Taking the High Ground:

The Impact of Social Status on the Derogation of Ideological Opponents

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Abstract

People tend to derogate their ideological opponents. But how does social status affect this tendency? We tested a prediction derived from hierometer theory that people with higher status would derogate ideological opponents *less* (i.e., evaluate them more charitably). We further predicted that greater rhetoric handling prowess (RHP: feeling more confident and less intimidated while arguing) would mediate the effect. Study 1 established a link between higher status and lesser opponent derogation correlationally. Study 2 did so experimentally. Using a scale to assess RHP developed and validated in Study 3, Study 4 established that RHP statistically mediated the correlational link between status and derogation. In Study 5, experimentally manipulating status affected RHP as predicted. However, in Study 6, experimentally manipulating RHP did not affect opponent derogation as predicted. Thus, our findings were substantially, but not entirely, consistent with our theoretically-derived predictions. Implications for hierometer theory, and related theoretical approaches, are considered.

Keywords: derogation, status, social status, rhetoric, hierometer theory

"You know—just to be grossly generalist—you could put half of Trump's supporters into what I call the basket of deplorables—right? The racist, sexist, xenophobic, homophobic, Islamophobic—you name it."

— Hillary Clinton, September 9, 2016, New York City

The opening quote—greeted with laughter and applause at a rally in the run up to the divisive 2016 US Presidential Election (Durden, 2016)—illustrates vividly how people tend to hold those with whom they disagree in lower regard than those with whom they agree, especially where the bone of contention matters. Empirical research amply bears out the anecdotal example. For example, Grossmann and Hopkins (2015, Table 5, p. 129) examined a subsample of respondents surveyed by the American National Election Studies in 2000, all of whom had donated at least $200 towards their preferred congressional candidate. These partisans expressed far warmer sentiments towards ideological allies than towards ideological opponents. Specifically, along a 0-to-100 feeling thermometer, the average ratings were 71 versus 24 for Democrats, and 79 versus 14 for Republicans. More generally, research conducted under the rubric of the *similarity-produces-liking* hypothesis confirms that attitudinal agreement fosters interpersonal amity. There remains some dispute over whether an overlap in attitudes prompts more favorable evaluations, conducive to interpersonal attraction (Byrne, Clore, & Smeaton, 1986), or whether discrepancies between attitudes prompt less favorable evaluations, conducive to interpersonal repulsion (Rosenbaum, 1986). Recently, Garcia, Bergsieker, and Shelton (2015) provided an illustration of how attitudinal discrepancies affected interpersonal liking both among long-established friends and recently acquainted strangers, and in ways that reflects intergroup dynamics. In a racially mixed US sample, they found that Black participants—for whom racial issues loom larger, and whose social standing is more precarious—were especially prone to dislike other Black participants if their attitudes on race diverged.

Considerations concerning the structure of society lead us to the specific question we address in this article: How does *social status* affect opponent derogation? Does having

higher status lead one to derogate those with whom one disagrees more or less? At first blush, higher status might seem to prompt greater derogation. Society, after all, is hierarchically stratified: People occupy a particular social rank, either enviably higher or regrettably lower (Fiske, 2010). Moreover, this stratification has often been interpreted as reflective of systemic dominance and oppression (Sidanius & Pratto, 1999). If so, then people of higher status, as part of the hegemonic elite, might be expected to look down upon others, thereby compounding the degree to which they would derogate them if they happened to disagree, as obeisance would be preferred. On the other hand, recent theorists have conceptualized status more benignly. They note that, both geographically and historically, so-called WEIRD societies (i.e., Western, educated, industrialized, rich, and democratic; Heinrich, Heine, & Norenzayan, 2010) tend to afford their members, at least comparatively speaking, reasonable opportunities for cooperative self-advancement, such that they need not grab status aggressively in a regime defined by dominance, but may be granted status consensually in a polity predicated on prestige (De Waal-Andrews, Gregg, & Lammers, 2015; Henrich & Gil-White, 2001). In particular, exhibiting an abundance of altruism (Hardy & Van Vugt, 2006) or virtue (Bai, 2017) facilitates status attainment in experimental groups. In light of such findings, status has come to be defined as *respect, admiration, and importance in the eyes of others* (Anderson, Hildreth, & Howland, 2015). If so, then people of higher status—perhaps out of a sense of noblesse oblige (Riddick, Cummins, Janicki, Lee, & Erlich, 2013)—might be expected to make allowance for others, thereby attenuating the degree to which they would derogate them if they happened to disagree.

However, the basis for these predictions is somewhat loose and speculative. The same would also be true of attempts to infer the impact of status on opponent derogation from whether or not status generally promotes prosocial or antisocial outcomes in general. The evidence here, in any case, is mixed, with some signs that status makes people less empathetic and helpful (Guinote, Cotzia, Sandhu, & Siwa, 2015; Kraus, Cote, and Keltner, 2010), and other signs that it makes them less prone to conflict and more inclined to be fair, especially having statistically controlled for correlated constructs such as power (Anicich, Fast, Halevy, & Galinsky, 2016; Blader & Chen, 2012). Accordingly, we derive a prediction

more specifically, on the basis of an extension to a theory that we have recently put forward: *hierometer theory* (Mahadevan, Gregg, Sedikides, & De Waal-Andrews, 2016).

Hierometer Theory

Hierometer theory was developed to advance understanding of the evolutionary function of self-esteem (Sedikides & Gregg, 2003; Sedikides & Skowronski, 2000). A leading complementary theory of self-esteem's function, *sociometer theory*, was ambiguous across different expositions as to whether self-esteem derived from *inclusion*—in the specific sense of being liked, loved, and accepted by a group to which one belongs (Leary, Tambor, Terdal, & Downs, 1995)—or from any number of sources that might contribute in the aggregate to one's *relational value* (Leary, 2005). One particular source was *status*—in the specific sense, defined above, of being respected, admired, and considered important (for an enumeration of other sources, see: Gebauer et al., 2015; Kirkpatrick & Ellis, 2001). Hierometer theory focuses specifically on status, thereby delineating self-esteem's sociometric (inclusion-tracking) function from its hierometric (status-tracking) one. The theory posits that self-esteem adaptively tracks status so as to orient people towards being more or less keen to enter competitive contests, in keeping with their greater or lesser capacity to engage in these contests successfully thanks to competitive advantages or disadvantages afforded to them by their higher or lower status. Advantages or disadvantages would include having more or fewer human fans whose advocacy and support could be called upon if needed, as well as a greater or smaller fund of resources earned in exchange for furnishing goods or services that those fans valued.[1] Consistent with this formulation, higher status predicts greater behavioral assertiveness, with the link being statistically mediated by levels of self-esteem (Mahadevan et al., 2016).[2]

A key point is this: Being more or less motivated to enter competitive contests entails at a psychological level the adoption of more or less extreme attitudes towards one's opponents in such contests. One may safely assume that, on average, opponents will be evaluated negatively. However, the degree of negative evaluation is liable to vary. In particular, the higher one's status, and the greater one's felt capacity to compete, the less of a threat one's opponent will be regarded as being. Conversely, the lower one's status, and the

lesser one's felt capacity to complete, the greater a threat one's opponent will be regarded as being. All else equal, therefore, being lower status should prompt more negative evaluations of one's opponents, whom one would be more likely to be defeated by, whereas higher status should prompt less negative evaluations of one's opponents, whom one would be more likely to prevail against.

For example, consider a job candidate. She may be expected not to look too kindly upon competing job candidates. However, if her status is higher, she will—all else equal—be more confident about beating them, and less intimidated by the prospect of going up against them. Regarding herself as more respected, admired, and important—characteristics that are liable to reflect others' objective opinions (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006)—puts her in a frame of mind where opponents, because they seem less formidable, need not be so feared. And this may well be justified: she may, for example, have letters of recommendation reflecting the respect and admiration she has earned from previous employers, which in turn causally underlie her confident frame of mind. At all events, not fearing the other candidates as much as she otherwise would, entails—all else equal—having a relatively less negative evaluation of them. In an absolute sense, she might still derogate them, because they still present some threat, or because, simply as strangers, she has a limited basis for liking them; however, her greater status would make the level of derogation less than it would otherwise be.

The Linguistic Hierometer Hypothesis

The question arises, however, as to why hierometer theory should apply to *attitudinal disagreements*. Why should non-correspondence between the truth-values assigned to propositions in the heads of different people be a cause for conflict at all? Among amicable academics, disputing arcane topics, perhaps it need not. However, ideas have implications, and precipitate action (von Mises, 1963). Especially on "hot" topics—of a political, religious, or ethical nature—attitudinal disagreement is a diagnostic sign of realistic conflict, albeit latent rather than manifest.

Furthermore, at a more fundamental level, beliefs can be considered the psychological equivalent of personal possessions (Abelson, 1986; Gregg, Mahadevan, & Sedikides, 2017a)

which people wish to retain, or some occupied land which people which to expand (Saucier & Webster, 2010). That is, people relate psychologically to their beliefs partly as if they were physical objects or extended spaces: they can be *mentally materialistic* and *ideologically territorial* (Gregg & Mahadevan, 2014; Gregg, Mahadevan, & Sedikides, 2017b). That this is the case is powerfully suggested by the metaphorical terms used to describe beliefs and process of argumentation over them. For example, like physical objects, beliefs can be *held*, *acquired*, and *abandoned*; and they can be *cherished*, such that one would be loath to *lose* them. Moreover, like physical conflicts, arguments over beliefs can be *won* or *lost*, by *opponents* on *different* sides, who *attack* one another's positions or *defend* their own, by making *incisive* points or *parrying* objections. In line with this idea, measures of mental materialism and ideological territoriality are inversely related to an index of rational objectivity (Gregg et al., 2017b).

This being the case, the psychological dynamics that regulate entry into competitive contests, which are ethologically rooted in physical combat (Parker, 1974), are also liable to regulate engagement in ideological conflicts, conducted solely via language (Aitchison, 2011). Accordingly, we put forward the *linguistic hierometer hypothesis*, which states that levels of status and corresponding self-perceptions operate functionally to regulate entry into argumentative contests specifically in the same way that hierometer theory states that they operate functionally to regulate entry into competitive contests generally. In particular, whereas having higher rank in non-human animals leads to an increase in their *resource holding potential* (Parker, 1974), thereby regulating their entry into physical contests, higher status in humans leads to an increase in their *rhetoric handling prowess*, thereby regulating their entry into argumentative contests. Rhetoric handling prowess—as the mediating variable between status and opponent derogation—would be reflected in a sense of greater confidence and lesser intimidation.

To test the linguistic hierometer hypothesis, we therefore ran a series of six empirical studies. These featured a mix of mutually reinforcing cross-sectional and experimental designs. In some studies, we included a measure of one or more of our key variables—social status, rhetorical handling prowess, and opponent derogation; and in other studies, we also

included a manipulation of either social status or rhetorical handling prowess. This enabled us to progressively confirm or disconfirm whether our three variables interacted in the linear causal manner we proposed.

STUDY 1

Study 1 represented our first attempt to establish the presence, size, specificity of the hypothesized inverse link between status—our independent variable—and opponent derogation—our dependent variable. For this purpose, we adopted a cross-sectional design, operationalizing our key constructs at the level of traits. For the sake of coverage, we operationalized opponent derogation in two ways: first, as evaluations of the intelligence of those with whom one disagrees; and second, as evaluations of the morality of those with whom one disagrees (cf. Van Lange & Sedikides, 1998).

In addition, for the sake of discriminant validity, we concurrently examined how inclusion played into this hypothesized link. As such, inclusion constitutes a conceptually close, but still distinct, construct, and one whose operationalization is likely subject to similar methodological biases. Both facts make it highly suited as a statistical control variable. Also, given that social inclusion is linked to behavioral amiability (Mahadevan et al., 2016), there are independent grounds for suspecting it might predict more positive evaluations of ideological opponents, thereby rendering it a relevant comparative benchmark.

Method

Platform, Procedure, and Participants

We ran the study online, as part of a larger survey lasting about one hour.[3] We created its content using *iSurvey* (University of Southampton, 2015), and crowdsourced participants (paying $3.00 each) via the leading platform *CrowdFlower*. Participants read an information sheet, indicated consent by checking a box, completed the survey, and were subsequently debriefed.

Crowdsourcing generally provides high quality data (Buhrmeister, Kwang, & Gosling, 2011; Germaine et al., 2012). Nonetheless, to maximize data quality, we excluded non-trivial cases on the basis of several standard criteria (Appendix A). Our final sample comprised 722 participants. This *N* permitted us to detect a medium-sized correlation ($r = .30$)

at a conventional alpha level (α = .05) with a probability near unity (P > .99). The majority were female (61.1%), younger (M_{AGE} = 36.0; SD_{AGE} = 11.7), and Western (USA: 47.5%; UK: 26.6%; Canada: 18.4%; Others: 7.5%).

Measures

 Independent variables. We assessed participants' status and inclusion with two self-report scales, respectively containing eight items (α = .91) and nine items (α = .93) (Mahadevan et al., 2016; Mahadevan, Gregg, & Sedikides, 2017a). Both featured the same five response options (*strongly disagree*, *generally disagree*, *neither agree nor disagree*, *generally agree*, *strongly agree*), and subsequently scaled from -2 to +2. All items began with the same sentence stem ("Most of the time, I feel that people…") and ended with different sentence completions. Sample items: "…*see me as an important person*" (status); "…*see me as fitting in*" (inclusion).

 Dependent variables. We assessed participants' attitudes towards ideological opponents with two self-report scales, one enquiring into the intelligence of those opponents, and the other into their morality. As we expected ideological opponents to be derogated, we termed these indices *Derogation of Ideological Opponent Scales* (*DIOS*).

 To add concreteness to the measure, we first had participants indicate their *own* level of agreement or disagreement with 24 statements (Appendix B). These statements dealt with controversial and emotive topics, including economics ("Every worker should be legally guaranteed a minimum wage, whatever job they do"), morality ("It is healthy for people to have multiple sexual partners"), and religion ("God—an eternal and all-powerful being—exists"). Statements were balanced such that about half asserted a left-wing position, and about half a right-wing position. Participants responded by clicking one of seven radio buttons (*strongly disagree*, *generally disagree*, *somewhat disagree*, *neither agree nor disagree*, *somewhat agree*, *generally agree*, *strongly agree*). These responses were scaled from -3 to + 3.

 Thereafter, participants rated their attitudes towards their ideological opponents on *each* of the aforementioned 24 topics—in one block regarding their intelligence (α = .89), and in another block regarding their morality (α = .87). As a preamble, participants were

reminded that people differ in terms of how stupid or smart (bad or good) they are, making them more or less likely to hold particular opinions. Participants were then asked to imagine people who disagreed with them about each statement—in particular, people who held exactly the opposite of their own opinion, whatever their own opinion was. Afterwards, participants were instructed to estimate on average how stupid or smart these people were in terms of their mental ability, due to not being able, or being able, to understand the relevant issues. They were also instructed, separately, to estimate on average how bad or good these people were in terms of their moral character, due to their being bad people, or good people, in their approach to the relevant issues. In both blocks, participants were then prompted with the stem "I think the type of people who disagree with me, who think the exact opposite of what I do about this statement, are..." They responded by clicking one of seven radio buttons (*much stupider [worse] than average, generally stupider [worse] than average, somewhat stupider [worse] than average, neither much stupider [worse] nor much smarter [better] than average, somewhat smarter [better] than average, generally smarter [better] than average, much smarter [better] than average.*) These responses were scaled from -3 to + 3.

Results and Discussion

Independent Variables

Overall, participants regarded both status and inclusion as something that they possessed more than they lacked (i.e., their ratings thereof were significantly above the midpoint of the scale), respectively, ($M = +.17$, $SD = .77$), $t(719) = 6.10$, $p < .001$, $d = .23$, and ($M = +.59$, $SD = .72$), $t(719) = 21.84$, $p < .001$, $d = .81$, with the latter exceeding the former, $t(719) = 18.65$, $p < .001$, $d = .70$. In addition, the independent variables correlated substantially, $r(718) = .68$, $p < .001$.

Dependent Variables

Overall, participants regarded their ideological opponents as being below average both in intelligence (i.e., more stupid than smart), ($M = -.43$, $SD = .67$), $t(716) = -16.98$, $p < .001$, $d = .63$, and in morality (i.e., more bad than good), ($M = -.35$, $SD = .60$), $t(694) = -15.38$, $p < .001$, $d = .58$. That is, on both dimensions, participants derogated their ideological opponents (Figure 1). In addition, they denigrated their opponents' intelligence more than

their morality (i.e., regarded them as more stupid than bad), $t(688) = 4.31$, $p < .001$, $d = .16$.

Finally, the two dependent variables correlated substantially, $r(687) = .72$, $p < .001$.

Hypothesized Links

At the level of raw correlations, both independent variables covaried with both dependent variables. In particular, status covaried positively both with ratings of the intelligence of ideological opponents, $r(713) = .17$, $p < .001$, and with ratings of their morality, $r(691) = .17$, $p < .001$. So too did inclusion, $r(713) = .11$, $p = .002$, and $r(691) = .09$, $p = .023$. However, the correlation for status exceeded those for social inclusion, both for intelligence, $Z = 1.98$, $p = .047$, and for morality, $Z = 2.64$, $p = .008$.[4] Moreover, in simultaneous regressions—featuring as predictors status, inclusion, plus a term to represent their interaction (i.e., their centred cross-product)—only status remained predictive, both of the intelligence of ideological opponents, $\beta = .18$, $p < .001$ (other $ps > .70$) and of their morality, $\beta = .20$, $p < .001$ (other $ps > .20$).

Thus, the hypothesized link was present: status covaried positively with less derogation of ideological opponents. Furthermore, the hypothesized link exceeded in extent the comparison link with inclusion. Finally, the hypothesized link specifically persisted, essentially unchanged in magnitude, when put into competition with this comparison link, which became non-significant. Accordingly, the pattern of results was fully consistent with our linguistic hierometer hypothesis.

STUDY 2

In Study 1, we operationalized our variables as enduring traits and used a correlational design. We established the predicted link between status and more positive evaluations of ideological opponents. We also established that it was large compared to the parallel link featuring inclusion, and that it persisted specifically even when controlling for that link. Nonetheless, to substantiate our linguistic-hierometer hypothesis further, we implemented in Study 2 an experimental design, and operationalized our variables at the level of temporary states, so as to investigate the causality entailed by our hypothesis. In particular, we attempted a conceptual replication of Study 1 by manipulating levels of status and examining subsequent effects on evaluations of ideological opponents. To complement Study 1, we also

manipulated inclusion, orthogonally to status, as a comparative benchmark. We hypothesized that higher as opposed to lower status would lead respectively to lesser or greater derogation of ideological opponents, both absolutely, and relative to inclusion.

Method

Participants

Participants were 346 undergraduates at the University of Southampton. Twenty-five guessed the purpose of the study, and a further four encountered technical problems, leading to the exclusion of their data. The final sample therefore comprised 317 individuals (246 female, 71 male; $M_{age} = 19.55$, $SD_{age} = 2.83$). This N permitted us to detect a medium-sized between-group difference ($d = .50$) at a conventional alpha level ($\alpha = .05$) with a strong probability ($P > .87$).

Procedure

We advertised two separate studies, respectively entitled "Which Way is your Life Heading" and "Theories, Issues, and Evidence." In fact, both comprised a single study, respectively featuring the experimental manipulation and dependent measures.

On arriving at the laboratory, participants were given a carefully contrived cover story. They were informed that, in collaboration with a London-based company, the university was administering a highly accurate and reliable scientific test that assessed a person's overall potential to achieve status and inclusion in their lives (cf. Twenge, Baumeister, Tice, & Stucke, 2001). To enhance credibility, and ensure comprehension, participants read a fake journal article that described the test and its ability to predict overall people's potential to achieve status and inclusion in their lives, and then signed a fake declaration form agreeing for their data to be added to the company's database. Subsequently, participants were escorted to separate cubicles and completed the test over computer. The test given was high in verisimilitude, featuring both Intelligence Quotient-relevant (e.g., vocabulary tests) and Emotional Quotient-relevant items (e.g., emotion perception). After about 20 minutes, a small clock appeared on the screen, and participants waited 5 seconds while the computer ostensibly scored their results. They then received the randomly-generated feedback over computer. Thereafter, participants were directed to a "Finish" screen and informed the

experimenter that they had completed the first study. They proceeded to complete the second study, which contained the dependent measures, also over computer. A thorough suspicion check and debriefing concluded the experimental session.

Experimental Manipulations

Participants were randomly assigned to one of four conditions defined by a 2 (status: high, low) × 2 (inclusion: high, low) between-subjects design. Respective condition *ns* were: high status/high inclusion = 72; high status/low inclusion = 78; low status/high inclusion = 84; and high status/low inclusion = 83. We counterbalanced feedback order, but, as it did not interact with any effects, do not discuss it further.

In each condition, participants received a quantitative percentile score, a qualitative interpretation of this score, and a diagrammatic representation of these scores. (We had previously determined optimal quantitative percentile scores, in terms of credibility and motivation, in a pilot study.) Accordingly, we set scores for the high-status and high-inclusion conditions at the 90th percentile (plus-or-minus 1, to defuse suspicion), and scores for the low-status and low-inclusion conditions at the 35th percentile (again plus-or-minus 1). We accompanied these quantitative percentile scores with corresponding qualitative interpretations several paragraphs long, highlighting the key words and incorporating high-quality diagrams. To ensure comparability, we carefully matched all conditions in other respects—quantitatively, textually, and visually, and for content format, length, style, phrasing, and mode of delivery.

Dependent Measures

Ostensibly as part of a different study, participants completed the DIOS (intelligence: $\alpha = .86$; morality: $\alpha = .86$) as described in Study 1.[5]

Results

Manipulation Checks

The orthogonal manipulations worked. High-status participants ($M = +2.48$, $SD = 1.14$) believed their overall potential for status to be higher than low-status participants ($M = +.64$, $SD = 1.81$), $F(1, 314) = 114.34$, $p < .001$, $\eta_p^2 = .267$. Likewise, high-inclusion participants ($M = +2.59$, $SD = 1.22$) believed their overall potential for inclusion to be higher

than low-inclusion participants ($M = +.75$, $SD = 1.78$), $F(1, 314) = 114.72$, $p < .001$, η_p^2 $= .268$.[6]

Attitudes to Ideological Opponents

Replicating Study 1, participants regarded their ideological opponents as being below average both in intelligence ($M = -.58$, $SD = .61$), $t(315) = -17.05$, $p < .001$, $d = .96$, and in morality ($M = -.61$, $SD = .59$), $t(315) = -18.36$, $p < .001$, $d = 1.03$. However, unlike in Study 1, they did not significantly differ in how much they denigrated their opponents' intelligence and morality, $t(315) = 0.973$, $p = .331$, $d =.063$.

We conducted a pair of parallel 2 x 2 factorial ANOVAs to gauge the impact of our manipulations of status and inclusion on participants' evaluations of ideological opponents. Main effects emerged for status for both intelligence, $F(1, 312) = 5.52$, $p = .019$, $\eta_p^2 = .017$, and morality, $F(1, 312) = 5.05$, $p = .025$, $\eta_p^2 = .016$. Moreover, both were in the hypothesized direction. Specifically, participants denigrated the intelligence and morality of their ideological opponents less when their status was high (respectively: $M = -.66$, $SD = 0.62$; $M = -.68$, $SD = 0.59$) than when it was low (respectively: $M = -.50$, $SD = 0.65$; $M = -.53$, $SD = 0.58$). In contrast, no corresponding effects emerged for inclusion on intelligence, $F(1, 312) = 0.04$, $p = .834$, $\eta_p^2 = .000$, or morality, $F(1, 312) = 0.91$, $p = .342$, $\eta_p^2 = .003$. Finally, no other effect attained significance.

Discussion

The results of Study 2, featuring an experimental design, dovetailed with those of Study 1, featuring a correlational design. Status independently predicted less derogation of ideological opponents, whereas inclusion—a good comparative benchmark—independently predicted neither. Thus, our linguistic hierometer hypothesis was again supported. Moreover, the results of Study 2, in virtue of incorporating an experimental design, provided stronger evidence for the causality underlying our hypothesis.

STUDY 3

According to our linguistic hierometer hypothesis, higher status diminishes the derogation of ideological opponents by augmenting the proponent's rhetoric handling prowess. Hence, for the hypothesis to be tested fully, rhetoric handling prowess requires

operationalization. In the absence of any pre-existing operationalizations, we set about crafting our own measure.

Someone high in rhetoric handling prowess is liable to feel *comfortable* getting into arguments with ideological opponents, and *well able to deal with* them, sensing they can *hold their own* in the battle of wits; in contrast, someone who is low in rhetoric handling prowess is liable to be *fazed* or *upset* by the disagreements aired, and to have their *confidence shaken*, finding the experience to be a *big deal*. Equally, someone high in rhetoric handling prowess is liable to feel that they have *nothing to fear* from those who think the opposite of them, and is *unlikely to be intimidated* by them; in contrast, someone who is low in rhetoric handling prowess is liable to be *scared* of people who disagree with them, regarding them as *dangerous* individuals who are capable of *hurting* them.

Accordingly, we generated a set of items that tapped into respondents' dispositional tendencies to exhibit such self-possessed or fearful reactions to the prospect of argumentation with ideological opponents. In so doing, we sought to meet the qualitative criteria of face validity, expressive clarity, and a presumed relation with the proposed construct (Appendix C). From these items, we then sought to devise a self-report scale of sufficient psychometric soundness to capture adequately meaningful differences in rhetoric handling prowess: the *Rhetoric Handling Prowess Scale (RHaPS)*. To achieve this, we ran Study 3 where we did the following: analyzed the individual properties of the items; determined the factor structure underlying them; quantified the reliability of the scale featuring them; and established how scores on the scale covaried with scores on measures of related constructs in the nearby nomological net.

Method

Platform, Procedure, and Participants

The platform was identical to that used in Study 1. We created the platform's content, and administered the consent and debriefing, using *iSurvey*. We also crowdsourced participants (at $.25 apiece) via the leading platform *CrowdFlower*. We screened data using criteria comparable to those in Study 2 (Appendix A). Our final sample comprised 190 participants. This *N* permitted us to detect a medium-sized correlation ($r = .30$) at a

conventional alpha level ($\alpha = .05$) with a probability near unity ($P > .98$). The majority were female (65.3%), younger ($M_{AGE} = 34.9$; $SD_{AGE} = 12.8$), and Western (USA: 73.2%; UK: 6.3%; Canada: 11.1%; Others: 9.4%).

Measures

Rhetoric Handling Prowess Scale. We devised a preliminary pool of 20 items (Appendix C). Participants were informed that these items dealt with people they disagreed with and how they reacted to them. For each item, they were instructed to select the response that best described how they reacted in general. Participants responded by clicking one of five radio buttons (*strongly disagree*; *generally disagree*; *neither agree nor disagree*; *generally agree*; *strongly agree*), later scaled from 1 to 5.

Related scales. In addition, we administered in the same session three other well-validated scales, two assessing ostensibly related constructs. The first was the *Generalized Self-Efficacy Scale* (*GSES*; Schwarzer & Jerusalem, 1995), a 10-item measure ($\alpha = .89$) assessing the strength of an individual's belief in his or her own ability to respond to novel or difficult situations, and cope with any associated obstacles or setbacks. Participants responded by clicking one of four radio buttons (*not at all true*, *hardly true*, *moderately true*, *exactly true*), later scaled from 1 to 4. The second was the *Social Phobia Inventory* (*SPIN*; Conner et al., 2000), a 17-item measure ($\alpha = .95$) assessing the extent to which individuals exhibit symptomatology indicative of social anxiety disorder. Participants responded by clicking one of five radio buttons (*not at all*, *a little bit*, *somewhat*, *very much*, *extremely*), later scaled from 1 to 5. The third was the *Ten-Item Personality Inventory* (*TIPI*; Gosling, Rentfrow, & Swann, 2003), a brief measure of the Big Five personality characteristics (extraversion, stability, conscientiousness, agreeableness, and openness); we consider these background dispositional variables. Participants responded by clicking one of five radio buttons (*strongly disagree*; *generally disagree*; *neither agree nor disagree*; *generally agree*; *strongly agree*), later scaled from 1 to 5.

Results

Item Analysis

For items on the RHaPS, scaled 1 to 5, we adopted two relevant guidelines to ensure that they exhibited adequate discriminative power: (a) the standard deviation of their scores exceeded 1; and (b) the mean of their scores lay between 2 and 4 (Jarvis & Petty, 1996). Of the 20 items, all met both guidelines, save for two near misses (variances [18/20]: .94 to 1.30; means [20/20]: 2.22 to 3.85). We also adopted two further guidelines to ensure that items cohered sufficiently with the remainder of the scale: (a) their item-total correlations (ITC) exceeded .30 and (b) their average inter-item correlation (AIIC) exceeded .20. With the exception of one item, all items met both guidelines (ITC [19/20]: .24 to .77; AIIC [19/20]: .16 to .50). Thus, the initial pool of items generally exhibited desirable psychometric properties.

Factor Analysis

We subjected the 20 items to a principal axis factoring with direct oblimin rotation (in case of multiple factors, liable to be correlated, emerged). Three factors emerged with eigenvalues exceeding 1, accounting for 44.8%, 11.3%, and 6.69% of the variance respectively, and on which 10, 7, and 3 items respectively loaded, with coefficients ranging from .38 to .81. To simplify the factor structure, we eliminated the three items loading on the last factor, all of which were forward-scored. In addition, we eliminated three further items, all loading on the first factor. One was eliminated for not meeting the guidelines for ITC and AIIC noted above, and the remaining two (those with the lowest loadings on Factor 1) were eliminated to ensure that equal numbers of items remained that were both forward-scored and reversed-scores (to minimize acquiescence bias). A follow-up factor analysis of the same type on the restricted item set yielded two factors, accounting for 49.5% and 14.6% of the variance respectively, such that seven items loaded on each, with coefficients ranging from .62 to .96. We interpreted the factors, which correlated at $r = -.57$, as being as likely to reflect the directionality of the wording as much as differing underlying constructs. The forward-scored items, reversed-scored items, and all items combined, exhibited respectable internal consistencies (respectively, $\alpha = .92$, $\alpha = .88$, and $\alpha = .92$).

Convergent Validity

If the RHaPS assessed rhetoric handling prowess, then it should have correlated in the predicted direction with measures of similar constructs in the nearby nomological net. In particular, it should have correlated positively with the GSES, in virtue of reflecting personal confidence while arguing, and negatively with the SPIN, in virtue of reflecting an interpersonal fear of arguing. Both these correlations were obtained, respectively, $r(188) = .60$, $p < .001$, and $r(188) = -.60$, $p < .001$. Even when simultaneously controlling for all five generic personality variables as assessed by the TIPI, these specific convergent links persisted, respectively, $r(181) = .38$, $p < .001$, and $r(181) = -.37$, $p < .001$.

Accordingly, we considered ourselves to have developed a serviceable 14-item self-report measure of rhetoric handling prowess. Its items were all discriminative and coherent; its dual factor structure made interpretative sense; its overall reliability was high; and it exhibited strong initial convergent validity, including after controlling for background personality variables. On average, participants rated themselves above the mean scores of the scale ($M = 3.52$, $SD = 0.77$), $t(189) = 9.30$, $p < .001$, $d = .68$.

STUDY 4

Studies 1 and 2 both found—in correlational and experimental designs—respectively, that higher status predicted less derogation of ideological opponents. The linguistic hierometer hypothesis attributes this to higher status augmenting levels of rhetoric handling prowess—the construct for which we developed a measure in Study 3. Accordingly, one should expect—in a correlational design—measures of status, rhetoric handling prowess, and derogation of ideological opponents to be interrelated. In particular, status and rhetoric handling prowess should be positively related to one another, and both negatively related to the derogation of ideological opponents. Furthermore, one would expect rhetoric handling prowess to mediate the link between status and derogation of ideological opponents. In Study 4, we tested whether these patterns would obtain. Furthermore, given that neither Study 1 nor Study 2 found evidence that inclusion confounded status-related effects, we dropped it from consideration.

Method

Platform, Procedure, and Participants

The platform was identical to that used in Study 1 and Study 3 (payment: $1.00 apiece). We screened data similarly (Appendix A). Our final sample comprised 229 participants. This N permitted us to detect a medium-sized correlation ($r = .30$) at a conventional alpha level ($\alpha = .05$) with a probability near unity ($P > .99$). The majority were female (55.8%), younger ($M_{AGE} = 36.0$; $SD_{AGE} = 11.5$), and Western (USA: 61.1%; UK: 17.0%; Canada: 17.9%; Others: 4.0%).

Measures

Participants completed the status questionnaire ($\alpha = .90$), the RHaPS ($\alpha = .91$), and the DIOS (intelligence: $\alpha = .91$; morality: $\alpha = .92$).

Results

Replicating Studies 1 and 2, participants generally derogated their ideological opponents, rating them as both less intelligent ($M = -.26$, $SD = 0.81$), $t(228) = -4.83$, $p < .001$, $d = .34$, and less moral ($M = -.22$, $SD = 0.81$), $t(228) = -4.21$, $p < .001$, $d = .29$, than average. As in Study 2, these indices did not statistically differ, $t(228) = -1.07$, $p = .287$, $d = -.082$.

Correlational Analyses

Replicating Studies 1 and 2, higher status predicted less denigration of both the intelligence, $r(227) = .29$, $p < .001$, and morality, $r(227) = .26$, $p < .001$, of ideological opponents. In addition—and in line with the linguistic hierometer hypothesis—higher status predicted greater rhetoric handling prowess, $r(227) = .25$, $p < .001$. Finally, in line with that hypothesis, greater rhetoric handling prowess predicted less denigration of both the intelligence, $r(227) = .21$, $p = .001$, and morality, $r(227) = .17$, $p = .012$, of ideological opponents. Thus, the pattern of raw correlations was consistent with rhetoric handling prowess being the mechanism that links status to diminished derogation of ideological opponents.

Mediation Analyses

To test whether rhetoric handling prowess mediated the effect of status on the derogation of ideological opponents, in terms of the denigration of both their intelligence and morality, we created two models (Hayes & Preacher, 2013). In each, we entered scores on status as the predictor and scores on the RHaPS as mediator. In Model 1, we entered the

intelligence component of the DIOS as outcome (Figure 1), and in Model 2, the morality

component (Figure 2). We estimated indirect effects using 5,000 bias-corrected and

accelerated bootstraps (Hayes, 2009).

In Model 1, higher status predicted greater rhetoric handling prowess, $B = .25$, $SE =$

.07, $t(227) = 3.82$, $p < .001$. This, in turn, predicted less denigration of opponents'

intelligence, $B = .14$, $SE = .06$, $t(226) = 2.35$, $p = .012$. The (partial) direct path between

status and more favorable evaluations of opponents' intelligence was positive and significant,

$B = .24$, $SE = .06$, $t(226) = 3.85$, $p < .001$. Most importantly, the indirect (i.e., mediated) path

between these variables was also positive and significant, $B = .036$, $SE = .02$, 95% $CI =$

[.0050; .0923]. In Model 2, higher status again predicted greater rhetoric handling prowess, B

$= .25$, $SE = .07$, $t(227) = 3.82$, $p < .001$. This is in turn predicted diminished denigration of

opponents' morality, $B = .10$, $SE = .06$, $t(226) = 1.62$, $p = .107$. The (partial) direct path

between status and favorable evaluations of opponents' morality was again positive and

significant, $B = .23$, $SE = .06$, $t(226) = 3.61$, $p < .001$. Most importantly, however, the indirect

path between these variables was (marginally) significant, $B = .03$, $SE = .0.02$, 95% $CI = [-$

.0032; .0797]. Thus, the pattern of mediation obtained was broadly consistent with rhetoric

handling prowess being the mechanism that links status to less derogation of ideological

opponents.

Study 5

Study 4 established that operationalizations of our three key constructs, of a chronic

or dispositional sort, covaried in a manner predicted by the linguistic hierometer hypothesis,

thereby offering support for it. However, we had so far only provided, in Study 2, more

telling experimental evidence that one of these constructs, namely status, causally influenced

another, namely the ideological derogation of opponents, in the expected direction. Study 5

sought to supplement this finding. It did so by testing—again by using an experimental

manipulation—whether status also causally influenced rhetoric handling prowess in the

expected direction—that is, whether raising or lowering current levels of status also raised

and lowered state levels of rhetoric handling prowess. The study being conducted online, we

employed an alternative manipulation of status, in which participants brought to mind ways in which their status was either higher or lower.

Method

As in previous online studies, we created content using *iSurvey*, crowdsourced participants (at $0.40 apiece) via *Crowdflower^{TM}*, and screened data (Appendix A). Our final sample comprised 201 participants. This N permitted us to detect a medium-sized between-group difference ($d = .50$) at a conventional alpha level ($\alpha = .05$) with a strong probability ($P > .94$). The majority were female (55.8%), mature adults ($M_{AGE} = 39.1$; $SD_{AGE} = 13.0$), and Western (USA: 60.7%; UK: 17.9%; Canada: 16.9%; Others: 4.5%).

Manipulation of Status

We randomly assigned participants either to a high status ($n = 96$) or low status ($n = 105$) condition. We did so by inviting them to recall respectively an aspect of their lives—an event, occasion, or setting—where they felt to have been either (a) particularly respected, much admired, and considered important by others (high status), or (b) *not* particularly respected, *not* much admired, and *not* considered important by others (low status). Participants then listed three keywords to describe this aspect of their lives. On the next screen, they then wrote about it in greater detail for at least two minutes.

Manipulation Check

To assess the efficacy of status manipulation, we used five of the eight items from our status measure ($\alpha = .89$). We excluded three that directly referred to feeling respected, admired, and important, to lessen the possibility that demand characteristics alone would induce participants—who would likely have noticed the obvious lexical correspondence—to report that the manipulation had worked.

Rhetoric Handling Prowess Scale

Participants completed a 14-item modified version of RHaPS ($\alpha = .94$). We optimized it to reflect better the state nature of this variable. The scale began with the general stem, "Right now, if someone would disagree with me, I would feel…". Each item completed this general stem with a specific phrase taken from each item constituting the trait version of the

RHaPS (e.g., "…that I can hold my own", "…that they might damage me"). We used identical response options.

Results and Discussion

Manipulation Check

The status manipulation was successful, $t(199) = 6.59$, $p < .001$, $d = .93$. Participants in the high status condition ($M = 3.69$, $SD = 0.66$) rated their status higher than those in the low status condition ($M = 2.95$, $SD = 0.91$).

Rhetoric Handling Prowess

The status manipulation led to the predicted changes in rhetoric handling prowess, $t(199) = 2.29$, $p = .023$, $d = .33$. Participants in the high status condition reported greater rhetoric handling prowess ($M = 3.89$, $SD = 0.74$) than those in the low status condition did ($M = 3.64$, $SD = 0.79$). Accordingly, we obtained more telling evidence of a causal link, strengthening the evidence for the linguistic hierometer hypothesis.

STUDY 6

Study 2 found a causal link between (higher) status and (reduced) opponent derogation. Study 5 found a causal link between (higher) status and (increased) rhetoric handling prowess. The purpose of Study 6 was to test for a causal link between (increased) rhetoric handling prowess and (decreased) opponent derogation.

Method

As before, we created content using *iSurvey*, crowdsourced participants (at $0.20 apiece) via *Crowdflower*^{TM}, and screened data (Appendix A). Our final sample comprised 160 participants. This N permitted us to detect a medium-sized between-group difference ($d = .50$) at a conventional alpha level ($\alpha = .05$) with a strong probability ($P > .88$). The majority were female (59.7%), mature adults ($M_{AGE} = 42.4$; $SD_{AGE} = 13.3$), and Western (USA: 59.4%; UK: 18.8%; Canada: 15.6%; Others: 6.2%).

Manipulation of Rhetoric Handling Prowess

We randomly assigned participants to conditions where rhetoric handling prowess was made either high ($n = 83$) or low ($n = 77$). We did so by inviting them to think of three people with whom they disagreed (whose initials they indicated) and with whom they may

have had, or were likely to have, a social interaction. In the high rhetoric handling prowess condition, the interaction was described as one where participants took the conversation in their stride, stayed calm, kept their composure, and felt secure. In the low rhetoric handling prowess condition, the interaction was described as one where participants felt frightened and apprehensive, or got rattled and bullied, during the course of the conversation. On the next screen, they then wrote about the interaction in greater detail for at least two minutes.

Manipulation Check

To assess the efficacy of our manipulation of rhetoric handling prowess, we used the modified version of the RHaPs featured in Study 5. The terms used in the manipulation, although they conceptually mapped on to rhetoric handling prowess, did not use any of the words in the RHaPS itself. As in Study 5, this lessened the possibility that demand characteristics alone would induce participants to report that the manipulation had worked.

Derogation of Ideological Opponent Scales

Participants completed the DIOS (intelligence: $\alpha = .94$; morality: $\alpha = .94$) as described in Study 1.

<div align="center">Results and Discussion</div>

Manipulation Check

The manipulation of rhetoric handling prowess ($\alpha = .93$) was successful, $t(158) = 4.81$, $p = .001$, $d = .77$. Participants in the high rhetoric handling prowess condition ($M = 3.62$, $SD = 0.82$) evinced higher RHaPS scores than those in the low rhetoric handling prowess condition ($M = 2.98$, $SD = 0.86$).

Derogation of Ideological Opponents

Replicating previous studies, participants generally derogated their ideological opponents, rating them as both less intelligent ($M = -.34$, $SD = 1.02$), $t(159) = -4.26$, $p < .001$, $d = .34$, and less moral ($M = -.32$, $SD = 0.96$), $t(159) = -4.22$, $p < .001$, $d = .33$, than average. Moreover, these indices did not statistically differ, $t(159) = -0.49$, $p = .627$, $d = -.04$.

Contrary to prediction, however, the manipulation of rhetoric handling prowess had no significant effect on the degree to which participants denigrated their ideological opponents, either in terms of their intelligence, $t(158) = .26$, $p = .798$, $d = .02$, or their

morality, $t(158) = .40$, $p = .689$, $d = .03$. Accordingly, we did not obtain experimental evidence of a causal link between rhetoric handling power and opponent derogation. Nonetheless, rhetoric handling prowess, as captured in the manipulation check, covaried positively (albeit directionally) with evaluations of opponents' intelligence, $r(158) = .13$, $p = .11$, and positively (plus significantly) with evaluations of opponents' morality, $r(158) = .19$, $p = .018$.

GENERAL DISCUSSION

Summary of Findings

People hold those with whom they disagree on important topics in lower regard than those with whom they agree (Garcia et al., 2015; Grossmann & Hopkins, 2015). This is but one example of how dissimilarities can drive an interpersonal wedge between people (Montoya & Horton, 2013). Here, we asked the question of how social status—the extent to which people are respected, admired, and considered important by others (Anderson et al., 2015)—moderates this consequential effect. We derived a directional hypothesis from an extension of hierometer theory. In its original form, hierometer theory posits that, via the psychological mediation of self-esteem, higher status makes people feel more capable of entering into competitive contests over scarce resources, whereas lower status makes them feel less capable of doing so. Such a dynamic arguably serves an evolutionarily adaptive function, given that people with higher status will typically have at their disposal both interpersonal and material wherewithal that people with lower status will lack, likely to increase their chances of winning competitive contests (Mahadevan et al., 2016). As a consequence, higher status should lead people to construe opponents as more defeatable and hence less fearsome, which all else equal should translate into a less negative attitude towards them. However, among articulate human mammals, competitive contests take linguistic as well as physical form (Gregg et al., 2017). This is shown, among other things, by the aggressive metaphorical vocabulary used to describe argumentation (Abelson, 1986). But if so, then higher status should also lead people to regard ideological opponents as less fearsome, which should all else equal reduce the extent to which they derogate them.

The results were informative. First, every time we tested for it (Studies 1, 2, 4, and 6), we found, as might be expected, that people on the whole derogated their ideological opponents—evaluating them as being both less intelligent and less moral than average. Second, and again every time we tested for it, we found that status moderated this link in the hypothesized direction. In particular, higher status entailed reduced opponent derogation, both correlationally (Studies 1 and 4) and experimentally (Study 2). Furthermore, we obtained evidence that this link was not due to inclusion—another key social variable with which status covaries. Thus, our primary prediction was confirmed.

But not only did we propose that high status would reduce opponent derogation, we also proposed why. On the basis of an extension of hierometer theory (Mahadevan et al., 2016), we predicted that higher status would increase rhetoric handling prowess—feeling more confident and less intimidated while arguing—which would in turn reduce opponent derogation. We accordingly developed and validated a scale to assess rhetoric handling prowess (Study 3). Scores on this scale statistically mediated the predicted link between status and opponent derogation (albeit marginally for evaluations of morality; Study 4). Also, experimentally raising and lowering perceived status (via a recall-based manipulation) raised and lowered rhetoric handling prowess in the predicted direction (Study 5). However, experimentally raising and lowering perceived rhetoric handling prowess (using a similar type of manipulation) did not raise and lower opponent derogation (Study 6), although levels of measured rhetoric handling prowess (assessed via a manipulation check) did show links to opponent derogation in the predicted direction. Our findings, then, were substantially, but not entirely, in accord with predictions.

Our findings add to the literature that seeks to weigh whether higher status, and related constructs such as power, is a source of prosocial or antisocial behavior more generally (Anicich et al., 2016; Fast et al., 2016). Matters can get complicated. For example, Hays and Blader (2017) found that higher status promoted generosity, but only when it was perceived as illegitimate; in contrast, when status was perceived as legitimate, it attenuated generosity. In the first case, the authors argued, participants sought to restore equality, but in the latter case, were convinced of their superior value. But possibly most pertinent here is the

research of Henry (2009). His primary contention is that people on the bottom of the social ladder are in socially precarious position, forever fearing they may fall off the bottom rung. Accordingly, they are especially vigilant to social threats, and are more prone to react to them with violence. Moreover, echoing hierometer theory, Henry posits a role for self-esteem as psychological mediator. In keeping with his thesis, greater levels of disparity in socioeconomic status—which correlate with self-reported levels of status (Mahadevan, Gregg, & Sedikides, 2017b)—predict more violent crime, both within the US, and across the world, even controlling for average levels of affluence. Even more tellingly, when people in a laboratory experiment were asked to recall a situation where "something happened that made you to feel really important and valuable," the pre-existing link between socioeconomic status, and proneness to respond aggressively to insults, disappeared. Bolstering a sense of status and self-worth made participants better disposed towards other people whose words disturbed them, and not merely in terms of how they judged others, but also in terms of how they were prepared to behave towards them.

Theoretical and Empirical Connections

We derived our hypothesis explicitly from an extension of hierometer theory. However, it is possible to discern, in the nearby nomological net, theories and findings that resonate with our own, insofar as they also deal with one or another of the three key elements of our investigation: the threat posed by ideological opponents, the vulnerability conferred by lower status, or the mediating role played by self-conception. We focus here on just two: *terror management theory* and *intergroup theories*. Reflecting on these resonances helps to contextualize our finding, and suggests fruitful avenues for research.

Terror Management Theory. Terror management theory (TMT: Greenberg, Pyszczynski, & Solomon, 1986; Pyszczynski, Solomon, & Greenberg, 2015) starts from the premise that the cognitive capacities that facilitate humans' unique ability to understand and master the world nonetheless have a chilling downside: they also make them aware of their inevitable death and imply that their life lacks meaning. This invites the perpetual possibility of experiencing a paralyzing fear that is less than adaptive. To allay it durably, TMT claims humans cleave to cultural worldviews that promise literal or symbolic immortality, if only

they successfully meet the standards of value that those worldviews prescribe, whereupon their self-esteem and sense of meaning are restored. Empirical evidence for TMT derives, in part, from the fact that making thoughts of mortality salient prompts defence of various aspects of this cultural anxiety buffer (Burke, Martens, & Faucher, 2010), and conversely that threats to this cultural anxiety buffer make thoughts of mortality more mentally accessible (Hayes, Schimel, Arndt, & Faucher, 2010).

TMT potentially enriches the current findings and explanation by specifying a further reason for why ideological opponents might evoke resentment, and for why higher status might alleviate it. First, those who credibly rebut one's attitudes on important issues may, in so doing, be challenging the overall soundness of worldviews crucial for existential security, which are precariously premised on the truth of particular attitudinal positions. If so, then decisive arguments against those attitudes become, in effect, existential threats, and those who wield them, mortal enemies. Accordingly, Greenberg, Pyszczynski, Veeder, Kirkland, and Solomon (1990, Studies 2 and 3) found that making mortality salient exacerbated participants' differential fondness for targets who shared an array of attitudes over those who did not, as well as for targets who praised their home nation over those who criticized it. Second, to the extent that people achieve status, they by definition evoke the admiration and respect of others, and are regarded as important (Anderson et al., 2015). However, the most reliable way to evoke these reactions is actually to produce goods and services, of either a material or social sort, which are themselves considered important (e.g., high-quality merchandise, competent group leadership). But this necessarily entails meeting standards of value prescribed by widely shared cultural worldviews. Hence, being considered important by many people facilitates the inference that one's own life's matters too. One's self-esteem—a known tracker of status (Mahadevan et al., 2016) and soother of anxiety (Greenberg et al., 1992; Routledge et al., 2010)—rises, thereby dampening the impact of mortality salience. Accordingly, Harmon-Jones et al. (1997, Study 2) found that participants' differential fondness for those who praised their home nation over those who criticized it was once again exacerbated by mortality salience, except among those whose self-esteem was dispositionally high rather than moderate, shielding them from existential threat. The impact

of ideological disagreement goes beyond mere derogation. For example, McGregor et al. (1998, Study 1) found that participants allocated greater quantities of tongue-stringing hot sauce to (fictitious) targets with an alleged aversion to spicy food, if they were led to believe that those targets had disparaged political views that they endorsed rather than opposed, but, again, only after (existentially threatening) thoughts of mortality had first been made salient. Future research attempting to coordinate hierometer theory and TMT could profitably explore the impact of manipulations of status (see Studies 2 and 5) on the accessibility of thoughts of mortality, as well as the impact of mortality salience on levels of compensatory status aspiration.

Intergroup Theories. The present research addressed derogation of ideological opponents, albeit within an individualistic framework. Similar dynamics, however, might be observed at an intergroup level. In support of this assertion, some of the TMT findings reported above—involving praise and criticism of their home nation—held only for participants who identified with their nation (Hohman & Hogg, 2015). More generally, under the rubric of *social identity theory* (Tajfel & Turner, 1979; Abrams & Hogg, 2010), it is well established that perceptions of outgroup threat—including those of a purely symbolic sort, reflecting antithetical values rather than economic competition (Kinder & Sears, 1981)—are keys predictors of outgroup derogation (Riek, Mania, & Gaertner, 2006). In addition, self-reports of greater socioeconomic fear predict increased derogation of an immigrant outgroup (Van Prooijen, Krouwel, Boiten, & Eendebak, 2015). Finally, some findings also suggest that constructs related to higher status may sometimes predict less outgroup derogation. For example, Bahns and Crandall (2013) found that straight people, who were higher as opposed to lower in social dominance orientation, showed *greater* tolerance for gay people, as long as gay people were portrayed as posing little threat. That said, overall high status groups probably show more pronounced outgroup discrimination (Bettencourt Dorr, Charton, & Hume, 2001). It remains to be seen whether collective ingroup status per se, measured or manipulated, is associated with greater or less derogation of outgroups, where the criterion for differentiation is ideological in nature. For example, if Whites and Blacks were led to believe that Blacks had recently been accorded in society greater respect, admiration, and

importance relative to Whites, a researcher would predict, by extrapolation from our own findings, that this belief would exacerbate any outgroup derogation of Blacks by Whites, but attenuate any outgroup derogation of Whites by Blacks. One would expect such effects to be mediated, moreover, by collective esteem (Branscombe & Wann, 1994).

Conclusion

The saying goes that "sticks and stones may break my bones, but names will never hurt me." However, human beings are unique in the sense that mere words have the capacity to wound them—and not merely when those words convey insulting slurs, but simply when they convey credible propositions that cast doubt upon cherished beliefs. When this happens, there is a temptation to blame the messenger; hence, ideological opponents are derogated. However, when people are generally esteemed by others in a particular way—when they are respected, admired, and considered important—such derogation abates. That is, higher status makes people less derogating towards those who contradict them on important topics. Furthermore, they are some signs that this is so, because high status makes people feel they are more capable of dealing with the fallout of disagreement. That is, higher status permits people to, metaphorically speaking, "take the high ground"—a secure vantage point from which rhetorical threats are easier to survey and parry.

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Footnotes

[1] A brief word here is in order on two other factors that contribute to social stratification. These are *social power*—which may be defined as one's capacity to asymmetrically control other people's outcomes (Galinsky, Rucker, & Magee, 2015)—and *social class*—which may be defined as one's semi-permanent economic, occupational, or cultural position relative to other people (Kraus & Stephens, 2012). Both are conceptually differentiable from one another and from status, while also being naturally intercorrelated with it and reciprocally influential (Fiske, Dupree, Nicolas, & Swencionis, 2016; Kraus, Piff, & Keltner, 2010; Magee & Galinsky, 2008; Ridgeway, 2014). Note that here, the capacity to call upon fans might be considered an addition to one's social power, and resources earned from those fans might be considered a contribution to one's social class. Whether and to what extent these elements mediate the effects of status prescribed by hierometer theory is a fertile subject for future research.

[2] *Dominance theory* (Barkow, 1980), although it posits that prestige-based status (which it confusingly refers to as "dominance," thereby confounding social and behavioral levels of analysis [Gregg, Mahadevan, & Sedikides, 2016], and muddying the distinction between dominance and prestige hierarchies [De Waal-Andrews, Gregg, & Lammers, 2015]) is an antecedent of self-esteem, does not explicitly posit that it operates to regulate entry into competitive contests with conspecifics. If anything, it suggests that self-esteem operates to regulate such contest-entry homeostatically, such that people with lower status, and hence self-esteem, should be more (not less) likely to enter into such contests, so as to gain status.

[3] Our measures were administered as part of larger investigation of intellectual humility. A full list of measures is available from the authors

[4] We used Hoerger's (2013) slightly optimized variant of the test for the difference between dependent correlations, pioneered by Steiger (1980).

[5] The DIOS was a one of several measures administered as part of larger investigation of intellectual humility.

[6] Low-status participants rated their potential for inclusion higher (M = +1.86, SD = 1.82) did high-status participants (M = +1.43, SD = 1.93), F(1, 314) = 4.61, p = .033, ηp2 = .014, Also, low-inclusion participants rated their potential for status (M = +1.68, SD = 1.57) marginally higher than high-inclusion participants (M = +1.35, SD = 1.97), F(1, 314) = 2.70, p = .101, ηp2 = .009. However, this reverse cross-over effect was comparatively minor, relative to the primary impact of the manipulations on their corresponding manipulation checks (i.e., effect sizes were an order of magnitude smaller).

Figure 1

Study 1: Frequency distributions representing participants' evaluation of the intelligence and

the morality of their ideological opponents relative to the average person.

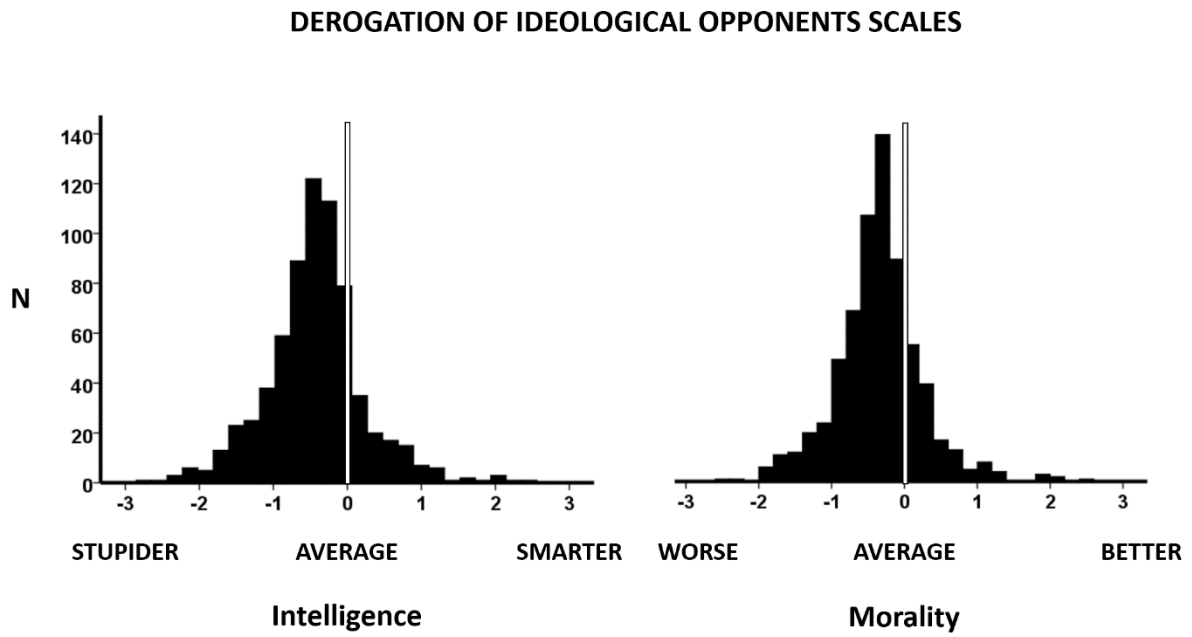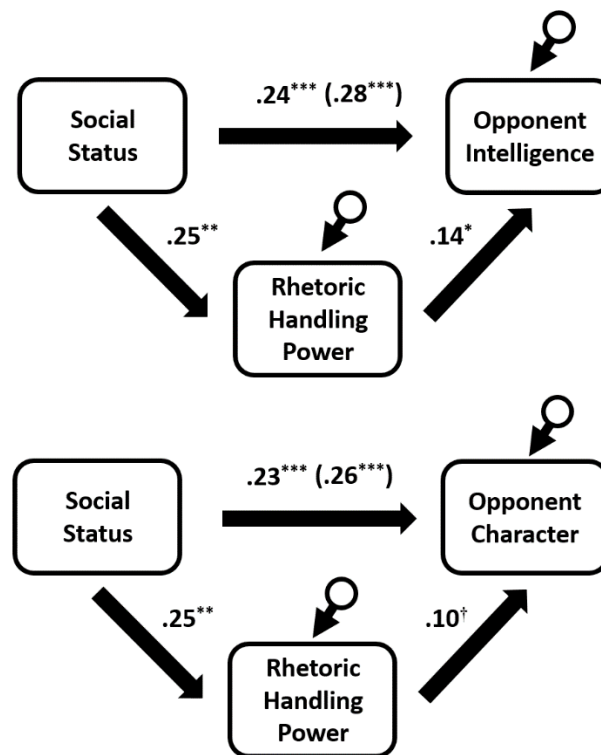**DEROGATION OF IDEOLOGICAL OPPONENTS SCALES**

Figure 2

Study 4: The role of rhetoric handling prowess in mediating the link between social status and ratings of opponents' intelligence and morality

Note. In all models, effects were estimated using 5000 bias-corrected and accelerated bootstraps with standardized (z) scores of the variables (Efron, 1987). Values in the models represent beta coefficients. Values within parentheses represent the strength of the association between the predictor variable and outcome variable before the mediator was included in the model, whereas values outside parentheses represent the strength of the association when the mediator was included in the model. Social status was entered as an exogenous variable. Security with disagreement and attitudes to opponents were entered as endogenous variables and are indicated with error terms. Goodness of fit indices are inapplicable because the models are saturated models with zero degrees of freedom (Kline, 2005, p. 133).

$^\dagger p < .10$; $^* p < .05$; $^{**} p < .01$; $^{***} p < .001$.

Appendix A

Further Information about Online Screening of Data from Studies 1, 3, 4, 5, and 6.

		Authentic Cases	Skipped Content	Participated Repeatedly	Finished Hastily	Responded Mindlessly	Met Other Criteria	Final Sample
				Exclusion Criteria				
Study 1*								
	N	1577	37	564	66	418	39	722
	%	100%	2.4%	35.8%	4.2%	26.5%	2.5%	45.8%
Study 3								
	N	214	7	8	1	12	0	190
	%	100%	3.3%	3.7%	0.5%	5.6%	0.0%	88.8%
Study 4								
	N	316	8	47	37	19	0	229
	%	100%	2.5%	14.9%	11.7%	6.0%	0.0%	72.5%
Study 5								
	N	253	1	27	19	7	0	201
	%	100%	0.4%	10.7%	7.5%	2.8%	0.0%	79.5%
Study 6								
	N	199	4	0	3	34	0	160
	%	100%	2.0%	0.0%	1.5%	17.1%	0.0%	80.4%

Note. Authentic cases were defined as those in which participants completed at least half of all items (to rule out completions reflecting curiosity or reconnaissance). All other figures are computed from this baseline. Participants were defined as having *skipped content* if they completed fewer than 90% of items on a survey (95% in Study 1); as having *participated repeatedly* if another case shared the same IP address; as having *finished hastily* if they completed the survey in less than a third of the median time taken (half in Study 1) for that survey overall; as having *responded mindlessly* if they identically answered all items on any questionnaire long enough to expect some variance; as having *met other criteria* if they exhibited an assortment of other problems, including participants reporting being under the age of 18 or being poor at English, or data qualifying as a multivariate outlier based on

extreme Mahalanobis distance ($\alpha < .001$). Note that participants could be excluded on multiple grounds, so that additivity is not to be expected.

Appendix A (cont.)

Further Information about Online Screening of Data from Studies 1, 3, 4, 5, and 6.

* Legal requirements imposed by the University of Southampton required that Study 1 be run on CrowdFlower in multiple stages, thereby permitting the same participants to complete it more than once in principle; however, the number that then did so in practice greatly exceeded expectations (i.e., the CrowdFlower sampling pool was not as large as expected), thereby inflating levels repeated participation and mindless responding. Nonetheless, the final carefully screened dataset yielded findings amply testifying to its quality (e.g., high Cronbach's alphas, the replication of well-known correlations on other questionnaires administered).

Appendix B

List of 24 Statements used in the Derogation of Ideological Opponents Scale

1. Every worker should be legally guaranteed a minimum wage, whatever job they do.

2. Ordinary civilians should be legally permitted to own a standard firearm for personal use.

3. People in wealthy countries should seek to reduce the amount of energy that they consume.

4. The institution of marriage is meant for one man and one woman.

5. Abortion should be legally permitted under most or all circumstances.

6. "Hard" drugs like heroin and cocaine, which are addictive and harmful, should be prohibited by law.

7. The richest 10% should be taxed more heavily to help the poorest 10%.

8. People have a moral duty to obey the law.

9. On average, women's pay should be the same as men's pay.

10. God—an eternal and all-powerful being—exists.

11. It is healthy for people to have multiple sexual partners.

12. The death penalty should be given for extremely serious crimes like mass murder.

13. Islam is fundamentally a religion of peace.

14. Medical research should include some experimentation on animals.

15. The government should ban the selling of high-calorie drinks in large containers.

16. It should be against the law for doctors to assist their patients in committing suicide.

17. Prostitution should be legal: people should be permitted to buy and sell sexual services.

18. Western powers (like the USA) are right to use drone strikes (attacks involving pilotless planes).

19. When the economy is in a slump, the government should spend money to get it going.

20. Darwin's theory—of evolution through natural selection—is just an unproven speculation.

21. Criminal suspects should never be tortured under any circumstances.

22. National security agencies should be permitted to monitor private messages over the Internet.

23. The bargaining power of labor unions should be expanded.

24. Powerful Western nations (like the USA. should intervene abroad to fight injustice and spread democracy.

Appendix C

The Rhetoric handling prowess Scale (RHaPS)

Retained Items (Factor 1: positively phrased)

1. I am never intimidated by people who disagree with me.

2. I have nothing to fear from people who think the opposite of me.

3. I am well able to deal with people who disagree with me.

4. I am comfortable getting into arguments with people who think the opposite of me.

5. In debates with people who contradict my view of the world I can hold my own.

6. If I need to argue with people who disagree with me it doesn't faze me.

7. Having difficult conversations with people who think the opposite of me is no big deal.

Retained Items (Factor 2: negatively phrased)

8. People who contradict my view of the world sometimes scare me.

9. I am quite rightly afraid of some people who disagree with me.

10. Now and again, I wonder whether people who think the opposite of me might do me damage.

11. People who contradict my view of the world sometimes strike me as capable of hurting me.

12. I regard people who disagree with me as potentially dangerous individuals.

13. People who disagree with me often really upset me during the conversations we have.

14. Sometimes my confidence is shaken by people who contradict my view of the world.

Appendix C (cont.)

The Rhetoric handling prowess Scale (RHaPS)

Discarded Items

15. People who contradict my view of the world do not pose any threat to me.

16. People who disagree with me are not in any position to harm me.

17. I never regard people who think the opposite of me as a personal menace.

18. I find it challenging to argue with people who contradict my view of the world.

19. I just don't know how to handle people who think the opposite of me.

20. I need to prepare carefully before I talk to people who disagree with me.

Appendix D

Wording and Diagrams Used in Study 2
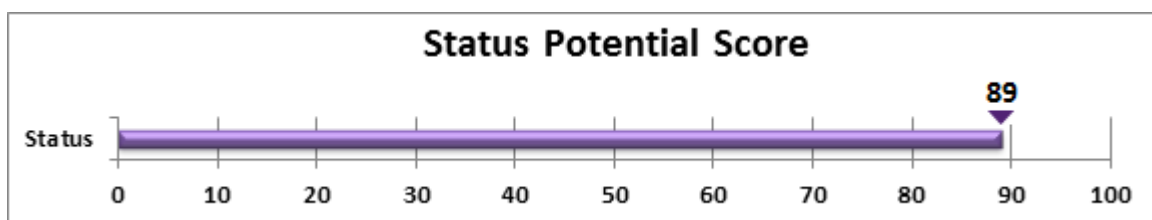
High Status Feedback

The SVI measures *overall potential for status*. This extends to **all social situations**, both **professional and non-professional**.

Here, you scored **significantly above average**—in the **89th percentile**—on status-relevant traits and behaviours, compared to a national sample of young adults. This means that your *long-term potential for status* is **very high**—among the **top 11%** of the population.

People who score in this range typically find it *easy* to accomplish their occupational and financial goals, and commonly become *very successful*, especially later in life. Long-term, you will probably have one or more *prestigious, fulfilling careers*, and you have a significantly higher than average chance of becoming *wealthy*: scorers in this range usually end up in the *top income earners* in the population, and will achieve *complete economic security*.

Even if you have not done well in your life so far, as time passes this will change, and you are liable to become more and more successful. Your test results show that you are *more intellectually versatile* than most of your peers, and given the right opportunity, can be a leader. You will likely be effective and efficient at achieving your goals.

Across your life as a whole, you will also enjoy a high social standing. Prospective friends, romantic partners, colleagues, bosses, and even casual acquaintances will *respect you*, *value your opinions and ideas*, and see you as *competent and accomplished*. Statistically, you are much *more likely* than your peers to *impress others*, get recognition, and stand out as important. People will tend to *admire you*, and think highly of your abilities and talents.

Appendix D (cont.)

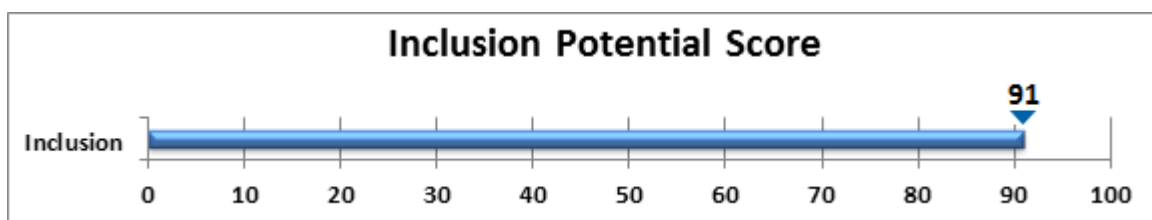Wording and Diagrams Used in Study 2

High Inclusion Feedback

The SVI measures *overall potential for inclusion*. This extends to **all social situations,** both **professional and non-professional**.

Here, you scored **significantly above average**—in the **91st percentile**—on inclusion-relevant traits and behaviours, compared to a national sample of young adults. This means that your *long-term potential for inclusion* is **very high**—among the **top 9%** of the population.

People who score in this range typically find it *easy* to form and maintain relationships, and are commonly in *close contact* with many people, especially later in life. Long-term, you will probably go on to have *many close and fulfilling relationships*, and you have a significantly higher than average chance of *fitting in socially*: scorers in this range are several times more likely to end up *belonging to social groups* than the rest of the population.

Even if you have not had many good relationships in your life so far, as time passes this will change, and you will find yourself becoming more and more included in social life. Your test results show that you are *more sympathetic* than most of your peers, and liable to be accepted. You will likely be able to relate well to other people, and to be good at understanding them.

Across your life as a whole, you will fit well into almost every group you join. Prospective friends, romantic partners, colleagues, bosses, and even casual acquaintances will *enjoy your company*, *feel warmly* towards you, and perceive you as *friendly and approachable*. Statistically, you are much *more likely* than your peers to be *liked*, to feel you belong, and to come across as one of the group. People will tend to be *fond of you*, and add you to their social circle.

Appendix D (cont.)

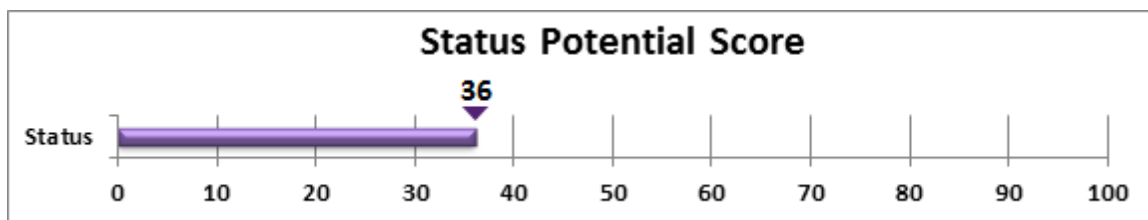Wording and Diagrams Used in Study 2

Low Status Feedback

The SVI measures *overall potential for status*. This extends to **all social situations**, both **professional and non-professional**.

Here, you scored **significantly below average**—in the **36th percentile**—on status-relevant traits and behaviours, compared to a national sample of young adults. This means that your *long-term potential for status* is **quite low**—among the **bottom 36%** of the population.

People who score in this range typically find it a *challenge* to accomplish their occupational and financial goals, and commonly encounter *failure*, especially later in life. Long-term, you will probably *struggle to build a prestigious, fulfilling career*, and you have a significantly higher than average chance of facing *financial difficulties*: scorers in this range often end up among the bottom income earners in the population, and the majority will require social assistance (e.g., from the government) at some point.

Even if you have done well in your life so far, as time passes this will change, and you are liable to find it harder and harder to succeed. Your test results show that you are less intellectually gifted than most of your peers, and show little leadership potential. Trying to achieve your goals may cause you significant frustration.

Across your life as a whole, you will also tend to have a low social standing. Prospective friends, romantic partners, colleagues, bosses, and even casual acquaintances will *tend not to respect you*, may *discount* your opinions and ideas, or even see you as *foolish or inept*. Statistically, you are *less likely* than your peers to impress others, get recognition, and stand out as important. People will tend to overlook you, and question your abilities and talents.

Appendix D (cont.)

Wording and Diagrams Used in Study 2

Low Inclusion Feedback

The SVI measures *overall potential for inclusion*. This extends to **all social situations,** both **professional and non-professional**.

Here, you scored **significantly below average**—in the **34th percentile**—on inclusion-relevant traits and behaviours, compared to a national sample of young adults. This means that your *long-term potential for inclusion* is **quite low**—among the **bottom 34%** of the population.

People who score in this range typically find it a *challenge* to form and maintain relationships, and commonly find themselves *isolated,* especially later in life. Long-term, you will very probably *struggle to build many close or fulfilling relationships*, and you have a significantly higher than average chance of being *socially impaired*: scorers in this range are several times more likely to end up excluded from social groups than the rest of the population.

Even if you have had good relationships in your life so far, as time passes this will change, and you will find yourself becoming more and more excluded from social life. Your test results show that you are less sympathetic than most of your peers, and in danger of rejection. You will likely have difficulty relating to other people, and be poor at understanding them.

Across your life as a whole, you will tend to be an outsider even in the groups you join. Prospective friends, romantic partners, colleagues, bosses, and even casual acquaintances will tend to *avoid your company*, be *suspicious* of you, and perceive you as *unfriendly and cold*. Statistically, you are *less likely* than your peers to be liked, to feel you belong, and to come across as one of the group. People will often take a negative view of you, and keep you at arms' length.