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Rising Stars and Sinking Ships: Consequences of Status Momentum

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We thank Joe Magee, Evan Polman, and Yuval Rottenstreich for helpful comments on a prior version of this manuscript.

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Abstract

Differences in rank are a ubiquitous feature of social life. Moving beyond the traditional static view of social hierarchy, five studies spanning multiple contexts examine how inter-temporal changes in rank influence people's status judgments. When final rank is held constant, people, products, and institutions are judged as higher-status when this position is preceded by an ascent rather than descent in the hierarchy; and, these judgments impact downstream pricing recommendations, willingness-to-pay for products, and influence accepted from others. This impact of rank history on our current status judgments is accounted for by expectations of future status, and moderated by the involvement of the *self*: self and others are afforded an equivalent status boost for ascending to a given rank, however only the self is pardoned the status tax that is levied on others for descending to this rank. The theoretical utility of a dynamic approach to social hierarchy is discussed.

Keywords: Status change, Status judgments, Social hierarchy, Rankings

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Systems of rank pervade our social landscape. Publications ranging from *US News & World Report's* university rankings and *ESPN's* football "Power Rankings," to *Forbes'* listing of wealthiest people, pander to our inherent desire to organize our environment from best to worst or most to least. Constructing and accurately perceiving such rank differences is fundamental to human nature (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Barkow, 1975).

This compulsion to know "where things stand" is, however, not satiated in a single sitting, but is instead updated and vigilantly monitored (e.g., annual university rankings, weekly athletic rankings). Implicit in peoples' continuous attention is that rankings can and do change (Pettit, Yong, & Spataro, 2010; Sivanathan, Pillutla, & Murnighan, 2008).

Despite multidisciplinary interest in social hierarchy, and an emergent understanding that jockeying occurs within (Bendersky & Hays, 2012; Porath, Overbeck, & Pearson, 2008), a consideration of rank *change* is conspicuously absent. We therefore ask a fundamental question about how rank change influences social judgments: are those who ascended the hierarchy viewed differently than those who have descended to an equivalent rank? We contend that hierarchical *change* provides an important *context* for both the calculus of status judgment and its downstream behaviors.

Status Momentum

People's evaluations of others are shaped by their knowledge and pre-existing beliefs about the social world (Macrae & Bodenhausen, 2000; Sherman, Macrae, & Bodenhausen, 2000). Instead of evaluating an individual on the basis of an attribute or a constellation of attributes, perceivers often rely on contextual and categorical factors to guide their valuation

(Hsee & Abelson, 1991; Tajfel, 1969). That is, generic beliefs and schemas about the world steer how new information is processed (Neisser, 1976; Schank & Abelson, 1977).

A neglected but pervasive contextual feature of social hierarchy—one likely to impact our status judgments—is whether an actor’s current rank has been preceded by a rank-based change i.e., ascent or descent. Specifically, humans have internalized the physical principle of momentum (Freyd & Finke, 1984; Finke, & Shyi, 1988) whereby, much as objects in motion may not stop immediately upon application of a resisting force, so too is our mental representation of social objects, that also continue on their trajectory due to an analogous momentum (Markman & Guenther, 2007). As such, when evaluating, for instance an actor’s status, such judgments are embellished by schematic forces that guide information processing in an expectancy-consistent manner. Given the dynamic nature in which actors within hierarchies soar and sink, inter-temporal changes in rank may provide a historical *context* that is analogous to physical movement; leading observers’ valuations of an actor’s status to be colored by schematic expectations drawn from physical principles of momentum. Thus, actors who have recently ascended [descended] the hierarchy will be seen as higher [lower] status than those who maintained their position, despite holding an objectively equivalent final rank.

Study 1

Study 1 tested the prediction above and also sought to rule out an alternate framing-based account. Specifically, actors ascending [descending] in rank may be seen as higher [lower] status simply because a lower [higher] comparison point has been made salient. If our effects are due to framing, then making salient another actor at a relatively lower [higher] rank should yield status judgments that are similar to those reported for actors who ascended [descended] from this lower [higher] rank. We predict instead that actors ascending [descending] in rank are seen as higher

[lower] status due to the extrapolation of their hierarchical trajectory and in turn, expectations of an even higher [lower] future rank. While an implicit comparison to another position exists for both accounts, we contend that schematic expectations of momentum go beyond simple framing; such that actors ascending [descending] in rank will be seen as higher [lower] in status than those implicitly compared to another actor of lower [higher] rank.

Method

Participants ($n=258$) were assigned to condition in a 2 (rank change versus framing) \times 2 (positive versus negative) + 1 control design.¹

Participants in the positive [negative] *rank change* conditions imagined “Lee” as a member of a 10-person informal workgroup, a group where differences in status (i.e., respect, prestige, admiration) existed with no differences in power/titles. Lee was described as previously ranked the 6th [2nd] highest status group member; however Lee’s rank had recently risen [dropped] a good deal, leaving Lee ranked 4th. Participants in the positive [negative] *framing* conditions imagined two members of a 10-person informal workgroup: Lee, ranked 4th, and another member ranked 6th [2nd] in status. In the control condition, Lee was ranked 4th over time.

Participants then reported Lee’s current status (status/respect/prestige/admiration; $\alpha=.92$) compared to other group members (1=*lowest*; 9=*highest*).

Results

A two-way ANOVA revealed a significant interaction, $F(1, 197)=23.82, p<.001$. As predicted, Lee was judged as higher-status in the positive change ($M=6.63, SD=.66$) than no-change control ($M=5.99, SD=1.04$) condition, $t(253)=3.78, p=.002, d=.73$, and as higher-status in the no-change control than negative change ($M=5.24, SD=.86$) condition, $t(253)=4.35, p<.001$,

¹ The samples reported across all studies include only participants who accurately answered the attention check questions. Attention check failures were the only data omitted.

$d=.79$. Importantly, and ruling out a framing-based account, Lee was judged as higher-status in the positive change than positive framing ($M=5.98$, $SD=.96$) condition, $t(253)=3.57$, $p=.004$, $d=.79$, and as lower-status in the negative change than negative framing ($M=5.75$, $SD=.82$) condition, $t(253)=3.02$, $p=.043$, $d=.61$. Neither of the framing conditions differed from the control, $ts<1.5$, *ns*.

Study 2

Changes in rank, according to academic ranking guides, are a reality for many universities. We anticipated that universities who recently ascended the hierarchy would be seen as higher-status than those who descended to arrive at the same rank. Moreover, because status can signal value (Podolny, 2003), we predicted that tuition recommendations would be higher for ascending than descending universities, a relationship accounted for by differential status evaluations.

Method

Participants ($n=103$) assigned to a positive [negative] rank change condition imagined themselves as a consultant helping “University X set its tuition for the coming year. Although University X was ranked 15th [7th] in 2011, it moved up [down] four places in the 2012 rankings and is now ranked higher [lower], as the 11th best university in the US.”

Participants indicated University X’s status (status/respect/prestige/admiration; $\alpha=.89$) compared to other universities” (1=*lowest*; 9=*highest*) and an adjustment (if any) to its tuition (1=*decrease 20%*; 5=*no change*; 9=*increase 20%*).

Results

University X was judged as higher-status in the positive ($M=82.33$, $SD=8.77$) than negative ($M=77.54$, $SD=14.24$) change condition, $F(1, 102)=4.38$, $p=.039$, $d=.41$. Moreover,

participants in the positive ($M=5.60$, $SD=1.08$) versus negative ($M=4.46$, $SD=1.26$) change condition differed in their tuition recommendations, $F(1, 102)=24.37$, $p<.001$, $d=.97$. Compared to recommending *no change*, positive change participants recommended an increase, $t=4.16$, $p<.001$, whereas negative change participants recommended a decrease, $t=2.93$, $p=.005$. As anticipated, bootstrapping (Preacher & Hayes, 2008) indicated that recommendations to adjust tuition based on changes in rank were explained by status judgments ($CI_{95} = .014, .430$).

Study 3

Consumer decision making is an arena where status inexorably influences both purchasing decisions (Frank, 2000; Sivanathan & Pettit, 2010) and a firm's pricing strategy (Shankar & Bolton, 2003). We anticipated people's willingness-to-pay (WTP) would be higher for a product that ascended the hierarchy than one that descended, despite sharing the same final rank, and that status judgments would mediate this relationship.

Method

Participants ($n=55$) assigned to a positive [negative] rank change condition read that a luxury-lifestyle magazine's "2009 'Best of the Best' watch ranking, ranked TAG Heuer in 6th [2nd] place. TAG steadily increased [decreased] in ranking over the next two years. After being ranked 6th [2nd] in 2009, TAG moved up [down] to be ranked 5th [3rd] in 2010 and is currently ranked 4th in 2011."

Participants then indicated TAG's current status (status/respect/prestige/admiration; $\alpha=.93$) compared to other luxury watches (1=*lowest*; 9=*highest*) and their maximum WTP (\$USD) for a new TAG watch.

Results

Status judgments of TAG were higher in the positive ($M=80.55$, $SD=9.94$) than negative ($M=71.95$, $SD=13.66$) change condition, $F(1, 54)=7.17$, $p=.010$, $d=.72$. WTP was also higher in the positive ($M=\$1484.46$, $SD=1506.78$) than negative ($M=\$736.67$, $SD=820.64$) change condition, $F(1, 54)=5.17$, $p=.027$, $d=.62$. As predicted, bootstrapping indicated that the effect of rank-based change on WTP was explained by judgments of current status ($CI_{95}=133.61, 623.84$).

Study 4

Beyond status judgments, a palpable social benefit of status is that it affords an actor the ability to influence others' behavior (Berger & Conner, 1974). We therefore predicted that actors who ascended the hierarchy would have more influence than those who descended—despite holding the same rank—and that status judgments would mediate the relationship between rank change and influence.

Method

Participants ($n=121$) were seated at laboratory computer terminals for a study on general knowledge. Participants learned they were assigned a partner—described as a student who plays in a trivia league—who would advise them on their answer to a trivia question. Players in this trivia league are assigned to sub-leagues (i.e., Platinum, Gold, Silver, Bronze, Copper) based on performance; with Platinum League players having the highest-status, Gold League players the second highest-status, etc. Participants in the positive [negative] change condition learned their partner was initially in the Bronze [Gold] League but has since moved up [down] to the Silver League.

Participants were then asked “What year was Mozart born?” and offered an initial guess. Following their response, and after receiving their partner's advice of 1770, they provided their

final answer. Participants also reported their partner's status among other trivia players (1=*lowest*; 9=*highest*).

Results

Partners were judged to have higher status in the positive ($M=5.68$, $SD=1.18$) than negative ($M=5.08$, $SD=1.19$) change condition, $F(1, 120)=7.52$, $p=.007$, $d=.51$.² Importantly, partners were more influential (i.e., difference between participants' final answer and their partners' advice was less) in the positive ($M=20.79$, $SD=28.33$) than negative ($M=37.75$, $SD=46.92$) change condition, $F(1, 120)=5.86$, $p=.017$, $d=.44$; an effect that held controlling for differences in initial estimates. Finally, bootstrapping again indicated that the effect of rank change on influence accepted was explained by status judgments ($CI_{95}=1.10, 9.25$).

Study 5

The basis for our predictions thus far is that the principal of momentum is internalized and applied to social objects, thereby allowing schema driven beliefs—those which extrapolate an actors' trajectory to a future point in time—to shape present status judgments. Therefore, we predicted that expectations of future status will mediate the relationship between rank change and current status judgments.

In Study 5 we also sought to rule out demand effects as an alternative explanation by considering status evaluations of both others and the *self*. An explanation based on demand effects would lead to equivalent status judgments of the self and others; however, an explanation rooted in individuals' differential reliance on schematic beliefs remains susceptible to people's enduring motivation to protect the integrity of the self (Baumeister, 1998; Kunda, 1990). This motive should then influence when people utilize or abandon schematic beliefs. The reliance on

² Female participants judged their partner as higher-status than did males in Study 4 ($F=3.85$, $p=.052$; gender \times change interaction, $F<1$). No other gender effects were found.

schematic processing when judging an ascent in rank—that results in assigning a status premium to others—should also hold for the *self* as this supports our need for self-integrity. However, when judging a descent in rank, assigning the same status tax to the *self* as would be levied on others is counter to our motive to protect the ego, and should therefore lead to a break from schema reliance. Thus, we predicted that both self and others will be endowed an equivalent status boost for ascent; however, and counter to both a demand effect and framing-based account, the usual tax on others for descent will be relaxed when this judgment concerns the *self*.

Method

Participants ($n=248$) were assigned to condition in a 3 (rank change: positive, negative, none) \times 2 (focal actor: self, other) design.

Participants in the *self* [*other*] condition saw the word “you” [“Lee”] in the scenarios and measures below. Self versus other was crossed with positive versus negative rank change. Participants in the positive [negative] rank change conditions read: “Imagine you/Lee are part of an 11-person group. Based on the value you/Lee initially brought to the group, you/Lee were ranked 8th [4th] in status. However, you/Lee have steadily gained [lost] rank over time, first gaining [losing] one spot to become ranked 7th [5th] and then another to become ranked 6th.” In the no-change control conditions participants read: “Based on the value you/Lee initially brought to the group, you/Lee were ranked 6th in status. There has been no change in your/Lee’s rank at any point in time.”

Participants then reported how much status (status/respect/prestige/admiration) you/Lee currently have ($\alpha=.93$) and are expected to have in the future ($\alpha=.97$) (1=*lowest*; 100=*highest*).

Results

Consistent with peoples' tendency not to overestimate their status in comparison to others under stable conditions (Anderson et al., 2006), we observed no differences in current status judgments between the self ($M=53.54$; $SD=9.99$) and other ($M=52.86$; $SD=10.13$) no-change control conditions, $t(248)<1$, *ns*. These conditions were collapsed into a single comparison control.

A 2 (rank change: positive versus negative) \times 2 (focal actor: self versus other) ANOVA revealed a significant interaction, $F(1, 192)=4.67$, $p=.032$. As anticipated, current status judgments in the self ($M=62.30$; $SD=13.83$) and other ($M=62.83$; $SD=15.30$) positive-change conditions did not differ, and each were higher than the control, $t_s(243)>3.5$, $p_s<.006$, $d_s>.74$. Moreover, current status judgments in the self negative-change condition ($M=54.37$; $SD=13.41$) did not differ from the control, $t(243)<1$, *ns*, and were higher than status judgments in the other negative-change condition ($M=46.07$; $SD=13.98$), $t(243)=3.03$, $p=.029$, $d=.61$. Further, status judgments in the other negative-change condition were lower than the control, $t(243)=2.73$, $p=.069$, $d=.58$. Finally, and in support of our proposed mechanism, bootstrapping indicated that the interactive (rank change \times focal actor) effect on current status judgments was explained by expectations of future status ($CI_{95}=.54, 4.00$).

General Discussion

Across five studies, people, institutions, and products were judged as higher-status when their current position was preceded by a hierarchical ascent rather than descent—a judgment rooted in expectations of an actor's future status—with significant downstream consequences (i.e., pricing recommendations, WTP, influence accepted). These effects were moderated by the involvement of the *self*: self and others were afforded an equivalent status premium for

ascending the hierarchy; however the self was pardoned the status tax levied on others for a descent.

We offer, to our knowledge, the first demonstration of how rank change impacts how an actor's current status is judged and acted upon. Specifically, while much is known about how ordinal rank-based status differences—examined at a single snapshot in time—impact an array of outcomes, we instead examined how prior hierarchical change informs our expectations for the future and thus guides our current status judgments. In doing so, we empirically demonstrate the utility of developing a perspective on social status that is more nuanced and dynamic than the predominant static approach.

While the physical world is governed by formal laws, the architecture of our social world seems to be administered through schematic beliefs that shape our understanding. How status judgments are formed in a dynamic world offer insights into a range of important phenomena (e.g., consumption, promotion/demotion, college applications/decisions) poised for future study.

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