

Agency's Role in Dehumanization: Non-human Metaphors of Out-groups

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Abstract

Dehumanization, the psychological process by which individuals or groups of individuals are denied human qualities or are believed to be less than human, has important negative consequences for intergroup relations: dehumanization reduces intergroup helping and excuses aggression towards members of other groups. Current models of dehumanization are unable to explain the variety of dehumanization that occurs in metaphorical thought. For example, they cannot account for the labeling of comatose individuals as “vegetables,” nor do they adequately distinguish between humans as predators vs. metaphors of humans as prey. We argue that this results from the paucity of attention devoted to the role of agency in the dehumanization process. The ABC model of dehumanization proposed in this paper broadens the scope of dehumanization theory by describing three unique components of agency: affective, behavioral, and cognitive. This article then delineates how the differential attribution of agency components impacts emotional responses toward out-groups in addition to the metaphors used to describe them. By incorporating both traditional types of dehumanization (extreme and overt negative evaluations) and ambivalent types of dehumanization (mixed positive and negative evaluations) into our model, we provide a more nuanced view of the dehumanization process that accounts for the variance in dehumanization by analogy.

Dehumanization is a psychological process by which individuals deny other individuals or groups human qualities or believe them to be less than human. Intergroup relations suffer as a consequence of dehumanization: intergroup helping is reduced (Cuddy, Rock, & Norton, 2007) and aggression towards out-groups is disinhibited (Struch & Schwartz, 1989). Dehumanizing metaphoric framings of the “enemy” are implicated in the facilitation and escalation of intergroup conflict (Bandura, Underwood, & Fromson, 1975; Kelman, 1973; Staub, 1992; Steuter & Wills, 2009; Struch & Schwartz, 1989). However, research has begun to distinguish among different dehumanizing metaphors that occur in the absence of overt intergroup conflict: persons-as-animals and persons-as-automata (Bain, Park, Kwok, & Haslam, 2009; Haslam, 2006; Loughnan & Haslam, 2007). Even so, a careful look at literature beyond psychology reveals that these distinctions are incomplete.

A more complete scheme of dehumanizing metaphors derives from recognizing agency's three components: affective, behavioral, and cognitive. Full agents possess the ability to (1) experience emotion and feel pain (affective mental states), (2) act and produce an effect on their environment (behavioral potential), and (3) think and hold beliefs (cognitive mental states). The type of dehumanizing metaphor applied reflects the types of agency that the out-group is ascribed and denied. For example, a perception of out-group members as parasites – who behave without thought or emotion – prescribes strategies of extermination, whereas a perception of out-group members as wild animals – who behave with emotion unchecked by reason – prescribes strategies of domestication and domination.

Significance of Metaphoric Framings

Extensive linguistic evidence indicates a pervasive utilization of metaphors in everyday communication. Growing evidence suggests that metaphors do not simply represent linguistic custom, but instead play a central role in structuring thought. In particular, metaphors structure abstract concepts by grounding them in the concrete (Landau, Meier, & Keefer, 2010). Metaphors might even be the primary vehicle for the conceptualization of abstract or novel concepts (Gibbs, 1994a, 1994b; Lakoff & Johnson, 1980; Lakoff & Turner, 1989). Unfamiliar groups or people, for example, are often understood in terms of more concrete concepts, such as animals. Greedy individuals lacking decorum are likened to pigs, while plodding, dimwitted individuals are called cows (Haslam, Loughnan, & Sun, 2011). Sweet and gentle individuals are likened to lambs or kittens.

The “target” of the metaphor is the relatively more abstract concept which is grasped through comparison to the “source,” the relatively more concrete concept (e.g., an out-group target compared to the source of “pig”; Landau et al., 2010; Richards, 1936; Verbrugge & McCarrell, 1977). Knowledge about the source’s attributes (pigs are greedy, messy, and corpulent) allows an individual to interpret the target (the person labeled a pig). “Conceptual mappings” create a system of mental associations between corresponding elements of the source and target. These associations include similarities (i.e., “grounding” in psycholinguistics) as well as dissimilarities (“tension”). Identifying the similarities between concepts allows one to make metaphoric inferences: the uncouth metaphorical Pig gorges himself at buffets, and his residence is a sty. Dissimilarities, in contrast, may be inhibited (Glucksberg, Newsome, & Goldvarg, 2001): the Pig’s collection of classical music may go unnoticed or be considered incidental (cf. Landau et al., 2010; Newman & Glucksberg, 2002).

Metaphors become familiar through repetition of the source–target pairing and conventional through association of the target with a conventional source. Sources become conventional through repeated association with specific attributes (Gentner & Bowdle, 2001). The metaphor of “police as pigs” is both familiar and conventional: police are often likened to pigs and pigs are commonly associated with greed and gluttony. Labeling the police as pigs evokes images of police as overweight, lazy, and corrupt. Such metaphors may bind the imagination by inhibiting alternative conceptualizations of the target (Gentner, Imai, & Boroditsky, 2002; Gentner & Wolff, 1997; Newman & Glucksberg, 2002). Glucksberg et al. (2001), for example, showed that people inhibit aspects of the source that are irrelevant to metaphor comprehension. The metaphor of shark for one’s lawyer evokes a shark’s viciousness but not its ability to swim. Participants exposed to sentences containing a metaphor (e.g., My lawyer is a shark) evinced delayed comprehension of subsequently-presented sentences that included source consistent information that was metaphor irrelevant (e.g., Geese can swim). Metaphor comprehension inhibits a source’s metaphor irrelevant qualities. The converse is also likely: aspects of the target that are irrelevant to metaphor comprehension will be inhibited. Once police are considered “pigs,” conceptions of them as “knights” or “brothers” should be inhibited.

Indeed, individuals may become unaware that a metaphor guides their perception of the out-group (Thibodeau & Boroditsky, 2011) and fail to recognize the metaphor as non-literal (Galinsky & Glucksberg, 2000). In a study by Glucksberg, Gildea, and Bookin (1982), participants rapidly judged the literal truth of sentences that were literally true, metaphorically true, or both literally and metaphorically false. When metaphoric interpretations of literally false sentences were available, participants took significantly longer to decide that such sentences were false. Through repeated use, metaphors assume self-evident status and begin to escape conscious notice (Lakoff & Johnson, 1980).

Traditional Non-human Metaphors for Persons

The traditional understanding of the relationship between non-human metaphors and dehumanization, emerging from the sociology, history, and linguistics literature, argues that dehumanization lead to the justification of slavery in the United States (Lott, 1999), the Holocaust during World War II (Chalk & Jonassohn, 1990; Musolff, 2007), and violence against immigrants (O'Brien, 2003; Santa Ana, 2002). Within this literature, dehumanization is most often discussed in relation to ethnicity and race and leads to violent opposition and genocide (e.g., Kelman, 1973). The primary focus concerns Jews during the Holocaust, Bosnians in the Balkan wars, Tutsis in Rwanda, and ethnic minorities in Cambodia. More recent examinations include portrayals of Muslims in Western media (Steuter & Wills, 2010). This literature typically depicts dehumanization as a prerequisite for genocidal violence (Hiebert, 2008).

The most commonly considered nonhuman metaphor within this literature depicts out-groups as vermin. Groups who commit genocide often portray their victims as swarming insects or disease-carrying pests (Russell, 1996). The only logical response to the infestation is extermination (O'Brien, 2003). Noteworthy examples in Hitler's *Mein Kampf* include the conceptualization of Jews as parasites and harmful bacilli (Musolff, 2007). More contemporarily, terrorists are characterized as rats and cockroaches, who must be "smoked out" when they "scurry for cover" (Steuter & Wills, 2010).

The vermin metaphor often runs concurrently with disease metaphors (Steuter & Wills, 2009). In *Mein Kampf*, Germany is a human body infected by the Jewish parasites, with Hitler as the physician with the cure (Musolff, 2007). Terrorism is also depicted as cancer and disease by the Western media (Steuter & Wills, 2009): the military is instructed to "root out the global terrorist cancer" by eliminating all Muslims (McChesney, 2002). Interestingly, these metaphors consistently conceptualize out-groups as engaged in threatening behavior, but devoid of thought or emotional desire. They simply destroy and therefore must be destroyed.

Recent Distinctions Between Non-human Metaphors for Persons

Within the mainstream psychological literature, two noteworthy frameworks of dehumanization have been proposed: Haslam and colleagues' notion of Human Nature versus Human Uniqueness (Haslam, Bain, Douge, Lee, & Bastian, 2005; Haslam, Loughnan, Kashima, & Bain, 2008) and the *Dehumanized Perception Model* (Harris & Fiske 2006, 2007, 2009, 2011).

Human nature-human uniqueness

Haslam and colleagues differentiate between Human Nature (HN) and Human Uniqueness (HU). HN comprises the fundamental and typical attributes of human beings (e.g., curiosity, emotionality, and depth; Haslam et al., 2005; Haslam, Loughnan, et al., 2008). HU comprises qualities that distinguish humans from other animals (e.g., civility, rationality, and maturity). According to this framework, two types of dehumanization are possible: out-group members may either be denied HN or HU. Individuals denied HN are seen as cold, rigid, passive, and interchangeable (Haslam, 2006). They are competent and rational, but lack emotional warmth and depth. The metaphors utilized to represent such individuals are robots and automata. Consistent with this notion, business people, who are attributed more HU (e.g., rational) than HN (e.g., unemotional) traits, are associated with machines (Loughnan & Haslam, 2007). In contrast, individuals denied HU are seen as irrational, amoral, lacking culture, and motivated largely by instinct: metaphorically, they are animals

(Haslam, 2006). Consistent with this view, artists, who are imputed more HN (e.g., spirited) than HU traits (e.g., civil), are easily associated with animals on measures of implicit association.

Though the above framework clearly distinguishes animals from animated machines, it does not appreciate the diverse range of dehumanizing metaphors. Metaphoric characterizations of groups as predators (e.g., vultures, wolves, and cougars) versus prey (e.g., sheep, deer, and kittens) imply different attitudes and prescribe different behaviors. One fends off, flees from, or retaliates against wolves, but sheep are corralled, guarded, and bred for their wool. While both predator and prey lack human uniqueness (i.e., they are animals), the predator-prey distinction differentiates out-groups toward whom people experience fear or anger versus out-groups toward whom people experience pity or expect dominion. The HN-HU framework also does not adequately capture metaphors of pestilence, disease, insects, and vermin. As noted earlier, these dehumanizing metaphors portend genocide rather than less extreme or retaliatory aggression. Whereas cautious alliances may be struck with predators, vermin can only be exterminated.

Finally, there are metaphors common in medical literature that remain largely unexplored within psychology. Individuals who have lost the ability to operate autonomously or independently of aide are conceptualized as living objects. Comatose individuals, for example, are commonly labeled “vegetables.” The notion of “couch potatoes” also suggests both immobility and mindlessness. Vegetables are presumably devoid of both human nature and human uniqueness (a combination not yet investigated within the HN-HU framework; but see Haslam, Loughnan, et al., 2008), but so too are vermin. The HN-HU dehumanization framework is not able to distinguish between these two metaphors, which prompt very different behavioral responses. Vegetables may be harvested or left to rot, but vermin must be actively exterminated.

Dehumanized perception model

Another framework for dehumanization has recently emerged, this one from the social cognitive neuroscience tradition. The Dehumanized Perception Model (Harris & Fiske, 2006, 2007, 2009, 2011) utilizes the Stereotype Content Model (SCM; Fiske, Cuddy, Glick, & Xu, 2002) as its framework.

The SCM proposes that individuals ascribe traits to conspecifics based on their perceived warmth and competence. Perceptions of targets' warmth are derived from interpreting the targets' intentions. Purportedly positive intentions lead to perceptions of warmth, while presumed harmful intentions lead to perceptions of cold-heartedness. Perceptions of targets' competence, on the other hand, concern efficacy (Fiske et al., 2002): the capacity to execute one's intentions underlies perceptions of competence.

The dimensions of competence (C) and warmth (W) produce four types of stereotypes: (1) high W, high C; (2) high W, low C; (3) low W, high C; and (4) low W, low C. The SCM nicely predicts ambivalent stereotypes (i.e., cold competent groups are envied and warm incompetent groups are disrespected; Eckes, 2002; Fiske et al., 2002; Zawisza & Cinnirella, 2010). The dehumanized perception model, however, centers on cold incompetent groups: these groups intend harm (cold) but have limited ability to act efficaciously (incompetent). They inspire disgust and are denied mental states, being viewed as “objects in the environment without internal states” (Harris & Fiske, 2011). This suggests that cold and incompetent individuals are seen as lacking both desires and beliefs. Studies employing fMRI imaging indicate that parts of the social-cognition neural network (Amodio & Frith, 2006; Frith & Frith, 2001) are inactive when viewing individuals in the low-warmth,

low-competence domain of the SCM (Harris & Fiske, 2006, 2007, 2009, 2011) and sexualized women (by individuals high in hostile sexism; Cikara, Eberhardt, & Fiske, 2010).

Unlike the HN-HU view, the Dehumanized Perception Model defines dehumanization in accordance with the more traditional conceptualization. As the metaphorical framing of out-groups as vermin or a spreading disease would suggest, individuals denied minds are considered extreme out-groups and inspire disgust. Individuals that elicit this basic negative emotion are often aggressed against (Haidt, Rozin, McCauley, & Imada, 1997). In a phone administered survey conducted by Cuddy, Fiske, and Glick (2007), participants judged how Americans viewed various groups. Consistent with a disgust-aggression association, contempt-related emotions (including disgust) predicted endorsement of both passively harmful actions (exclude, demean) and actively harmful actions (fight, attack). Thus, the Dehumanized Perception Model is consistent with the literature linking dehumanization with genocide. But given the primary focus on low competence-low warmth out-groups, this model provides limited insight into more subtle types of dehumanizing metaphors allowed by HN-HU framework.

Agency, Dehumanization, and Theory of Mind

Within these frameworks, agency generally refers to the possession of mental states required for the ability to act upon one's intentions. Consistent with work on Theory of Mind, mental states ascribed to other people may be cognitive or affective (Kalbe et al., 2010; Shamay-Tsoory & Aharon-Peretz, 2007). In the HN-HU framework, cognition is assumed to underlie the behavior of individuals higher in HU (e.g., automata) whereas desire is assumed to underlie the behavior of individuals higher in HN (e.g., animals). Curiously, however, the actions of automata are "caused rather than propelled by personal will" (Haslam, 2006), despite the derivation of behavior from rationality and cognition. Thus, it is unclear whether agency, defined as the ability to act in one's interest, is strictly an HN quality or whether it may be attributable to individuals that possess only HU. The Dehumanized Perception Model, unlike the HN-HU Model, does not distinguish between cognitive and affective mental states, but all behavior is considered a function of mental states (Harris & Fiske, 2009). Importantly, however, not all actions that threaten – bacteria invading a cell, vermin infesting a house – require an attribution of cognition, emotion, or intention. In addition, the denial of both action and mental states (e.g., vegetative states) is more likely to evoke pity and avoidance than disgust.

Definitions of agency within the psychological literature help to elucidate the missing distinctions in dehumanizing out-group metaphors. They suggest the presence of two subcomponents of agency: mental states and action. While mental states are divided into the affective and cognitive components noted earlier, action is recognized as a distinct and does not necessarily derive from intentions (Spencer-Rodgers, Hamilton, & Sherman, 2007). Indeed, observers can perceive activity in an agent without attributing them a mind. Cockroaches may scuttle across the floor (behavioral output), but perceivers rarely ascribe them thoughts or desires. They possess the ability to produce activity independent of cognition or affect.

Mental states can be divided into beliefs (intentional states requiring rationality) and desires (less refined intentional states; Malle, 1999, 2005). Theory of Mind (TOM) research has recently begun to consider this distinction between perceiving affective and cognitive mental states. TOM refers to the ability to represent and understand another person's psychological perspective through the attribution of mental states (Amodio & Frith, 2006). Cognitive TOM involves the comprehension of beliefs and intentions, while

affective TOM entails the ability to understand emotional states (Shamay-Tsoory, Tibi-Elhanany, & Aharon-Peretz, 2006). Impairment in TOM abilities is linked to neurological disorders such as schizophrenia and autism (Baron-Cohen, 1995; Shamay-Tsoory et al., 2007). However, neurologically normal individuals also vary in their attributions of affective and cognitive abilities to others. For example, individuals make fewer references to desires when explaining their own actions than when explaining the actions of other individuals (Malle, 2005). Individuals also differentially attribute affective and cognitive mental states to others based on their group membership (Gray, Gray, & Wegner, 2007; Haslam, 2006).

Thus, three distinct components of agency may be denied or ascribed to others. Affective agency refers to the ability of the target to experience emotion and possess desires. Cognitive agency refers to the ability of the target to hold beliefs and think rationally. Behavioral agency refers to the ability of the target to produce a behavior and exhibit activity. When individuals deny out-group members the possession of affective agency, they perceive these out-group members as passionless or unemotional.¹ When out-groups are denied cognitive agency they are seen as irrational and unintelligent. Out-group members denied behavioral agency are perceived as passive or submissive.

The ABC Model's Account of Dehumanizing Metaphors

The proposed three factor model, comprising Affective, Behavioral, and Cognitive dimensions of agency results in eight cells of agency attribution (see Table 1). These eight cells represent the respective attribution or denial of the three types of agency. Although previous frameworks of dehumanization capture some of these cells, others are unique to the three-factor model. The following sections describe each cell according to the type of agency denied, the typical targets and associated metaphors, and the emotional and behavioral responses evoked.

Affect, behavior, and cognition: fully human

When targets are ascribed desires, beliefs, and the ability to produce an effect, there is no dehumanization. Full agency is typically ascribed to in-group members or the self. Perceivers experience positive emotions toward these groups or individuals, and they are rarely described metaphorically.² However, particularly noble, effective, or exemplary in-group members may be seen as superhuman or messianic. For example, Lincoln is often depicted as the “superhuman savior of the Union” (Peterson, 1994, p. 176) and iconic figures like Martin Luther King are often ascribed superhuman qualities (Alridge, 2006). The superhuman metaphoric framing is also heavily utilized in religious communities, where religious leaders become sanctified over time (Kenel, 1987).

Affect and behavior: wild animals

Targets who possess both desires and efficacy, but no cognitive mental states are feared as wild animals, monsters, and predatory animals. This dehumanization type is often attributed to sexualized women (e.g., cougar and vixen; Boozer, 1999/2000; López Rodríguez, 2007; Nilsen, 1996) who are seen as holding primitive lusts and the ability to do great harm. They must be tamed, dominated, or “put down.” These wild animal metaphors also have been used historically to describe ethnic or racial minorities (Jahoda, 1999), including the insidious comparison of people of African descent to apes (Lott, 1999).

Table 1. Affective, behavioral, and cognitive agency attributions to outgroup members and the resulting emotions, behaviors, and metaphorical frameworks.

Affective	Behavioral	Cognitive	Target	Emotions	Behavioral Script	Metaphors
+	+	+	In-group	Appreciation	Admire	Superhumans
+	+	-	Sexualized Women: "Temptresses"	Fear	Tame, Dominate	Predators, Wild Animals, Beasts
+	-	+	Primitive Peoples, Elderly	Liking, Pity	Nurture Assist	Children
+	-	-	Children, Women: "Dumb Blondes"	Liking, Disrespect	Nurture Dominate	Prey, Domesticated Animals, Pets
-	+	+	Asians, Jews, Businesspeople	Disliking, Respect, Envy	Challenge, Reprogram	Robots, Automata
-	+	-	Terrorists, Homeless	Disgust, Fear	Exterminate	Vermis, Insects, Zombies
-	-	+	Intellectuals	Disinterest, Disregard	Ignore	Brains
-	-	-	Drug Users, Comatose Individuals	Discomfort, Nervousness	Avoid	Vegetables

The evocation of this metaphor can produce metaphor-consistent social judgments. For example, while direct reference to the metaphoric association between African Americans and apes has disappeared, the metaphor (both familiar and conventional) still influences attitudes. In a study conducted by Goff, Eberhardt, Williams, and Jackson (2008), participants subliminally primed with words associated with apes or big cats viewed a film of a police officer violently subduing a single suspect, whose race was manipulated with a Black or White mug shot. Consistent with the metaphoric framing “wild animals require subduing,” participants primed with apes rated the police as more justified in beating the Black suspect than the White suspect. Participants primed with big cats did not show the same pattern of responses, suggesting the power of familiar and conventional metaphors.

Affect and cognition: pre-humans

Individuals believed to possess mental states (desires and beliefs) but denied behavioral potential are captured by the SCM’s “paternalistic” stereotype. Such “protohumans” include primitive peoples and elderly individuals (Fiske et al., 2002; Jahoda, 1999). Perceivers feel fondness and pity towards these targets and liken them to children. They possess the capacity for higher-order thought, but are largely emotional creatures unable to sustain their physical needs. Consequently, the behavioral script emphasizes caretaking and their non-threatening demeanor inhibits aggression.

Although colonizers initially represent primitive peoples as barbarian or savage (i.e., animals), they often shift to representing primitive peoples as unsophisticated, curious, and emotional (i.e., children; Jahoda, 1999). Thus, as dominance over a feared out-group is gained, the out-group loses its “teeth” or behavioral potential while retaining its affective agency. As conquered groups become “civilized” by the colonizing in-group, cognitive agency is also attributed. The child metaphor is also applied to extremely aged individuals, as evinced by their receipt of infantilizing speech (Whitmer & Whitbourne, 1997). Participants asked to give oral persuasive messages to elderly targets directed overly nurturing speech (including features of baby-talk) towards targets fitting a despondent stereotype (neglected and dependent; Hummert, Shaner, Garstka, & Henry, 1998).

Affect only: prey

Targets attributed desires but lacking both beliefs and behavioral potential are captured by Haslam’s (2006) HN-HU dehumanization model. Denied Human Uniqueness, they possess primitive desires but are not accorded higher cognition or behavioral efficacy. Targets include very young children (England & Folbre, 1999; Mills & Mills, 2002, pp. 26–28) and some women (e.g., “kitten”). These targets, likened to animals that are domesticated or hunted, inspire liking but also disrespect. Domesticated animals require care and domination to realize their full potential: they are fed, groomed, and penned. Some domesticated animals are bred for ornamentation and others for their by-products.

Nilsen (1996) asked students to write sentences illustrating how others might use animal names (e.g., bird) to refer to persons. Only non-literal usages in which a feature of the metaphor was overtly linked to the animal term were analyzed. Results indicated that “bird” and “peacock” were employed when discussing women’s appearance. Indeed, these animals are bred predominantly for aesthetic purposes and ornamentation. Metaphoric reference by the participant to “cows” and “chickens” concerned size and inferiority.

Importantly, cows and chickens are tamed animals that are utilized for the materials they provide as well as considered cognitively disinclined.

Behavior and cognition: automata

Individuals denied basic human drives but believed to possess higher-order cognitions and the ability to produce effective action are captured by the HN-HU framework and the SCM (Fiske et al., 2002; Haslam, 2006). These individuals are often likened to robots or automata. Their purported ability to think abstractly and produce results inspires envy, but the targets' lack of basic human desires and emotional skills produce discomfort (Lin, Kwan, Cheung, & Fiske, 2005). These individuals, denied Human Nature, are victims of "envious" stereotyping (Fiske et al., 2002). Typical targets of this kind of dehumanization are Asians, Jews, and businesspeople (Cuddy, Fiske, et al., 2007; Fiske, Xu, Cuddy, & Glick, 1999; Loughnan & Haslam, 2007).

Because the robotic out-groups display the potential of action and the cognitive mental states to drive skilled behavior, they threaten in-group goals. Although the kinds of behavioral scripts directed towards this group have not been investigated in detail, the envy that such groups evoke has been associated with competitive behavior: cooperate when necessary, sabotage when able. In Cuddy, Fiske, et al.'s (2007) phone administered survey, envy-related emotions predicted a combination of passive facilitation (association and cooperation) and active harm (fight and attack). Individuals should behave similarly towards mechanized individuals: perceivers should strive to gain dominance over groups they view as artificial and capable of controlling important resources.

Behavior only: vermin

As discussed earlier, targets denied mental states (both desires and beliefs) but imputed behavioral potential inspire disgust and fear and are likened to pestilence, cockroaches, parasites, vermin, and other disease-carriers. Targets of these metaphors include terrorists (Steuter & Wills, 2009, 2010), homeless individuals (Amster, 2003), welfare recipients (Gring-Pemble, 2001 p. 350), and immigrants (Green et al., 2010; O'Brien, 2003). These groups exhibit behavioral agency through their "swarming" and their ability to transfer contamination and spread disease, but they are denied mental states.

Likening out-groups to vermin may identify them as contaminants and motivate associated behaviors. Cottrell and Neuberg (2005) have demonstrated that social groups seen to pose contamination threats evoke disgust. Participants reported the degree to which they believed a target group (1) posed varying threats to American society, and (2) prompted particular emotions. Results indicated that contamination threats (threats to group health and values) lead to greater feelings of disgust. Neuberg and colleagues (Neuberg & Cottrell, 2002; Neuberg, Kenrick, & Schaller, 2011) also speculate that disgust motivates contaminant minimizing behaviors (including avoiding and/or eliminating the contaminant). Support for this idea comes from stereotyping research: both passive harm (exclude) and active harm (attack) are directed at groups that inspire disgust (Cuddy, Fiske, et al., 2007). The behavioral script adopted is one of total elimination: vermin must be exterminated and cancer must be eradicated. This suggests a unique role for pestilence metaphors in the facilitation of extreme violence or genocide.

Cognition only: brains

Some individuals are ascribed beliefs or higher-order cognition abilities, but denied attributions of desires and the ability to act. This kind of dehumanization, not previously addressed, is

directed towards intellectuals (e.g., “The Thinker’s Club,” Tipton, 2003, p. 69; Heyck, 1998). Intellectuals are perceived to be capable of higher-order cognition, but appear sterile and uninspired, and incapable of producing much of use to society (reading more than doing). These individuals are often compared to brains: intelligent, but sterile and lifeless.

The comparison to brains is likely utilized because the brain is used to metaphorically express mental experience. Such phrases as “use your brain” and “empty headed” refer to thinking and reflect the belief that thinking is localized in the brain. In a study conducted by Gottfried and Jow (2003), in which transcripts of naturally occurring adult-child conversations were analyzed for literal and metaphoric utterances, adult’s metaphoric usage of “brain” referred almost entirely to mental functioning.

Likening out-group members to brains encourages perceivers to adopt a behavioral script emphasizing disregard. “Brainiacs” are respected for their displays of cognitive agency, but their supposed lack of affective agency (e.g., poor social skills) makes them appear unnatural. Because they are thought to lack behavioral potential, intellectuals are perceived as neither threats nor allies leading to a general disinterest in this group until they are seen as utilizing an unnecessary amount of resources.

Lacking affect, behavior, and cognition: vegetables

Finally, individuals may be denied agency altogether. Objectified individuals, likened to objects devoid of mental states and behavioral potential elicit discomfort and may be likened to vegetables. Targets typically objectified are comatose individuals (Oden, 1976, p. 14) and drug users (Devine, 2009). Comatose individuals in a “vegetative” state are denied the ability to think and feel. Participants, who compared the mental capacities of 13 targets (e.g., self, dog, and chimpanzee) on a 5-point scale, rated comatose individuals as comparatively less capable of rationality (e.g., planning and thought) and comparatively less able to experience emotions and sensations (e.g., hunger and joy; Gray et al., 2007). Another vegetable metaphor likens heavily medicated or drugged individuals to “cabbage heads” or considers them “cabbaged” (Frost, 2004). They are similarly denied warmth and competence (Fiske et al., 2002). Indeed, it appears that any state resulting in restricted movement and loss of or little consciousness is described in reference to vegetables. For example, “couch potatoes” often “veg out” in front of the television.

Groups viewed as vegetables promise little value, prompting avoidance and disregard. Supporting this notion, Cikara, Farnsworth, et al. (2010) showed that participants endorse sacrificing individuals denied affective, behavioral, and cognitive agency. In this study, participants rated the moral acceptability of a character pushing one person off an overpass in order to save five people. Participants deemed it more acceptable to sacrifice incompetent targets than competent targets and least acceptable to save low-warmth, low-competence individuals.

Future Directions

There are still several avenues requiring exploration within dehumanization research. Most models of dehumanization, including the one presented here, are target focused. All three models center their explanatory power on the characteristics of the target being observed. When perceivers view a target, they are exposed to characteristics of the target (e.g., aggressive) that match a source concept (e.g., wild animal). Observing targets engage in stereotype-congruent behaviors facilitates categorization of the targets with a group (Macrae, Bodenhausen, & Milne, 1995). Thus, target characteristics may directly elicit categorization of a target with a source concept.

However, perceivers may process targets differentially based on prior beliefs they “bring in” to a situation (top-down processing; Bodenhausen & Hugenberg, 2009). Perceiver’s intentions towards the target may impact how the perceiver interprets and subsequently dehumanizes the target. This possibility is supported by research conducted on the “objectification” of women (Cikara, Eberhardt, et al., 2010). These researchers demonstrated that individuals high in hostile sexism (but not benevolent sexists) exhibited reduced activity in the medial prefrontal cortex when viewing sexualized women. A similar effect of perceiver intention may occur when dehumanizing metaphors are utilized. The influence of a dehumanizing metaphor on perceiver cognition, emotion, and behavior may be strongest when the perceiver’s attitude matches the available metaphor. For example, aggressive behaviors towards females may be galvanized by exposure to a wild animal metaphor only in those individuals high in hostile sexism. Similarly, a prey metaphor may encourage chivalrous behavior only in those individuals high in benevolent sexism.

Thus, perceiver motivations may influence the adoption of a dehumanizing metaphor and its use in structuring emotional and behavioral responses. However, because metaphor comprehension requires the enhancement of metaphor-consistent content and the suppression of metaphor-irrelevant content, listeners without strong a priori intentions towards an out-group may seize upon available metaphors. It would be fruitful to consider perceiver intentions in future work.

Conclusion

A closer look at agency’s role in dehumanization led to the proposal of a three-factor model (Affective, Behavioral, and Cognitive Agency) with the ability to identify and describe a wide range of dehumanizing metaphors. In particular, this article identified the need to distinguish between predator and prey animal metaphors, as they represent fundamentally distinct ways to describe out-group members. A distinction was also made between out-groups that are predominantly defined according to viral metaphors and those that are described as flora. Future research should identify the impact of perceiver intention towards the target on agency attributions.

Short Biographies

Caroline Tipler received her bachelor’s degree in Psychology and Philosophy from Tulane University in 2011 and is currently pursuing her PhD in Psychology at Tulane University. Her research interests include dehumanization, stereotyping, and social cognition. She is particularly interested in the effect of dehumanized perception on behavioral responses to out-group members.

Janet B. Ruscher (PhD 1991 University of Massachusetts-Amherst) is a Professor in the Department of Psychology in the School of Science and Engineering at Tulane University. She has served as Department Chair, and currently serves as Associate Dean for Graduate Programs. Her primary research interests are prejudiced communication, and the interplay between language and social cognition. Recent published work appears in *Group Processes and Intergroup Relations* and *Journal of Language and Social Psychology*.

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¹ Note that the term “denial” as used in this paper does not always denote the complete absence of agency attribution, but may instead refer to the belief that the dehumanized other possesses primitive or abnormal abilities within the specified domain. For example, out-groups typically denied affective agency (e.g., business people) are not necessarily seen as completely lacking in emotionality, but as possessing abnormal affective abilities. While they appear to possess “secondary” emotions, or emotions associated with higher cognitive functioning (e.g., nostalgia), they are seen as lacking

“primary” emotions, or emotions associated with basic animal drives (e.g., fear; Demoulin et al., 2004; Haslam, Kashima, Loughnan, Shi, & Suitner, 2008).

² In particular, in-groups considered as a whole are generally not dehumanized, but ascribed qualities of emotionality, rationality, and action. For example, Fiske and colleagues (Cuddy, Fiske, et al., 2007; Fiske et al., 2002) have shown that in-groups (e.g., “Americans” and “students” when study participants are American students) tend to be ascribed the most warmth and competence. Individual group members, however, may face more critical examination. Research concerning in-group identity suggests that in-group members that violate group norms are evaluated more negatively than analogous out-group members (for a review, see Marques & Paez, 1994). This downgrading of unlikely in-group members is thought to be a cognitive strategy aimed at preserving an individual’s positive sense of their group. In an effort to cognitively distance themselves from the disliked in-group member, individuals may also deny them human qualities.

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