S

Service-for-Prestige Theoryof Leader-Follower Relations

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Au2 6 **Definition**

An evolutionary theory of leader-follower relations that aims to explain why these relations can range from being "bad" (i.e., based on coercion) to "good" (i.e., based on mutually beneficial exchange).

12 Introduction

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The service-for-prestige theory (Price and Van Vugt 2014, 2015) takes an evolutionary perspective on leader-follower relations in order to accomplish two main aims. The first aim is to explain why these relations can range from being "bad" and coercive (i.e., based on a leader's ability to harm followers) to "good" and voluntary (i.e., based on a leader's ability to benefit followers). The second aim is to propose that "good" leadership is governed by the logic of reciprocity, whereby leaders deliver public goods to followers in exchange for elevated social prestige. Both of these aspects of leader-follower relations are examined in more detail below.

What Are the Characteristics of "Bad" Versus "Good" Leadership, and Why Does Leadership Quality Vary So Widely?

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People from a diverse variety of cultures tend to 31 agree about what constitutes good leadership. The 32 GLOBE survey (Den Hartog et al. 1999) mea- 33 sured preferences for leader traits across 61 cul- 34 tures. The most consistently valued leader 35 attributes were those which allow a leader to ben- 36 efit followers via prosociality (e.g., trustworthi- 37 ness, fairness) and ability (e.g., intelligence, 38 competence). Similar findings are reported in a 39 review of characteristics of successful leaders 40 (Hogan and Kaiser 2005). These sources both 41 suggest that followers prefer leaders who would 42 make good exchange partners: people who have 43 the skills that would enable them to benefit fol- 44 lowers and who can be trusted to not be deceptive 45 or exploitative. By the same token, these sources 46 also suggest universal aversion to traits indicating 47 that a leader would be a poor exchange partner 48 (e.g., dominance, selfishness); leaders are gener- 49 ally reviled if they exploit their positions for their 50 own benefit and at the expense of their followers 51 (Tooby et al. 2006).

This spectrum of leadership styles, from bad 53 (self-serving and exploitative) to good 54 (trustworthy and productive of group benefits), 55 can be observed in modern environments. These 56 leadership styles map on fairly well to the two 57 kinds of social status that are commonly 58

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Author's Proof

distinguished in behavioral science: dominance and prestige (Henrich and Gil-White 2001). The high status of bad leaders constitutes dominance, and leaders extract this status coercively, via their ability to harm followers. In contrast, the high status of good leaders constitutes prestige and is conferred voluntarily on leaders by followers, in exchange for the benefits that the leader provides. Humans obviously possess the psychological machinery necessary for engaging in both dominance-based and prestige-based leaderfollower relations in modern environments, and service-for-prestige (Price and Van Vugt 2014, 2015) describes the kinds of hunter-gatherer environments of the evolutionary past that could have selected for this machinery.

Prestige-based leadership is common in the kinds of societies that were probably most typical of our evolutionary past: small (25–50 members) bands of nomadic hunter-gatherers. In contemporary examples of such societies, good leaders are described as skilled individuals who are voluntarily appreciated, respected, and followed by others, whereas bad leaders are group members who attempt to become too pushy, dominant, and coercive (Price and Van Vugt 2014, 2015). It's difficult to be a bad leader for very long among nomadic foragers because people will be both eager to get away from you and also relatively able to do so; in the fission-fusion societies of nomadic huntergatherers, it's relatively easy to leave one band and join another, and bands commonly break apart due to social conflict (Kelly 1995). Moreover, because these groups tend to be so small, organizing group members for collective action tends to be a relatively simple undertaking, and there is no great need for strong leadership in order to solve problems related to group coordination and free rider punishment. These two aspects of typical nomadic hunter-gatherer societies – the relative ease with which members can escape bad leaders and the reduced need for solve leaders to collective problems – combine to create an environment in which follower dependence on leaders relatively low.

In other kinds of hunter-gatherer environments, however, the dependence of followers on leaders – and thus the power of leaders – can 107 become much stronger. Indigenous peoples of 108 the North American northwest coast lacked agri- 109 culture, but were nevertheless able to live in sed- 110 entary villages, because they settled close to rivers 111 allowed which their main protein 112 source - salmon - to deliver itself directly to 113 them. These villages could grow to include hun- 114 dreds of residents, much larger than nomadic 115 hunter-gatherer bands, and so their collective 116 action problems were more challenging to solve 117 without strong leadership. Moreover, the seden- 118 tary nature of these settlements made fission- 119 fusion social organization less feasible, and it 120 therefore became harder to simply pack up and 121 leave a leader who became too dominant. 122 Increased dependence on leaders along the north- 123 west coast created a niche for the emergence of 124 leadership that was significantly more dominant 125 than that seen among nomadic foragers; for exam- 126 ple, although slavery is unknown among nomadic 127 hunter-gatherers, it was common along the northwest coast (Kelly 1995).

According to service-for-prestige, the kinds of 130 hunter-gatherer environments that selected for 131 dominance-based and prestige-based leader- 132 follower relations in the ancestral past are both 133 represented in the modern world. The theory 134 in modern environments, 135 that dominance-based leadership will emerge most 136 often in social environments more similar to 137 northwest coast, that is, environments in which 138 followers have low ability to reject or escape 139 leaders (due to, e.g., poor exit options) and/or in 140 larger social organizations in which strong lead- 141 ership is required to solve collective action prob- 142 lems. In contrast, prestige-based leadership 143 should more likely emerge in environments more 144 similar to those of nomadic foragers, that is, environments in which followers have greater freedom 146 to desert or depose leaders, and/or in smaller 147 organizations in which coordination problems 148 are relatively easily solved at a local level.

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Leader-Follower Relations Are Perceived as Good When They Involve Voluntary, **Mutually Beneficial, Service-for-Prestige** Exchange

It was noted above that according to surveys of leadership preferences such as the cross-cultural GLOBE study, followers prefer leaders who would make good exchange partners: leaders who are willing and able to produce benefits for followers and who can be trusted to not abuse their power for their own narrow self-interest. Service-for-prestige (Price and Van Vugt 2014, 2015) suggests that people prefer leaders to be good exchange partners because in the evolutionary past, this preference would have enabled followers to engage benefit-generating leaders in mutually advantageous and therefore sustainable relationships.

How would this mutually beneficial exchange have played out in the evolutionary past? In hunter-gatherer environments, competent leadership benefits follower fitness by facilitating cooperation in activities such as warfare, big game hunting, forging political alliances, maintaining within-group order, and camp migrations. However, leadership roles often involve substantial costs for leaders, such as time and energy investments, stressful decision-making, and physical risk-taking. For these costs to pay off, and for leaders to be motivated to continue to lead, they must be compensated by some kinds of return benefits.

Accordingly, leaders do appear to be rewarded for the contributions they make. As high-prestige individuals, leaders are highly valued as friends, allies, and mates; and therefore social, material, and sexual resources tend to flow their way. Evidence that hunter-gatherer leaders receive relatively large shares of material and social resources can be challenging to collect, since this increased access may be observable only over the long term or under conditions of unusually great need such as sickness or sustained hunger. Nevertheless, respected leaders in small-scale societies have been observed to be rewarded over the long term with social, political, and material support (Bird and Bliege Bird 2010; Gurven et al. 2000; Von Rueden et al. 2014). And when 197 the focus is on reproductive rather than social and 198 material resources, the rewards of leadership 199 become relatively easy to observe. The high status 200 of male leaders is attractive to women (Ellis 1992) 201 as well as to parents who wish to form alliances 202 with a leader by betrothing their daughter to him 203 (Kelly 1995). In small-scale societies, higher sta- 204 tus men are reported to have more wives and 205 sexual partners, higher-fertility wives, and more 206 surviving offspring (Chagnon 1979, 1988; Von 207 Rueden et al. 2008, 2011).

Service-for-prestige suggests that just as lead- 209 ership services were costly for leaders to provide, 210 prestige allocations to leaders were costly for fol- 211 lowers to make. Prestigious leaders have high 212 power to benefit followers, so followers will 213 invest time and resources to remain in good stand- 214 ing with them. Such investments may take the 215 form of, for example, deferring to leader interests, 216 sharing resources with the leader, taking pains to 217 avoid harming the leader, and cooperating with a 218 leader's directions instead of pursuing one's nar- 219 row self-interest (Price and Van Vugt 2014, 2015). 220

Prestige-based leader-follower relations con- 221 stitute reciprocal exchange (Price 2003), then, 222 because just as leaders voluntarily pay costs to 223 deliver leadership services in exchange for pres- 224 tige, followers voluntarily pay costs to deliver 225 prestige in exchange for leadership services. 226 However, because this prestige must often be 227 allocated to the leader by a whole group of fol- 228 lowers, it's a more complicated form of reciproc- 229 ity than the dyadic reciprocal altruism first 230 described by Trivers (1971). Although leader- 231 follower reciprocity has aspects in common with 232 dyadic reciprocal altruism, it also shares charac- 233 teristics with n-person reciprocity (Tooby 234 et al. 2006) and can be considered a form of 235 collective action. And as in any collective action, 236 a free rider's advantage (Olson 1965) will accrue 237 to group members who accept the benefits of 238 cooperation (in this case, a share of the services 239 that the leader is motivated to provide, by virtue of 240 being compensated with prestige) but who do not 241 pay contribution costs (in this case, the cost of 242 allocating prestige to the leader). Service-for- 243 prestige predicts that in order to neutralize this 244

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Author's Proof

free rider's advantage, high contributors – that is, high allocators of prestige – will experience punitive sentiment towards those who fail to "pay respect" to leaders (Price et al. 2002). This phenomenon could be observed repeatedly in the notoriously violent rallies that occurred during Donald Trump's campaign to become the US Presidential nominee for the Republican Party, beginning in the latter months of 2015. A pattern developed at these rallies in which attendees who were perceived as not being sufficiently supportive of Trump would be humiliated and forced to leave, or even physically attacked, by other attendees who apparently considered themselves vociferous Trump supporters (Jacobs 2016).

Finally, it should be noted that the free rider problem described above applies only to prestigebased leadership scenarios, in which leaders are perceived by the group as being valued providers of public goods. In dominance-based leadership scenarios, in which the power of leaders is based on their ability to harm and intimidate followers, the logic of this collective action should essentially flip. If a leader is perceived as exploitative and parasitic rather than benefit-producing, then the collective action should focus not on maintaining leader motivation to lead but on removing the leader from power. In this flipped context, the role of selfless contributor would now be played by the member who undermines the leader's authority by rebelling against it and who thus risks attracting the leader's wrath. The free rider, meanwhile, would now be the member who continues to allocate status and thus lend support to the harmful leader. A real-world example of this sort of collective action would be Boston's famous 1773 "tea party," initiated by rebellious colonists to outrageously undermine the authority of what they perceived to be an exploitative royal regime. From the perspective of tea party supporters, the rebels were heroic risk-takers, whereas the King's supporters were traitors who deserved to be publically humiliated (tarred and feathered).

Conclusion

Leadership is not unique to humans and indeed is 290 a feature of a vast variety of species, from bees to 291 ravens to nonhuman primates (King et al. 2009). 292 But whereas leader-follower interactions enable 293 many species to solve coordination problems 294 and share information, it is apparently only in 295 humans that these interactions occur as reciprocal 296 interactions, in which followers reward high- 297 contributing leaders with allocations of social sta- 298 tus. This context of reciprocity would have 299 enabled human followers to allocate relatively 300 large incentives (in the form of prestige) to their 301 leaders and to thus embolden their leaders to make 302 relatively costly and substantial leadership contri- 303 butions. Thus, because they occurred as reciprocal 304 exchanges, human leader-follower relations may 305 have enabled the emergence of a kind of leader- 306 ship that was more risk-seeking and self- 307 sacrificial, more creative and committed, and gen- 308 erally higher quality than leadership in other spe- 309 cies. Even if reciprocity-based leadership is 310 indeed higher quality, however, this was appar- 311 ently not enough to permit its evolution in 312 nonhuman species. It seems that leader-follower 313 reciprocity, like other forms of complex coopera- 314 tion that can occur among nonkin (Tooby 315 et al. 2006), is a behavior that the human brain is 316 especially well adapted to achieve.

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References

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- Bird, D. W., & Bliege Bird, R. (2010). Competing to be 342 leaderless: Food sharing and magnanimity among 343 Martu Aborigines. In J. Kanter, K. Vahn, & J. Earkins 344 345 (Eds.), The evolution of leadership: Transitions in deci-346 sion making from small-scale to middle-range societies (pp. 21–49). Santa Fe: SAR Press. 347
- Chagnon, N. A. (1979). Is reproductive success equal in 348 egalitarian societies? In N. A. Chagnon & W. Irons 349 (Eds.), Evolutionary biology and human social behav-350 ior: An anthropological perspective (pp. 374–401). 351 North Scituate: Duxbury Press. 352
- 353 Chagnon, N. A. (1988). Life histories, blood revenge, and warfare in a tribal population. Science, 239, 985–992. 354
 - Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., & GLOBE Associates. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? Leadership Quarterly, 10, 219-256.
- Ellis, B. J. (1992). The evolution of sexual attraction: 361 Evaluative mechanisms in women. In J. H. Barkow, 362 L. Cosmides, & J. Tooby (Eds.), The adapted mind: 363 Evolutionary psychology and the generation of culture 364 (pp. 267–288). New York: Oxford University Press. 365
- Gurven, M., Allen-Arave, W., Hill, K., & Hurtado, 366 M. (2000). "It's a wonderful life": Signaling generosity among the Ache of Paraguay. Evolution and Human 368 Behavior, 21(4), 263-282. 369
- Henrich, J., & Gil-White, F. J. (2001). The evolution of 370 prestige: Freely conferred status as a mechanism for 371 enhancing the benefits of cultural transmission. Evolu-372 tion and Human Behavior, 22, 165-196. 373

- Hogan, R., & Kaiser, R. B. (2005). What we know about 374 leadership. Review of General Psychology, 9, 169–180.
- Jacobs, B. (2016). Trump campaign dogged by violent 376 incidents at rallies. The Guardian, 11 Mar 2016. Downloaded 12 May 2016 from http://www. theguardian.com/us-news/2016/mar/11/donald-trumpcampaign-claims-violence-rallies
- Kelly, R. L. (1995). The foraging spectrum: Diversity in hunter-gatherer lifeways. Washington, Smithsonian.
- King, A., Johnson, D. D. P., & Van Vugt, M. (2009). The 384 origins and evolution of leadership. Current Biology, 385 19, R911-R916.
- Olson, M. (1965). The logic of collective action: Public goods and the theory of groups. Cambridge, MA: Harvard University Press.
- Price, M. E. (2003). Pro-community altruism and social status in a Shuar village. *Human Nature*, 14, 191–208.
- Price, M. E., & Van Vugt, M. (2014). The evolution of leader-follower reciprocity: The theory of service-forprestige. Frontiers in Human Neuroscience, 8, 363.
- Price, M. E., & Van Vugt, M. (2015). The service-forprestige theory of leader-follower relations: A review of the evolutionary psychology and anthropology literatures. In R. D. Arvey & S. M. Colarelli (Eds.), Biological foundations of organizational behaviour (pp. 169–201). Chicago: University of Chicago Press.
- Price, M. E., Cosmides, L., & Tooby, J. (2002). Punitive sentiment as an anti-free rider psychological device. Evolution and Human Behavior, 23, 203–231.
- Tooby, J., Cosmides, L., & Price, M. E. (2006). Cognitive adaptations for n-person exchange: The evolutionary roots of organizational behavior. Managerial and Decision Economics, 27, 103-129.
- Trivers, R. L. (1971). The evolution of reciprocal altruism. Quarterly Review of Biology, 46, 35–57.
- Von Rueden, C., Gurven, M., & Kaplan, H. (2008). The 410 multiple dimensions of male social status in an Ama- 411 zonian society. Evolution and Human Behavior, 29, 402-415.
- Von Rueden, C., Gurven, M., & Kaplan, H. (2011). Why 414 do men seek status? Fitness payoffs to dominance and 415 prestige. Proceedings of the Royal Society B: Biological Sciences, 278, 2223–2232.
- Von Rueden, C., Gurven, M., Kaplan, H., & Stieglitz, J. (2014). Leadership in an egalitarian society. Human 419 Nature, 25(4), 538-566.