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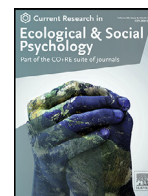
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# An integrated psychology of (animalistic) dehumanization requires a focus on human-animal relations

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## ABSTRACT

Relative to the study of prejudice and stereotyping, the systematic study of how we animalize outgroup members is a newcomer to the study of intergroup relations. With remarkable gains made in the last two decades, the field is now represented by distinct methods and approaches emphasized across camps, with recent calls for conceptual integration (see this Special Issue). Our central contention is that the existing literature focuses too much on humans (and the psychological stripping away of humanness from targets) with insufficient attention to animals, particularly regarding how we think about and treat animals (i.e., human-animal relations). How and why we animalize other people is systematically linked to how we overvalue humans relative to other animals; dehumanization of other people carries its sting and clout because animals are disregarded or exploited as entities deserving less protection and fewer rights *relative to humans*. We argue that the dehumanization field would benefit from this perspective, including the introduction of novel interventions, but also that the spillover benefits would help us to better understand human nature and our future challenges.

## 1. Introduction

When we “animalize” people, the process or outcome is not uniformly negative (see Haslam et al., 2020). People can good-naturedly refer to their own children as *monkeys*, to their romantic partner as *pet*, or to themselves as being as strong as a *lion*. Consider also that, in gay male culture, the term *bear* is used to denote a desirable male body replete with body hair (see Silva, 2022), and that many gods were historically depicted as half-human (Bajaj, 2022), frequently taking animal form in stories. But in contemporary industrialized societies, where we routinely breed, confine, ignore, or exploit animals for our own purposes, likening someone from outside one’s inner circle to an animal is rarely positive or flattering but rather derogatory, demeaning, and delegitimizing (e.g., people as pigs, vermin, snakes)<sup>1</sup>. Indeed, the *intention* of such a comparison is for the allegedly negative value and lower status of the animal to transfer to the animalized human. Thus, we look down on animals to justify our mistreatment, disregard, and often exploitation of them much in the same manner as we look down on lower status human groups. It should be apparent to researchers and theorists, therefore, that how we think about *animalized others* is systematically linked to how we think about and treat animals (see Hodson et al., 2020). But a

keen reader could be forgiven for not gleaning this point from the main corpus of the dehumanization literature.

Part of the problem, we argue, is that the process of dehumanization, as captured in the social psychological literature, is often decontextualized from other psychological processes and from the wider social-cultural context. We find much in agreement with Leader Maynard and Luft (2023, this volume) who question the ecological validity of contemporary dehumanization research. Their example concerns how the Nazis under Hitler endorsed a form of biological hierarchy of species (with Jews at the bottom and likened to vermin) that stood in contrast to, and was opposed by, the Soviets under Stalin. Although the Soviets also fostered the animalistic dehumanization of their opponents (e.g., Ukrainians), the dehumanization process was less “ideologically thick” and more conventional or practical in form, focusing more on disgust and contempt for outgroup targets without evoking racial dominance as the underpinning framework (see Leader Maynard & Luft, 2023). Without consideration of bigger-picture ideologies and worldviews, therefore, it is difficult to understand and appreciate the nature of dehumanization as a process to delegitimize others (see also Hodson & MacInnis, 2016). We share their call to consider the ecological context of dehumanization (see also Smith, 2023, this issue), using the context of

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<sup>1</sup> Note that we use “animals” as a shorthand for “non-human animals”. We also recognize that many people living in industrialized countries can revere and adore animals (while nonetheless exploiting non-humans), and that harming animals is not confined to contemporary Western cultures. For more on *Why We Love and Exploit Animals*, we refer the reader to Dhont and Hodson (2020).

human-animal relations to illustrate what can be gained by broadening the ecological lens to consider higher-level, contextual factors and shared or common processes.

### 1.1. Basic distinctions between dehumanization approaches

In psychology, the contemporary study of dehumanization largely focuses on *animalistic dehumanization*, that is, others as animal-like (e.g., Costello & Hodson, 2014a; Kteily et al., 2015; Leyens et al., 2000, 2007; Salmen & Dhont, 2023). In this context, Loughnan et al. (2009) have raised another important distinction, the difference between *attribute-based dehumanization* (attributing relatively lower levels of “human” qualities or traits to the ingroup/self relative to outgroup/other), and *metaphorical dehumanization* (likening human targets to animals, in an analogous sense). Below we discuss some examples of these different forms, before asking the field whether these forms of dehumanization are sufficient to capture the phenomenon.

### 1.2. Dehumanization as “Missing the human stuff”

The attribute-based approach to dehumanization begins with the concept *human* and subsequently to the under-attributing or denying human qualities to that target. Here, human is the focal point, with humanness removed as seen fit by the perceiver. Leyens et al. (2000, 2007) exemplify this approach – participants rate ingroups and outgroups with regard to their tendency to experience positive and negative emotions that people typically consider, correctly or incorrectly, to be shared with animals (primary emotions; e.g., fear, joy) or relatively unique to humans (secondary emotions; e.g., remorse, compassion). What matters most is the perceived *humanness* of the emotions – participants generally assign positive and negative emotions to ingroups and outgroups but withhold secondary emotions from outgroups (see also Costello & Hodson, 2010, 2014a). In the mind of the dehumanizer, therefore, people can subtly withhold humanness to others by downgrading their capacity for the emotions typically perceived as uniquely human. Although the focus is on humans (specifically, “less human”), the implication is “more animal”, tacitly reasoning that if targets lack the qualities that divide humans and animals, then not having those attributes renders one more animalistic (Leyens et al., 2007; Loughnan et al., 2009).

Haslam’s (2006; Haslam et al., 2005) Dual Process model builds on this work in several ways. In addition to animalistic dehumanization (of the sort discussed by Leyens) Haslam adds mechanistic dehumanization, seeing others as robots or objects. In doing so he distinguishes between uniquely human qualities (that differentiate humans from animals) and human nature qualities (that are shared with animals but not inanimate or living creatures). Clearly, he considers animals in both forms of dehumanization, although not necessarily human-animal relations (i.e., treatment of animals). Methodologically, rather than focusing on the attribution of (secondary) emotions, Haslam and his group consider attributions of personality traits that are deemed uniquely human (or to reflect an absence of human nature if missing). Targets can be dehumanized if they are deemed not uniquely human enough, or if they are deemed lacking in qualities that animals (including humans) share. Other researchers propose that having a mind, or mental capacity, is essential to being deemed human, meaning that dementalization (i.e., denying agency or sense of experience in others) “lowers” a target (Gray et al., 2007; Waytz et al., 2010). Dementalized human targets thus become psychologically dehumanized. Importantly, mind perception is not only a factor in dehumanization but also in ascribing moral worth to animals (see Bratanova et al., 2011; Leach et al., 2021; Rottman et al., 2021), suggesting that some of the same processes likely apply when thinking about and evaluating humans and animals (Dhont et al., 2019; Gradidge et al., 2023).

Each of these approaches share a common theme: dehumanization is largely operationalized by a focus on the human qualities, observing which targets are denied that humanness. Human is the only true

focal point; with humans perceived to be at the top of the chain in terms of value and superiority, removing humanness can only move a target down the chain, implying movement toward animals (or sometimes objects). But in these methods, animals are themselves largely absent, essentially serving as a default fill-in for when humanness psychologically erodes.

### 1.3. Dehumanization as “Analogous to animal”

Other approaches more directly involve comparisons to animals, even if not examining human-animal relations. Goff et al. (2008) demonstrated the presence of dehumanization after subliminally priming participants with Black/White/control faces before exposing them to degraded images of apes and non-ape animals (Study 1). Participants were faster to identify apes in images after being primed with Black faces. This effect was not moderated by participant race (i.e., not confined to White participants). The reverse was also found in a White sample: priming with apes facilitated identifying Black faces in images (Study 2). Clearly, mental representations of Black people overlap with those of apes, likening the two targets.

Others have employed self-report measures. Viki et al. (2006) developed a measure of creatureliness that directly pits human against animal (e.g., person or citizen vs. mongrel or creature); participants are tasked with explaining which terms best describe one’s ingroup or outgroup. As expected, the more human terms are generally associated with the former, and animal terms with the latter. In related measures, researchers have asked participants to rate the degree to which various animal terms (e.g., beasts, animals) characterize the outgroup (Landry et al., 2023; Stathi et al., 2017). Also requiring participants to mentally contrast humans with animals, Kteily et al. (2015) introduced the popular Ascent of [Hu]Man scale that presents participants with an image of a continuum, with an ape-like animal on the left and a human on the right, with various intermediary depictions between ape and human in between. Participants typically rate their ingroup as closer toward the human end and outgroups less so (i.e., a relative difference, rarely representing outgroups as animals per se). This measure makes explicit the human-animal contrast, and also makes salient commonly held notions of human evolution from apes. Finally, in their Moral Expansiveness Scale, Crimston et al. (2016) ask participants to indicate their circles of moral concern or obligation for a variety of targets, including animals, requiring respondents to compare and contrast humans with animals. They find that greater moral expansiveness leads to greater willingness to save both animals and human outgroups, and to donate more to both animal and human causes. Overall, however, human outgroups and animals are deemed less worthy of moral concern than human ingroups, family, and friends.

### 1.4. Summarizing contemporary approaches to dehumanization

Our review above is not intended to be exhaustive but rather illustrative of the conceptualization and methods employed in psychology to study dehumanization. The field distinguishes between animalistic and mechanistic dehumanization (focusing more heavily on the former), and between attribute-based and metaphor-based dehumanization (focusing more heavily on the former). It would be fair to say that, in the majority of this research, the methodological emphasis focuses on *humanness* and the ways that people mentally shift outgroups away from humanness (or ingroups toward heightened humanness). Animals are often conceptually part of theoretical positions, but the move away from humanity is taken to tacitly reflect movement toward animals in many approaches, with key operationalization often reflecting how *human* a target is considered to be. Animals often feel an afterthought relative to stripping humanness. Perhaps not surprisingly, therefore, major reviews largely focus on dehumanization interventions drawn from the prejudice literature and focus on human outgroups, including intergroup contact, recategorization of outgroups into common ingroups, and the

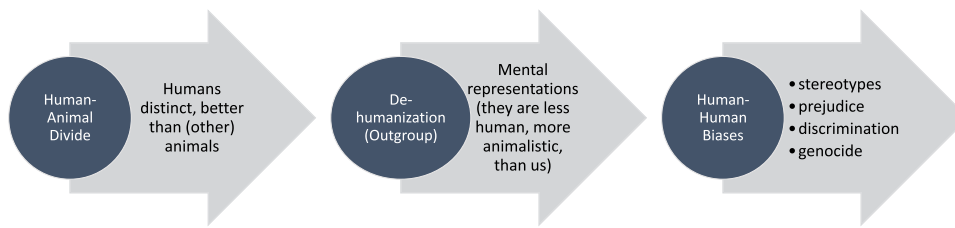


Fig. 1. The interspecies model of prejudice.

multiple categorization of people's various human groupings (see Haslam & Loughnan, 2014; Kteily & Landry, 2022).

## 2. Human-animal relations is (largely) absent from dehumanization research

Based on this literature, therefore, one might wonder *where is the animal in (animalistic) dehumanization?* Even when animals are deemed theoretically important they are often excluded during the measurement (and hence analysis) process, instead putting a focus on humans and humanity. Consider a paper by Vaes et al. (2010), where the authors argued that people dehumanize outgroups relative to ingroups, often boosting the ingroup, to avoid reminders of their creatureliness (inevitability of death). Yet nowhere do they examine animals, or participants' concerns about being close to animals. Instead, they show that mortality salience (reminders of death) predicts ingroup humanness. *Conceptually* the focus concerns animals, but there is a *methodological* misfit with the theory. We see this as a missed opportunity because these ideas are interesting and align with observations of human perceptions of superiority over animals.

At times animals are minimized in operationalizing dehumanization in the literature. In their reformulation of dehumanization, for instance, Kteily and Landry (2022) "propose a broader perspective that considers whether, taken together, the perceiver's attitudes and behavior reflect a view that the target falls meaningfully short of an 'ideal human' standard" (p. 231). One of us has also strongly emphasized humanity in earlier writing, operationalizing dehumanization as "the perception and/or belief that another person (or group) is relatively less human than the self (or ingroup)" (Hodson et al., 2014, p. 87). Our goal at the time, like that of Kteily and Landry, was to be expansive and inclusive. Indeed, *dehumanization* broadly defined is likely well captured by the "less human" operationalization. But is our understanding of *animalistic dehumanization* hampered by focusing on the human aspect and not integrating the animal part?

A case can be made that the field would benefit from paying more attention to animals, especially to human-animal relations – how we think about them, how we devalue them, how we dementalize them, and how we treat them. If animalizing a person or outgroup member strips them of their freedoms, rights, and unleashes prejudice and discrimination toward that person, the field should pivot to consider how we perceive and treat animals. Only recently have social psychologists started to systematically investigate patterns of human behaviour towards and thinking about other animals, documenting the widespread biases and discrimination against other beings based on species membership (i.e., speciesism, Caviola et al., 2019; Dhont et al., 2020; Leach et al., 2023a). Akin to how attribute-based dehumanization strips human outgroup members from their mental capacities and traits, people are motivated to view other animals, and especially those considered food animals, as relatively mindless (e.g., Bastian & Loughnan, 2017; Loughnan & Davies, 2020), and they underestimate animals' capacity to think and feel in a way that are inaccurate (Leach et al., 2023b). Perceiving animals as such helps to preserve the belief in moral superiority of humans over other animals, yet it is also precisely this anthropocentric view of human-animal relations that seems to underpin the animalistic dehumanization of outgroup members.

This premise underpins the Interspecies Model of Prejudice (IMP; Costello & Hodson, 2014a; Hodson et al., 2014, 2020; Hodson &

Costello, 2018): "it would be no insult, or of no strategic social advantage, to label another human as animal-like if animals themselves were not devalued in the first place" (Hodson et al., 2020, p. 70). The IMP model (see Fig. 1) stipulates that biases such as stereotypes, prejudice, and discrimination against human groups can be predicated on dehumanizing perceptions of those outgroup members. Outgroup dehumanization itself in turn is predicated by perceptions of the human-animal divide, the sense that humans are different from and inherently superior to non-human animals. Theoretically, the human-animal divide can exacerbate human-human prejudices (e.g., racism) by giving social power and meaning to dehumanization representations. The idea here is that the human-animal divide can shape the functionality of outgroup dehumanization as a *process*, that is, whether dehumanization is "applicable" as a tool that could, if invoked, elevate biases regarding a human outgroup<sup>2</sup>. This theorizing builds on that of Bandura et al. (1975), who argued that in order to do harm to other humans, we often need factors present that can serve to disinhibit our reluctance to cause harm. Dehumanization, they argue, provides such "grease" to unstick our moral objections and concerns with hurting people (who become represented more in animalistic terms and thus less human terms). In theory, dehumanization brought about by a heightened sense of the human-animal divide could impact (a) stereotypes, such as the outgroup represented as simplistic (monkeys), lazy (sloths), or dangerous/untrustworthy (snakes); (b) prejudices, such as outgroup dislike, sense of ingroup superiority, or other group evaluations that maintain or develop intergroup inequalities; (c) discrimination, such as rejecting or facilitating outgroup members into high or low status, respectively; or (d) genocide, as when Nazis in Europe or Hutus in Rwanda represented their enemies as vermin to facilitate their extermination<sup>3</sup>.

Cross-sectional data have provided initial support for the IMP model. Among university undergraduates the associations between human-animal divide and anti-immigrant prejudice (Costello & Hodson, 2010, Study 1) or anti-Black racism (Costello & Hodson, 2014b) were mediated by immigrant dehumanization or racial dehumanization, respectively. Worryingly, similar patterns have been observed among White children aged 6-10 (Costello & Hodson, 2014a). In a small pilot study, the more children perceived animals and humans to be distinct and divided the more they dehumanized Black children (denying secondary emotions, and denying "human" personality traits), and the more they expressed anti-Black attitudes ( $r_s > .42$ ). In the subsequent study the IMP model was again supported, with greater human-animal divide predicting greater racial dehumanization, which in turn predicted greater

<sup>2</sup> In theory, the front half of the model could operate and leave perceptions of the human outgroup (in the second half of the model) intact, at least perceptions that have little or nothing to do with animality. For instance, shifting the human-animal divide might have little impact on perceptions that a human outgroup is forgetful, whereas it might have significant impact on perceptions of that group as uncivilized. In both cases, however, shifts in the human-animal divide would be expected to increase the value in and potential of dehumanizing a human outgroup, which would erode protections and benefits normally associated with people. This potential has not yet been tested and represents rich ground for future research.

<sup>3</sup> Of course, genocides such as the Holocaust can often involve demonization, where outgroups are represented as having supra-human abilities exceeding those of the ingroup, making them very dangerous and targets for harm/elimination (see Hodson et al., 2014; Smith, 2023).



racism. Again, there existed an indirect effect between human-animal divide and racism through increased dehumanization. It should be noted that, in both studies, human-animal divide perceptions were successfully manipulated; watching a video on human-animal similarities reduced divide perceptions. However, in Study 2 this did not have knock-on effects on dehumanization or prejudice, suggesting that stronger and more concrete manipulations may be necessary to reduce dehumanization in young children.

Recent research using nationally representative data from multiple countries shows that people who disbelieve evolution, and by extension resist the notion that humans and animals are inherently similar, expressed higher levels of prejudice and support for discrimination against racial outgroups and sexual minorities, even after controlling for political ideology, religiosity, and education level (Syropoulos et al., 2022). Relatedly, those with stronger beliefs in human superiority over animals and who are more accepting of exploiting animals for human benefits (e.g., consumption, cosmetic tests, entertainment) generally score higher on human-prejudice measures, including ethnic prejudice, sexism, and homophobia (e.g., Caviola et al., 2019; Dhont et al., 2016; Salmen & Dhont, 2021).

Such cross-sectional results open up an interesting possibility: if the human-animal divide could be narrowed or eliminated, theoretically this could cut off dehumanization at one of its roots. Costello and Hodson (2010, Study 2) exposed university students to “scientific” articles that emphasized that animals and humans were different or similar, and also manipulated the frame (e.g., animals-are-similar-to-humans vs. humans-are-similar-to-animals). In theory, “raising” animals to the supposed level of humans (animals-are-similar-to-humans frame) should significantly reduce immigrant dehumanization and immigrant prejudice relative to stressing the human-animal divide or “lowering” humans to animals. Consistent with the IMP model, a manipulation to elevate animals to humans reduced prejudice by cutting down outgroup dehumanization. In related research, a manipulation whereby participants were told to write about animal-to-human (vs. human-to-animal) similarities not only impacted positive feelings about animals but boosted moral concern for marginalized human groups ( $d = .66$ ; Bastian et al., 2012). Findings from and relevant to the IMP model therefore indicate that many people naturally devalue animals, which can serve as the starting point for negativity toward humans (including dehumanization), but this tendency can be undone by psychologically raising the value of animals and reminding people of their similarity to us. By emphasizing the IMP in our commentary we do not suggest that it fully explains dehumanization, prejudice, and discrimination/genocide, nor that it does so alone. Rather we believe that it captures part of the story and serves as a reminder to researchers to consider the animal-side of the animalistic dehumanization phenomenon given the field’s more natural tendency to take humanness (and its removal) as the focal starting point. We also recognize the important work conducted on related aspects of this question, such as the question of social identification with animals (Amiot et al., 2020). Indeed, we are encouraged by the many successful attempts to integrate mainstream social psychology, particularly those focusing on human intergroup relations, with the study of human-animal relations (for an overview, see Dhont et al., 2019).

### 3. What engaging with human-animal relations means for the field

There are clear gains for the dehumanization field if it more fully embraces human-animal relations. For instance, animal advocates and courts have long grappled with the notion of *personhood*, what it means, and whether it can apply to animals. Discussions about whether chimps, dolphins, or even rivers deserve personhood status press us to confront what “being a person” means, and the implications of having (or being denied) person status. Such discussions are currently germane to the abortion issue in the U.S. The boundaries of human and person are ultimately fluid, as evidenced by the process of dehumanization itself,

ultimately being a social construct like race. One of the key reasons we are so careful and specific about attributing or assigning human(like) status is that humans are valued, if not overvalued, in the hierarchy of being. If non-humans also gain personhood status then humans’ rights would not necessarily supersede those of other beings or entities, and this poses a threat to many people. The parallel with animalistic dehumanization is clear; we limit humanness to control status, privilege, and protection. Interestingly, many countries grant personhood status to corporate organizations, despite them not being actual entities, while denying personhood to actual sentient beings. The more we engage with our interactions with the animal and natural world, the better we understand what being human means and what we think it means. To be clear, we do not think that the goal should be to eliminate the distinction between humans and other animals to reduce human-human prejudices, in part given the psychological challenge such an endeavour would represent. Rather we take inspiration from the recategorization approach to intergroup relations, where categorization markers are not eliminated but shifted to become more inclusive and thus curtailing strong biases associated with rigid ingroup/outgroup distinctions (see Gaertner & Dovidio, 2000). Indeed, researchers are making important forays into studying identification with animals, which includes solidarity with animals, human-animal similarity, and animal pride (see Amiot et al., 2020).

Embracing human-animal relations will be psychologically uncomfortable for many people. It involves recognizing the exploitation (e.g., meat, fish, dairy, and egg consumption) of animals for our own gain or hedonism. It also means explicitly recognizing that we overvalue humans relative to other beings, arbitrarily imposing a “human premium” on the world. If we recognize this tendency, we might not devote near sole attention to removing humanness from others but think more deeply about why humans are so valued, essentially as a truism. This is a gain for the field.

An additional benefit of our position is that attending more to human-animal relations draws attention to the fact that different forms of bias and exploitation are systematically linked to each other; better understanding this point helps our understanding of human-human prejudices and dehumanization (see Dhont et al., 2014, 2016; Hodson et al., 2014, 2020; Salmen & Dhont, 2021). At some level, we suspect that most intergroup and dehumanization researchers recognize this point, but such thinking does not make its way explicitly enough into our theories and research paradigms. Yet failing to recognize the interconnectedness of intergroup relations comes at a huge cost. Efforts to tackle one form of prejudice or bias become a game of whack-a-mole if we do not address how such systems of oppression are systematically linked. This point is well captured by Martin Luther King Jr’s assertion that “Injustice anywhere is a threat to justice everywhere” (Ratcliffe, 2017). Allowing injustices or prejudices against one group legitimizes the *practice* of exclusion and delegitimization, leaving open only the question of which groups shall this tool target. Consider a new bill coming into effect in Florida in July 2023: physicians will have the ability to decline service to a patient who they know or suspect is a sexual minority (regarding identity or orientation), with no requirement to find them an alternative doctor, a decision that would be illegal if made on the basis of race, gender, or country of origin (Mahdawi, 2023). Importantly, recent research demonstrates that generalized (Dhont et al., 2016) or sexist (Salmen & Dhont, 2021) prejudices co-exist with speciesism precisely because they share the desire for hierarchical orientations and intergroup dominance at their core (as opposed to, for instance, concerns relevant to traditionalism or conventionality). It would be folly for our field to overlook such covariance. Consider how both animal abuse (Cleary et al., 2021) and mass shootings in the U.S. (Geller et al., 2021) are systematically related to intimate partner violence in the home; overlooking such commonalities would come at a cost to understanding any of the phenomena. We encourage our field to more fully embrace the idea that human-animal processes are systematically linked to human-human processes and outcomes such as dehumanization and prejudice.

In doing so, we are not calling for researchers to equate prejudices or to ignore differences between specific intergroup biases. After all, prejudices and ideologies show both commonalities and generalities as well as uniqueness, although the former is becoming increasingly recognized as meaningful (see Hodson et al., 2017). Indeed, critiques of the dehumanization literature have argued that people do not literally see the outgroup as animals and indeed recognize very human-like qualities in these targets (see Bloom, 2017; Over, 2021), with the humanness being critical to giving the process meaning (Lang, 2010). We agree that perpetrators of dehumanization do not literally see outgroups as animals, but such criticisms represent a misreading of the dehumanization literature (see also Vaes et al., 2021). Animalistic dehumanization is widely considered a relative (not categorical) process, seeing others as relatively more animal-like not as categorically different from the self or ingroup. We would also add that, in contemporary times, most people acknowledge that they themselves are part of the animal kingdom and accept evolution (see Pew Research Centre, 2015). Moreover, it is important to stress that dehumanization is not a process that happens to us, but is rather a process enacted by us, and rarely in an objective manner that simply reflects outside externalities passively. Although dehumanization can be perceptual in nature (as when one passively views a propaganda poster of an outgroup portrayed in animalistic terms), it is very often *motivated*, as a form of rationalization or justification for harming another or turning a blind eye to their plight. We invoke animal-ness in others because animals have lower status and fewer rights than humans, all the while fully recognizing that the others are indeed human. This fact speaks to the power of dehumanization as a psychological process, but also to the ways we think about human-animal relations, that in no way undermines dehumanization theories or the notion of dehumanization. Rather it speaks to a fundamental aspect of humanity – that we have a tremendous capacity to metaphorically liken others to animals when it suits us, knowing full well that this reduction in status delegitimizes the concerns of the other and our own culpability in their suffering.

#### 4. Who cares? (Why human-animal relations matter to dehumanization)

In practical terms, accentuating the human-animal aspect to dehumanization provides multiple new avenues for intervention development. Major reviews (e.g., Haslam & Loughnan, 2014; Kteily & Landry, 2022) understandably draw from the prejudice literature for suggestions, but, as these authors observe, dehumanization is a distinct process from prejudice. We also speculate that one reason that manipulations of the human-animal divide can be effective at reducing dehumanization and prejudice, even among those higher in prejudice-prone proclivities (see Costello & Hodson, 2010, Study 2), is because they are less proximal to the outcome variable and less salient, making the intervention more difficult to circumvent or resist. Vezzali et al. (2022) promote interventions based on the human-animal divide as outgroup-independent exercises that are “not inherently linked to a target outgroup, [meaning] that their effectiveness is less dependent on the specific intergroup dynamics under consideration” (p. 215). Such interventions could thus apply to a range of intergroup contexts where animalization of the outgroup is a potential factor. Other possibilities offer promise. For instance, given the efficacy of contact between human groups in reducing prejudice (Pettigrew & Tropp, 2006), human contact with other animals may well close the human-animal divide and lower animalistic dehumanization of outgroups. Interventions could also be designed to better educate children and adults alike that people are animals, taking the sting out of outgroup animalization. Such interventions, however, should engage in careful efforts to reduce threats to the self, given that such human-to-animal similarity manipulations on their own can exacerbate human-human negativity (see Bastian et al., 2012; Costello & Hodson, 2010).

A strong case can also be made that devoting more attention to the animal (and especially human-animal) aspect of dehumanization not

only helps us to better understand animalized humans but it also better informs us about human nature. Focusing on both human and non-human animals can lead to better conditions for both human and non-human outgroups alike. This shift requires a wider focus on our place within the wider biosphere, one clearly struggling with the shrinking biodiversity of animals and insects, the impending climate emergency, and the spread of both zoonotic and bacterial diseases, all of which are exacerbated by our sense of human superiority over animals (see Hodson & Costello, 2018). If we want to grasp the darker sides of humanity, such as our propensity to dehumanize others, we need to recognize that dehumanization operates within a bigger context of human prioritization over other species and nature in general, with outgroup dehumanization one very important but not sole aspect. Overlooking (or downplaying) human-animal relations thus limits the ecological validity of dehumanization theorizing and research, decontextualizing it from bigger picture processes and ideologies of dominance and intergroup dynamics (see also Leader Maynard & Luft, 2023).

Future research would benefit from better integrating the human-animal side of the equation with the dehumanization side. For instance, research on the animalistic dehumanization of outgroups would benefit from considering scales relevant to the social identification with animals (Amiot et al., 2020) and moral expansiveness (Crimston et al., 2016); presently such literatures exist relatively independently. Likewise, the Social Dominance Human-Animal Relations (SD-HARM; Dhont et al., 2016) model, which examines linkages between speciesism and generalized outgroup prejudices, could branch out to integrate outgroup dehumanization in the model. Future research would also benefit from greater cross-cultural consideration (see Leader Maynard & Luft, 2023). For instance, ideological orientations typically considered relevant to human intergroup relations (e.g., authoritarianism, social dominance orientation) may operate differently as a function of whether animal exploitation practices are linked with one's national identity, with potential implications for outgroup dehumanization.

#### 5. Concluding remarks

Imagine if aliens came to Earth to study dehumanization, and a human participant from Group X expressed to the aliens that “Group Y [humans] are filthy animals and I treat them accordingly” (i.e., with fewer rights and protections). It is not difficult to imagine an alien scientist's response being: “Interesting. Now tell me more about these animals of which you speak, and how you treat *them*”. To understand the process of animalizing another human, any scientist would benefit from knowing how the subject not only thinks about other people but also how they think about animals. Yet the field largely takes *human* as the starting point, then observes how that humanness is stripped from targets, with an implicit (and often untested) assumption that movement away from human represents movement toward animal. Our central point is that an outside observer could be forgiven for thinking that one can study how we animalistically represent other people without (largely) thinking about animals or their treatment. Much of the existing dehumanization literature focuses largely (and at times solely) on humans and humanness, with considerably less focus on animals themselves, and even less focus on human-animal relations. If tasked with building a new theory of dehumanization from the ground up, we arguably would incorporate human cognition about, and behaviour regarding, animals. We hope that colleagues in the field will share our enthusiasm for this prospect.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Data availability

No data was used for the research described in the article.

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