# Moral Heroes Look Up and to the Right

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## Abstract

Portraits of moral heroes often portray the hero gazing up and to the viewer's right in part because ideologically minded followers select and propagate these images of their leaders. Study 1 found that the gaze direction of portraits of moral heroes (e.g., Martin Luther King, Jr.) tend to show the hero looking up-and-right more often than chance would predict, and more often than portraits of celebrities (e.g., Elvis Presley) do. In Studies 2 and 3, we asked participants to play the role of an ideologically motivated follower, and select an image of their leader to promote the cause. Participants preferentially selected the up-and-right version. In Study 4, we found that conceptual metaphors linking directionality to personal virtues of warmth, pride, and future-mindedness helped explain why the up-and-right posture looks most heroic. Followers play an active role in advancing social causes by portraying their leaders as moral heroes.

As Barack Obama ran for the U.S. Presidency in 2008, a portrait image emerged. The image, now in the National Portrait Gallery at the Smithsonian Institute, was a stylized red and blue rendition of Obama, with his head tilted up and to the viewer's right. The words "hope," "change," or "progress" appeared below. The image came to symbolize Obama's vision and his campaign, and may have helped him win the Presidency. We suggest that Obama's particular gaze direction—up and to the viewer's right—was no coincidence. The examples of other moral heroes like Mother Teresa, Martin Luther King, Jr., and Nelson Mandela in Figure 1, all gazing up and to the viewer's right, hint at a general trend. We suggest that portraits of moral heroes disproportionately have the moral hero gazing up and to the viewer's right, in part, because the up-and-right posture exudes positive character attributes such as interpersonal warmth, personal pride, and a future mind-set.

Why might heroes tend to look up and to the viewer's right in portraits? Without ruling out the possibility that heroes actively pose, we suggest that members of ideologically minded groups select and propagate certain images of their leaders in a heroic posture. Figure 1 is illustrative—the images of both Mother Teresa and Nelson Mandela are of sculptures, constructed at the hands of an active agent—an artist. Similarly, Shepard Fairey selected a particular image of Obama, gazing up and to the right, from which to draw the now famous red-and-blue portrait.

## Direction and Virtue

What is so special about the up-and-right posture? Applying Lakoff and Johnson's (1980) theory of conceptual metaphors,



**Figure 1.** Illustrative examples of images of moral heroes looking up and to the viewer's right.

we suggest that viewers make metaphorical meaning of directionality, manifesting as inferences about the portrayed person's character. Within Western culture, both the vertical and horizontal dimensions are steeped in rich metaphor. The horizontal dimension is asymmetric, with the right being superior to the left. This metaphorical bias is evident in words like "righteous," the Latin word "sinister" meaning "left," and in the connotation of "right" as "correct" or "proper." The right is also a metaphor for the future, evident in how people typically draw an arrow to represent the flow of time, from left to

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right. And people conceive of active agents as being situated to the left, facing the recipient of their action on the right (Chatterjee, Southwood, & Basilico, 1999). Insofar as the moral hero's job is to agentically lead people into a better future, we predict that followers will preferentially select images of moral heroes looking right, and not left.

People also imbue the vertical dimension with evaluative metaphors like "uplifting," "top-notch," and the notion of heaven above (Haidt & Algoe, 2004; Lakoff & Johnson, 1980; Schnall, 2014). Expansive posture makes a person look and feel proud and powerful (Carney, Cuddy, & Yap, 2010, 2015; Huang, Galinsky, Gruenfeld, & Guillory, 2011; Tracy & Robins, 2004; Tracy, Weidman, Cheng, & Martens, 2014, for a review). However, tilting one's head upward can also make a person exude arrogance, coldness, and contempt (Mignault & Chaudhuri, 2003). This is why the up-and-right posture may be so effective at projecting heroism. By looking upward but off to the side, one retains the benefits of the head-held-high posture (e.g., pride, confidence) while avoiding the costs (e.g., arrogance, coldness). The expression "upright citizen" neatly summarizes the metaphorical epicenter of virtue.

## The Present Studies

Four studies tested whether moral heroes tend to gaze up-and-right in pictures because their followers select and propagate these images. To our knowledge, these are the first studies to examine how horizontal and vertical head tilt simultaneously influence impression formation. Doing so is necessary to detect differences in the "magical corner," the up-and-right orientation.

In Study 1, we downloaded and coded the gaze direction of several hundred images of famous moral heroes (e.g., Martin Luther King, Jr.). Given the cultural schema surrounding portrait images, we predicted that the modal gaze direction would be straight into the camera. However, we also predicted that moral heroes would look up-and-right more often than chance would predict and more often than other famous people (celebrities such as Elvis Presley) did. In Study 2, we put participants in the mind-set of a follower, tasked with selecting a portrait image of their leader for cause-promoting purposes. In this situation, we predicted that they would select images of the leader facing up-and-right more often than chance would predict and more often than they would when selecting an image for a non-moral promotional purpose (e.g., a job application). A follow-up Study 3 tested whether superficial explanations (e.g., the model's hair part) explained away the selection of up-and-right images, and tested for moderation by theoretically predicted individual differences. In Study 4, participants judged the character of one of nine postures. We predicted that viewers would judge the up-and-right orientation to be the most heroic because they would perceive the up-and-right poser to be future-oriented, proud, and warm. We examined whether

turning one's head to one side (especially to the right) would mitigate and even reverse some of the negative impressions that the head-held-high posture makes.

## Study 1

We tested whether moral heroes tend to look up-and-right by gathering and coding the gaze direction of Internet images of widely endorsed moral heroes. To assess the default gaze direction of portraits of famous people, we included a group of celebrities to serve as a comparison group. Being portrait images, we predicted that the modal gaze direction would be straight into the camera (level-and-straight). However, we also predicted a pull to populate the up-and-right orientation. Based off of previous findings (McManus & Humphrey, 1973; see Powell & Schirillo, 2009, for a review), we also predicted that celebrities would look to the left more than the right. However, we hypothesized that moral heroes would gaze up-and-right more often than celebrities do and chance would predict.

### Method

*Sample.* To form groups of moral heroes and celebrities, we asked a pilot sample of 158 Americans (49% male, $M = 37$ years old, $SD = 12$) on the crowdsourcing website Crowdflower to list three moral heroes and three celebrities from the past 100 years. The most common *moral hero* nominees were Martin Luther King, Jr. (12.9% of all nominations), Mother Teresa (6.7%), Nelson Mandela (6.5%), Mohandas Gandhi (5.2%), and John F. Kennedy (4.1%). The most common *celebrities* were Brad Pitt (3.8%), Marilyn Monroe (3.6%), Elvis Presley (3.6%), Michael Jackson (3.0%), and Charlie Chaplin (1.7%). (These participants and those in all other samples described in this article received $0.10 to $0.50 for participating.)

*Procedure.* Effect sizes are unknown so we collected large samples of images (~600 per condition) and computed power post hoc. For each of the 10 targets, we performed a Google Images search of their name, and downloaded the images that came up on the first page (~120 images for each target; $N = 1,205$ images total). Two research assistants independently coded each image for the direction of (a) eye gaze and (b) head orientation. We used the viewer's vantage as the horizontal convention; as such, "right" means the viewer's right and the model's left.

The coders classified each image into one of nine quadrants within a 3 (horizontal: left, straight, right) × 3 (vertical: up, level, down) matrix. We dropped the images that the coders judged to not be of the intended target (2.8%), and counted as missing data instances in which the coders judged the target to have the eyes closed or obscured (for eye gaze coding only; 6.3%). The coders agreed substantially on their classification of judgments of eye gaze direction (73%
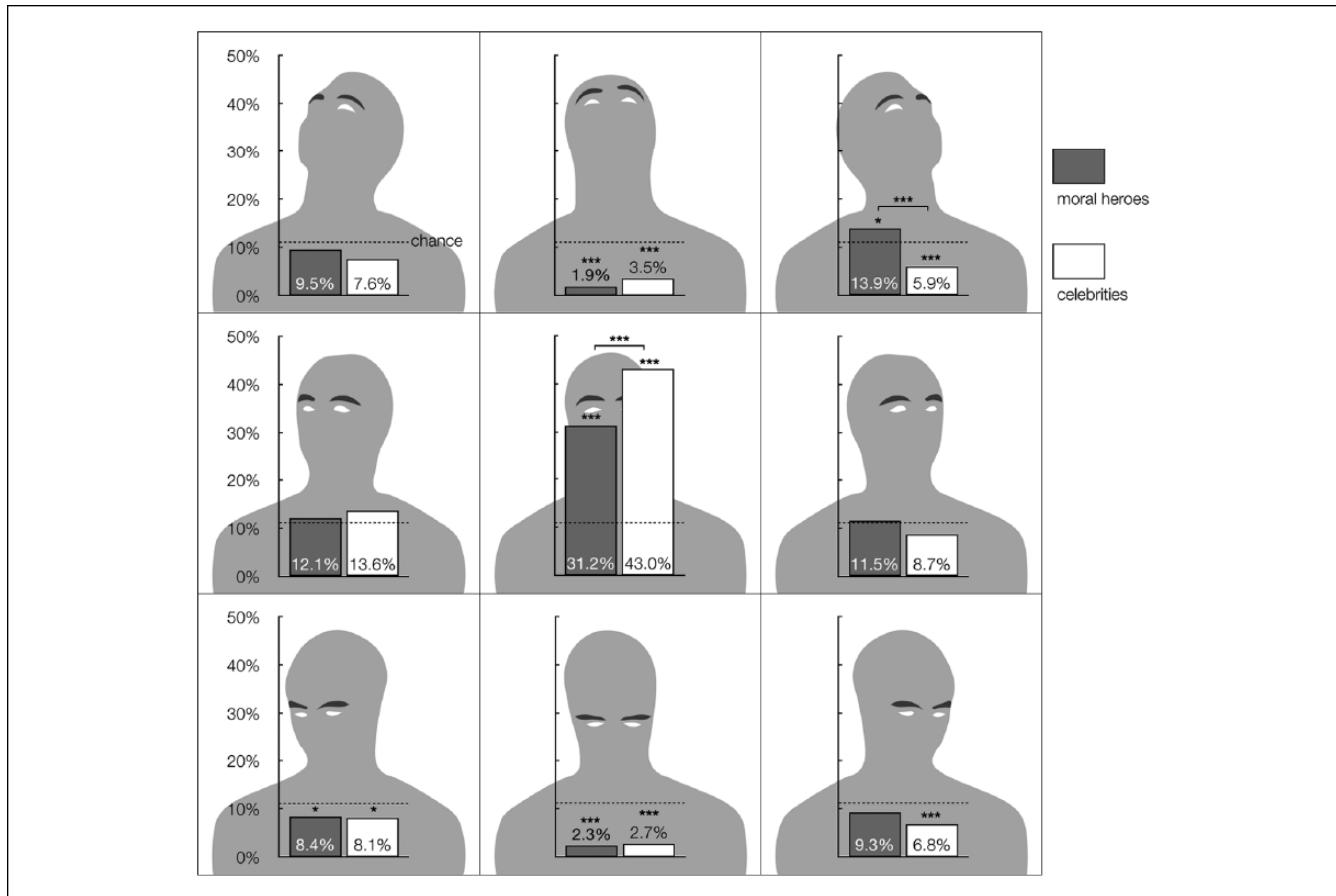
**Figure 2.** Proportions of portraits of moral heroes and celebrities with various gaze directions (Study 1).
*Note.* Moral heroes tended to look up-and-right more often than one would expect by chance and more than twice as often as celebrities did. Statistics represent deviation from chance and group differences. See Table S1 for exact statistics.
*$p < .05$. ***$p < .001$.

agreement, $\kappa_n = .72$) and head orientation (68% agreement, $\kappa_n = .65$) so we averaged their tallies.

## Results

Averaging the classifications for eye gaze and head direction, we found that moral heroes tended to look up-and-right more often than one would expect by chance (11.1% or 1 in 9), and more often than celebrities did (see Figure 2). These effects were generally consistent for both eye gaze and head orientation, albeit slightly stronger for eye gaze (see the supplemental materials). Moral heroes' gravitation away from the modal level-and-straight orientation was specifically toward the up-and-right. We found little evidence that moral heroes preferentially looked up-and-left, and similarly scant evidence of group differences in the level-and-right and down-and-right orientations. To estimate the effect size and post hoc power, we derived an up-and-right variable, defined as 1 if the image was up-and-right and 0 otherwise. We averaged the four scores (2 coders × Eyes, head), and found the predicted difference between conditions, $t(1,203) = 5.77$, $p <$ .001, $d = 0.33$, 95% confidence interval (CI) = [.050, .101] with >99% post hoc power.

Replicating past research (e.g., McManus & Humphrey, 1973), we found that celebrities tended to look to the left (29.3%) more often than they looked to the right (21.5%), $z = 3.00$, $p = .003$. In contrast, moral heroes tended to look to the right (34.7%) slightly more often than they did to the left (30.0%), $z = 1.70$, $p = .091$.

## Discussion

After coding portrait images from the Internet, we found that moral heroes tend to gaze up-and-right more often than celebrities do or chance would predict. This observation may be a product of several social and psychological processes. For example, moral heroes may tend to hold an up-and-right posture. Without aiming to rule out this possibility, we suggest an alternative explanation—moral heroes gaze up-and-right because the people who follow these moral heroes select and propagate these images to advance the social cause. We test this hypothesis experimentally in Study 2.

## Study 2

We tested whether people select images of models looking up-and-right when trying to promote a social cause. To test whether the preference for up-and-right facing portraits generalizes to other non-moral promotional contexts, we included a control condition in which participants chose a portrait image for a job application.

### Method

*Sample.* Participants were 412 Americans (49% male, $M = 36$ years old, $SD = 12$) on the crowdsourcing website Crowdflower. Given an effect of $d = 0.33$ (see Study 1), we required a sample of 288 for the conventional 80% power. To also detect small but meaningful deviations from chance, we increased the power to 92%, necessitating a sample of 410.

*Procedure.* Participants reviewed nine images of a person gazing up, level, or down and left, straight, or right and selected a single image to either help promote a social cause or a job application (randomly assigned, between-subjects design).

*Instructions.* In the *social cause condition*, the instructions read as follows:

Imagine the following scenario: You are involved in a group promoting a social cause. You truly believe in this cause and feel that it would make the world a better place. To help rally others to action, you and your fellow organizers decide to make a poster. The poster will provide information about the cause and will also include a photo of one of the leaders of the cause. Someone does a photo shoot of a leader. Your task is to select a picture that will go on the poster.

In the *job application* condition, the instructions read as follows:

Imagine the following scenario: You are trying to help a friend get a job. You truly want your friend to get the job. To help make his application memorable, you and your friend decide to include a picture. Someone does a photo shoot of your friend. Your task is to select a picture that will go on his résumé.

*Image selection task.* The instructions read, "Which photo do you choose? Take a moment to review them carefully before making your selection." Nine black-and-white images, $200 \times 200$ pixels in size each, appeared below. The pictures were of a 20-year-old male with a neutral facial expression, looking either up, level, or down and either left, straight, or right. His head and eyes were looking in the same direction as one another. Deviations from center (left, right, up, or down) were 10 degrees. The images appeared in a $3 \times 3$ grid, with the location of each image randomly determined for each participant.

### Results

When trying to promote a social cause, participants selected the up-and-right orientation more often than one would expect by chance, and more often than they did when trying to promote a job applicant (see Figure 3). This selection preference was specific to the up-and-right orientation, not generalizing to the up-and-left orientation. Participants selected level-and-right orientations more often than chance would predict, but at similar rates across conditions. Participants selected job applicant portraits with the person looking straight at the viewer, level-and-right, and straight-and-down more frequently than one would expect by chance. To estimate the effect size, we rescored participants choices as 1 if they selected the up-and-right image and 0 if they did not. We again found an effect of condition, $t(410) = 2.79$, $p = .005$, $d = 0.28$, 95% CI = [.029, .167].

### Discussion

Portraits of moral heroes tend to have the hero gazing up-and-right. Study 2 presents evidence that this may be partly a result of the promotional activities of the heroes' *followers*. Tasked with choosing a portrait of a model to promote a social cause, participants preferentially selected one with the person facing up-and-right. We again found no preference for up-and-left oriented portraits. The prevalence of the images in the various directional quadrants found on the Internet in Study 1 is strikingly similar to those found in the present follower-selection study.

What underlies this right > left asymmetrical preference? Perhaps some asymmetry in the model—for instance, his posture, facial expression, or hair part—is fully responsible for the rightward preference. In Study 3, we tested this possibility and aimed to rule it out. Simultaneously, we tested (using a moderation approach) whether the rightward preference is partly a result of the different metaphorical meaning that viewers infer from directionality.

## Study 3

We tested whether a right > left preference persists even when removing the model's hair part, and removing all physical asymmetries in the images (by digitally flipping the image). We also examined whether three individual differences measures of left-centrism—handedness, left/right political ideology, and metaphoric directional flow of time—moderate (attenuate or reverse) the preference for right-facing figures.

### Method

*Sample.* Participants were 331 Americans (48% male, $M = 37$ years old, $SD = 13$) on Crowdflower. We collected a large sample to catch a non-trivial set of individuals from rare minorities (e.g., left-handed people).
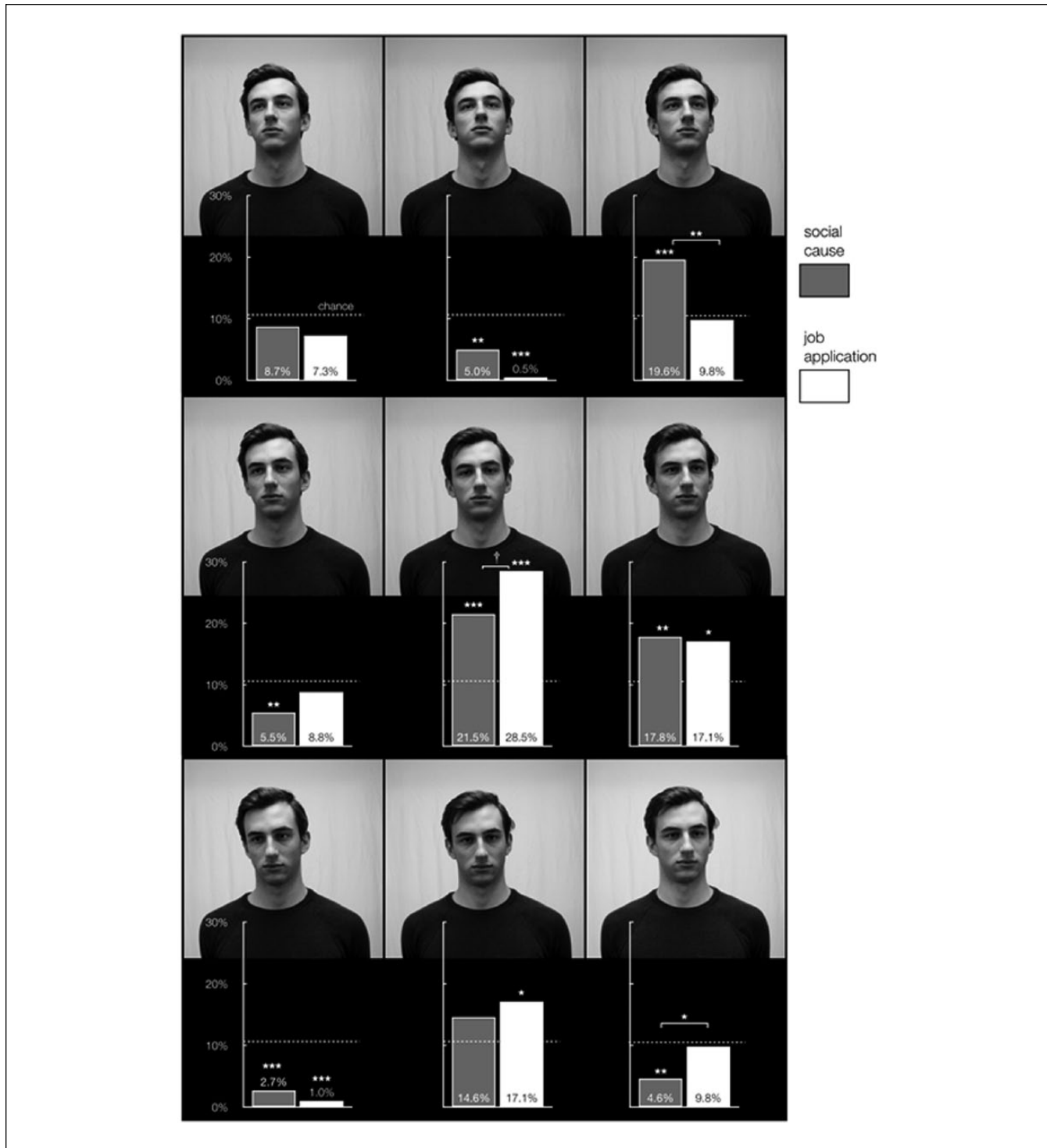
**Figure 3.** Images of a model gazing in various directions, along with the proportion of selections within each condition (Study 2).
*Note.* When tasked with promoting a social cause, participants selected the up-and-right orientation more often than one would expect by chance, and twice as often as they did when trying to promote a job applicant. Statistics are comparisons against chance and between conditions. See Table S4 for exact statistics.
$^{\dagger}p < .10.$ $^{*}p < .05.$ $^{**}p < .01.$ $^{***}p < .001.$

*Procedure.* Participants viewed two images of a person wearing a baseball cap and looking either up-and-left or up-and-right (see Figure 4). The images appeared side by side, with the order randomized between participants. The
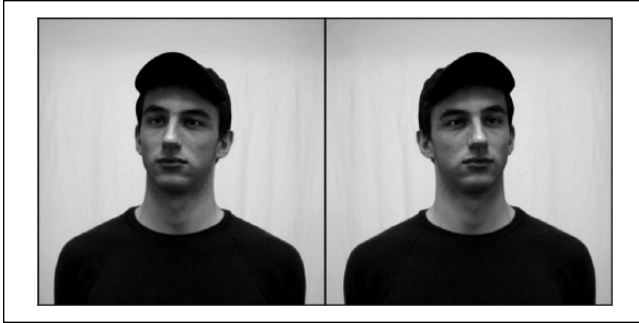
**Figure 4.** Digitally flipped images of a baseball capped individual looking up-and-right or up-and-left (Study 3).
*Note.* Even in the absence of a visible hair part or any other asymmetries, participants still selected the right-facing version of the image to promote a social cause by a 2:1 margin.
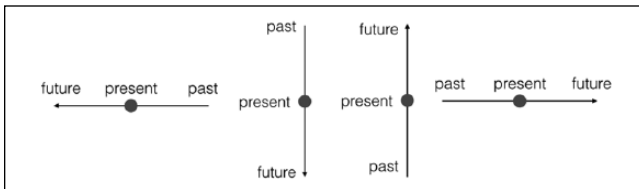


**Figure 5.** Four options for how individuals metaphorically represent the flow of time into the future (Study 3).

task was to select a single image to help promote a social cause (see Study 2 *social cause* condition for details.) The original image was of the same model as in Study 2, but now wearing a baseball cap and facing up-and-right, at 10 degrees. We digitally flipped the image horizontally to create a pixel-for-pixel equivalent up-and-left version.

*Moderators*. Participants completed three individual differences measures of left-centrism.

*Metaphoric future direction*. This measure tapped individual differences in how people represent time metaphorically within two-dimensional space. The question asked, "If you were to draw an arrow from the past to the present to the future, how would it look?" Participant selected one of the four images in Figure 5, which appeared in random order within a 2 × 2 matrix. Most participants (68%) conceived of time flowing rightward, with minorities thinking of time as flowing upward (19%), leftward (8%), and downward (5%).

*Handedness*. Participants indicated their handedness (left, fully ambidextrous, or right). Most participants were right-handed (82%), with minorities being left-handed (12%) and fully ambidextrous (6%).

*Political ideology*. In the United States, liberals tend to ascribe to left wing political views, and conservatives

tend to ascribe to right wing views. Participants indicated their political ideology ($\alpha$ = .90) on social policy, economic policy, and foreign policy on scales anchored at −50 (*liberal*), 0 (*moderate*), and 50 (*conservative*). We trisected the sample into 102 liberals (ideology < −10), 113 moderates (ideology between −10 and 10), and 109 conservatives (ideology > 10).

## Results

Across the entire sample, 64% of participants selected the up-and-right image to promote a social cause, $z$ = 6.22, $p$ < .001, $d$ = 0.29, 95% CI = [.177, .385]. (We directly replicated this effect with a new sample of 71 Americans, of which 68% chose the right-facing figure, $z$ = 2.85, $p$ = .004, $d$ = 0.37, 95% CI = [.129, .575].)

### Moderators

*Metaphoric future direction*. Thinking of time flowing up and right moderated this effect. Combining the future-is-up and future-is-right participants to form a single up-and-right group, and combining the future-is-down and future-is-left participants to form a single down-and-left group, we found that group moderated the preference for right-facing portraits, $z$ = 3.04, $p$ = .002. Most (69%) of up-and-right oriented group preferred the right-facing model, $z$ = 5.69, $p$ < .001, whereas fewer (43%) of the down-and-left group did, $z$ = −0.77, $p$ = .441. (See the supplemental materials for further analyses that support these conclusions.)

*Handedness and ideology*. Neither handedness nor ideology moderated the preference for right-facing portraits. Both left-handers (60%) and right-handers (64%) selected the right-facing model, a non-significant difference, $z$ = 0.45, $p$ = .653. And both liberals (71%) and conservatives (61%) tended to choose the right-facing model, which again did not differ from one another, $z$ = 1.40, $p$ = .163. (See the supplemental materials for additional analyses that support the conclusion that neither handedness nor ideology moderate the right > left preference.)

*Culture*. We explored whether the preference for right-facing portraits applies across cultures by recruiting a sample whose native language is written from right-to-left (e.g., Arabic, Urdu; $N$ = 123, 91% power; see the supplemental materials for sample details). They completed the same picture choice task, and chose left- and right-facing portraits at equal rates (50%), $z$ = 0.00, $p$ = 1.000, which differed from the tendency in the American sample, $z$ = 2.80, $p$ = .005. These results tentatively suggest that the preference for right-facing portraits may be limited to Western culture. However, the mismatch between the race of the leader and the perceivers, the bilingualism of the sample, and the study being in English render this conclusion preliminary.

## Discussion

A rigorous test of whether the tendency to select right-facing portraits to represent a social cause yielded further evidence of a rightward bias by a 2-to-1 margin, ruling out the possibility that that the bias is attributable to some feature of the image. Rather, we found evidence that the bias is in the perceiver. Only individuals who metaphorically think of time flowing rightward or upward evidence this bias, whereas individuals who think of time as flowing downward to leftward did not. Mere exposure to left-centrism (in the form of left-handedness and left wing politics) did not moderate the rightward bias. These results tentatively suggest that individuals' *metaphorical* conception of progress and agency may explain the preference for right-facing portraits of moral heroes.

## Study 4

To more systematically investigate why people (Americans) select images of models looking up-and-right to promote a social cause, we tested whether a model's gaze direction makes a person look heroic and alters the personal character it projects. We included several character attributes, including future-orientation, pride (Tracy & Robins, 2004), warmth, and competence (the primary dimensions of social judgment; Fiske, Cuddy, & Glick, 2007). We also included attractiveness to test for a halo effect.

### Method

**Sample.** Participants were 750 Americans (49% male, *M* = 36 years old, *SD* = 12) on Crowdflower (80% power).

**Procedure.** Participants viewed one photo from Study 2 (see Figure 3) and rated it along several dimensions. The study was a 3 (horizontal: left, center, right) × 3 (vertical: down, level, up) full-factorial, between-subjects design. In each condition, participants viewed a single image, 300 × 300 pixels in size, and responded to the question "How does this person look?" using several scales.

*Heroism*. The first dimension, and dependent variable, was "heroic," with the responses being on a slider scale anchored at 0 (*not at all*), 50 (*somewhat*), and 100 (*totally*).

*Impressions*. The mediator items were on 9-point bipolar scales, ranging from −4 to 4, with 0 labeled "neutral." The items, which appeared in counterbalanced order, were (a) past-oriented: future-oriented, (b) cold: warm, (c) incompetent: competent, (d) proud: ashamed, (e) confident: unsure, (f) uninspired: inspired, (g) pessimistic: optimistic, and (h) attractive: ugly. We reverse scored items, such that higher scores indicated a more positive connotation for all variables. And we aggregated *proud, confident, inspired*, and *optimistic*
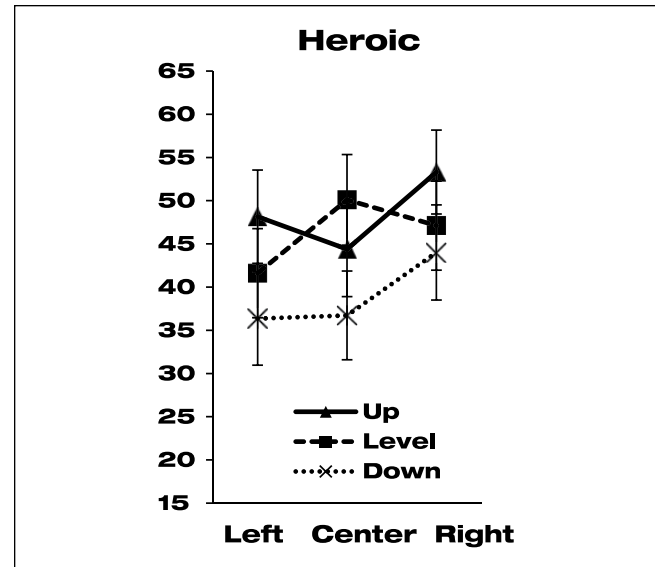


**Figure 6.** Looking up and to the viewer's right makes a person appear heroic (Study 4).
*Note.* The scale ranged from 0 to 100. Error bars represent 95% CIs. CI = confidence interval.

(α = .80) to yield a single aggregated of pride (see the supplemental materials for analyses broken down by item).[1]

### Results

Small adjustments to the model's head orientation had widespread consequences for his perceived character. The up-and-right posture was the most heroic (see Figure 6). To systematically test how head orientation altered the subject's perceived character, we performed 3 × 3 between-subject ANOVAs. Gazing both up and gazing right independently made the model look more morally heroic, warm, competent, future-oriented, and proud. Looking up made him look more attractive (see Figures 6 and 7 and Table 1).

Two character attributes—warm and proud—yielded interactions. Tilting the head straight upward made the model look *cold, t*(82) = −3.12, *p* = .003, *d* = −0.34, 95% CI = [−1.12, −0.25]. Interestingly, turning his head to the left mitigated this negative attribution, *t*(83) = 1.27, *p* = .209, *d* = 0.14, 95% CI = [−0.15, 0.67]. And turning to the right made him appear *warm, t*(85) = 4.69, *p* < .001, *d* = 0.51, 95% CI = [0.46, 1.14], fully reversing the negative effects of the "power posture."

*Mediation.* To test for mediation, we derived an *up-and-right* variable, by recoding the up-and-right quadrant as 1 and the remaining eight quadrants as 0. The model looked more heroic when he gazed up-and-right (*M* = 53.3, *SD* = 23.0) than he did when facing in the other directions (*M* = 43.5, *SD* = 25.0), *t*(748) = 3.46, *p* = .001, *d* = 0.44, 95% CI = [4.24, 15.40]. This was because he exuded a future-orientation, pride, and

## Warm

## Competent
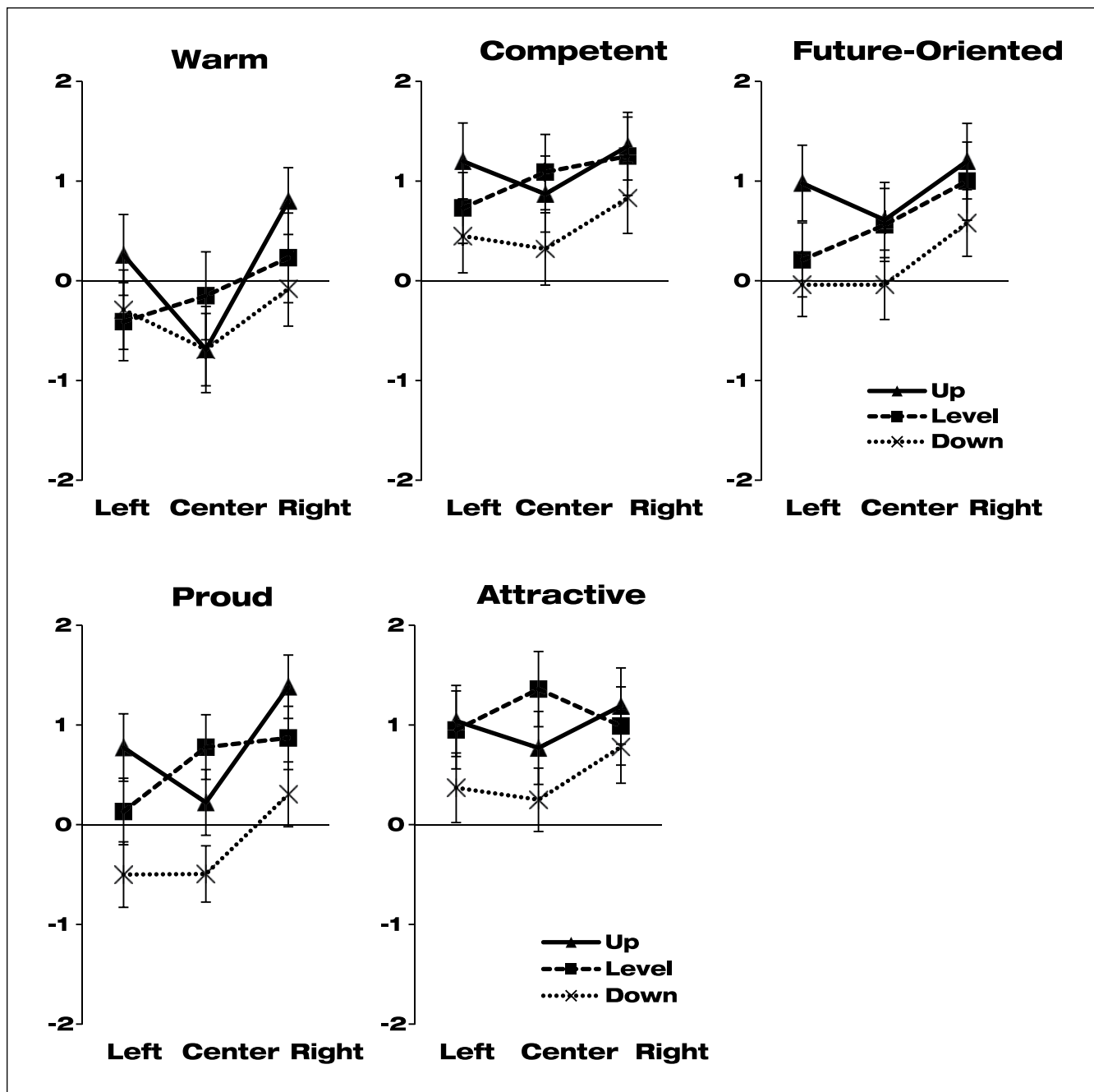
## Future-Oriented

## Proud

## Attractive

**Figure 7.** Head tilt alters character impressions (Study 4).

*Note.* Participants judged a single model looking either left, straight, or right and either up, level, or down. The scales ranged from −4 to 4. Error bars represent 95% CIs. CI = confidence interval.

warmth—but not necessarily competence or attractiveness (see Figure 8).

*Left-right asymmetries.* Comparing just the up-and-left versus the up-and-right portraits, we again found that the up-and-right version exuded a more positive impression across all variables, with two (namely, warmth and pride) reaching significance (see Table 2).

### Discussion

An experiment found that gazing up-and-right makes a person look like a hero because people see an up-and-right gazer as future-oriented, proud, and warm (but not more competent or attractive). These favorable impressions may explain why people select and propagate images of leaders looking up-and-right to promote a social cause.

**Table 1.** Head Orientation Influences Character Impressions (Study 4).

| | Horizontal | | | Vertical | | | Interaction | | |
|---|---|---|---|---|---|---|---|---|---|
| | $F$ | $p$ | $\eta_p^2$ | $F$ | $p$ | $\eta_p^2$ | $F$ | $p$ | $\eta_p^2$ |
| Heroic | **4.14** | **.016** | **.011** | **10.46** | **<.001** | **.027** | 1.87 | .114 | .010 |
| Warm | **12.40** | **<.001** | **.032** | **4.23** | **.015** | **.011** | **3.04** | **.017** | **.016** |
| Competent | **3.84** | **.022** | **.010** | **8.86** | **<.001** | **.023** | 0.94 | .440 | .005 |
| Future-Oriented | **8.57** | **<.001** | **.023** | **12.76** | **<.001** | **.033** | 1.07 | .371 | .006 |
| Proud (Agg.) | **18.21** | **<.001** | **.047** | **32.84** | **<.001** | **.081** | **4.04** | **.003** | **.021** |
| Attractive | 1.09 | .337 | .003 | **9.89** | **<.001** | **.026** | 1.91 | .107 | .010 |

*Note.* Impressions of a model looking left, straight, or right and up, level, or down. Results of 3 (horizontal) × 3 (vertical) between-subjects ANOVAs. Bolded numbers are significant.
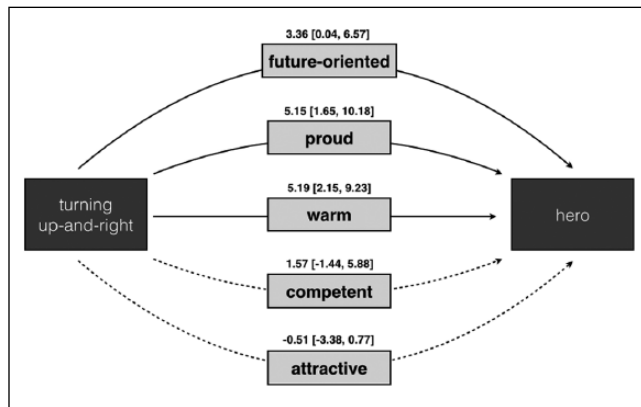


**Figure 8.** Looking up and to the right made a person look future-oriented, proud, and warm, which explained why people perceived this head tilt to be especially heroic (Study 4). *Note.* Results are unstandardized coefficients with 95% CIs, for independent bootstrapped mediation analyses (Preacher & Hayes, 2008). Solid lines are statistically significant. CI = confidence interval.

## General Discussion

Pictures of moral heroes (but not celebrities) tend to portray the hero gazing up and to the viewer's right (Study 1). This may be because people select and propagate these images of their leader to advance a shared social cause (Studies 2, 3). Followers choose these images because the up-and-right gaze communicates a demeanor of pride, warmth, and a metaphorical sense of future-mindedness to the observer (Study 4). Turning to the right mitigated and even reversed some of the negative impressions (e.g., coldness/contempt) that looking straight up communicated. The combination of both horizontal and vertical head tilt variables were necessary to detect, describe, and explain the curious phenomenon that is the hero's pose.

What underlies this preference for up-and-right portraits? One possibility is that universal neurological processes are responsible. Lateral asymmetries in how the brain processes emotion cause the left cheek to be more emotionally expressive than the right cheek (e.g., Sackeim, Gur, & Saucy, 1978).

However, in our studies, both moderation and mediation analyses supported a culturally specific, metaphoric explanation for the up-and-right bias. Among Americans, only those who think of time flowing rightward or upward prefer up-and-right facing portraits. And up-and-right facing portraits exude the impression of future-mindedness. An exploratory cross-cultural study found no evidence of the right > left bias among people who are fluent in languages written from right-to-left.

Precisely how culture moderates biases for differently oriented portraits remains an important question for future research. The fact that Alberto Korda's iconic portrait of Ché Guevara has the revolutionary leader facing up-and-*left* anecdotally raises the possibility that some dissonant contexts may pull for the up-and-left orientation. Future research should also investigate the differential roles that eye gaze and head orientation play in impression formation, how mismatches between them (e.g., head left, look right) further modify these impressions, and how target gender moderates these effects. Proud, powerful postures signal high status, which benefit the displayer by eliciting deference from observers. Observers also benefit from these displays because it affords them the social information necessary to know whom to emulate (Martens, Tracy, & Shariff, 2012). Whether up-and-right facing postures differentially influence followers to take group-promoting action remains another important question for future research.

The present results are particularly surprising in light of the finding that most politicians' portraits tend to have them facing to the viewer's *left* (Thomas, Loetscher, Clode, & Nicholls, 2012)—precisely the opposite direction that the present findings suggest they ought to face. Politicians and other social leaders may benefit from a careful selection of portraiture.

Moral leaders have special qualities (Walker & Frimer, 2007) and influence their followers (Frimer, Aquino, Gebauer, Zhu, & Oakes, 2015; Frimer, Gaucher, & Schaefer, 2014; Reicher & Haslam, 2011). But followers also influence leaders, elevating them to the status of moral heroes. Just as Shepard Fairey did with the stylized red-and-blue

**Table 2.** Contrasts Between Impressions of the Up-and-Right Versus the Up-and-Left Posture (Study 4).

| | $t(168)$ | $p$ | $d$ | 95% CI |
|---|---|---|---|---|
| Heroic | 1.40 | .165 | +0.21 | [−2.14, 12.46] |
| **Warm** | **2.02** | **.045** | **+0.31** | **[0.01, 1.07]** |
| Competent | 0.56 | .575 | +0.09 | [−0.37, 0.66] |
| Future-oriented | 0.81 | .420 | +0.12 | [−0.32, 0.76] |
| **Proud** | **2.58** | **.011** | **+0.40** | **[0.14, 1.08]** |
| Attractive | 0.56 | .574 | +0.09 | [−0.38, 0.68] |
| Average | | | +0.20 | |

*Note.* Positive statistics mean that the up-and-right posture scored higher. Bolded numbers are significant. CI = confidence interval.

Obama poster, followers promote certain images of leaders (Bligh, Kohles, & Meindl, 2004; Haslam et al., 2001). This cultural practice may transform leaders into iconic moral heroes around which groups of like-minded people unite.

## Note

1. We also included a manipulation check, asking whether the model was looking up/down and left/right. The up/down check was successful; however, the left/right check was not, perhaps because we neglected to include a frame of reference. The left and right conditions yielded bimodal distributions whereas the center conditions yielded a unimodal distribution (see the supplemental materials for details).

## Supplemental Material

The online supplemental material is available at http://pspb.sage-pub.com/supplemental

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