.org/10.1098/RSPB.2018.0712>
- Micheletti, A. J., Brandl, E., & Mace, R. (2022). What is cultural evolution anyway? *Behavioral Ecology*, 33(4), 667–669.
- Minocher, R., Duda, P., & Jaeggi, A. v. (2019). Explaining marriage patterns in a globally representative sample through socio-ecology and population history: A Bayesian phylogenetic analysis using a new supertree. *Evolution and Human Behavior*, 40(2), 176–187. <https://doi.org/10.1016/J.EVOLHUMBEHAV.2018.11.003>

- Minocher, R., & Ross, C. T. (2022). Spousal age-gaps, partner preferences, and consequences for well-being in four Colombian communities. *Evolution and Human Behavior*, 43(5), 394–407. <https://doi.org/10.1016/j.EVOLHUMBEHAV.2022.06.004>
- Morgenroth, T., & Ryan, M. K. (2018). Gender trouble in social psychology: How can Butler's work inform experimental social psychologists' conceptualization of gender? *Frontiers in Psychology*, 9, 1320. <https://doi.org/10.3389/FPSYG.2018.01320/BIBTEX>
- Morimoto, J. (2020). Bateman (1948): Was it all wrong? A comment on Hoquet (2020). *Animal Behaviour*, 168, e1–e4. <https://doi.org/10.1016/j.anbehav.2020.04.020>
- Morton, B., Vercueil, A., Masekela, R., Heinz, E., Reimer, L., Saleh, S., ... Oriyo, N. (2022). Consensus statement on measures to promote equitable authorship in the publication of research from international partnerships. *Anaesthesia*, 77(3), 264–276. <https://doi.org/10.1111/ANA.15597>
- Moya, C., Snopkowski, K., & Sear, R. (2016). What do men want? Re-examining whether men benefit from higher fertility than is optimal for women. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 371, 20150149.
- Muehlenhard, C. L., & Peterson, Z. D. (2011). Distinguishing between sex and gender: History, current conceptualizations, and implications. *Sex Roles*, 64(11–12), 791–803. <https://doi.org/10.1007/S11199-011-9932-5/METRICS>
- Mughogho, W., Adhiambo, J., & Forscher, P. S. (2023). African researchers must be full participants in behavioural science research. *Nature Human Behaviour*, 2023, 1–3. <https://doi.org/10.1038/s41562-023-01536-6>
- Nelson, R. G. (2021). The sex in your violence: patriarchy and power in anthropological world building and everyday life. *Current Anthropology*, 62(S23), S92–S102. <https://doi.org/10.1086/711605>
- Nettle, D. (2009). Beyond nature versus culture: Cultural variation as an evolved characteristic. *Journal of the Royal Anthropological Institute*, 15(2), 223–240. <https://doi.org/10.1111/J.1467-9655.2009.01561.X>
- Nettle, D. (2018). What we talk about when we talk about biology. In: *Hanging on to the edges: Essays on science, society and the academic life* (pp. 17–42). Open Book Publishers. <https://doi.org/10.11647/OBP.0155.02>
- Nettle, D., Gibson, M. A., Lawson, D. W., & Sear, R. (2013). Human behavioral ecology: Current research and future prospects. *Behavioral Ecology*, 24(5). <https://doi.org/10.1093/beheco/ars222>
- Omariba, D., & Boyle, M. H. (2007). Family structure and child mortality in Sub-Saharan Africa: Cross-national effects of polygyny. *Journal of Marriage and Family*, 69(2), 528–543. <https://doi.org/10.1111/j.1741-3737.2007.00381.x>
- Onyishi, I. E., Prokop, P., Okafor, C. O., & Pham, M. N. (2016). Female genital cutting restricts sociosexuality among the igbo people of Southeast Nigeria. *Evolutionary Psychology*, 14(2), 1–7. <https://doi.org/10.1177/1474704916648784>
- Palombit, R. A. (2014). Sexual conflict in nonhuman primates. *Advances in the Study of Behavior*, 46, 191–280. <https://doi.org/10.1016/B978-0-12-800286-5.00005-5>
- Parker, G. A. (1979). Sexual selection and sexual conflict. In M. S. Blum & N. A. Blum (Eds.), *Sexual selection and reproductive competition in insects* (pp. 123–166). Academic Press.
- Parker, G. A. (2006). Sexual conflict over mating and fertilization: An overview. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 361(1466), 235. <https://doi.org/10.1098/RSTB.2005.1785>
- Pazhoohi, F., & Kingstone, A. (2020). Sex difference on the importance of veiling: A cross-cultural investigation. *Cross-Cultural Research*, 54(5), 486–501. <https://doi.org/10.1177/1069397120931031>
- Peacey, S., Campbell, O. L. K., & Mace, R. (2022). Same-sex competition and sexual conflict expressed through witchcraft accusations. *Scientific Reports*, 12(1), 1–13. <https://doi.org/10.1038/s41598-022-10315-8>
- Perry, B., Oluoch, L., Agot, K., Taylor, J., Onyango, J., Ouma, L., ... Corneli, A. (2014). Widow cleansing and inheritance among the Luo in Kenya: The need for additional women-centred HIV prevention options. *Journal of the International AIDS Society*, 17(1), 19010. <https://doi.org/10.7448/IAS.17.1.19010>
- Perry, J., & Chapman, T. (2023). The interface of sexual selection, conflict and evolutionary psychology: Emerging core themes. In D. Buss (Ed.), *The Oxford handbook of human mating* (pp. 33–65). Oxford University Press.
- Pesando, L. M. (2021). *Polygyny and women's status: Myths and evidence* (pp. 975–987). Springer. https://doi.org/10.1007/978-3-319-95687-9_141
- Pot, H. (2019). INGO behavior change projects: Culturalism and teenage pregnancies in Malawi. *Medical Anthropology*, 38(4), 327–341.
- Ravallion, M. (2020). Should the Randomistas (continue to) rule? NBER Working Papers. <https://ideas.repec.org/p/nbr/nberwo/27554.html>
- Rosenthal, G. G., & Ryan, M. J. (2022). Sexual selection and the ascent of women: Mate choice research since Darwin. *Science*, 375(6578). <https://doi.org/10.1126/SCIENCE.ABI6308>
- Šaffa, G., Zrzavý, J., & Duda, P. (2022). Global phylogenetic analysis reveals multiple origins and correlates of genital mutilation/cutting. *Nature Human Behaviour*, 6(5), 635–645. <https://doi.org/10.1038/s41562-022-01321-x>
- Sanganyado, E. (2021). *AuthorAID – Four lessons from leading an international collaboration*. <https://www.authoraid.info/en/news/details/1425/>
- Sani, A. (2017). *Inferior*. Beacon Press.

- Scelza, B., Prall, S., & Starkweather, K. (2021). The role of spousal separation on norms related to gender and sexuality among himba pastoralists. *Social Sciences*, 10(5), 174. <https://doi.org/10.3390/SOCSCII0050174/S1>
- Scelza, B. A. (2013). Choosy but not chaste: Multiple mating in human females. *Evolutionary Anthropology: Issues, News, and Reviews*, 22(5), 259–269. <https://doi.org/10.1002/evan.21373>
- Scelza, B. A., Prall, S. P., Swinford, N., Gopalan, S., Atkinson, E. G., McElreath, R., ... Henn, B. M. (2020). High rate of extra-pair paternity in a human population demonstrates diversity in human reproductive strategies. *Science Advances*, 6(8), 6195. https://doi.org/10.1126/SCLADV.AAY6195/SUPPL_FILE/AAY6195_SM.PDF
- Schacht, R., & Borgerhoff Mulder, M. (2015). Sex ratio effects on reproductive strategies in humans. *Royal Society Open Science*, 2(1), 140402–140402. <https://doi.org/10.1098/rsos.140402>
- Schacht, R., Rauch, K. L., & Borgerhoff Mulder, M. (2014). Too many men: The violence problem? *Trends in Ecology & Evolution*, 29(4), 214–222. http://ac.els-cdn.com/S0169534714000251/1-s2.0-S0169534714000251-main.pdf?_tid=e729ef46-e679-11e3-a441-00000aacb35e&acdnat=1401289879_c445b07a28e07fcf4d8f2e6c46478a89
- Schaffnit, S. B., Hassan, A., Urassa, M., & Lawson, D. W. (2019). Parent–offspring conflict unlikely to explain ‘child marriage’ in northwestern Tanzania. *Nature Human Behaviour*, 3(4). <https://doi.org/10.1038/s41562-019-0535-4>
- Schaffnit, S. B., Page, A. E., Lynch, R., Spake, L., Sear, R., Sosis, R., ... Shenk, M. K. (2023). The impact of market integration on arranged marriages in Matlab, Bangladesh. *Evolutionary Human Sciences*, 5, e5. <https://doi.org/10.1017/EHS.2022.54>
- Schaffnit, S. B., Wamoyi, J., Urassa, M., Dardoumpa, M., & Lawson, D. W. (2021). When marriage is the best available option: Perceptions of opportunity and risk in female adolescence in Tanzania. *Global Public Health*, 16(12), 1820–1833. <http://dx.doi.org/10.1080/17441692.2020.1837911>
- Schimmelpennig, R., & Muthukrishna, M. (2023). Cultural evolutionary behavioural science in public policy. *Behavioural Public Policy*, 1–31. <https://doi.org/10.1017/BPP.2022.40>
- Sear, R. (2021). The male breadwinner nuclear family is not the ‘traditional’ human family, and promotion of this myth may have adverse health consequences. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376(1827). <https://doi.org/10.1098/rstb.2020.0020>
- Sear, R., Lawson, D. W., & Dickens, T. E. (2007). Synthesis in the human evolutionary behavioural sciences. *Journal of Evolutionary Psychology*, 5(1). <https://doi.org/10.1556/JEP.2007.1019>
- Shenk, M. K. (2007). Dowry and public policy in contemporary India: The behavioral ecology of a ‘social evil.’ *Human Nature*, 18(3), 242–263. <https://doi.org/10.1007/s12110-007-9006-0>
- Smith, E., Borgerhoff Mulder, M., & Hill, K. (2001). Controversies in the evolutionary social sciences: A guide for the perplexed. *Trends in Ecology and Evolution*, 16, 128–135.
- Smith, J. E., von Rueden, C. R., van Vugt, M., Fichtel, C., & Kappeler, P. M. (2021). An evolutionary explanation for the female leadership paradox. *Frontiers in Ecology and Evolution*, 9, 468. <https://doi.org/10.3389/FEVO.2021.676805/BIBTEX>
- Smuts, B. (1992). Male aggression against women. *Human Nature*, 3(1), 1–44.
- Smuts, B. (1995). The evolutionary origins of patriarchy. *Human Nature*, 6, 1–32.
- Snopkowski, K., & Nelson, J. J. (2021). Fertility intentions and outcomes in Indonesia: Evolutionary perspectives on sexual conflict. *Evolutionary Human Sciences*, 3, e33. <https://doi.org/10.1017/EHS.2021.27>
- Somefun, O. D., & Adebayo, K. O. (2020). The role of mentoring in research ecosystems in Sub-Saharan Africa: some experiences through the CARTA opportunity. *Global Public Health*, 16(1), 36–47. <https://doi.org/10.1080/17441692.2020.1776365>
- Starkweather, K. E., Shenk, M. K., & McElreath, R. (2020). Biological constraints and socioecological influences on women’s pursuit of risk and the sexual division of labour. *Evolutionary Human Sciences*, 2, e59. <https://doi.org/10.1017/EHS.2020.60>
- Stieglitz, J., Kaplan, H., Gurven, M., Winking, J., & Tayo, B. V. (2011). Spousal violence and paternal disinvestment among Tsimane’ forager-horticulturalists. *American Journal of Human Biology*, 23(4), 445–457. <https://doi.org/10.1002/AJHB.21149>
- Stieglitz, J., Trumble, B. C., Kaplan, H., & Gurven, M. (2018). Marital violence and fertility in a relatively egalitarian high-fertility population. *Nature Human Behaviour*, 2(8), 565–572. <https://doi.org/10.1038/s41562-018-0391-7>
- Strassmann, B. I. (1992). The function of menstrual taboos among the dogon – Defense against cuckoldry? *Human Nature*, 3(2), 89–131. <https://doi.org/10.1007/BF02692249/METRICS>
- Strassmann, B. I. (2011). Cooperation and competition in a cliff-dwelling people. *Proceedings of the National Academy of Sciences of the United States of America*, 108 (suppl 2), 10894–10901. <https://doi.org/10.1073/pnas.1100306108>
- Strassmann, B. I., Kurapati, N. T., Hug, B. F., Burke, E. E., Gillespie, B. W., Karafet, T. M., & Hammer, M. F. (2012). Religion as a means to assure paternity. *Proceedings of the National Academy of Sciences of the United States of America*, 109(25), 9781–9785. https://doi.org/10.1073/PNAS.1110442109/SUPPL_FILE/PNAS.201110442SI.PDF
- Stumpf, R. M., Martinez-Mota, R., Milich, K. M., Righini, N., & Shattuck, M. R. (2011). Sexual conflict in primates. *Evolutionary Anthropology: Issues, News, and Reviews*, 20(2), 62–75. <https://doi.org/10.1002/EVAN.20297>
- Suran, L., Amin, S., Huq, L., & Chowdury, K. (2004). Does dowry improve life for brides? A test of the bequest theory of dowry in rural Bangladesh. *Poverty, Gender, and Youth*. <https://doi.org/10.31899/pgy2.1017>
- Swindle, J. (n.d.). *Pathways of global cultural diffusion: Mass media and people’s moral declarations about men’s violence against women*. <https://doi.org/10.31235/OSF.IO/U2ZHW>

- Tavener, K., & Crane, T. A. (2022). Hitting the target and missing the point? On the risks of measuring women's empowerment in agricultural development. *Agriculture and Human Values*, 39(3), 849–857. <https://doi.org/10.1007/S10460-021-10290-2/METRICS>
- The Lancet Global Health. (2018). Closing the door on parachutes and parasites. *The Lancet Global Health*, 6(6), e593.
- Thornhill, R., & Palmer, C. T. (2000). *A natural history of rape*. MIT.
- Tooby, J., & Cosmides, L. (1992). The psychological foundations of culture. In L. Barkow, L. Cosmides, & J. Tooby (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 19–136). Oxford University Press. <https://psycnet.apa.org/record/1992-98504-001>
- Tregenza, T., Wedell, N., & Chapman, T. (2006). Introduction. Sexual conflict: A new paradigm? *Philosophical Transactions of the Royal Society B: Biological Sciences*, 361(1466), 229–234. <https://doi.org/10.1098/RSTB.2005.1796>
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the Descent of Man* (pp. 136–179). Aldine.
- Trivers, R. L. (1974). Parent-offspring conflict. *American Zoologist*, 14, 249–264.
- Tucker, B., & Rende Taylor, L. (2007). The human behavioral ecology of contemporary world issues. *Human Nature*, 18(3), 181–189. <https://doi.org/10.1007/s12110-007-9013-1>
- Ugla, C., & Mace, R. (2017). Adult sex ratio and social status predict mating and parenting strategies in Northern Ireland. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 372(1729). <https://doi.org/10.1098/RSTB.2016.0318>
- Urassa, M., Lawson, D. W., Wamoyi, J., Gurm, E., Gibson, M. A., Madhivanan, P., & Placek, C. (2021). Cross-cultural research must prioritize equitable collaboration. *Nature Human Behaviour*, 5, 668–671. <https://doi.org/10.1038/s41562-021-01076-x>
- Vandermassen, G. (2011). Evolution and rape: A feminist Darwinian perspective. *Sex Roles*, 64(9), 732–747. <https://doi.org/10.1007/S11199-010-9895-Y/METRICS>
- Wazir, R. (2023). Social norm change, behavioural approaches and the politics of knowledge: A conversation between the ivory tower and the field. *Development and Change*, 54(1), 3–30. <https://doi.org/10.1111/DECH.12731>
- West, S. A., Mouden, C. el & Gardner, A. (2011). Sixteen common misconceptions about the evolution of cooperation in humans. *Evolution and Human Behavior*, 32, 231–262. <https://doi.org/10.1016/j.evolhumbehav.2010.08.001>
- Winter, B., Thompson, D., & Jeffrey, S. (2002). The UN approach to harmful traditional practices. *International Feminist Journal of Politics*, 4(1), 72–94. <https://doi.org/10.1080/1461674042000211344>
- Wood, W., & Eagly, A. H. (2012). Biosocial construction of sex differences and similarities in behavior. *Advances in Experimental Social Psychology*, 46, 55–123. <https://doi.org/10.1016/B978-0-12-394281-4.00002-7>
- Yarbrough, M. W. (2022). Very long engagements: The persistent authority of bridewealth in a post-apartheid South African community. *Generation, Gender and Negotiating Custom in South Africa*, 68–85. <https://doi.org/10.4324/9781003147398-3>