TOWARD A COMPREHENSIVE TAXONOMY OF DEHUMANIZATION: INTEGRATING TWO SENSES OF HUMANNESS, MIND PERCEPTION THEORY, AND STEREOTYPE CONTENT MODEL

MENGYAO LI  
BERNARD LEIDNER  
UNIVERSITY OF MASSACHUSETTS AMHERST  

EMANUELE CASTANO  
NEW SCHOOL FOR SOCIAL RESEARCH OF NEW YORK

We review and integrate existing literature on perceptions of humanness and dehumanization. Synthesizing three independent lines of research (Haslam’s two senses of humanness, mind perception theory, the stereotype content model), we provide a taxonomy of different phenomena (e.g., animalistic and mechanistic dehumanization, objectification, demonization, etc.) that all fall under the broad category of dehumanization. In our current framework, humanness is understood in terms of two basic dimensions: one concerned with agency, competence, and other characteristics that are seen as uniquely human, and the other concerned with experience, interpersonal warmth, and other characteristics that are seen as the essence of human nature. Combinations of these two dimensions result in a mixed model with four main clusters depicting different ways in which humanness is denied or recognized in others. Implications for intergroup and interpersonal relations are also discussed.

Key words: Humanness; Dehumanization; Mind perception; Stereotype content model.

Correspondence concerning this article should be addressed to Mengyao Li, University of Massachusetts Amherst, 135 Hicks way, Amherst, MA 01003, USA. Email: mengyao@psych.umass.edu

Dehumanization, the denial of humanness to others, has received extensive attention both in popular media and in academic scholarship. It has been frequently proposed as a mechanism that mitigates or even eliminates moral concern about cruel behavior, thus playing a crucial role in war, genocide, and other forms of extreme violence (Bandura, 1999, 2002; Bandura, Underwood, & Fromson, 1975; Kelman, 1973; Smith, 2011). In searching for psychological explanations of “sanctioned” massacres, Kelman (1973) writes, “the inhibitions against murdering fellow human beings are generally so strong that the victims must be deprived of their human status if systematic killing is to proceed in a smooth and orderly fashion” (p. 48). The most infamous examples of dehumanization during the past century are perhaps the depiction of Jews as vermin and evil in the Nazi propaganda and repeated media references to Tutsis in Rwanda as inyenzi (“cockroach” in Kinyarwandan).

In addition to the traditional understanding of dehumanization as an explicit, brutal deprivation of humanity in its entirety, in the last decade researchers have devoted their attention to a
more subtle, banal form of dehumanization — the perception of others as less than (but not necessarily non-) human (e.g., seeing others as lacking secondary, uniquely human emotions; Leyens, Demoulin, Vaes, Gaunt, & Paladino, 2007; Leyens et al., 2000, 2001). Leyens and colleagues (2007) used the term infrahumanization to describe this more widespread and less blatant phenomenon, distinguishing it from its close cousin dehumanization. Other scholars (Ben-Ari, 2001; Smith, 2011) distinguished between dehumanization, describing more blatant denial of human qualities, and objectification, describing perceptions of others as objects rather than humans. Diverging from this approach to delineate or separate these related phenomena, Haslam (2006) discussed infrahumanization and objectification as two specific forms of dehumanization. Following Haslam and others (e.g., Jack, Dawson, & Norr, 2013), in this paper we adopt a broad and inclusive definition of dehumanization, encompassing both subtle and more blatant ways in which human traits, values, and/or emotions are not fully recognized in others.

Two basic questions have emerged from the literature on dehumanization and related concepts (e.g., infrahumanization, objectification). First, what constitutes humanness? Second, what does it mean to deprive others of their humanness? Building upon several earlier psychological models of human perception, Haslam (2006) integrated earlier work, most importantly that on infrahumanization, arguing that dehumanization is a complex, multifaceted phenomenon that comprises of two distinct ways in which humanness can be denied: denying human uniqueness (attributes that are perceived to be unique to human beings) or human nature (attributes that are perceived to be essential to human beings). As we will show, this two-dimensional conceptualization of humanness is echoed in several other research programs focusing on social perception in general: the recently developed mind perception theory, which distinguishes between agency and experience (Epley & Waytz, 2010; Gray, Gray, & Wegner, 2007; Waytz, Gray, Epley, & Wegner, 2010), and the stereotype content model, which distinguishes between competence and warmth (Fiske, Cuddy, Glick, & Xu, 2002; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). The existing literature, however, has not integrated these three lines of research to systematically address the two questions laid out above. In this contribution, therefore, we will first review and compare the different theoretical approaches to dehumanization, with the goal to achieve a more comprehensive understanding of this important phenomenon. Next, we will discuss in detail how different combinations of the two overarching dimensions of humanity, integrated from the aforementioned theories, can result in four main clusters of (de)humanizing perceptions, in which others’ humanness is recognized or denied in different manners. In doing so, this paper provides a taxonomy of different phenomena that all fall under dehumanization broadly understood, but are appreciably different. The taxonomy can help to understand the phenomena in more detail and test yet overlooked hypotheses. Consequently, this paper serves as one of the first steps toward a more fine-grained conceptualization of humanness and its denial.

WHAT DOES IT MEAN TO BE HUMAN?

Human Uniqueness and Human Nature

Haslam’s (2006) integrative review on dehumanization proposes two distinct senses of humanness: human uniqueness and human nature. According to Haslam, uniquely human (UH) characteristics define the boundary that separates humans from the related category of animals.
Language, higher-order cognitions, and refined emotions can all be considered uniquely human (see Leyens et al., 2001). Considerable research has empirically examined the emotional component of UH (e.g., Castano & Giner-Sorolla, 2006; Demoulin et al., 2004; Gaunt, Leyens, & Demoulin, 2002; Leyens et al., 2000, 2001, 2003, 2007; Vaes, Paladino, Castelli, Leyens, & Giovannazzi, 2003). Research on infrahumanization focuses on the distinction between emotions that are perceived to be biologically rooted, shared by both humans and animals (primary emotions; e.g., anger, surprise, fear, joy, sadness, and disgust) and “uniquely human” emotions that are perceived to be more specific to human beings (secondary emotions; e.g., admiration, contempt, love, guilt, humiliation, and hope). It has been demonstrated, for instance, that people respond faster to secondary (rather than primary) emotions when confronted with a human context as compared to an animal context (Demoulin et al., 2004), indicating that secondary emotions are distinctly linked to the concept of humanity. People are also more likely to attribute secondary (but not primary) emotions to their own group than to outgroups (Gaunt et al., 2002; Leyens et al., 2000, 2001), even in the absence of intergroup conflict (Gaunt, Leyens, & Sindic, 2004) and regardless of the valence of emotions (Leyens et al., 2001). These findings have collectively revealed the important role that perceptions of UH play in intergroup relations.

Humanness may also be understood in terms of features that are seen as “essentially, typically, or fundamentally” human, which Haslam labeled human nature (HN). In other words, characteristics that are typically human may not necessarily be the same ones that distinguish humans from other animals. Take curiosity as an example: while feeling curious is perceived as a core attribute of humans, it is also perceived to be widely present in other animals. Typical HN characteristics include emotionality, interpersonal warmth, agency and flexibility. HN further distinguishes from UH in that UH characteristics are viewed as socially acquired, reflecting the cultural and societal environment in which these characteristics are developed, whereas HN is primarily concerned with inherent, universal characteristics, reflecting the essence of human beings independently from culture (Haslam, Bain, Douge, Lee, & Bastian, 2005; Haslam, Bastian, & Bissett, 2004). In interpersonal contexts, people tend to attribute less HN (but not UH) characteristics to others than to the self (Haslam & Bain, 2007; Haslam et al., 2005), further demonstrating that UH and HN are two independent constructs.

Lessons from Mind Perception Theory: Agency and Experience

Introduced by Gray and colleagues (2007), the mind perception theory postulates that people perceive other minds, human or non-human, in terms of two fundamental dimensions: agency and experience. Agency refers to the capacity for planning and acting, including self-control, morality, memory, communication, thought, and reasoning. Experience refers to the capacity for desires and feelings, including emotions, awareness of the surrounding environment, and basic psychological states such as hunger, thirst, and pain. In Gray et al.’s, participants rated a variety of targets (e.g., animals, humans, supernatural entities, robots, dead people) on mental capacities representing either agency or experience. Their findings indicated that humans were perceived as having considerably more agency compared to non-human animals (but less compared to God), and having more experience as compared to non-living objects (e.g., dead man, robot, God). It should be noted that the term “agency” in mind perception theory is used differently from the
same term in Haslam’s theory. As an aspect of human nature, agency in Haslam’s theory is equivalent to individuality or fungibility — the extent to which the target is interchangeable. Denying others agency thus renders them “interchangeable (fungible) and passive” (Haslam, 2006, p. 258). In mind perception, however, agency is primarily concerned with higher-order cognitive abilities rather than the traits that characterize the essence of humans (for a review on the role that agency, as understood by Gray et al., plays in dehumanization see Tipler & Ruscher, 2014). Importantly, Gray and colleagues’ agency corresponds more closely to UH than HN characteristics.

Research has shown that these two dimensions of mind perception have important implications in the moral domain (Gray et al., 2007; Gray, Knobe, Sheskin, Bloom, & Barrett, 2011; Gray & Wegner, 2009; Gray, Young, & Waytz, 2012; Waytz, Gray, et al., 2010). On the one hand, perceived capability for reasoned thought and intentional action is closely linked to the judgment of others’ moral agency: the perceived causal responsibility for an agent’s moral actions. On the other, perceived capability for feelings and emotions is closely linked to perceived moral patiency: the entitlement to be protected from harm. In one study, people indicated that it was morally wrong to harm a non-human target to the extent that it was perceived as having human-like mind (Waytz, Cacioppo, & Epley, 2010). In another, people attributed more responsibility to a robot for its actions when instructed to anthropomorphize the robot (Hinds, Roberts, & Jones, 2004). In their research on moral typecasting, Gray and Wegner (2009) found that moral agents are seen as less sensitive to pain and pleasure, whereas moral patients are seen as less blameworthy for negative actions, indicating that moral agency and patiency are complementary to each other.

Linking the two dimensions of mind perception to Haslam’s (2006) two senses of humanness, agency can be understood as an element of UH, incorporating moral sensibility, rationality, and maturity as they all reflect the ability to think, reason, and act. On the other hand, experience can be understood as an element of HN, incorporating emotional responsiveness and perhaps also cognitive openness as they both reflect the ability to feel and to sense the environment. This is not to suggest, however, that the mind perception theory can be reduced to an aspect of Haslam’s dehumanization theory. Mind perception can be applied to contexts much broader than perceptions of humanity, but integrating it with Haslam’s account of dehumanization can enrich our understanding of this particular phenomenon.

Lessons from the Stereotype Content Model: Competence and Warmth

Another bi-dimensional structure of human qualities is evident in the stereotype content model (SCM; Fiske et al., 2002; Judd et al., 2005), which has been extensively researched in the domains of intergroup relations and social judgments in general. Within the SCM, social perception and evaluation incorporate a capability judgment (competence), mirroring the characteristics related to human uniqueness and (Gray’s) agency, as well as a “friend-foe” judgment (warmth), mirroring the characteristics related to human nature and experience. In Fiske et al.’s (2002) operationalization of these two dimensions, warmth includes sociality (good nature, tolerance) and morality (sincerity), and competence is operationalized as task (as opposed to social) competence (competitiveness, intelligence). Perceptions and evaluations of other individuals or groups are organized into four Warmth × Competence clusters, resulting in different stereotypes about others.
Paternalistic stereotypes, for example, result from a combination of low competence and high warmth. Prevalent in gender and some racial stereotypes, this mixed combination portrays the outgroup as lacking competence but simultaneously being kind and friendly. In contrast, envious stereotypes represent a mixed combination of high competence and low warmth, which appears frequently in portrayals of Asian Americans, Jews, and wealthy businesspeople. With regard to the other two Warmth × Competence clusters, the high-high quadrant consists of high-status but not competitive individuals such as ingroup members and close allies, which are usually seen with admiration, and the low-low quadrant consists of low-status, disgust-inducing outgroups such as homeless people, who evoke what Fiske et al. (2002) called contemptuous prejudice.

Linking the two dimensions of the SCM to Haslam’s (2006) two senses of humanness, competence can be understood as an element of UH, incorporating rationality and maturity as they both reflect the capacity to perform complex tasks. The morality component of warmth is directly in accordance with moral sensibility in Haslam’s model. The sociality component of warmth, on the other hand, can be understood as an element of HN, incorporating emotional responsiveness and interpersonal warmth as they both reflect the ability to socially connect with others. Like the mind perception theory, the SCM was originally proposed not as a model of dehumanization, and has been applied to a wide variety of domains, including evaluations of non-human and non-social targets (Fournier & Alvarez, 2012; Kervyn, Fiske, & Malone, 2012). Thus, instead of reducing the SCM to an aspect of Haslam’s two senses of humanness, we draw parallels between these two to arrive at a more comprehensive conceptualization of humanness and its denial. Linking competence and warmth to the two dimensions of mind perception, it seems clear that competence partly overlaps with agency in terms of competence and cognitive capacities, but not moral agency, which is related to the morality component of warmth. The sociality component of warmth partly overlaps with experience in terms of emotionality.

Similarities and Differences

Although neither the mind perception theory nor the SCM was originally proposed to directly address the question of what it means to be perceived as human, their experience and warmth dimensions conceptually correspond to human nature, whereas their agency and competence dimensions conceptually correspond to human uniqueness. The mind perception-dehumanization parallels can be observed in past research that focuses on the comparisons between humans and non-humans (Haslam, Kashima, Loughnan, Shi, & Suin, 2008). Incorporating both the dimensions of mind perception and Haslam’s (2006) human/nonhuman contrasts, Haslam and colleagues demonstrated that animals were perceived as lacking refined emotions, agency-related cognitions, but having comparable levels of primary emotions and greater perceptual capacities (e.g., seeing, hearing) than humans. Robots were believed to lack mental capacities across the board, but most deficient in emotions (both primary and secondary) and desires, and least deficient in cognitions and perceptual abilities. Supernatural beings were viewed as comparable to humans in primary and secondary emotions, but superior in higher cognitions and perceptions. These findings indicate that HN and UH characteristics broadly encompass the two dimensions of mind perception. There also exist, however, a number of important differences between these three bi-dimensional approaches when applied to our understanding of what it means to be perceived as human.
First, mind perception and the SCM focus primarily on mental states and group-based stereotypical traits, respectively, whereas HN and UH encompass a wide range of traits, capacities, and dispositions that collectively define what it means to be human. An important feature of human nature, for instance, is interpersonal warmth (Haslam, 2006; Haslam et al., 2005), which is not part of people’s perception of others’ minds but a crucial element in the SCM. Emphasizing its roots in social relations, the SCM defines warmth as being friendly, tolerant, sincere, and essentially prosocial (Fiske et al., 2002). Conversely, the SCM does not incorporate perceived emotionality of the target, which is a central component of the other two theories. Therefore, the concept of HN and UH expands beyond warmth/competence and experience/agency.

Second, while feelings and emotions are at the heart of the “experience” dimension of mind perception, this theory does not distinguish between primary and secondary emotions. This distinction is particularly important in human-animal and ingroup-outgroup comparisons because animals and outgroups are generally seen as lacking secondary, but not primary, emotions as compared to humans (Haslam et al., 2005, 2008; Leyens et al., 2000, 2001, 2003, 2007). In contrast, the distinction is perhaps less important in human-automaton and human-superhuman comparisons because robots are seen as lacking emotions altogether (Gray et al., 2007; Haslam et al., 2008), and supernatural beings are seen as possessing comparable levels of both primary and secondary emotions (Haslam et al., 2008). As mentioned earlier, UH (but not HN) characteristics are also judged similarly in self-other comparisons in interpersonal contexts (Haslam & Bain, 2007; Haslam et al., 2005), suggesting that people differentially ascribe primary and secondary emotions to other groups, but not to other individuals as such.

Finally, the three theories adopt different approaches to the role of morality in perceived humaness. Within the SCM, morality is an essential element in the warmth dimension, as being moral implies sincerity, compassion, and good intention toward others (Fiske et al., 2002; also see Heflick, Goldenberg, Cooper, & Puvia, 2011). By contrast, both Haslam (2006) and Gray et al. (2007) consider the ability to think and act morally as part of higher-order cognitions, thus distinguishing them from, rather than counting them toward, human nature and experience. The resulting question of whether prosocial morality is a fundamental, inherent part of human essence, or a sophisticated, higher-order human capacity, has been subjected to debate for centuries. The categorization of prosocial morality as higher-order or basic humaness may have important implications for moral judgments. If prosocial morality involves higher-order cognitions, denying others of UH characteristics and thereby likening them to animals implies a perception of the dehumanized target as somewhat immoral or incapable of adhering to moral principles. If morality is a fundamental human essence, however, those who are denied UH characteristics and thereby are likened to animals might still be seen as a moral being or entity, albeit lacking cognitive complexity. Conversely, if prosocial morality involves higher-order cognitions, denying others of HN characteristics and thereby likening them to robots/objects would not call into question their moral capabilities. If morality is a fundamental human essence, however, those who are denied HN characteristics and thereby are likened to robots/objects would be seen as incapable of moral thought and behavior.

Despite the considerable differences among these three bi-dimensional theories, they offer convergent evidence that people intuitively evaluate humans and non-humans, and judge who belongs to which group, according to two basic dimensions, one concerned with uniquely human, higher-order cognitions and emotions, and the other concerned with feelings and sensations that
are perceived to be at the core of humanity. Remarkably, cross-cultural studies have revealed largely consistent patterns across vastly different cultural contexts (for comparisons between different Western cultures see Demoulin et al., 2004; for comparisons between Western and non-Western cultures see Bain, Park, Kwok, & Haslam, 2009; Haslam et al., 2008; Loughnan, Leidner, et al., 2010; see also Bilewicz, Kumagai, & Castano, 2010), suggesting that the bi-dimensional representation of humanness may exist beyond Western cultures where these theories originally emerged and developed. Loughnan, Leidner, et al. (2010) further demonstrated that across six different cultures, people tend to see themselves as more human than fictitious outgroups (self-humanizing), particularly in terms of HN characteristics.

Some cultural differences have been documented, however. Australians, for instance, attributed less HN but more UH characteristics to Chinese than to the ingroup, whereas Chinese attributed less UH (but not UH) characteristics to Australians than to the ingroup (Bain et al., 2009). Thus, people attribute HN and UH to other groups differently depending on their cultural origins. Importantly, the finding that Australians attributed more UH characteristics to an outgroup than the ingroup shows that infrahumanization may not be a universal phenomenon. Taken together, the prior work demonstrates that across different cultures, people generally distinguish between these two forms of humanness with some cultural variations in the extent to which HN and UH characteristics are used in perceiving and describing others. Having established that humanness perception is comprised of two distinct aspects that encompass elements identified as key to the understanding of the perception of others, we now turn to the second question: what does it mean to deny others humanness?

A MIXED MODEL OF (DE)HUMANIZATION

Haslam (2006) theorized that the two dimensions underlying humanness perceptions, UH and HN, may lead to two distinct forms of dehumanization: animalistic and mechanistic. Animalistic dehumanization results from seeing others as lacking what distinguishes humans from animals (i.e., human uniqueness). Mechanistic dehumanization, on the other hand, results from seeing others as lacking human essence (i.e., human nature). In addition to rather separate streams of research on animalistic and mechanistic dehumanization, respectively, recent neuroimaging studies have revealed distinct neural patterns associated with animalistic and mechanistic dehumanization, respectively (Jack et al., 2013). Linking these two forms of dehumanization to the mind perception theory and the SCM, animalistic dehumanization corresponds to perceived low agency and competence, whereas mechanistic dehumanization corresponds to perceived low experience and warmth. The mind perception theory contends that the denial of mental states is the essence of dehumanization, with the denial of experience resulting in treatment of others as unthinking animals and the denial of agency resulting in treatment of others as unfeeling objects (Epley & Waytz, 2010). The SCM, on the other hand, has focused its discussion of dehumanization on a more traditional conceptualization, in which dehumanization is defined as a complete denial of both warmth and competence (Cuddy, Fiske, & Glick, 2007). The existing literature, therefore, falls short of discussing in detail the various combinations of these two basic dimensions in human perception, and more importantly, their implications for perceived humanness or the lack thereof. Thus, we propose a 2 (UH: high and low) × 2 (HN: high and low) model that arrives at a
taxonomy of the different forms of (de)humanization as a result of different combinations of the two dimensions (see Table 1).

<table>
<thead>
<tr>
<th>Human Nature</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Humanization (e.g., ingroup members)</td>
<td>Animalistic dehumanization (e.g., artists, disable people, traditional women)</td>
</tr>
<tr>
<td></td>
<td>Superhumanization (e.g., God, religious authorities)</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Mechanistic dehumanization (e.g., businesspeople, technicians, unfamiliar outgroups/others)</td>
<td>Double dehumanization: - with no or negative utilities to the perceiver: disgusted dehumanization (e.g., homeless, drug addicts) - with utilities to the perceiver: objectification (e.g., slaves, women in pornography)</td>
</tr>
<tr>
<td></td>
<td>Superhumanization (e.g., God)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonization (e.g., terrorists; Jews in the Nazi propaganda)</td>
<td></td>
</tr>
</tbody>
</table>

We propose this mixed model of dehumanization to address several limitations and inconsistencies in the existing literature on (de)humanization and the related concepts. First, the combination of high UH and high HN, reflecting for instance phenomena such as superhumanization, and the various forms of dehumanization in the mixed high-low clusters (e.g., demonization), have received relatively little attention to date. Second, the dehumanization literature has traditionally treated animalistic dehumanization as a rather extreme form of intergroup derogation that sanctions and legitimates mass violence (Bandura, 1999; Kelman, 1973; Smith, 2011). The treatment of others as objects has also been associated with violence, particularly in the feminist account of sexual objectification (e.g., MacKinnon, 1993). However, more recent research has expanded the narrow focus on victims of violence, and examined prototypical social groups that are viewed as animal-like (e.g., artists) or machine-like (e.g., businesspeople), but are not necessarily outright derogated by, or in conflict with, the perceiver (Loughnan & Haslam, 2007). The notion that dehumanization can take more banal forms is consistent with the key features of infrahumanization (Demoulin et al., 2004), and the SCM with regard to social groups that elicit mixed positive and negative reactions (Fiske et al., 2002). To distinguish between explicitly derogating and more banal or subtle forms of dehumanization, we will argue in the following sections that the former is dominant for groups that are deprived of both UH and HN characteristics, whereas the latter is dominant for the two low-high mixed clusters, which can nevertheless lead to similarly undesirable consequences for the dehumanized target. It should be noted that in our current framework, UH and HN are understood as encompassing the typical characteristics of UH and HN, as well as the relevant elements in agency/competence and experience/warmth.
DENIAL OF HUMAN UNIQUENESS BUT NOT HUMAN NATURE:
ANIMALISTIC DEHUMANIZATION

Social groups or individuals that are denied UH but not HN characteristics are essentially likened to non-human animals (Haslam, 2006; Loughnan & Haslam, 2007). Loughnan and Haslam (2007) demonstrated that animals and artists were both associated more strongly with HN rather than UH characteristics, indicating that animalistic dehumanization involves both negative and positive evaluations of the target (in terms of UH and HN, respectively). The perceived lack of UH often results in a negative view of others as unintelligent, impolite, or lacking in self-control, resembling non-human animals. The perceived high levels of HN, however, are associated with a simultaneously neutral or even positive view of others as warm, emotional, and imaginative (Haslam et al., 2005; Loughnan & Haslam, 2007). This form of dehumanization treats dehumanized targets as unrefined animals without necessarily subjecting them to malicious prejudice and inhumane treatment. This perception is consistent with the paternalistic stereotype in the SCM, which appears predominantly in traditional portrayals of women, the elderly or disabled (Fiske et al., 2002). This paternalistic form of dehumanization is also captured in the concept of benevolent sexism, which views traditional female homemakers as communal but not agentic (Glick & Fiske, 1996, 2001). In spite of the positive perception of women as warm and communal, the denial of agency and competence in women contributes to the consolidation of gender inequality, and can even be internalized by women especially in sexist societies (Glick & Fiske, 2001).

Animalistic dehumanization has also received considerable empirical attention and support with regard to the denial of uniquely human emotions to others, or infrahumanization (Leyens et al., 2000, 2007) but without simultaneously accounting for HN. Infrahumanization of outgroups has been found to predict reduced helping behavior (Cuddy, Rock, & Norton, 2007; Vaes et al., 2003). In one study, participants expressed interest in helping outgroup victims of Hurricane Katrina only to the extent that they did not deny them secondary emotions (Cuddy et al., 2007; see also DeLuca-McLean & Castano, 2009). Castano and Giner-Sorolla (2006) showed that drawing attention to ingroup-committed violence against outgroups increases the infrahumanization of outgroup victims, thus revealing the moral disengagement function of infrahumanization. Extending this finding, Čehajić, Brown, and González (2009) demonstrated that infrahumanization of outgroup victims further predicted reduced feelings of empathy. Therefore, although animalistic dehumanization does not always induce active harm, it is by no means a benign perception of other social groups — in fact, it can have very negative consequences for intergroup relations.

DENIAL OF HUMAN NATURE BUT NOT HUMAN UNIQUENESS:
MECHANISTIC DEHUMANIZATION, DEMONIZATION, SUPERHUMANIZATION

Mechanistic dehumanization. In addition to the animalistic dehumanization of artists, Loughnan and Haslam (2007) also showed that automata and businesspeople were both associated more strongly with UH rather than HN traits. This finding provided empirical evidence that mechanistic dehumanization represents another form of mixed dehumanization (low HN, high UH). Targets of mechanistic dehumanization are often perceived as cold, rigid, passive, and yet highly competent (e.g., technicians, businesspeople). This combination of characteristics likens
others to objects or automatons. According to Haslam (2006), mechanistically dehumanized others are seen as nonhuman rather than subhuman due to their lack of fundamental human attributes. Unlike animalistic dehumanization, which represents downward social comparison, mechanistic dehumanization implies a horizontal social comparison to unfamiliar others, invoking reactions such as indifference and alienation, rather than dislike and derogation. The SCM proposes a somewhat different interpretation of its combination of low warmth and high competence. Instead of indifference, groups stereotyped as competent but not warm elicit envy and jealousy, and are thus associated with upward, rather than horizontal, social comparison (Fiske et al., 2002). While the mechanistic form of dehumanization may seem rather harmless, depriving others of their subjective experiences and emotions can make them unworthy of moral concern and care (Gray et al., 2007, 2011, 2012; Waytz, Gray, et al., 2010). Moreover, envied persons or groups often fall victim to schadenfreude, the malicious pleasure in the suffering of others (Cikara & Fiske, 2011; Leach, Spears, Branscombe, & Doosje, 2003; Smith, Powell, Combs, & Schurtz, 2009; Takahashi et al., 2009; Van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006).

Superhumanization. In certain cases, viewing others as unemotional, rigid, and yet highly intelligent (low HN, high UH) may reflect some sort of superhumanization, ascribing characteristics that transcend ordinary humanness to the target. The mind perception research has shown that God is perceived as possessing high levels of agency but very little experience (Gray et al., 2007; Gray & Wegner, 2010). The denial of subjective experience to God might reflect the belief that superhumans such as God are omnipotent and invulnerable, and therefore insensitive to pain as well as other ordinary human feelings (i.e., no experience). If such superhumanization is applied to human religious agents (e.g., supreme religious leaders), they might be unintentionally excluded from the sphere of care and protection due to their perceived superior ability to withstand pain.

Demonization. The perceived characteristics of God, ironically, also point to the possibility that perception of devils, which represent the polar opposite of God, might fall into the same low HN/high UH cluster due to their superhuman status. Research on infrahumanization emphasizes that the denial of secondary emotions to the outgroup should be independent of the valence of the emotions (Leyens et al., 2000, 2001). Similarly, the morality component of UH and agency incorporates both good and evil intentions and acts (Gray et al., 2012). However, valence seems to be crucial in determining whether to positively superhumanize or demonize those who fall into the low HN and high UH cluster. The perception of others as incapable of experiencing prosocial secondary emotions (e.g., sympathy), and yet highly capable of planning and performing immoral actions, might result in demonization, rather than positive superhumanization, of the social target when bad rather than good intentions are attributed to the target.

Demonization, in which the target is condemned as evil and incapable of reform, is prevalent in practices of extreme violence (Giner-Sorolla, Leidner, & Castano, 2011). When victims of violence are subject to demonization, the roles of perpetrators and victims are reversed. During the Holocaust, for instance, Jews were presented as pernicious villains and the persecutors, in their own eyes, became heroes acting for the survival of the people belonging to a superior race (Rochat, 2002). In doing so, not only does demonization exclude victims from moral consideration (see Opotow, 1990, 1995; Staub, 1990, for discussions on moral exclusion), but it also creates a moral mandate (Skitka, 2002; Skitka & Mullen, 2002) that identifies victims as evil and requires measures to fight against them. Even without specifically identifying the target of demonization, Campbell and Vollhardt (2014) showed that general beliefs in the existence of evil
predicted support for violence against outgroups, and the effects were explained by endorsement of redemptive violence, the notion that violence can be used to eradicate and save the world from evil. Therefore, active moralization of violence through demonization makes victims appear fully deserving of inhumane treatment.

**DENIAL OF HUMAN UNIQUENESS AND HUMAN NATURE:**
**DISGUST-DRIVEN DEHUMANIZATION AND OBJECTIFICATION**

*Disgust-driven dehumanization.* As noted in Giner-Sorolla and colleagues’ (2011) discussion on the various psychological justifications of extreme violence, it is not uncommon for people to deny others both the ability to think and the ability to feel. Research on the SCM has demonstrated that people who are stereotyped as neither competent nor warm tend to receive “the worst kind of prejudice” — being fully deprived of humanness (Cuddy et al., 2007; Harris & Fiske, 2006, 2007, 2009, 2011). Social groups that are most vulnerable to this extreme form of dehumanization include welfare recipients, drug addicts, and homeless people (Fiske et al., 2002). Seen as cold and incompetent, these groups evoke extremely aversive emotions such as disgust and hate, which in turn predict both active harm (harassing) and passive harm (neglecting) behavioral tendencies (Cuddy et al., 2007). Studies employing neuroimaging techniques indicate that “low-low” social groups fail to activate the brain region that is necessary for social cognition; instead, they activate insula and amygdala, a pattern consistent with disgust and fear (Harris & Fiske, 2006, 2007, 2009, 2011). These findings suggest that double dehumanization can involve extreme derogation of others as vermin or pests that require extermination, mirroring the common behavioral response to demonization.

*Objectification.* In addition to perceived low competence and low warmth, social groups that traditionally fall into the low-low quadrant within the SCM seem to share another important characteristic: they all present little, or even negative, utilitarian value to the perceiver, and thus elicit strongly aversive emotions and harm tendencies. Would a different type of double dehumanization emerge if the derogated target is seen as possessing utilities that are exploitable by the perceiver? Neither the SCM nor other dehumanization theories distinguish the nuances among the low-low groups. However, this very tool-like, degrading perception echoes the concept of sexual objectification (e.g., Fredrickson & Roberts, 1997; MacKinnon, 1993; for a critical analysis of objectification see Nussbaum, 1995), and can be traced further back to the Marxist account of objectified and alienated workers under capitalism (for a discussion on the relationship between sexual objectification and objectification in Marxism see MacKinnon, 1982). Haslam’s (2006) mechanistic dehumanization involves a similar objectifying perception; however, it does not imply a sense of ownership or treatment of the target as disposable, or even exploitable commodities. To our knowledge, no research to date has examined the role of perceived utilities in dehumanization in general and objectification in particular.

Nussbaum (1995) identified seven components of objectification, among which instrumentality and fungibility refer to the treatment of others as interchangeable tools; denial of autonomy and inertness refer to the treatment of others as lacking self-determination and agency; ownership refers to the treatment of others as commodities that can be bought or sold; denial of subjectivity involves denying others their experience and feelings; and violability gives the li-
cense to break or smash the objectified target. This extreme form of objectification therefore resembles more closely the traditional low-low cluster rather than the relatively less severe form of objectification underlying mechanistic dehumanization.

Empirical research has also provided support for this double dehumanization in objectified social groups. Although women are traditionally perceived as warm and likable (Fiske et al., 2002), people tend to ascribe less competence, warmth, and even moral status to women when instructed to focus on their physical appearances (Heflick & Goldenberg, 2009; Heflick et al., 2011; Loughnan, Haslam, et al., 2010). Neuroimaging studies further demonstrated that among male participants who endorsed hostile sexism, objectified women elicit reduced activities in the brain region responsible for social cognition, a pattern similar to the neural responses to disgusted targets of dehumanization (Cikara, Eberhardt, & Fiske, 2010). Using measures of agency and experience, however, Gray and colleagues (2011) found that drawing attention to people’s physical appearances resulted in a redistribution, rather than complete denial, of perceived mind — targets were ascribed less agency and moral responsibility but more experience and moral patience. The authors explained the difference between these findings and previous research (e.g., Cikara et al., 2010) by pointing to the moderating role of hostile sexism, which was not examined in their study. These discrepancies thus call for more in-depth investigations into the nature and consequences of objectification.

**ATTRIBUTION OF BOTH HUMAN UNIQUENESS AND HUMAN NATURE: HUMANIZATION AND SUPERHUMANIZATION**

Of course, not all social targets are dehumanized in one way or another. At the opposite extreme of double dehumanization, some individuals and groups are perceived as fully human on both dimensions of humanity. Consistent with the notion of ingroup favoritism, or the tendency to favor the ingroup over the outgroup (e.g., Sherif, 1967; Turner, Brown, & Tajfel, 1979), the SCM proposes that ingroup members are generally favored as both warm and competent (Fiske et al., 2002). In addition, close allies, especially in a hostile environment, are also viewed positively on both dimensions of the SCM. Culturally dominant groups (e.g., Whites and Christians in the United States) also fall into this unmixed, positive quadrant. According to the SCM, the high-high combination elicits feelings of admiration, pride, and respect.

As mentioned earlier, although God tends to be ascribed high UH but low HN characteristics (Gray et al., 2007), Haslam et al. (2008) found a similar, albeit slightly inconsistent, pattern where supernatural beings as a broader category exceeded humans in cognitive abilities but were comparable to humans in primary and secondary emotions. This finding suggests that superhumanization might also apply to certain individuals and groups in the high-high quadrant, as they are also seen as capable of experiencing primary human emotions. Based on the SCM, ingroup authorities, including highly admired religious and political leaders, might be ascribed superior cognitive abilities without necessarily being denied HN characteristics. Thus, future empirical research is needed to reconcile these discrepancies in previous findings on perceptions of supernatural beings and, more importantly, to examine the superhumanization of human agents rather than supernaturals like God.
CONCLUDING REMARKS

The main purpose of this article was to review and integrate existing literature on humanity perceptions and their denial, and to develop a taxonomy of different phenomena that fall under the umbrella of dehumanization. Three independent research programs (i.e., Haslam’s two senses of humanness, mind perception theory, the SCM) have provided convergent evidence that humanness attributions should be understood in terms of two distinct dimensions: one concerned with agency, competence, and other uniquely human characteristics, and the other concerned with experience, interpersonal warmth, and other characteristics that are perceived to be at the core of human nature. These two dimensions result in a mixed model of (de)humanization, which has four main clusters depicting different ways in which humanness is denied or recognized in others.

While our mixed model identifies social groups that typically fall victims to one type of dehumanization or another, it is not uncommon that some groups are simultaneously dehumanized in multiple ways. The most notable example of multiple dehumanization is perhaps the inhumane treatment of Jews during the Holocaust — they were simultaneously portrayed as vermin (double dehumanization) and villains (demonization), treated as mere numbers in concentration camps (objectification) and rats in laboratories (animalistic dehumanization). The use of different dehumanization languages might reflect different motivations and behavioral intentions. Depicting victims as vermin and villains paves the way for violent actions against them, whereas treating prisoners as numbers facilitates deindividuation and regulation, but does not justify the use of violence to eliminate them.

It is worth noting that dehumanized individuals and groups are sometimes rehumanized through conflict resolution and reconciliation programs (Fiske, 2009; Staub, Pearlman, Gubin, & Hagengimana, 2005). In Rwanda, local participants (victims and perpetrators) of a training program that involved extensive group discussions on their painful experiences during the genocide felt rehumanized after the discussions (Staub et al., 2005). Harris and Fiske (2007) showed that inferring individuating information such as target’s food preferences reactivated the brain region necessary for social cognition. Thus, even those who receive the worst kind of dehumanization can be rehumanized to a certain extent through interventions. Our mixed model of dehumanization also raises questions and identifies understudied phenomena that warrant future research. The nature and underlying mechanisms of demonization, objectification, and superhumanization, as well as the role of perceived utilities in dehumanization are all potentially important topics that suffer from a lack of systematic empirical research. This contribution, therefore, provides a foundation and framework for future work.

REFERENCES


