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# Dehumanization and Infracumanization

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## Abstract

We review early and recent psychological theories of dehumanization and survey the burgeoning empirical literature, focusing on six fundamental questions. First, we examine how people are dehumanized, exploring the range of ways in which perceptions of lesser humanness have been conceptualized and demonstrated. Second, we review who is dehumanized, examining the social targets that have been shown to be denied humanness and commonalities among them. Third, we investigate who dehumanizes, notably the personality, ideological, and other individual differences that increase the propensity to see others as less than human. Fourth, we explore when people dehumanize, focusing on transient situational and motivational factors that promote dehumanizing perceptions. Fifth, we examine the consequences of dehumanization, emphasizing its implications for prosocial and antisocial behavior and for moral judgment. Finally, we ask what can be done to reduce dehumanization. We conclude with a discussion of limitations of current scholarship and directions for future research.

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## INTRODUCTION

To perceive a human being as less than human would seem on the surface to be an extraordinary category mistake. If so, it is a mistake that is remarkably tenacious and widespread. Victims of genocide are labeled as vermin by perpetrators. Slaves are officially adjudged to be worth a fraction of a person. Immigrants are likened to invasive pests or infectious diseases. African players are greeted with monkey noises in European football stadiums. Indigenous people are stereotyped as brute savages, noble or otherwise. Outraged members of the public call sex offenders animals. Psychopaths treat victims merely as means to their vicious ends. The poor are mocked as libidinous dolts. Passers-by look through homeless people as if they were transparent obstacles. Dementia sufferers are represented in the media as shuffling zombies. Degrading pornographers depict women as mindless, pneumatic objects. Exhausted doctors view their patients as inert bodies. Patients feel their individual identities have been stripped away by depersonalized medicine.

Dehumanization is important as a psychological phenomenon because it can be so common and yet so dire in its consequences. It is the most striking violation of our belief in a common humanity: our Enlightenment assumption that we are all essentially one and the same. It can be blatant or subtle; driven by hate, lust, or indifference; collectively organized or intensely personal. Because of its long history, deep ramifications, and wide variety, dehumanization is a crucial topic of study for psychologists.

In this article we review the burgeoning psychological literature on dehumanization, setting aside the smaller but growing body of work in other fields of sociology and genocide studies (e.g., Savage 2013, Smith 2010). We begin with a brief survey of contributions made by pioneering psychologists between the 1970s and the 1990s and then offer a more detailed discussion of the theoretical perspectives that have arisen since then. These theories, which traffic in concepts of infrahumanization, humanness, stereotype content, and mind perception, represent a promising “new look” at the field.

After these historical and theoretical preliminaries, we examine six key questions addressed by recent dehumanization research. First, we ask how people dehumanize, exploring the diverse ways in which people are perceived as less than human. Second, we ask who is dehumanized, examining the range of groups and individuals that have been shown to be the targets of dehumanization. Third, we shift focus to ask who dehumanizes, addressing the personal characteristics of perceivers who are especially prone to dehumanize others. Fourth, we ask when people dehumanize, reviewing research on the transient factors—contextual, emotional, and motivational—that promote dehumanization. Fifth, we ask what the consequences of dehumanization are, exploring research on the outcomes and implications of dehumanizing perceptions. Finally, we ask how we can overcome dehumanization, investigating research on ways to counteract these perceptions.

## EARLY THEORIES OF DEHUMANIZATION

Kelman (1976) and Staub (1989) were among the first social psychologists to address dehumanization systematically, examining it in the context of mass violence. Kelman conceptualized the process primarily as a perception of victims that weakens the victimizer’s normal restraints on violent behavior. The dehumanizing perception consists of a denial of victims’ “identity” and “community,” referring respectively to their distinct individuality and their belonging to a network of caring interpersonal relations. When these attributes are denied, victims become a deindividuated mass that lacks the capacity to evoke compassion.

The moral dimension of dehumanization features in two other early accounts. Opatow (1990) discussed dehumanization as one of several forms of moral exclusion in which people are placed “outside the boundary in which moral values, rules, and considerations of fairness apply” (p. 1). Opatow framed dehumanization not as a denial of specific attributes but rather as a categorical act of exclusion from a moral community that makes people indifferent to the suffering and unjust treatment of others. Bandura (1999) emphasized how dehumanization enables a disengagement of the aggressor’s moral self-sanctions. Together these accounts show how dehumanization makes the other seem less morally worthy and makes the self less subject to the self-condemnation and empathic distress that might otherwise restrain aggressive behavior.

Two final early perspectives in dehumanization focused exclusively on its role in intergroup conflict. Schwartz & Struch (1989) proposed that people are dehumanized when they are seen as lacking prosocial values or when their values are seen as incongruent with those of the perceiver’s in-group. Bar-Tal (1989), in contrast, conceptualized dehumanization as a form of collectively shared delegitimizing belief in which a group is given a subhuman or demonic label. Beliefs of this

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### Dehumanization:

perceiving a person or group as lacking humanness

### Infrahumanization:

perceiving an out-group as lacking uniquely human attributes relative to an in-group

### Humanness:

attributes that define what it is to be human

### Mind perception:

the process of perceiving minds in entities and the consequences of this process

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sort arise in the context of extreme interethnic conflict and hatred, and they serve to explain the conflict, justify the in-group's aggression, and provide it with a sense of superiority.

These early accounts of dehumanization vary in their emphases but share some common threads. Dehumanization is understood as an extreme phenomenon, observed in conditions of conflict, and it is primarily called upon to explain and enable acts of violence.

## THE "NEW LOOK" AT DEHUMANIZATION: FOUR THEORIES

### Infracumanization Theory

A "new look" at dehumanization-related processes was initiated by psychologists in Belgium. Starting with the anthropological insight that ethnic groups often reserve the "human essence" for themselves, Leyens and colleagues (2001) theorized that this form of ethnocentrism may be a general phenomenon. They proposed that people tend to perceive out-group members as less human than in-group members even in the absence of significant intergroup antagonism. Most importantly, Leyens and colleagues argued that this process may be subtle, in contrast to the blatant denials of humanness described by early dehumanization theorists. To emphasize this distinction they coined the term "infracumanization" to refer to the subtler form.

Leyens and colleagues first sought a working understanding of humanness. An informal survey of laypeople suggested three main attributes that distinguished humans from animals: intelligence, language, and refined emotions (sentiments in French). Focusing on these "secondary" emotions, which are understood to be unique to humans, these researchers reasoned that ascribing fewer secondary emotions to out-group members than to in-group members amounts to a subtle denial of the out-group's humanity; compared to the in-group, the out-group is less human. Because uniquely human emotions may be positive (e.g., joy) or negative (e.g., embarrassment), this ascription of lesser humanness could in principle occur independently of any negative evaluation of the out-group.

Leyens and colleagues established the predicted infracumanization effect in a large body of research (for reviews, see Leyens et al. 2003, 2007). Their research has demonstrated that the phenomenon is robust across many intergroup contexts, evident in the absence of intergroup conflict, contingent on the existence of meaningful in-group/out-group distinctions, and independent of out-group derogation or in-group favoritism. The phenomenon can be demonstrated in simple judgment tasks, typically involving the attribution of emotions to groups, and also using implicit association methods (e.g., Paladino et al. 2002). It can be shown when humanness is represented by secondary versus primary emotions or by more directly human- and animal-related words (Viki et al. 2006). Infracumanization has a variety of behavioral implications, and it appears to involve not simply a lack of recognition of the out-group's humanity but also an active reluctance to accept it.

Infracumanization theory was a major theoretical advance. It recognized that humanness can be denied to others in subtle and commonplace ways, rather than being confined to blatant denials in killing fields and torture chambers. It provided a clear operational definition of humanness as those attributes that distinguish humans from other animals. Infracumanization researchers also popularized simple methods through which the differential attribution of humanness to in-group and out-group could be tested. All of these innovations made dehumanization-related phenomena tractable for social psychology researchers and relevant to normal intergroup relations in a way that earlier theoretical approaches did not.

### The Dual Model of Dehumanization

In an effort to integrate infracumanization theory with previous work on dehumanization, Haslam (2006) developed a new model. A key conceptual innovation addressed infracumanization theory's

understanding of humanness. Although Leyens had been more explicit than previous theorists in defining humanness as that which is unique to our species (e.g., secondary emotions), Haslam proposed that human uniqueness, and the human-animal distinction on which it rests, is only one of two ways in which humanness might be understood. People also tend to conceptualize humanness in opposition to inanimate objects such as robots and automatons; Haslam designated the distinguishing attributes as human nature. Whereas humans are distinguished from animals on attributes involving cognitive capacity, civility, and refinement, we differ from inanimate objects on the basis of emotionality, vitality, and warmth.

Haslam and colleagues found substantial empirical support for the two senses of humanness. Ratings of the extent to which traits reflect human uniqueness and human nature are uncorrelated, and traits that best reflect each sense have different content. Traits that embody human uniqueness are seen as late to develop and believed to differ across cultures, whereas those that embody human nature are seen as essence-like, universal, and emotion related (Haslam et al. 2005). The two sets of characteristics differentiate humans from animals and robots, respectively, as predicted (Haslam et al. 2008), and understandings of them are highly convergent across cultures (Bain et al. 2012, Park et al. 2012).

Haslam (2006) reasoned that if humanness has two distinct meanings, tied to two human-nonhuman contrasts, then two broad varieties of dehumanization should be evident. When individuals are denied human uniqueness, they should be seen as lacking refinement, self-control, intelligence, and rationality, and subtly or overtly likened to animals. A comprehensive review of prior dehumanization scholarship indicated that this “animalistic” form of dehumanization captures phenomena ranging from the most blatant genocidal labeling of people as vermin through to the subtlety of infrahumanization. In contrast, when individuals are denied human nature, they are seen as lacking warmth, emotion, and individuality, and likened to inanimate objects. This “mechanistic” form captures phenomena described by previous writers on dehumanization in the contexts of technology, medicine, and forms of objectification in which people are perceived as inert or instrumental. Research motivated by this dual model of dehumanization has found extensive evidence for both forms in studies that examine perceptions of social groups and individuals and that explore the perceiver’s and the target’s perspectives.

The dual model is broader than infrahumanization theory in two main ways. First, it extends the concept of humanness by incorporating the human-object distinction alongside the human-animal distinction, thereby encompassing forms of dehumanization that relate to denials of human nature. Second, it aims to encompass the diverse forms of dehumanization—subtle or blatant, animal or object related, intergroup or interpersonal—rather than to pick out a specific phenomenon in group perception. The two theories differ in their reach rather than being in competition. Indeed, infrahumanization can be understood as a specific variant within Haslam’s framework.

### The Stereotype Content Account

A third theoretical perspective on dehumanization was developed by Harris & Fiske (2006). Their account of “dehumanized perception” is distinctive in several respects. First, unlike infrahumanization theory or Haslam’s dual model, it does not proceed from an explicit definition of humanness. Instead, it defines dehumanization as the failure to spontaneously consider another person’s mind, or to engage in social cognition when perceiving them. Second, the theory has primarily been examined using social neuroscience methods. Ingeniously, Harris and Fiske argue that dehumanization can be said to occur when the neural network that underpins social cognition (e.g., medial prefrontal cortex, superior temporal sulcus) fails to activate in the normal manner when a

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**Human uniqueness:**  
attributes that distinguish humans from other animals

**Human nature:**  
attributes that are essentially or typically human

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human target is perceived. Third, the theory specifies the sorts of target that are most likely to be dehumanized, based on stereotype content.

According to the stereotype content model (SCM; Fiske et al. 2002), group stereotypes vary on the dimensions of warmth and competence. Admired groups (e.g., in-groups) are perceived as high on both dimensions, pitied groups (e.g., the elderly) are seen as warm but incompetent, envied groups (e.g., the rich) are seen as cold but competent, and groups that evoke disgust (e.g., the homeless) are unambivalently seen as low on both dimensions. Harris & Fiske (2006) argue that dehumanizing perceptions target these “lowest of the low” and consistently find that low-low groups fail to engage the social cognition network, instead activating disgust-related structures such as the insula. These groups also fail to elicit spontaneous attributions of mental states compared to groups that fall in the other three quadrants of the SCM (Harris & Fiske 2011). Nevertheless, cold but incompetent groups may also be dehumanized as robot-like, consistent with Haslam’s mechanistic form.

### The Mind Perception Account

A fourth theoretical approach to dehumanization emerged from recent work on mind perception, the study of attributions of mind to entities of all sorts (Waytz et al. 2010). A surprising finding of this research is that mind is ascribed along two separate dimensions (Gray et al. 2007). “Agency” includes mental capabilities such as thinking, self-control, and communication and distinguishes humans from nonhuman animals, whereas “experience” includes attributes such as emotion, consciousness, and personality and distinguishes humans from robots and inanimate objects. These dimensions show strong affinities with Haslam’s model: Agency represents human uniqueness both in content and in its implied contrast (animals), and in the same manner experience represents human nature.

The mind perception framework conceptualizes dehumanization as mind denial or “dementalization” (Kozak et al. 2006). In theory, mind denials could be specific to one dimension or generalized across both. The mind perception framework also enables a widening of theoretical focus, seeing dehumanization not as an exceptional process that must be understood only on its own terms but rather as a phenomenon that is related to the fundamental processes of mind attribution: Too little mind is bestowed on some entities and too much on others (e.g., anthropomorphic perceptions of beloved pets, misbehaving computers, and dreaded deities; Epley et al. 2007). Any factors that influence mind attribution in general, such as the motives that it serves, can help us to understand why people might fail to attribute mind to their fellow humans (Waytz et al. 2010).

### HOW DO WE DEHUMANIZE?

We can now begin to answer the six key questions posed at the beginning of this review: in essence, how dehumanization occurs, who experiences it, who perpetrates it, when it occurs, what its consequences are, and how it can be overcome. The first question is prefigured by our review of major theories, which lay out some of the diverse ways in which dehumanization can be conceptualized. Nevertheless, it is valuable to survey the many shades of dehumanization that have been demonstrated within the empirical literature.

The great diversity among forms of dehumanization has a qualitative and a quantitative aspect. The qualitative aspect refers to the nature of the nonhuman entities that dehumanized people are likened to or conversely to the nature of the attributes that are denied to those people. Different theories and ways of assessing dehumanization implicate qualitatively distinct kinds of entity or

attribute. The quantitative aspect refers to the differing degrees of blatancy, explicitness, or severity seen in empirical demonstrations of dehumanization.

### **Qualitative Differences Among Forms of Dehumanization**

The theoretical approaches reviewed above suggest that dehumanization can occur in two registers with distinctive psychological content. In Haslam's (2006) model, the animalistic form is defined by the contrast between humans and animals, occurring when people are directly associated with animals or denied uniquely human attributes. The mechanistic form is defined by the contrast between humans and inanimate objects, occurring when people are likened to objects or denied human nature. The two contrasts, closely aligned with the dimensions of Gray et al.'s (2007) mind perception framework, invoke qualitatively different metaphors and attributes, which have been shown to be independent in studies of lay understandings of the respective entities (Haslam et al. 2008). Nevertheless, the contrasts involve dimensions, not mutually exclusive types, so people may be denied attributes on both dimensions simultaneously, as in the wholesale denial of mind that may occur in perceptions of pariah groups (Harris & Fiske 2006).

### **Quantitative Differences Among Forms of Dehumanization**

Dehumanization has been investigated along a spectrum from blatant and severe to subtle and relatively mild. Two main components contribute to this spectrum. First, blatant examples of dehumanization are explicit: The perceiver views the target as less than human in a way that is direct, overt, and consciously accessible to the perceiver. In subtler examples, the lesser humanness of the target is indirect, implicit, and nonconscious. More blatant forms of dehumanization, for example, tend to draw a direct metaphorical link between a person or group and a nonhuman entity, whereas subtler forms ascribe fewer human attributes to a target. Second, more blatant forms of dehumanization make absolute judgments about a particular target, denying its humanity outright, whereas subtler forms merely make relative judgments, seeing one group as less human than another. The following sections review the diverse forms of dehumanization in light of these two components of blatancy.

### **Explicit Versus Implicit Dehumanization**

At the top of the blatancy spectrum are instances of dehumanization that are offensively direct. The most blatant are cases where people directly liken individuals or groups to nonhumans in language. For example, Tileagă (2007, p. 730) observed dehumanizing language in middle-class Romanians' discourse on the Romany (gypsy) minority (e.g., "there is . . . a block especially built for them and they have eaten it from the ground like rats"), and Haslam and colleagues (2011) demonstrated experimentally that animal metaphors typically signify degradation (e.g., apes, dogs) or disgust (e.g., rats, pigs).

Equally blatant phenomena are revealed by studies that use self-report dehumanization scales to assess perceptions about deviants (e.g., "Some people deserve to be treated like animals"; Bandura et al. 1996), enemies (e.g., "Terrorists are vermin that need to be exterminated"; Jackson & Gaertner 2010), and ethnic groups (e.g., "Native Americans were basically wild creatures before the arrival of the White men"; Castano & Giner-Sorolla 2006) and perceptions of being dehumanized (e.g., "I felt like I was mechanical and cold, like a robot"; Bastian & Haslam 2010). Endorsement of these items reflects an explicit perception of people as less than human but potentially assesses dehumanization merely as a manifestation of antipathy.

Less blatant, but still somewhat explicit, are beliefs that others lack the characteristics that humans possess. This form of dehumanization is typified by classic infracategorization studies (Leyens et al. 2003), which require participants to select emotion terms that characterize in-group and out-group from a list that includes a mix of primary and secondary emotions. The number of secondary emotions ascribed to a group is a measure of its perceived humanness. Viki et al. (2006) have shown that the same methodology can be employed using words that refer directly to humans (e.g., person, citizen) and animals (e.g., wildlife, mongrel) rather than indirectly to their distinctive attributes, a somewhat more blatant version of the same task. Similar procedures have been used to assess the attribution of human traits (e.g., Haslam & Bain 2007, Heflick & Goldenberg 2009), human suffering (Riva & Andrighetto 2012), and mental capacities (e.g., Waytz & Epley 2012). One advantage of this popular method is that it taps a relatively subtle form of dehumanization. Participants can be unaware that their choice of attributes indicates dehumanization of the target, allowing these methods to be resistant to faking (Eyssel & Ribas 2012). Another advantage is that balancing the list of attributes by valence (i.e., positive and negative emotions or traits) allows subtle dehumanization to be neatly distinguished from antipathy.

Dehumanization can also be observed even more subtly in the implicit associations people hold about social groups. Many studies have used the Go/no-Go Association Task (GNAT) or the implicit association task (IAT) to demonstrate these automatic perceptions. Researchers have examined associations between social groups and nonhuman entities (e.g., Bain et al. 2009, Rudman & Mescher 2012) or, even less directly, associations between groups and human attributes such as traits and emotions (e.g., Martinez et al. 2012). Such studies reveal very subtle, nonconscious forms of dehumanization: In essence, participants are unintentionally revealing a lack of automatic association between persons and the distinctive qualities of persons rather than deliberately expressing an equation between persons and nonpersons, as in the most blatant form of dehumanization.

Subtle, nonconscious forms of dehumanization have also been demonstrated using priming, linguistic, and neuroscience methods. Subliminal presentation of black faces facilitates identification of ape images (Goff et al. 2008), and subliminal presentation of monkey versus human faces facilitates identification of out-group versus in-group names (Boccatto et al. 2008). People used relatively few mental-state verbs (e.g., think, feel) when writing about dehumanized targets drawn from the low-low quadrant of the SCM (Harris & Fiske 2011). A small number of neuroimaging studies (Harris & Fiske 2006, 2011) reveal a lack of activation of social cognition networks in the brain when low-low targets are present. Because they do not rely on an explicit, direct, and conscious expression of the lack of humanness of another person, these methods provide another scientific pathway to subtle dehumanization.

### Relative Versus Absolute Dehumanization

Explicitness is a major component of blatancy, but another important component is the extent to which a target is denied humanness absolutely or merely by comparison with another. Absolute denials ascribe deficient or absent humanity to a target. Relative denials involve perceptions that one group is less human than another. For example, a study finding that fewer secondary emotions are ascribed to citizens of one country than another demonstrates a relative form of dehumanization, whereas one in which a single group is rated as subhuman demonstrates an absolute form. The basic infracategorization effect is relative in this sense because it involves the differential attribution of humanness to out-group and in-group. The same is true of most implicit association studies, which usually compare the strength of association of humanness-related stimuli and two different social targets.

## Conclusions

Our review shows that researchers have conceptualized dehumanization in qualitatively and quantitatively diverse ways. The quantitative variations represent a spectrum of blatancy, ranging from explicit likenings of people to despised nonhumans to weaker implicit associations of some people with human attributes than others.

The continuum stretching between these extremes poses the terminological challenge of deciding whether or where a semantic line should be drawn between dehumanization proper and subtler phenomena such as *infrahumanization*. Some readers of the literature favor a narrow, restrictive definition of dehumanization. As Leyens et al. (2007) argued, “people are inclined to perceive members of out-groups as somewhat less human, or more animal-like, than themselves; such a view corresponds to the word *infrahumanization*. . . . By contrast, dehumanization of an out-group implies that its members are no longer humans at all” (p. 143). However, if subtlety varies by degrees, it is not possible to draw sharp distinctions along the spectrum between history’s paradigm cases of dehumanization (e.g., blatant, explicit, and absolute equations of humans with nonhumans, such as “Jews are vermin”), less blatant but still highly objectionable denials of humanness (e.g., the nonconscious “Africans = apes” association; Goff et al. 2008), and subtler phenomena like *infrahumanization*.

In recognition of this spectrum, we propose a broad and inclusive definition of dehumanization that encompasses blatant and subtle forms, retaining the term “*infrahumanization*” to refer to a specific but important variant within the dehumanization spectrum (i.e., one that involves the subtle differential attribution or association of uniquely human attributes to groups). Although our view expands the meaning of dehumanization from earlier usages, it has the virtue of simplicity, avoids conceptual hairsplitting, and recognizes the commonalities among the diverse phenomena explored in recent research. We recommend that researchers conceptualize dehumanization as a broad spectrum whose milder variants have important continuities with its most severe forms.

## WHO IS DEHUMANIZED?

Researchers have documented dehumanizing perceptions of a wide variety of target groups and individuals. We begin this section with a survey of these targets before examining whether certain target types are most likely to be dehumanized.

### Specific Targets of Dehumanization

A major emphasis of dehumanization research has been the attribution of lesser humanness to particular ethnic groups. These groups have been the primary focus of *infrahumanization* research given its theoretical claim that *infrahumanization* is a form of ethnocentrism. Many of the original demonstrations of the effect involved national or ethnic comparisons (e.g., Belgians versus Arabs and Turks, Walloon versus Flemish Belgians, Canarian versus mainland Spaniards, northern versus southern Italians; see Leyens et al. 2003), although ethnicity-based *infrahumanization* is not invariably found (e.g., Italians did not *infrahumanize* Germans; Vaes & Paladino 2010). Less subtle forms of ethnic dehumanization have also been demonstrated, notably Boccato and colleagues’ (2008) finding that northern Italians automatically associated southern Italians with apes to a greater extent than their fellow northerners.

Other targets of dehumanization may be understood as “racial” rather than ethnic groups in the sense that they exemplify popular conceptions of broad races (e.g., “Asian” or “black” rather than “Japanese” or “Zulu”) or ancestry-based subpopulations (e.g., Caucasian Americans and African

Americans). Several researchers have demonstrated dehumanizing perceptions of people of African descent by white perceivers, whether through implicit associations with nonhuman apes (Goff et al. 2008) or the ascription of fewer uniquely human characteristics (Costello & Hodson 2013). Less research has been conducted on perceptions of other “racial” groups, but Bain and colleagues (2009) found that European Australians implicitly associated East Asian faces with machines more than white faces and associated them less with human nature traits. Chinese participants associated white faces less strongly with uniquely human traits than East Asian faces.

Researchers have also explored dehumanizing perceptions of groups that are defined by social or historical predicaments rather than intrinsic ethnicity but that may be ethnically different from perceivers. In Canada, Hodson & Costello (2007) documented a denial of uniquely human traits to immigrant groups, and Esses et al. (2008) demonstrated that refugees were rated as barbaric and lacking in humane values. In Australia, Saminaden et al. (2010) showed that people from a multiethnic assortment of traditional societies were more strongly associated with animals and children and less strongly associated with uniquely human traits than equally multiethnic representatives of industrialized societies. In the cases of refugees and traditional peoples, the dehumanizing perception appears to be linked to a belief that the targets are primitive and undeveloped, perhaps reflecting an equation of perceived social development with phylogenetic development.

Several studies have begun to expand the range of dehumanized target groups. Subtle forms of dehumanization have been demonstrated in perceptions of occupational groups (Loughnan & Haslam 2007), people from lower social class backgrounds (Loughnan et al. 2013), medical patients (Lammers & Stapel 2011, Vaes & Muratore 2013), the mentally ill (Martinez et al. 2011), sex offenders (Viki et al. 2012), violent criminals (Bastian et al. 2013a), and asexuals (MacInnis & Hodson 2012). This list heeds Jahoda’s (1999) observation, following a discussion of colonial-era dehumanization of non-European “savages,” that “Savages. . . form part of a cluster that includes not only children but also the rural and urban poor, criminals, the mentally ill, and even women” (p. 237).

The possibility that “even women” may be dehumanized has recently been supported by several researchers, who show that dehumanizing perceptions may depend on perceiver characteristics and how women are depicted. Heflick & Goldenberg (2009) and Heflick and colleagues (2011), for example, found that when participants focused on women’s appearance rather than their personhood they viewed them as lacking human nature, as well as warmth, morality, and competence. Loughnan et al. (2010b) showed that less mind, moral worth, competence, and capacity to experience pain were attributed to women (and men) when their bodies were sexualized or made visually salient. At a basic and automatic level, Bernard et al. (2012) showed that sexualized women are visually processed as objects rather than people, and Cikara et al. (2011) found that hostile sexist men viewing sexualized images of women showed reduced neural activation in social cognition networks. Sexualized women are implicitly associated with animals by male and female perceivers alike (Vaes et al. 2011), and men who implicitly associate women with animals and objects have a higher propensity for sexual aggression (Rudman & Mescher 2012).

To this point, our review of targets of dehumanization has examined the perceptions of groups or individual members of identified groups. Humanness may also be differentially ascribed to individuals as individuals. There is now a substantial body of work indicating that the self is attributed greater humanness than others and in some circumstances can be, or feel, dehumanized. The finding that people commonly perceive themselves as being more human (i.e., having more human nature) than average was first obtained by Haslam and colleagues (2005). This “self-humanizing” effect is distinct from the more familiar phenomenon of self-enhancement, uncorrelated with self-esteem, and cross-culturally robust (Loughnan et al. 2010c), even in Eastern cultures where self-enhancement is difficult to establish (Park et al. 2013). Arguably the lesser perceived humanness of

others reflects the philosophical problem of other minds: the attenuated, merely two-dimensional reality of minds outside our own.

The self may also undergo a perceived loss of humanity under certain conditions. Bastian and Haslam (Bastian & Haslam 2010; see also Bastian et al. 2013b) showed that people who recalled or experienced episodes of social exclusion rated themselves as lacking human nature traits, implying a temporary state akin to the numbed, cognitively deconstructed state previously identified as an outcome of ostracism (Twenge et al. 2003). Bastian and colleagues (2012b) found that players of violent video games rated themselves lower on humanness after playing a violent interactive video game than after playing an equally frustrating and competitive nonviolent game. Different interpersonal experiences may also generate qualitatively different perceptions of having been dehumanized. Whereas people report feeling shame and guilt when they feel they have been abused (i.e., denied uniquely human attributes), they tend to feel numbed, sad, or angry when they feel that they have been rejected, invalidated, or treated instrumentally (i.e., denied human nature) (Bastian & Haslam 2011).

### Commonalities Among Targets of Dehumanization

A diverse assortment of groups and individuals appear to be potential targets of dehumanization. Are there any consistencies among them, such that target types are particularly vulnerable to dehumanization? This question can be systematically examined only in studies that have explored perceptions of multiple groups.

The theoretical claim that dehumanization is most likely for groups stereotyped as lacking both warmth and competence has been supported by two studies. Harris & Fiske (2006) confirmed that the medial prefrontal cortex, a brain structure crucial for social cognition, was deactivated only when perceiving members of groups that fell within the SCM's low-low quadrant (i.e., drug addicts and homeless people). Vaes & Paladino (2010) showed that northern Italians inhumanized a variety of ethnic out-groups to some degree, but the effect was particularly strong for those stereotyped as cold and incompetent. These studies offer convergent support for the stereotype content account, although Vaes & Paladino's (2010) study suggested that dehumanization is driven by the competence dimension more than by warmth.

The possible primacy of incompetence-related stereotypes is consistent with findings that low-status groups are most readily dehumanized. Capozza and colleagues (2012a) showed that higher-status real and minimal groups implicitly dehumanized lower-status groups, but lower-status groups did not perceive themselves as more human than higher-status groups. This asymmetry implies that intergroup status differentials that are correlated with competence-related stereotypes moderate dehumanization. Status may be especially relevant when dehumanization is defined along the dimension of human uniqueness, given that uniquely human attributes implicate competence and sophistication.

Nevertheless, status has not consistently predicted levels of dehumanization: Rodriguez-Perez and colleagues (2011) found that attribution of secondary emotions to members of 27 national or regional groups was uncorrelated with the perceived status of these groups. Instead, the groups that were ascribed the fewest uniquely human emotions were those seen as the least friendly, similar, and familiar to the Spanish in-group. Although previous inhumanization research had discounted the role of familiarity in the basic phenomenon, the effect may be stronger for groups that are more socially distant as well as those that are socially subordinate.

Our review of dehumanization's targets indicates that a remarkably broad range of social targets can be perceived to lack humanness. These targets extend far beyond ethnic groups, the focus of most inhumanization research, to include groups defined by gender, social and sexual deviance,

and illness, as well as the self. There is now substantial evidence that the lowest of the low are most vulnerable to dehumanization, especially when humanness is understood as human uniqueness, a vertical dimension of comparison in which being human amounts to being above animals.

However, it is unlikely that all forms of dehumanization fit within this hierarchical framework. Some targets may be seen as lacking humanness in a more horizontal manner, based on distance and disconnection rather than status and domination. For example, dehumanization in the domain of medicine (Lammers & Stapel 2011), where people seek emotional distance from others' suffering, and in self-perception, where people perceive others as less human than they are or feel their own humanness has been sapped by social exclusion, implicates a different kind of humanness than infrahumanization. In these cases, human nature—warmth, depth, and emotionality—is denied as a result of social disconnection rather than human uniqueness being denied as a result of hierarchical thinking.

### WHO DEHUMANIZES?

Certain groups and individuals are more likely to be dehumanized than others. Similarly, shifting focus from targets to perceivers, certain people may be more apt to dehumanize than others. Although the capacity to see others as less than human may be universal, apparent even among children (Costello & Hodson 2013, Vezzali et al. 2012), there may be individual differences in the tendency to do so. There is now evidence that individual differences in personality, beliefs, ideologies, and attitudes play a role.

Personality characteristics have been explored in several studies. Hodson & Costello (2007) found that Canadians who scored higher on interpersonal disgust-proneness, the tendency to experience disgust in response to contact with strangers, were more likely to dehumanize immigrants. More narcissistic individuals were especially likely to see others as less human than themselves (Locke 2009), and higher levels of psychopathy and autism were associated with the ascription of less mind to human targets (Gray et al. 2011). Although these four traits are somewhat dissimilar—involving emotional aversion, perceived superiority of the self, callousness, and social disconnection, respectively—they all bear directly on interpersonal relations, and narcissism and psychopathy correlate moderately as elements of personality's "dark triad," alongside Machiavellianism. Tendencies to dehumanize others may be stronger among people who are disagreeable (callous and self-seeking), who experience strong emotional aversion to members of out-groups (perhaps especially in the context of xenophobic perceptions of immigrants), or who have diminished capacity for empathy or mentalizing.

The literature on the role of ideologies in dehumanization is more substantial than the literature on personality. DeLuca-McLean & Castano (2009) found that conservative American participants infrahumanized a Hispanic hurricane victim but liberal participants did not, and Maoz & McCauley (2008) found that Israeli (right-wing) hawks dehumanized Palestinians more than (left-wing) doves. Viki & Calitri (2008) showed that British participants were more likely to infrahumanize Americans if they held nationalistic beliefs (i.e., in the superiority of Britain over other countries) but less likely to do so if they held patriotic beliefs (i.e., positive views of their nation unaccompanied by a belief in superiority). By implication, infrahumanization depends on not just the degree of in-group identification but also on the tendency to derogate out-groups.

The most replicated ideological correlate of dehumanization is social dominance orientation (SDO). Hodson & Costello (2007) found SDO to be their strongest predictor of dehumanization of immigrants, Esses et al. (2008) found it to be associated with dehumanization of refugees, and Jackson & Gaertner (2010) showed it to correlate with dehumanization of enemy war victims. In each of these studies, SDO was more strongly associated with dehumanization than was right-wing

## ANIMALS, MEAT, AND DEHUMANIZATION

Approaches to dehumanization that focus on what is denied—traits, emotions, and mind—can be employed to examine attributions beyond the boundaries of our species. For instance, there is increasing evidence that people attribute humanity differently to animals when reminded of their meat consumption. Consuming meat, either by choice or experimental induction, is linked to reduced attribution of mind, moral standing, and secondary emotions to animals (Bilewicz et al. 2011, Loughnan et al. 2010a). Indeed, simply being categorized as a “meat animal” reduces the animal’s perceived mental capacity to suffer (Bratanova et al. 2011). Recently, Bastian et al. (2012c) found evidence that cognitive dissonance partially underlies this dehumanization. For example, people reminded of the link between meat and animal suffering decreased mind attribution to food animals, which in turn reduced experienced negative affect regarding meat consumption. Framing the human-animal divide also appears to play an important role. Thinking about how animals are similar to humans leads to increased attribution of mind and improved moral standing, whereas thinking of how humans are similar to animals does not (Bastian et al. 2012a). The introduction of a dehumanization perspective has provided new insight into how people think about animals.

authoritarianism, implying that dehumanization of the groups in question rests on a tough-minded striving for dominance rather than on social conformity and an exaggerated perception of threat. Perhaps the most striking finding, from Costello & Hodson (2013), is that white parents’ levels of SDO predict their children’s tendencies to dehumanize black children.

Costello & Hodson (2010) examined a related belief that is associated with the propensity to dehumanize others. People who perceived a greater divide between humans and other animals were more likely to engage in racial dehumanization. According to the authors’ interspecies model of prejudice, the oppression of marginalized human groups is associated with a belief in human supremacy over animals. This vertical differentiation of humans from animals promotes the view that “inferior” humans are bestial and justifies discrimination against them. In this regard, human-animal divide beliefs are akin to SDO: The two correlated ideologies both implicate hierarchical thinking and predict tendencies to dehumanize (see sidebar, *Animals, Meat, and Dehumanization*). The role of human-animal divide beliefs in dehumanization and prejudice is also supported experimentally by the finding that people show increased moral concern for marginalized groups when similarities between humans and animals are accentuated (Bastian et al. 2012a).

Attitudes represent a final set of individual difference variables that may correlate with dehumanization tendencies, although they have been examined only in relation to perceptions of women. Two studies using divergent methodologies have found that hostile sexism predicts the denial of humanness to female targets. Viki & Abrams (2003) showed that hostile sexists denied uniquely human positive emotions to women, whereas benevolent sexists did the reverse. Cikara et al. (2011) found that male hostile sexists showed reduced neural activation of brain regions associated with mental state attribution when viewing images of sexualized women. However, hostile sexism was not correlated with implicit associations of nonsexualized women with animals or objects (Rudman & Mescher 2012).

There is some consistency among the individual differences associated with the propensity to dehumanize. First, this propensity is associated with hostile and disagreeable characteristics, including psychopathic and narcissistic traits, nationalistic beliefs, and hostile attitudes. Second, it is linked to emotional aversion to unfamiliar persons. Third, it is associated with hierarchical ideological positions, notably SDO and belief in human dominion over animals. Fourth, it may be associated with social disconnection and deficient empathy, given the link to autistic traits. These

conclusions suggest that several distinct individual-difference domains are implicated in seeing people as less than human, each potentially having particular relevance to certain kinds or targets of dehumanization.

## WHEN DO PEOPLE DEHUMANIZE?

The preceding section reviewed enduring individual differences associated with the tendency to see others as less than human; the “who” of dehumanization. More transient factors determine the “when” of dehumanization: the conditions or circumstances under which it occurs. These factors include emotional, motivational, and cognitive states of the perceiver; aspects of the situation such as threat; and social-structural factors such as power.

### Emotion

Research on emotional states linked to dehumanization is scarce. However, consistent with findings that dispositional disgust-proneness is associated with the tendency to dehumanize (Hodson & Costello 2007) and that disgust-inducing groups are most likely to be dehumanized (Harris & Fiske 2006), experienced disgust also promotes dehumanization. Buckels & Trapnell (2013) recently showed that experimentally induced disgust produced stronger implicit associations between an out-group and animals than did induced sadness or neutral mood. The related emotion of contempt, which combines aversion with anger and targets people of perceived low status, has also been linked to dehumanization of refugees (Esses et al. 2008).

### Motives

A larger quantity of research has examined the role of motives in dehumanization. Four main motives have been examined: sociality, sexuality, moral equanimity, and group protection. These motives are disparate, and their relevance to dehumanization may be restricted to specific inter-group or interpersonal contexts.

Evidence that the need for social connection plays a role in dehumanization originated in research on anthropomorphism, which showed that people with unmet sociality needs were especially likely to attribute mind to nonhumans (Epley et al. 2008). In a striking extrapolation, Waytz & Epley (2012) reasoned that if unmet needs for connection promote mind attribution, then satiated sociality needs should promote mind denial. They demonstrated experimentally that people who felt more socially connected were more likely to dehumanize distant others. This finding that feeling connected makes one more likely to dehumanize others is intriguing when placed alongside Bastian & Haslam’s (2010) finding that people who have been socially excluded feel less than human themselves.

Research on the role of sexual motives in dehumanization is restricted to a single study on the perception of objectified women by Vaes and colleagues (2011). Male perceivers associated sexualized female targets with animals to a greater extent than nonsexualized female (or male) targets, implicating an appetitive sexual motive in the process. It can be argued that an aversive process must operate if dehumanization is said to occur (Cikara et al. 2011), but the finding of Vaes and colleagues satisfies our broad, motivationally agnostic understanding of dehumanization as a denial of humanness, and the woman-animal association can have aversive consequences (Rudman & Mescher 2012).

The desire for moral equanimity also plays a part in some forms of dehumanization. Castano & Giner-Sorolla (2006) found that people were more likely to dehumanize an out-group that

had suffered a historical harm when their in-group was assigned responsibility for it. People are motivated to avoid collective guilt and the tarnishing of their in-group's image, and by denying the humanity or moral worth of its historical victims, they can accomplish that goal post hoc.

A group-protective motive outside of the moral domain also plays a part in another dehumanization-related effect. Koval and colleagues (2012) found that people tend to judge their in-group's negative attributes to be human (i.e., human nature) to a greater extent than out-group flaws. This effect of humanizing in-group flaws is independent of the familiar tendency to ascribe more positive attributes to the in-group. The finding that the effect is amplified when in-group identity is threatened and that it is not obtained for positive attributes implies that it is motivated by a desire to protect the image of the in-group. Seeing one's group's failings as only human renders them excusable, and the failure to humanize the out-group's failings constitutes a subtle, motivated form of dehumanization.

### **Cognitions**

Relatively little research has explored cognitive factors that promote the dehumanization of groups. Two factors that may be implicated are suggested by research on moderators of the self-humanizing effect, in which others are seen as less human than the self (Haslam et al. 2005). Haslam & Bain (2007) showed that this effect was diminished when participants' self-focus was disrupted and when their construal of the other was more concrete (i.e., comparing the self to a hypothetical individual or past self rather than to an average person or future self). By implication, egocentrism and abstract construal may promote dehumanization.

### **Threat**

An association between perceived threat and dehumanization has been suggested in several studies. Maoz & McCauley (2008) found greater tendencies to dehumanize Palestinians among Jewish participants who perceived them as a more severe threat, although dehumanization and threat represented partially distinct contributors to support for aggressive policies. Perceived threat also moderates the effect of dehumanization on endorsement of aggression, such that participants who saw Muslims as a greater threat only showed a proclivity to torture Muslim prisoners of war if they also dehumanized them (Viki et al. 2013). The existential threat of mortality has also been implicated in inhumanization, with terror management theory proposing that people defend against this threat by attempting to transcend their creatureliness. Goldenberg et al. (2009) and Vaes et al. (2010) argued that ascribing uniquely human attributes selectively to the self and the in-group is a plausible way to do so. They demonstrated that reminders of mortality increase inhumanization. Whereas threat posed by others may increase dehumanization by promoting a more bestial view of the out-group, mortality threat may increase it by promoting a less bestial view of the in-group.

### **Power**

The only social-structural factor that has been investigated as a contributor to dehumanization is power. Lammers & Stapel (2011) found that participants who had a greater personal sense of power tended to ascribe more animalistic traits to a low-status fictitious out-group and that participants induced to feel powerful in a medical decision-making context were more likely to dehumanize a fictitious patient and also to endorse a more painful but effective treatment. The capacity for power to increase dehumanization has been further demonstrated by Gwinn and

colleagues (2013), who found that students who were assigned high-power roles within dyads rated their low-power partner as lacking uniquely human traits. Most impressively, this tendency was found in a concrete interaction, in the absence of derogation of the low-power partner, and whether the dyadic activity was cooperative or competitive.

The research reviewed in this section clarifies the diverse factors that determine when dehumanization occurs. These factors include an assortment of stable individual differences, variable psychological states, contextual triggers, and social positions. Empirical support for these factors is thinly spread, but it helps to flesh out our understanding of the range of intrapersonal, interpersonal, and broader social conditions that promote dehumanization.

## WHAT ARE THE CONSEQUENCES OF DEHUMANIZATION?

A major impetus for the study of dehumanization is to understand its profoundly negative consequences. Dehumanization of enemies, victims, and colonized peoples has been associated with pogroms, atrocities, and exploitation. Although recent dehumanization research has rarely investigated such extreme events and seldom allows strong inferences that dehumanization causes particular outcomes, it has established a variety of effects that are plausibly interpreted as consequences of dehumanization.

These putative consequences can be divided into four broad groupings. First, dehumanizing perceptions of individuals or groups may reduce prosocial behavior toward them. Second, dehumanizing perceptions may increase antisocial behavior toward their targets. Third, these perceptions may have a variety of implications for moral evaluation of targets. Fourth, dehumanizing perceptions of others may have functional consequences for the perceiver or the target.

### Reduced Prosociality

Dehumanizing perceptions of others may be associated with a diminished tendency to respond to them prosocially. Vaes et al. (2002) established that people respond more prosocially to others who express themselves in terms of secondary emotions because, they inferred, these others are tacitly seen as more human. An implication of this finding is that people should discriminate against out-group members by failing to help, as they are perceived as lacking these uniquely human emotions. Vaes and coworkers (2003) supported this prediction of differential helping: Participants were less likely to help and express solidarity with out-group members who needed assistance than in-group members and indeed were particularly unhelpful to out-group members who violated expectations by expressing secondary emotions. A related effect was obtained by Cuddy and colleagues (2007), who showed that the tendency to deny uniquely human emotions to other-race Hurricane Katrina victims was associated with a lesser likelihood of volunteering to help with relief efforts.

Dehumanization can also diminish collective helping. Zebel and colleagues (2008) found that Dutch participants who perceived Muslims as subtly animal-like were less supportive of reparations being made to the Bosnian Muslim families of victims of an atrocity that Dutch peacekeepers had failed to prevent. In related work, Cehajic et al. (2009) showed that dehumanization of a victim group was associated with diminished empathy for them. Dehumanization of sex offenders has also been shown to predict lack of support for rehabilitation programs (Viki et al. 2013).

Dehumanization may also diminish prosocial behavior by reducing intergroup forgiveness. Tam and colleagues (2007) found that Protestants and Catholics in Northern Ireland were less likely to forgive one another for past violence if they inhumanized the other community. This effect was independent of anger and out-group attitudes, suggesting that dehumanization is not merely an epiphenomenon of negative evaluation. Inhumanization may also reduce forgiveness

by rendering apologies ineffective. Like Tam and colleagues, Wohl et al. (2012) showed that people tended not to forgive others whom they inhumanized. In addition, they showed that apologies issued by transgressor groups did not generate forgiveness if they were expressed using secondary emotions. These studies reveal the powerful role that inhumanization may play in hindering intergroup reconciliation.

### Increased Antisociality

Reductions in prosocial behavior toward dehumanized groups represent omissions, but the most well-known consequences of dehumanization involve the commission of antisocial acts. The link between dehumanization, violence, and aggression was emphasized in the early writings of Kelman and Staub on war and genocide, and early work by Bandura and colleagues (1996) firmly established that dehumanization of victims disinhibits violent actions. Subsequent research has revealed the wide variety of forms of aggression with which dehumanization is associated and the multiple mechanisms that account for this association.

Dehumanization is sometimes associated with predatory forms of aggression that are not direct responses to provocation. The tendency to dehumanize others is associated with perpetration of bullying among children (Obermann 2011), consistent with the work of Bandura et al. (1996), who showed that dehumanization-prone children were particularly unlikely to experience anticipatory guilt before and remorse after engaging in aggressive behavior. In a different context, men who implicitly associated women with animals and objects reported greater proclivities to rape and sexually harass them (Rudman & Mescher 2012).

Dehumanization has also been shown to predict forms of aggression that are perceived as reactive and retaliatory—and often righteous—by the perpetrator. Perceiving enemies as less than human is associated with support for war among Americans (Jackson & Gaertner 2010), for torture of Muslim prisoners of war among British Christians (Viki et al. 2013), and for coerced population transfers of Palestinians among Israelis (Maoz & McCauley 2008). Perceiving criminals as less than human predicts harsh and retributive sentencing decisions independently of the moral outrage that their crimes evoke (Bastian et al. 2013a). The special relevance of dehumanization to retributive responses in ongoing conflicts is demonstrated by Leidner et al. (2013), who showed that the more Palestinian and Jewish Israeli participants dehumanized one another in Haslam's mechanistic sense—denial of human nature or “sentience”—the more they supported retributive forms of justice that punished their opponents over restorative forms that sought peace through apologies and affirmation of shared values. This preference for retributive justice was, in turn, associated with support for violence (e.g., bombings) rather than peace deals.

Related effects have been observed among cyber-warriors: Dehumanization of opponents, and of the self, occurs among players of violent video games (Bastian et al. 2012b). The tendency to dehumanize others that these games promoted can increase extragame aggressive behavior, possibly accounting in part for the effects of violent video games on general aggressiveness (Greitemeyer & McLatchie 2011). However, the causal role of dehumanization as an enabling precursor of aggression cannot be established in this research, as the dehumanizing perception can serve as a post-hoc rationalization instead. Perhaps ironically, however, perceiving violence itself as less than human (i.e., animalistic), rather than the enemy, may sometimes reduce support for military aggression (Motyl et al. 2009).

Retaliation in the form of support for punitive treatment of people who violate social norms is also associated with dehumanization. Viki et al. (2012) showed that people who dehumanized sex offenders favored especially harsh punishments. Goff et al. (2008) found that media reports of crimes in Philadelphia contained more dehumanizing jungle imagery when defendants were

African American than when they were white, and this imagery was associated with defendants receiving death sentences. In another study, Goff et al. (2008) showed that white participants who viewed a videotape of police violently subduing a suspect believed the violence to be more justified when the suspect was described as African American and they had been primed with ape-related stimuli. This work suggests that dehumanization may facilitate aggression by promoting an image of feral dangerousness.

The antisocial consequences of dehumanization discussed above involve forms of hostile approach, such as aggressive and punitive actions. A few studies have explored hostile avoidance. Martinez et al. (2011) found that mental illness labels led hypothetical persons to be perceived as animalistic, increasing their perceived dangerousness and intentions to socially reject them. Similarly, Viki et al. (2012) found that participants who dehumanized sex offenders were more likely to support excluding them from society. These links between dehumanization and social exclusion may be especially pertinent for socially deviant groups.

### Consequences for Moral Judgment

Another possible consequence of dehumanizing perceptions is to confer diminished moral standing on people (cf. Opatow 1990). Researchers have shown that perceived moral status covaries strongly with attributions of mind and that different kinds of mind denial have different moral implications (Gray et al. 2007). In particular, people who are seen as lacking agentic mental states are judged to be deficient in moral responsibility (moral agency), and those seen as lacking experiential mental states are judged to lack the right to be protected from harm (moral patiency). Bastian et al. (2011) confirmed this pattern in relation to perceived humanness, finding that people seen as lacking uniquely human traits were viewed as less blameworthy and punishable for immoral behavior, whereas people seen as lacking human nature were judged less worthy of protection, less capable of rehabilitation, and less deserving of praise for moral behavior.

Dehumanization's effects on moral standing might help to account for its links to antisocial and diminished prosocial behavior. The finding that people are willing to harm and exclude dehumanized persons, and see them as less worthy of help, forgiveness, and empathy, is consistent with the evidence that a perceived lack of human nature or experience is associated with reduced moral worth. The lesser blame and punishment assigned to people lacking human uniqueness or agency appears to conflict with the substantial evidence that people seen as animal-like are often targeted for punitive treatment. One resolution to this apparent paradox is that this punitiveness is driven not by a perception that the punished are morally responsible for their actions, but rather by perceived dangerousness and threat. Punitive treatment of animalistically dehumanized people may reflect a judgment that they are not moral agents: Coercive treatment is required precisely because they are not amenable to reasoning or capable of controlling themselves.

### Functional Consequences

The consequences of dehumanization reviewed above have been unambiguously negative. Two studies conducted in a medical context complicate that generalization. Lammers & Stapel (2011) found that participants who denied human nature traits to a fictitious patient in a medical decision-making scenario were most likely to recommend a treatment that was more painful but ultimately more effective than its alternative. Although this evidence is several steps removed from clinical reality, it implies that under certain conditions medical dehumanization might benefit patients. The possibility that it might also benefit doctors is suggested by Vaes & Muratore (2013), who showed that health workers who were less inclined to humanize the suffering of a fictitious terminal

patient showed fewer symptoms of burnout (i.e., exhaustion, poor relationships with patients, disillusionment). These studies imply that dehumanization may sometimes be advantageous in domains such as medicine where tough-minded but prudent decisions must be made on behalf of people who may suffer short-term costs. However, these implications must be weighed against the strong evidence that empathy and humanizing have predominantly positive associations with patient outcomes (Haque & Waytz 2012, Haslam 2007).

## HOW CAN WE OVERCOME DEHUMANIZATION?

Recent research has documented the existence of dehumanizing perceptions and their causes, correlates, and consequences. Relatively little attention has been paid to the important practical problem of how these perceptions can be reduced. This problem is likely to be a knotty one. First, many dehumanizing perceptions are rooted in stereotypes and intergroup relations that have long histories. Second, these perceptions are often unconscious and automatic. Third, dehumanizing perceptions are often reinforced by strong motives and biases: They can protect in-group identity (Koval et al. 2012), people actively resist information that challenges them (Vaes et al. 2003), and they can be a moving target because people judge to be human whatever distinguishes their group from others (Paladino & Vaes 2009).

Despite these reasons for pessimism there is evidence that prosocial behavior can be increased by humanizing social targets (Majdandžić et al. 2012) and that dehumanization can be reduced by factors that are well known to social psychologists. One is intergroup contact. Greater or higher-quality contact was associated with less dehumanizing perceptions of (a) members of other communities in sectarian Northern Ireland (Tam et al. 2007), (b) sex offenders by staff at a rehabilitation center (Viki et al. 2012), and (c) immigrants by Italian citizens and southern Italians by northerners (Capozza et al. 2012b). In the only experimental study, an imagined contact intervention reduced infrahumanization of immigrants by Italian children (Vezzali et al. 2012).

A second way to reduce dehumanization is to promote a common or superordinate identity, thereby emphasizing the similarities and shared fate of different subgroups and de-emphasizing their boundaries. In a correlational study, Capozza et al. (2012b) showed that the humanizing effects of contact were partly mediated by the construal of Italians and immigrants as sharing a single identity as town dwellers and of northerners and southerners as sharing a national identity. Albarello & Rubini (2012) experimentally demonstrated reduced dehumanization of blacks when Caucasian Italian participants received human identity primes.

Although superordinate categorization may hold promise in reducing dehumanization, some writers have expressed caution about making human identity salient. Morton & Postmes (2011) argue that groups that have harmed others can use notions of shared humanity to deflect collective responsibility and guilt and to expect unearned forgiveness. Awareness of common humanity can also reduce empathy for victim groups (Greenaway et al. 2012). Making the human category salient can also backfire if it is framed negatively (e.g., human “nature red in tooth and claw”), increasing support for torture and the use of force by in-group members and reducing their associated feelings of guilt. In essence, a sense of common human identity can normalize aggression and excuse the harmful behavior of in-group members as “only human.”

There is little evidence for alternative methods of reducing dehumanization besides contact and superordinate identity. One study has shown that emphasizing similarities between humans and animals led to humanized perceptions of immigrants by Canadian participants (Costello & Hodson 2010), and another has shown that multiple categorization of blacks (i.e., supplementing racial labels with information about age, gender, religion, and so on) attenuated dehumanizing

perceptions in Italy (Albarello & Rubini 2012). In view of the paucity of work of this type, experimental research on the reduction of dehumanization is an urgent priority.

## CONCLUSIONS

This review reveals the vitality of the “new look” at dehumanization that has emerged in the new century. Original theoretical perspectives have driven research programs that have begun to answer many of the key questions in the field. The central message of this work is one of diversity. Recent research shows that dehumanization can take many forms, including subtle variations that extend far beyond the extreme phenomena that provided the focus for early dehumanization scholarship. It shows that dehumanization can involve many themes, from derogation to degradation to disconnection. It demonstrates that the potential targets of dehumanization are many, rather than being confined to combatants and victims of genocide. It indicates that dehumanization is associated with a diverse assortment of individual differences (e.g., personality traits, ideologies, attitudes) and contextual factors (e.g., emotions, motives, threats, social positions) rather than being driven only by hate or hatefulness. It shows the consequences of dehumanization to be disparate: They include many varieties of aggression—the focus of early theory—but stretch to forms of social exclusion, diminished prosociality, moral judgment, and even potentially beneficial outcomes.

Despite this evidence of significant progress, the psychology of dehumanization also faces important challenges. More work is needed to establish that dehumanizing perceptions exert a causal influence on behavior in ecologically valid contexts. Researchers have given insufficient attention to how dehumanization operates in interpersonal relationships and interactions as distinct from perceptions of groups. Ways of reducing dehumanization, or humanizing dehumanized groups, are under-researched. Similarly, it is important to clarify distinctive neural signatures of different forms of dehumanization (e.g., Jack et al. 2013) and to use social neuroscience methods to unpack the conceptual overlaps between dehumanization, empathy, mirroring, and mentalizing. The relationship between subtle and blatant forms of dehumanization remains uncertain, and plausible hypotheses—e.g., subtle forms predispose blatant forms under conditions of conflict—have yet to be examined. More generally, there is a need to establish patterns within the diversity of dehumanization, such as determining whether particular forms of dehumanization have selective associations with particular targets, perceiver characteristics, contextual triggers, and consequences. The delineation of these patterns will help to refine theory on this challenging topic.

Although much remains to be done, the psychology of dehumanization has taken great strides in the past decade. Theorists and researchers have established that perceiving people as less than human is surprisingly common, complex, and broad in its implications for social life, both everyday and *in extremis*. The next decade of work is likely to cement dehumanization as a fundamental process in social perception.

### SUMMARY POINTS

1. The study of dehumanization has undergone a renaissance in the past decade.
2. Several new theories offer compelling accounts that make dehumanization-related phenomena empirically tractable.
3. Dehumanization phenomena lie on a spectrum from blatant to subtle and also take different qualitative forms.

4. Although the best-known historical examples of dehumanization involve ethnic or racial groups, research has documented dehumanizing perceptions of many other targets, including the self.
5. Several personality, ideological, and attitudinal factors are associated with the tendency to dehumanize others.
6. Several emotional, motivational, and social-structural factors influence when dehumanization occurs.
7. Many consequences of dehumanization have been demonstrated, extending beyond effects on aggressive behavior to reduced prosociality and some functional consequences.
8. Relatively little research has examined the crucial task of identifying how dehumanizing perceptions can be challenged and overcome.

### FUTURE ISSUES

1. What is the range of groups that can be dehumanized, and what are the common elements among them?
2. Can dehumanization be examined as an interpersonal phenomenon, based on the dynamics of interactions and relationships, as well as an intergroup phenomenon?
3. Do different forms of dehumanization have different neural signatures?
4. When do dehumanizing perceptions have causal effects on social outcomes rather than merely being side effects of negative evaluations?
5. What are the implications of dehumanizing perceptions beyond their central consequence of promoting aggression?
6. Can dehumanization be studied in the thick of real-life social conflicts?
7. Can dehumanizing perceptions be studied longitudinally?
8. What are the best ways to humanize targets of dehumanizing perception?

### DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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Strongest evidence to date that people can perceive themselves as lacking humanness.

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Establishes the neural underpinnings of dehumanization.

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Provides an integrative, psychological account of dehumanization.

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Field research showing the importance of dehumanization for justice and conflict resolution in the Middle East.

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Multiple studies establishing humanness as an important dimension of intergroup perception.

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Examines how likening women to animals and objects is associated with a suite of hostile beliefs.

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Provides suggestive evidence that dehumanization may be functional in some circumstances.

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A thorough and systematic account of the mind perception perspective.

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