

Politics and Psychology:

A View From A Social Dilemma Perspective

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It is an undeniable fact from social life that most processes in politics are inherently psychological. The revival of social psychology's interest in political processes is therefore to be welcomed wholeheartedly. A case in point is the revival of a classic line of research, which has contributed much to our understanding of a classic issue in psychology - the personality and social processes underlying political ideology. For example, right-wing ideology is linked to greater happiness (e.g., Napier & Jost, 2008) - a state increasingly seen as having trait-like qualities - and a greater aversion to change, along with a greater need for structure (e.g., Jost, Glaser, Kruglanski, & Sulloway, 2003). In contrast, left-winged ideology is linked to greater openness to experience (Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006) and a greater tendencies toward inequity aversion and prosociality (e.g., Zettler, Hilbig, & Haubrich, 2011; Van Lange, Bekkers, Chirumbolo, & Leone, 2012). These findings, along with some findings suggesting that differences in ideology seems to associated with differences in genetic make-up (e.g., Alford, Funk, & Hibbing, 2005), indicate that there is a lot of psychology, perhaps more deeply hardwired than many might think, underlying political preferences and ideology.

The present contribution focuses on an equally classic issue, yet one that social psychology largely has left untouched in recent research: How could authorities and governments effectively manage or regulate social behavior in society? In addressing this basic question, one might adopt two broad approaches: the Vision Approach and the Application Approach. The *Vision Approach* is derived from the notion that political leaders, like social

philosophers and other scientists, have implicit or explicit views about the nature of human nature that might guide their public policy and communication. Most of our readers probably know how Machiavelli thought about human nature - as basically self-interested and deceitful - and about how governments and authorities could influence people - through the use of power and manipulation and doing so by any means that has been proven effective. In contrast, Abraham Lincoln and Theodore Roosevelt shared a deeply felt belief in “fellow feeling,” the broad notion that people have a need for affiliation and be part of a social group.

A second broad approach is that political leaders need to develop a view of specific measures that seems especially promising to help solve or resolve urgent societal issues. This *Application Approach* refers to the toolbox that authorities and governments may use to effectively promote behavior by individuals and groups that serves the society now and in the future. If the governments seeks to promote a clean society, what measures should the government then use? If the government seeks to promote a safe society, what measures should the government then use? We realize that these issues are still quite abstract. The problem is that it is often impossible to apply one and the same solution to effectively prevent, reduce, or eliminate all societal issues: In this context, the one-size-fits-all dictum is often an illusion. But still, it is possible - and this is a key challenge - to derive solutions from broad psychological principles that have been examined and supported in past research (Van Lange, 2013). In the present chapter we adopt both approaches, but emphasize the Application Approach. In particular, we review a rapidly growing social dilemma literature that focuses on reward and punishment in social dilemmas, and propose two broad categories of solutions that authorities and governments should consider in their attempt to promote a well-being of all of us in the future.

Politics and Social Dilemmas

Our theoretical analysis starts with a simple -- and perhaps somewhat controversial -- assumption. It states that one of the key tasks for governments is to manage social dilemmas. This assumption summarizes one of my convictions that is rooted in a strong interest in politics as well as in more than two decades of research on social dilemmas -- that is, on conflicts between self-interest and collective interest. In fact, I have come to believe that governments' major challenge is to regulate social dilemmas that individuals and groups cannot regulate themselves. Governments should be concerned about maintaining an unpolluted environment, in which people could live a healthy life. Governments should be concerned about maintaining high-quality natural resources, rather than depleting them, to ensure a prosperous future to the people. Governments should be concerned about a safe society, in which people might help one another in any (life-)threatening situation. Governments should be concerned that people pay their "dues" or taxes to enable them to maintain high-quality public goods, such as an efficient infrastructure, proper health care, and high-quality education. Of course, one can have differing views as to how equal the resources and wealth should be distributed, or how to optimize collective welfare and fairness, as well as the specific measures one takes to pursue these broad collective goals. But the important point to be made is that governments often find themselves dealing with the management of many situations that are, or closely resemble, social dilemmas.

One central question from this perspective is what a government can do to manage those social dilemmas in an efficient manner. What are the kind of measures that work, and what are the kind of measures that do not work? In short, what can authorities and governments do to promote human cooperation? We provide a brief review of the recent literature on social

dilemmas, and offer several broad recommendations and suggestions for promoting human cooperation in society. In doing so, we will discuss empirical research from social psychology, as well as some other fields and disciplines, such as anthropology, economics, neuroscience, and political science. We start with a definition of social dilemmas, follow with a brief discussion of the literature, which we use to offer broad recommendations and suggestions to inform governmental policy.

Social dilemmas: Definition and review

Social dilemmas are ubiquitous. In fact, many of the world's most pressing problems represent social dilemmas, broadly defined as situations in which short-term self-interest is at odds with longer-term collective interests (Dawes, 1980; Van Lange, Joireman, Parks, & Van Dijk, 2013). Some of the most widely-recognized social dilemmas challenge society's well-being in the environmental domain, including overharvesting of fish, overgrazing of common property, overpopulation, destruction of the Brazilian rainforest, and buildup of greenhouse gases due to overreliance on cars. The lure of short-term self-interest can also discourage people from contributing time, money, or effort toward the provision of collectively beneficial goods. For example, people may listen to National Public Radio without contributing toward its operations; community members may enjoy a public fireworks display without helping to fund it; employees may elect to never go above and beyond the call of duty, choosing instead to engage solely in activities proscribed by their formally defined job description; and citizens may decide to not exert the effort to vote, leaving the functioning of their democracy to their compatriots.

Social dilemmas apply to a wide range of real-world problems; they exist within dyads, small groups, and society at large; and they deal with issues relevant to a large number of

disciplines, including psychology, sociology, political science and economics, to name but a few. Given their scope, implications, and interdisciplinary nature, social dilemmas have motivated huge literatures in each of these disciplines (see also Van Lange, Balliet, Parks, & Van Vugt, 2014). Also, disciplines have tended to focus on one of the social dilemmas. For example, the two-person prisoner's dilemma has been very popular in social psychology during the seventies, followed by greater appreciation for other social dilemmas, including social dilemmas involving a greater number of people. In some social dilemmas, the act of cooperation involves "giving" to a public good, in other social dilemma "not taking too much" from a shared resource. Indeed, social dilemmas come in many flavors. Sometimes cooperation means giving or contributing to the collective, sometimes it means not taking or consuming from a resource shared by a collective. Sometimes the time horizon is short, even as short as a single interaction, sometimes it is long-lasting, almost without an end as in ongoing relationships. There are social dilemmas involving two persons, and social dilemmas involving all people living in a country, continent, or even world. Not surprisingly, the diversity in social dilemma settings has led researchers to offer a range of different definitions for the concept.

We define social dilemmas as situations in which a non-cooperative course of action is (at times) tempting for each individual in that it yields superior (often short-term) outcomes for self, and if all pursue this non-cooperative course of action, all are (often in the longer-term) worse off than if all had cooperated (see also Van Lange et al., 2013). This definition is inclusive of the well-known prisoner's dilemma, as well as related structures (e.g., the Chicken Dilemma and the Assurance Dilemma), and it includes the "correlation" with time, such that consequences for self are often immediate or short-term, while the consequences for the collective often unfold over longer periods of time.

Although the above definition of social dilemmas is fairly comprehensive, we acknowledge that other important distinctions are not included. One such distinction is the difference between a *first order dilemma*, which represents the initial dilemma, and a *second order dilemma*, which represents the dilemma that one might face when deciding whether to contribute to a costly system that might promote cooperation in the first order dilemma (e.g., a system that sanctions free-riders, Yamagishi, 1986). Cooperation in the first order dilemma is known as *elementary cooperation*, while cooperation in the second order dilemma is known as *instrumental cooperation*. Indeed, a good deal of contemporary research on social dilemmas has been devoted to second order dilemmas, providing strong evidence that many (but not all) people are quite willing to engage in costly behavior to reward other group members who have cooperated and punish those who have not cooperated.

This line of research started with two seminal papers by Fehr and Gächter (2000, 2002) who designed a public good dilemma in which people face the choice of how much from their own resources (endowment) to a public good. Unlike previous studies on public good dilemmas, these researchers added an option: It was now possible to not only to contribute resources to the public good, but also to punish others. They were particularly interested in examining whether people were willing to punish at a cost to self, and with no material gain for themselves. Under strongly controlled experimental conditions, Fehr and Gächter (2002) showed that people were quite willing to punish - and to do so at a material cost to themselves. It was also evident that most punishments were directed at defectors or free-riders who contributed below average, and most of the punishment was executed by cooperators who contributed above average: In fact, this pattern was observed in 74% of all punishment acts. They also provided some evidence that free-riding causes strong negative emotions, and that people expect such emotional reactions

from other people as well. Moreover, people were more prepared to punish if the free-rider deviated more strongly from the average contribution by the other members. Perhaps the most important conclusion from this research is that the introduction of an option for punishment leads to strong increases in contributions to the public good, while the elimination of the option for punishment leads to strong decreases in contributions to the public good.

Since the seminal work by Fehr and Gächter (2000, 2002), hundreds of studies on punishment (and reward) in public good dilemmas have been conducted. A recent meta-analysis that sought to provide the big picture revealed that the availability of the options for reward or punishment promote cooperation (Balliet, Mulder, & Van Lange, 2011; see also Van Lange, Rockenbach, & Yamagishi, 2014). Also, the effects of punishments seem to generalize across a number of variables, such as group size or whether the dilemma involved actual or hypothetical pay. However, two “moderators” were found to be important. First, the effect of punishment was more pronounced when the incentives are costly (versus free) to administer. Presumably, the administration of costly punishment might signal a strong commitment to the goal of promoting cooperation, rather than pursuing self-interest or competition (spite) (Balliet et al., 2011). Second, cross-societal studies on punishment have found much variation across societies in the degree to which punishment promotes cooperation (Henrich et al., 2006; Herrmann, Thoni, & Gächter, 2008; Marlow et al., 2008). In fact, in the paradigm used by Fehr and Gächter (2000, 2002) punishment is effectively directed toward free-riders and promotes cooperation in several societies, but not in all societies.

In some societies, the effectiveness of punishment to promote contributions to public goods is weak or even absent (Herrmann et al., 2008). Recently, a meta-analysis has uncovered what it

might be about culture that helps explain the variation in the effectiveness of punishment (Balliet & Van Lange, 2013). Specifically, they found that the effectiveness of punishment in promoting cooperation in a public goods experiment is greater in societies with high trust (such as Denmark, China, or Switzerland), rather than low trust (such as Turkey, Greece, or South Africa). It is possible that a history of political systems underlies such differences in trust, especially in strangers (Gintis, 2008), with the more proximal explanation being that those who punish must feel part of a network where such norm-enforcement is appreciated and supported (Balliet & Van Lange, 2013).

We have discussed research on reward and punishment in rather detail, as it might have strong implications for how governments and authorities might seek to solve social dilemmas. After all, reward and punishment are important tools to governments, which often take the form of subsidies, taxes, or other measures by which cooperation is encouraged and noncooperation is discouraged. For example, in the Netherlands, commuting with public transportation is traditionally encouraged by financially supporting the national railway company. In several states of the USA, carpooling is rewarded by reserving lanes that can only be used by carpoolers. These measures yield a reduction in individual car use, and therefore promote an efficient (and safe) use of the infrastructure, as well as a reduction in the emission of air pollutants. Clearly, these are desirable outcomes for all of us.

To social and behavioral scientists, with knowledge about principles of learning, reinforcement, and operant conditioning, it should perhaps not come as a real surprise that reward and punishment can promote cooperation. But these insights are theoretically important, as we will see, and it is important to enrich the toolbox that governments and authorities might

use to promote cooperation. Indeed, we suggest that many effective forms of solving dilemmas are closely linked to principles of reward or punishment, but that the toolbox can be enlarged by taking broad, and perhaps innovative approaches to the notions of reward and punishment. As we will see, reward and punishment can take different forms. It can be used at large scale or small scale (the scale of the incentive) and it can take on material forms or immaterial forms (the nature of the incentive). We discuss both issues in turn, followed by a brief discussion of how authorities and governments can benefit from these insights.

The scale of incentives

We have provided a brief review of past research on reward and punishment. It is important to note that in many of the studies that are conducted, punishment is administered by peers - the fellow members that were faced with the public good. The interesting (and important) observation is that people - especially those pursuing cooperative goals - are quite prepared to punish others, especially those pursuing selfish goals. This observation suggests that groups may have considerable self-organizing capacity. It is possible that in everyday life, people may not always reward or punish in any formal sense (Guala, 2012), but it is easy to imagine that in groups and communities in the real world people do reward and punish in many different ways. They may show approval or disapproval, they may show respect or not, they may give status or not, they may include or exclude. Such rewards and punishment may perhaps exert even more powerful effects. But the important point to be made is that groups and communities should have considerable opportunity to reward and punish, and they are quite willing to do as we have seen in strongly controlled laboratory research.

That said, we should remind the reader that this self-organizing capacity of groups and communities is likely to be stronger in high-trust societies than in low trust societies (Balliet & Van Lange, 2013). Moreover, this meta-analysis also revealed that societies with stronger democracies demonstrate a greater ability to secure and promote contributions towards public goods by the use of peer punishment. These findings paint a picture in which the ways in which individuals relate to each other in small groups and local communities is important to the overall functioning of society. Perhaps the effective “management” needs to occur at the local scale - in the neighborhoods, in the communities, and among the neighbors that people trust - rather than at global, governmental scale. After all, the more intense “face-to-face” psychology takes place in communities where people gossip or not, exclude or not, and show appreciation or not.

The insights described above are consistent with those outlined by political scientist Elinor Ostrom (1990), who suggested that institutes could play a very important role in regulating the management of natural resources and avoiding ecosystem collapses. She emphasized the importance of sanctioning and reward, preferably at local levels, and the use of local monitoring, and conflict resolution that are inexpensive and of easy access. She outlined the benefits of local arrangements, thereby also capturing benefits of internal mechanisms such as effective communication, internal trust and reciprocity among the people who literally face the social dilemma (Ostrom, Burger, Field, Norgaard, & Policansky, 1999). Her insights are virtually identical to our analysis that is now supported by a meta-analytic study (Balliet & Van Lange, 2013).

We wish to go one important step further by recommending the organization of relative small groups within communities. In particular, we suggest that among smaller units, such as

dyads and small groups, it is trust and reciprocity that matters and that has a real meaning, as these processes are directly relevant to actual social interaction. It is one thing to be focused on communities, it is still another step to suggest that communities could also be informally (and sometimes formally) be organized in groups of four or five. We base this speculation in part on “older” research on social dilemmas. The general result of this field of research states that the level of cooperation exhibited in a social dilemma is substantially higher in small groups than in larger groups, other things being (almost) equal (cf. Dawes, 1980; Kerr, 1989; Kerr & Bruun, 1983). The effect has been found in a variety of social dilemmas (Bonacich, Shure, Kahan, Meeker, 1976; Hamburger, Guyer, Fox, 1975; Komorita, Parks, & Hulbert, 1992; Liebrand, 1984). For example, Hamburger, Guyer, and Fox (1975) found a higher level of cooperation in three-person groups than seven-person groups; Fox and Guyer (1977) found a difference in level of cooperation between two-person groups and seven-person groups, but did not find such a difference between seven- and twelve-person groups, where the level of cooperation was constantly low (see also Liebrand 1984). Thus, the empirical literature suggests that cooperation is very high in group as large as four or five, it declines as groups become larger up to seven or eight persons, and remains steadily low for groups larger than nine. There is also evidence from other disciplines, such as anthropology, biology, and political science, that supports the “functionality” of relatively small groups (e.g., Bentor & Mookherjee, 1987; Boyd & Richardson, 1988).

We suggest that in the context of communities, and especially small groups, people are better able to reap the benefits of various direct forms of “reward and punishment”. Specifically, in those small-group contexts, people are better able and more likely to reward cooperation and punish noncooperation by acts of reciprocity; people are better able to communicate sympathy

and generosity, and when needed, apology and forgiveness; and people are better able to monitor one another's behavior and preferences. All the factors should contribute to climates of trust and cooperation, with the ultimate mechanisms largely being rooted in reward and punishment.

The nature of incentives

Much like the concepts of reinforcement and incentives, the concepts of reward and punishment has the connotative flavor of a material outcome, such as money, goods, or services. And while the domain of "immaterial outcomes" can include various social needs and preferences (e.g., need to belong), there is one inherently social outcome - reputation - that has received considerable attention in recent research on social dilemmas (e.g., Milinski et al., 2001; Nowak & Sigmund, 1998; Feinberg et al., 2012). Reputation is often defined in terms of the standing or image score one has in terms of cooperativeness or prosociality. Importantly, the concept of reputation as been advanced as one of the key mechanisms that helps explain the abundance of cooperation observed among strangers with no certain future. One solution to this challenge is that human social networks contain a system of *indirect reciprocity*, whereby a person takes into account another person's reputation in deciding how cooperatively one should approach this person (Nowak & Sigmund, 2006). Rather than reciprocating another person's actions (as in the case of direct reciprocity), people might reciprocate another's reputation, hence cooperating with those having a cooperative reputation and not cooperating with those having a noncooperative reputation. Several mathematical models demonstrate that cooperation amongst unrelated others can flourish when people condition their own cooperation based on partner reputation (Nowak & Sigmund, 1998; Panchanathan & Boyd, 2004).

Recent research supports the notion that indirect reciprocity promotes cooperation. When people know that their cooperative behavior affects their own reputation, then people tend to be more cooperative, compared to situations when their own behavior cannot affect their reputation (Milinski et al., 2001; Milinski et al., 2002; Sommerfeld et al., 2007). Moreover, people tend to be more cooperative in the presence of others who are known to gossip (Beersma & Van Kleef, 2011; Piazza & Bering, 2008). Importantly, people do condition their own cooperation based on knowledge of others' reputation and this continues to exert an influence even when people have direct experience with this other person (Sommerfeld, Krambeck, Semmann, & Milinski, 2007). Thus, much research over the last decade establishes that indirect reciprocity is characteristic of human social networks.

There is also some evidence that implicit - or subtle - reminders of reputation can promote cooperation. A seminal case in point is the study by Bateson, Nettle, and Roberts (2006), which revealed that the presence of eyes (versus flowers) on pictures may promote financial donations to an honesty box used to collect money for drinks. Similarly, eye images may help reduce littering at cafeterias (Ernst-Jones, Nettle, & Bateson, 2011). Such findings have been explained in terms of the notion that implicit reminders of reputation may promote cooperation. Although it is theoretically possible that reminders of reputation may even promote high-cost forms of cooperation, we think that is primarily applies to low-cost forms of cooperation (see Wu, Balliet, & Van Lange, 2014). Perhaps implicit reminders of reputation may promote low-cost cooperative action, such as paying 10 pence for the cup of milk or looking for a garbage can rather than littering, where the norm is to enact cooperative - or simply decent - behavior. Perhaps when a very small cost to self yields a very high outcome for others in an experimental game, then subtle reminders of reputation may actually enhance cooperation. Indeed, there is

some initial evidence from research on the bystander effect showing that subtle reminders of reputation can promote lost-cost helping (Van Bommel, Van Prooijen, Elffers, & Van Lange, 2011).

As noted earlier, considerable research on social dilemmas has revealed that rewards and punishment promote human cooperation (Fehr & Gächter, 2002; Balliet et al., 2011). There has been some discussion whether people formally punish (or reward) one another often outside of the laboratory. For example, there is evidence from anthropology showing that people might first turn to gossip to explore whether other people feel the same way about those who tend to free-ride on the efforts of others. A case in point is the study by Pierre Lienard (2014) who provides evidence for the importance of communication, and especially the role of emerging informal structures, as way of dealing with free-riders in tribal societies. In particular, in Turkana pastoralist groups of northwest Kenya, a tribal society without central institutions, he shows that people often “communicate” with several others before they might consider some form of punishment to “correct” norm violators.

There is also recent experimental evidence for this line of reasoning. In a very integrative study, Feinberg, Willer, and Schultz (2014) demonstrated that people are quite prepared to communicate reputational information about others, and that people select cooperative individuals for interactions in social dilemmas and tend to exclude those with selfish reputations. Moreover, ostracized individuals respond to exclusion by subsequently cooperating as much as those who were not ostracized. The important point is that gossip - the spreading of reputational information in social networks - can promote cooperation, and as such provide further evidence for some of the observations by Pierre Lienard in Kenya. From a social dilemma perspective, the

behavior of individuals is regulated through a gossip system, rather than a formal sanctioning system. In other words, human cooperation is regulated and promoted by rewards and punishment that is summarized in terms of reputational outcomes.

Although more research is needed, it may well be that a concern with reputational outcomes is often as strong, if not stronger, than a concern with material outcomes per se. As noted earlier, there is indeed some tentative evidence that implicit reminders of reputation might also promote cooperative behavior or at least reduce tendencies toward norm violations (Bateson et al., 2006; Ernst-Jones et al. 2011). Such findings have been explained in terms of the notion that implicit reminders of reputation may promote cooperation, and add credence to the claim that reputational concerns seem quite strong and perhaps deeply rooted in our social mind.

Recommendations for Authorities and Government

It should be clear that our social dilemma analysis emphasizes the importance of local governance in communities and small groups, along with the power of reputational concerns. Although these have been discussed separately, we like to note the obvious: that decentralization and reputational concerns are strongly interconnected, and perhaps their (natural) combination may yield effects that are stronger than the effects in isolation. While behavior in small groups may be regulated through some direct forms of reciprocity, human behavior in communities is mostly regulated through indirect reciprocity - through reputation - perhaps in much the same way as Feinberg and colleagues (2014) and Lienard (2014) have shown. It is in the medium-sized groups, such as communities, where people gossip, communicate, include, exclude, along perhaps with other forms of informal reward and punishment, such as showing approval or disapproval. We suggest that people as individuals and groups adapt to those circumstances in

such a manner as to regulate one another's behavior toward to promoting collective outcomes and fending of collective risks and threats. Thus, we believe that this analysis inspires authorities and governments to consider, and perhaps reconsider, their policy and measures they seek to implement in society. In the hope to contribute to the toolbox of authorities and governments, we close by offering two broad-yet-concrete recommendations based on the social dilemma analysis we advanced in this chapter.

Design groups of no more than five. A first recommendation is to shape the social circumstances in ways in which group sizes are constrained to five persons. It is the “dinner party size” group that seems optimally suited to cope with social dilemmas. It is also the group that seems well-equipped at coordination, because it is possible to communicate well in groups of five - indeed, experience tells me that dinner parties often reveal that people spontaneously form conversational groups of five if the size exceeds eight or so. We are not the first to suggest this, as groups of small size are considered in a wide range of evolutionary processes, such as those entailing cognitive evolution (Caporael, 1997), kin selection (Hamilton, 1975), and the emergence of language (Dumbar, 1996). But what is it that authorities and governments could do to promote interactions in groups of no more than five? One example that comes to mind is student housing. In the Netherlands, student housing was designed for units of around 12-16 people, meaning that students often shared a kitchen and other facilities (bathroom) with several other people. With that size, it is predictable that the refrigerator will be depleted, and that the ideals for toilets hygiene are illusions.

We suggest that the logic may also apply to organizational design and group decision making. For example, it is probably wise to constrain committees, if they should benefit from a

genuine and open exchange of information, to a maximum of five members. Again, it is often easier to coordinate in such small groups, but there is also reason to believe that free-riding is kept to a minimum, while a commitment to cooperation (and promises in that direction) are promoted. The general point is that societies, organizations, and communities are more likely to function well if there is a mindset by policy makers and designers - of buildings, of management, and the like - that often “more is less”: increases in the size of face-to-face groups can undermine trust and cooperation, and the mechanism seems to be that its members are simply less able to regulate one another’s behavior through norm enforcement.

Optimize opportunities for reputation monitoring. There is increasing evidence to suggest that gossip and reputation monitoring may increase cooperation and thus provide a cost effective and efficient solution to promoting cooperation (e.g., Feinberg et al., 2012; 2014; Lienard, 2014; Wu, Balliet, & Van Lange, 2014). Rather than establishing formal sanctioning systems, it may be useful to think creatively about the more informal, perhaps less costly, reputational systems. Needless to say, in several novel contexts such mechanisms are already in place, such as online anonymous exchange forums. And on online auction markets such as Ebay, reputation scores are quite explicit and report, for example, the percentage of positive feedback and reinforce such information by salient indicators (stars). Indeed, reputation is clearly one central mechanism by which virtual strangers are able to trust one another. Still authorities could still benefit from some key insights. For example, asking for urgent donations to noble causes in public settings (such as around a stadium where people gather with friends) may be more effective than doing so in private settings (such as at the front door of one’s house). The use of cameras or mirrors in various public settings, such as in the train stations, may not only reduce aggression and vandalism, but may also reduce free-riding.

Concluding Remarks

Social dilemmas are of strong scientific interest. They provide the context in which the evolutionary origins and psychological mechanisms relevant to trust and human cooperation can be examined. At the same time, several social dilemmas pose a serious challenge to the well-functioning society. We provided a social dilemmas analysis of political behavior of authorities and governments, and argued that reward and punishment uncover key mechanisms that help promote human cooperation. We highlight the importance of small groups, as well as local governance, in resolving social dilemmas, along with triggering reputational concerns as a deeply rooted mechanism that promotes human cooperation. While research on social dilemma has a decades-long history, with roots in the fifties, it is rare for psychologists to contribute to key insights revolving around the politics of solving social dilemmas. We hope to make a useful exception, as we strongly believe that “one of the key tasks for governments is to manage social dilemmas.” We realize that it is unlikely that everybody completely agrees with this claim. We also realize that some basic preferences, needs, or even principles might be seriously conflicting with some of our recommendations. Indeed, the precious need for privacy is often at stake in our recommendations toward triggering reputational concerns. We deliberately do not want to be normative about such issues, as simply hope to demonstrate what measures might be effective in promoting human cooperation. As such, we hope that even those who might not agree with our claims or otherwise feel uncomfortable with some of our recommendations, recognize the importance of how and why human cooperation might be sustained and even promoted. After all, human cooperation is ultimately rooted in small groups where actions are not completely anonymous. And these are exactly the circumstances that we need to create, maintain or facilitate if we want to promote human cooperation.

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