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# Dehumanizing representations of women: the shaping of hostile sexist attitudes through animalistic metaphors*

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**ABSTRACT**

Women are frequently depicted as non-human objects or animals. While female animalization has typically been conceptualized in the psychological literature as communicating a unitary perception of women, linguistic research suggests that there are at least two distinct animalizing linguistic metaphors for women that depict women at opposite ends of a sex-based power differential: 'women-are-predators' and 'women-are-prey'. Are these linguistic metaphors able to shape sexist attitudes towards women? US Male and female undergraduates read an article, which concerned women voters in an election year, containing language that described women as predatory, prey-like, or in a humanized manner (baseline). They then reported their ambivalent sexist attitudes towards women in general. Consistent with both metaphors' emphasis on sex-based power differentials, both male and female participants, who read about predatory women, exhibited greater agreement with hostile sexist attitudes than participants who read about prey-like women. This study suggests that the continued transmission of animalizing metaphors for women may help perpetuate prejudicial beliefs about appropriate roles for women in society. Media communicators might learn to identify and eliminate the use of the animalizing terms in their own work.

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Ambivalent sexism; metaphor; dehumanization; psycholinguistics; sex roles; gender equality

## Introduction

According to Landau, Meier, and Keefer (2010), when individuals are exposed to abstract concepts like 'people', they utilize knowledge of more concrete concepts like 'predators' to structure their understanding. Similarities between the abstract concept and the concrete concept allow for metaphoric inferences. For example, the woman described with words that evoke images of a predatory 'cougar' is perceived as sexually aggressive. Repeated exposure to a particular metaphor increases the accessibility of the associations and speeds their utilization: the more frequently women are labelled as cougars, the more accessible the association between woman and sexual aggression becomes.

Over the last ten years, social scientists have increasingly investigated how metaphoric framings of others might be related to dehumanization. Several researchers in social psychology have proposed the presence of two distinct types of dehumanization or dementalization (Gray, Gray, & Wegner, 2007; Haslam, 2006; Haslam, Loughnan, Kashima, & Bain, 2008; Waytz, Gray, Epley, & Wegner, 2010). One type involves the denial of a person's human essence, nature and experience; the other involves the denial

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*Treatment of participants was in accordance with the American Psychological Association's Ethical Principles in the Conduct of Research with Human Participants and appropriate approval was obtained from Tulane University's Social-Behavioral Institutional Review Board prior to the start of research.

of a person's human uniqueness, agency and competence. These two types of dehumanization have been linked to metaphoric depictions of others: individuals perceived as lacking human essence or experience are objectified (likened to and perceived as objects) and individuals perceived as lacking human uniqueness or agency are animalized (likened to and perceived as animals).

Women are frequently subject to both types of dehumanization (Rudman & Mescher, 2012; see also Morris & Goldenberg, 2015 for a review of the objectification literature from a dehumanization perspective). Women are objectified when observers focus on women's appearance more than their intellect or personality (Fredrickson & Roberts, 1997; Heflick & Goldenberg, 2009; Rudman & Borgida, 1995) and when perceivers view women as interchangeable possessions to be utilized (Nussbaum, 1999; Rudman & Mescher, 2012). Objectified women are denied human nature (Heflick & Goldenberg, 2009) and moral status (Loughnan et al., 2010), and perceived as less competent, less warm, and less moral (Heflick, Goldenberg, Cooper, & Puvia, 2011) than non-objectified women. When 'women are objects', their ability to satisfy the observer's aims is emphasized at the expense of their personhood (Loughnan et al., 2010): they are inert and fungible tools to be used.

Animalized women, in contrast, are seen as creatures of emotion, nature, and desire (Ortner, 1974). Women are often animalized when their sexual and reproductive functions are emphasized (Gray, Knobe, Sheskin, Bloom, & Barrett, 2011; Morris & Goldenberg, 2015). For example, images that prominently display women's sexual body parts are more quickly associated with animal words than human words (Vaes, Paladino, & Puvia, 2011) and lead to the denial of women's human agency (such as, self-control, planning; Gray et al., 2011).

Importantly, metaphor-based female animalization is often linked to the sexual sphere (such as vixen, kitten; López Rodríguez, 2009). Several related metaphors further connect animalization with sexualization. For example, lustful people are often likened to animals (Lakoff, 1987) and passions are equated with the beast within (Kövecses, 1988). However, sexuality is not the only relevant aspect of the metaphor. When applied to women, the terms 'vixen' and 'kitten' connote not just sexual availability, but also dominance and submission, respectively (López Rodríguez, 2009).

When women are labelled animals, they are portrayed as inferior to men in the 'great chain of being' (Lakoff & Turner, 1989). The contrasting metaphors of predator and prey further communicate the appropriateness of women's position relative to men and women's relative acceptance of this power hierarchy. Consider the notion of 'sex-is-hunting', in which heterosexual sexual relationships are conceptualized as a hunt. The traditional formulation of this metaphor situates man in the role of the hunter and woman as the passive prey (Emanatian, 1995). In the metaphors of 'desire-is-hunger' and 'the object-of-lust-is-food' (Lakoff, 1987), 'women-as-prey' are eaten – consumed (López Rodríguez, 2009). However, when the woman takes an active role in a relationship and becomes 'the hunter', she is portrayed as a menacing predator, implying the inappropriateness of a woman asserting power (López Rodríguez, 2007). Thus, two distinct forms of animalization emerge from studies of gendered metaphors, with each metaphor situating women at opposing ends of a sex-based power differential. 'Women-as-predators' are the dangerous hunters of men and 'women-as-prey' are the quarry to be hunted.

## Predator and prey metaphors for women

*Nothing says 'cradle-robbing **vixen**' like leopard and lace.*

(*Star*, Nov. 29, 2004, p. 76; cited by López Rodríguez, 2007).

Predator metaphors label women as aggressive and are often used to describe powerful women (Baider & Gesuato, 2003). Wild animals are independent, outside of human control, and dangerous (López Rodríguez, 2007). Predator metaphors suggest that the power enjoyed by these women is illegitimate and that higher social status should be retained by men (who are rational and intelligent). The corresponding fear, that women may leverage sexuality in order to gain dominance over men, is exemplified by terms like 'cougar', 'vixen', and 'tiger' which refer to female aggressiveness and sexuality (López Rodríguez, 2009; Nilsen, 1996).

*Be his sexy spring **chicken**.*

(Cosmopolitan, March 2005, p.237, cited by López Rodríguez, 2007).

Prey, on the other hand, are smaller and more easily domesticated or tamed, and pose little threat to humans. Prey serve three main functions: they are pets (such as bunnies), service animals (such as mules), or food (such as chickens) (Martsa, 1999, 2003; Nilsen, 1996). Domesticated prey are used as tools and/or are dependent on their masters. Undomesticated prey are hunted for what they can provide (for example, meat). In each case, prey are clearly subordinate, submissive and docile. The emphasis on youth in many 'women-are-prey' metaphors enhances the perception of docility (Hines, 1999). 'Chicks', 'kittens', and 'fillies' are meek and sweet. Importantly, prey do not challenge the authority of humans. They are appropriately dominated by their masters and submissive to their will. Thus, 'women-as-predator' and 'women-as-prey' offer distinct affordances: 'women-as-predator' are dangerous beasts from which control must be wrested and 'women-as-prey' are submissive creatures who can be captured and dominated.

## Ambivalent sexism, gender, and animalizing metaphors

The predator and prey metaphors for women both emphasize control, dominance, and sexuality. 'Women-as-predators' are inappropriately situated outside of male sexual control and 'women-as-prey' are appropriately dominated within it. Hostile sexist attitudes similarly frame the male-female relationship as one of control and dominance (Glick & Fiske, 1996). Hostile sexism emphasizes men's power and status over women, reflects desires to forcibly maintain women in comparatively low status positions, and depicts high status women as leveraging their sexuality to gain dominance over men. Benevolent sexism, a complementary form of sexism, instead depicts women as the cherished romantic complement to men. For individuals who endorse benevolent sexism, women are moral and pure treasures to be adored and protected.

While both types of sexism preserve the status quo, only hostile sexism depicts inter-gender relations as a struggle for power and control, key features of the predator and prey metaphors. In contrast, benevolent sexism more strongly emphasizes *complementary* inter-gender relations (Lee, Fiske, Glick, & Chen, 2010). As evidence of this distinction, men's endorsement of Social Dominance Orientation (the degree to which they affirm group-based hierarchies) predicts their endorsement of hostile sexism, but not benevolent sexism (Sibley, Wilson, & Duckitt, 2007). In contrast, men's endorsement of benevolent sexism is predicted by their support for social cohesion and collective security (Right Wing Authoritarianism). Similarly, the focus of female animalizing metaphors is the legitimacy of men's dominance over women, not the assurance of interdependent social support. Because the predator and prey metaphors frame women at opposite ends of a sex-based power differential, it is likely that the animalizing metaphors impact hostile (but not benevolent) sexist attitudes.

Importantly, exposure to particular female subtypes can shift endorsement of sexist beliefs. For example, women and men endorse higher hostile sexist attitudes after exposure to non-traditional women (career women, temptresses) and higher benevolent sexism after exposure to traditional women (housewives, chaste women) (Becker, 2010; Fowers & Fowers, 2010; Sibley & Wilson, 2004). Though some research suggests that men might be more likely than women to dehumanize women (for example, men have been found to endorse hostile sexist attitudes more frequently than women; Glick & Fiske, 1996; Glick et al., 2000), a vast majority of the empirical research investigating female objectification indicates that *both* genders dehumanize sexualized women (Gray et al., 2011; Vaes et al., 2011; cf. Cikara, Eberhardt, & Fiske, 2011). So, it is conceivable that there are no gender differences in the impact of animalizing metaphors on attitudes towards women.

## Hypotheses

In order to test the ability of the animalizing linguistic metaphors to structure anti-female sexist attitudes, we randomly assigned men and women to a baseline condition or to be primed by a predator or prey metaphor. Participants then reported their endorsement of hostile and benevolent sexism.

Exposure to a predator metaphor was expected to increase endorsement of hostile sexism relative to a prey metaphor, and both metaphors were expected to differ from baseline (Hypothesis 1). Metaphor exposure was *not* expected to shape endorsement of benevolent sexist attitudes, because benevolent sexism emphasizes complementary inter-gender relations rather than gender-based power struggles. Men were expected to endorse both hostile and benevolent sexism more than women (Hypothesis 2). A gender-by-metaphor interaction was not predicted, insofar as most of the research on objectification suggests men and women similarly dehumanize objectified women.

## Method

### *Participants*

Eighty-five male and 90 female undergraduates at a private university in the southern United States participated in the study in exchange for psychology course credit. Participant race and age was not recorded, but the population from which the sample was drawn (an introductory Psychology course, $N = 505$) was 80% White, 74% sophomores, and the average age was 18.82 years ($SD = 1.38$). Data from four participants (due to experimenter error) were omitted from analyses, leaving a sample of 171 (82 men; 89 women). A maximum of four individuals participated per session. Participants were randomly assigned to the Predator, Prey, or Humanized Baseline condition.

In order to determine sample size, power was estimated a priori for a fixed effects analysis of variance (ANOVA). An estimate of effect size was calculated from Loughnan, Haslam, and Kashima (2009, Study 1), an experiment that assessed the impact of animalizing and mechanizing metaphors for novel groups presented via stories on perceptions of the novel groups' humanness. The most conservative comparison reported was used to estimate effect size. Using the resulting effect size estimate of $f = .30$ [medium], 111 participants would be required to achieve power of .80 to detect an interaction effect in a fixed effects ANOVA ($\alpha = .05$, numerator df = 2, # of groups = 6) (Faul, Erdfelder, Lang, & Buchner, 2007).

### *Procedure*

After obtaining written consent, a condition-unaware college-aged female experimenter indicated that participants would complete two purportedly unrelated studies from the same lab: a brief honours project on recall and the main project on impressions. To avoid inadvertently bolstering either metaphor, the experimenter wore a button-down or polo style shirt, neutral-colour slacks, no jewellery, and secured her hair with an elastic band.

#### *Metaphor manipulation*

The alleged honours project comprised a bogus political report about the importance of female voters during election seasons. We utilized this relatively neutral election season context in order to avoid gendered or sexual contexts that might inadvertently influence participants' sexist attitudes purely as a result of story context (for example by exposing participants to a 'temptress' archetype; Becker, 2010). The three articles differed only in a few sentences in the narrative, which were used to embed the 'woman-as-predator' metaphor ('with women *prowling* the campaign trail'), the 'woman-as-prey' metaphor ('with women *being hunted on* the campaign trail'), and the humanized baseline ('with women *following* the campaign trail') through repetition of the source-target pairing. The paragraph read:

> Independent voters, who could sway the outcome of the presidential race, are making up an increasingly larger share of North Carolina's registration rolls. Since 2000, the number of unaffiliated voters has grown by 77 percent in Cumberland County and 112 percent statewide, according to an analysis of voter records by The Fayetteville

Observer. Women (58%) make up a larger share of independent likely voters than men (42%), while men (59%) make up a larger share of Democratic likely voters than women (41%). Both political parties, focusing on independent voters, are looking to sway women's votes this election season. And with women {**prowling the campaign trail/being hunted on the campaign trail/following the campaign trail**}, this election season promises to be an interesting one. As a rule, women **{pounce on/lap up/identify}** misinformation**.** {**Both campaigns should exercise caution, or they'll risk being snatched up like unsuspecting prey./If fed the right tidbits, they should begin purring in no time./If approached with the facts, women will be sure to examine all positions.**} With a large number of independent voters, North Carolina is seen as a battleground that could determine who will occupy the White House next year. That's why the Democrats are holding their convention in Charlotte on Sept. 4-6 and the presumptive Republican presidential nominee made a campaign swing through North Carolina on Sunday. Both presidential campaigns will attempt to sway independent-minded voters, with special focus placed on those {**strange beasts/strange creatures/unique individuals**} known as women. (modified from *Fay Observer*, 2012)

It was predicted that the articles containing the animalizing metaphors, due to their dehumanizing content, would be perceived by our participants as more offensive than the humanized baseline article. Importantly, we also anticipated the possibility that our participants might simply perceive prey metaphors as less aversive than predator metaphors, and this in turn might account for any difference in hostile sexist attitudes engendered by the two metaphors. In order to confirm that the animalizing articles were identical in valence, pilot raters (25 female, eight male) read one of the three randomly assigned articles and indicated on seven-point Likert scales the general evaluative tone of the article and its depiction of women voters. Statistical tests[1] confirmed that participants perceived the articles containing the dehumanizing metaphors as equally negative in overall tone[2] compared to the baseline[3] and as equally negative towards women[4] compared to the baseline[5].

The experimenter then removed the 'honors project' packets and introduced the 'main study', which purportedly examined appearance-based and behaviour-based impressions. In reality, participants completed several distractor questionnaires before completing the Ambivalent Sexism Inventory (ASI).

### *Ambivalent sexist attitudes*

The ASI (Glick & Fiske, 1996) comprises 22 items assessing endorsement of culturally transmitted anti-woman attitudes subdivided into hostile and benevolent types. Hostile sexist attitudes were assessed with 11 statements (for example 'Women seek to gain power by getting control over men') and benevolent sexist attitudes were assessed with 11 statements (such as 'No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman', 1 = *Strongly Disagree*, 7 = *Strongly Agree*). Internal consistencies from our sample were similar to previous observations (Cronbach's $\alpha$ hostile sexism = .83; benevolent sexism = .80).

## Results

Hostile and benevolent sexist attitudes were submitted to separate 3 (Metaphor: Predator, Prey, Baseline) X 2 (Gender: Male, Female) between groups ANOVAs. The expected main effect of metaphor exposure emerged for hostile sexist attitudes[6] (Table 1).

Men and women differed as expected on hostile[7] and benevolent[8] sexist attitudes (Table 2). No interactions emerged.

**Table 1.** Hostile and benevolent sexism as a function of metaphor exposure.

| | | Predator | Prey | Baseline |
|---|---|---|---|---|
| Hostile Sexism | *M* | $4.14_{a}$ | $3.71_{b}$ | $3.81_{ab}$ |
| | *SD* | .91 | .97 | .99 |
| Benevolent Sexism | *M* | $3.89_{ab}$ | $3.75_{ab}$ | $3.91_{ab}$ |
| | *SD* | .97 | 1.01 | 1.03 |

Note: Means not sharing a subscript differ at $p < .05$ by Tukey post-tests.

Table 2. Hostile and benevolent sexism as a function of participant gender.

| | | Men | Women |
|---|---|---|---|
| Hostile Sexism | *M* | $4.19_a$ | $3.61_b$ |
| | *SD* | .87 | .98 |
| Benevolent Sexism | *M* | $4.02_a$ | $3.69_b$ |
| | *SD* | .93 | 1.04 |

Note: Means not sharing a subscript differ at $p < .05$ by Tukey post-tests.

## Discussion

The present research indicates that two common animalistic metaphoric frameworks for women (predator and prey) can shape distinct attitudes towards women. In particular, metaphor exposure shaped endorsement of hostile sexism (but not benevolent sexism), with participants exposed to a predator metaphor exhibiting greater hostile sexism than those exposed to a prey metaphor. Once a particular metaphor was invoked, it evoked attitudes germane to gendered power conflicts.

## Limitations and Implications

While this study provides some evidence of metaphors' power, there are limitations to the current research. Notably, only the expected difference between the two animalizing metaphors achieved significance: neither differed from baseline. It is possible that different contexts (for example a sexualized issue rather than a political one) might exaggerate effects. Determining what mediates the impact of metaphor exposure on sexism would help clarify the issue. The predator vs. prey metaphors are composed of three distinct components: aggression (vs. submission), promiscuity (vs. chastity), and age (vs. youth) (Hines, 1999; López Rodríguez, 2007). One of these aspects may drive the impact of metaphor exposure on hostile sexism. For example, the predator metaphor may activate perceptions of female aggression, thereby eliciting hostile sexism. Future research might determine which aspect – aggression, sexuality, age – most drives the impact of animalizing metaphors on sexist attitudes.

It is conceivable that the impact of the animalizing metaphors on hostile sexism emerges because the language of the animalizing metaphors depicts women as more or less agentic: 'women-as-predators' hunt, whereas 'women-as-prey' are hunted. This ascription of agency (or lack thereof) might further influence perceptions of women's responsibility for their actions and perceivers' concern for women's pain. Researchers that define dehumanization as a process of denying individuals mental states (Gray et al., 2007) argue that ascriptions of agency confer moral responsibility to the target (that they are deserving of punishment for wrongdoing) and ascriptions of experience (the ability to experience sensations and emotions) depict targets as moral patients (that they are deserving of protection from harm; Gray & Wegner, 2009). Thus, if 'women-as-predators' are ascribed more agency than 'women-as-prey', 'women-as-predators' may be perceived as culpable for actions that perceivers view as moral violations. For example, when women are sexually victimized, society may be more likely to accuse these women of having 'asked for it' if women are described with language referencing the 'women-as-predators' metaphor (such as, cougar) than if women are depicted as prey (for example, chick).

## Study implications

The study of dehumanizing metaphors is important, because many people are oblivious to metaphors' impact on crucial judgments and perceptions. Dehumanizing metaphors for women likely emerge from society's cultural views and values, as other metaphors do (Deignan, 2003; Kövecses, 2005), and serve to justify the status quo, as gender stereotypes do (Glick & Fiske, 2001). Because dehumanizing metaphors depict women through reference to something else, they subtly can transmit a host of underlying assumptions about women and frame behavioural responses towards them (Landau et al., 2010). Indeed, once a metaphor is instilled in the culture's lexicon, individuals may not even recognize

its presence or influence (Thibodeau & Boroditsky, 2011). For these reasons, metaphors are exceptionally suited to the dissemination and perpetuation of society's stereotypes.

Confirming that the two types of dehumanizing metaphors can indeed structure particular perceptions of women and their place in society provides a framework for future investigations concerning the best method for combating the influence of these metaphors. For example, we might consider training members of the populace at large in reducing the automatic activation of stereotypic information communicated by the 'women-are-predator' and 'women-are-prey' metaphors. One such method of reducing stereotypic associations is known as 'semantic retraining' (Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000). During semantic retraining, individuals are required to repeatedly negate stereotypic information ('women are bad at math') and affirm counter-stereotypic information ('women are good at math'). Practising both the negation of stereotypes and the affirmation of counter-stereotypes teaches people to inhibit the automatic activation of stereotypes. Though semantic retraining programmes are still in their infancy, many researchers recommend their usage (Ebert, Steffens, Von Stülpnagel, & Jelenec, 2009; Forbes & Schmader, 2010; Kawakami, Dovidio, & van Kamp, 2005). Importantly, the presence of two contrastive metaphors suggests the need for two distinct semantic retraining programs in order to decouple the group-metaphor associations.

Further, the presence of two contrastive metaphors suggests that some individuals might be more or less sensitive to a particular animalizing depiction of women and more or less likely to utilize the metaphor in shaping their attitudes. Identifying these individuals would allow researchers to target them for the most appropriate interventions. Interestingly, perceiver gender does not appear to be one such individual difference variable on which to identify candidates for targeted interventions, as gender did not impact utilization of the metaphors in this study. We examined the possibility that gender might impact metaphor utilization, to the extent that men are more likely to endorse hostile attitudes than women. Conceivably, exposure to the predator [prey] metaphor might prompt men – but not women – to demonstrate greater [less] endorsement of hostile sexist attitudes. However, the absence of an interaction between metaphor exposure and gender is largely consistent with research on female objectification. Though some research regarding female sexual objectification – linked to animalistic dehumanization (Morris & Goldenberg, 2015) – finds that only men dehumanize sexualized women (Cikara et al., 2011), a majority of the research indicates that both genders dehumanize sexualized women (Bernard, Gervais, Allen, Campomizzi, & Klein, 2012; Gray et al., 2011; Vaes et al., 2011).

## Conclusions

The results of this study suggest that animalizing metaphors for women transmit cultural views that emphasize a sex-based power differential. Each animalizing metaphor depicts women at opposing ends of the gendered power differential. Women are the hunters or they are the hunted; they are inappropriately dominating, or appropriately subordinate. Continued transmission of animalizing metaphors for women perpetuates prejudicial beliefs about the appropriate roles for women in society. Scientists and practitioners should educate the general public regarding the impact animalizing metaphors have on perceptions of women. Media communicators might avoid using animalizing terms in order to shift public discourse in a more progressive direction. Though the metaphors' use is ubiquitous and their power to shape attitudes insidious, a directed effort to identify and eliminate their usage will go a long way towards mitigating their influence.

## Notes

1. One-way between groups ANOVAs followed by Tukey tests.
2. $M_{predator} = 2.82$, $SD_{predator} = .60$; $M_{prey} = 3.00$; $SD_{prey} = 1.05$; $p_{predatorvs.prey=}$.869.
3. $M_{baseline} = 4.33$, $SD_{baseline} = .78$, $p_{predatorvs.baseline} < .001$, $p_{preyvs.baseline} = .002$; $F(2, 30) = 11.64$, $p < .001$, $\eta_p^2 = .437$.
4. $M_{predator} = 2.36$, $SD_{predator} = .92$; $M_{prey} = 2.00$; $SD_{prey} = .94$; $p_{predatorvs.prey=}$.743.
5. $M_{baseline} = 4.17$, $SD_{baseline} = 1.40$, $p_{predatorvs.baseline} = .002$, $p_{preyvs.baseline} < .001$; $F(2, 30) = 11.98$, $p < .001$, $\eta_p^2 = .444$.

6. $F(2,165)=3.38$, $p = .04$, $\eta_p^2 = .039$). As expected, no main effect emerged on benevolent sexist attitudes ($F(2,165)=.45$, $p = .64$.
7. $F(1,165)=16.87$, $p < .001$, $\eta_p^2 = .093$.
8. $F(1, 165) = 4.85$, $p = .03$, $\eta_p^2 = .029$.

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## Disclosure statement

No potential conflict of interest was reported by the authors.

## Notes on contributors

*Caroline N Tipler* received her PhD in Social Psychology from Tulane University in 2016. Her research interests include gender, dehumanization, stereotyping and social cognition. She is particularly interested in the impact of dehumanizing communications on attitudes towards outgroup members.

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