COOPERATION BY EXAMPLE

"Together against corona" is the motto for fighting the pandemic. At present, the best way of containing it is for everyone to keep their distance, wear a mask, and minimize contact with others. However, the temptation to make an exception in one's own case is great. After all, it is enough if everyone else is following the rules – right? The more dependent we are on mutual cooperation, the more egotism threatens our common goals. Economist Matthias Sutter explains the circumstances in which people can nonetheless cooperate successfully.

When I talk about the value of cooperation and present my research on this topic to the public, I like to begin with an ancient Chinese parable. In my view, it not only effectively illustrates the advantages of cooperation, but also shows why it can fail. The parable goes like this: a bridal couple did not have much money but were still keen to have a lot of people come and celebrate their wedding. Happiness doubles when shared, or so they thought. They decided to organize a big wedding with lots of guests. In order to make this possible, they asked everyone invited to bring a bottle of wine. There would be a large barrel at the entrance into which everyone would be able to pour their wine; this meant that everyone would be able to drink the wine donated by others, and everyone would be relaxed and in high spirits. When the celebration began, the servers went to the barrel and scooped out its contents. But everyone was horrified to find that it contained only water. Everyone stood or sat frozen in shock at the realization that everyone had had the same thought: "Nobody will notice or taste the one bottle of water I pour in. And today I want to celebrate at somebody else's expense."

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VIEW POINT



Matthias Sutter initially obtained a diploma in Catholic theology and then went on to study economics at the University of Innsbruck, where he completed his doctoral degree in 1999 and his habilitation in 2002. Following professorships in Innsbruck, at the European University Institute in Florence, and in Cologne, he was appointed Director of the Max Planck Institute for Research on Collective Goods in Bonn in 2017. His experimental laboratory and field research mainly focuses on the determinants of cooperation, including the importance of patience and the economic decision-making behavior of children and adolescents. He became known to the public primarily for his research into the positive effects of quota regulations on competitiveness among women, and for his book Die Entdeckung der Geduld (The Discovery of Patience), which spent several weeks on Austria's bestseller lists.

ILLUSTRATION: SOPHIE KETTERER FOR MPG

The parable accurately pinpoints the problem of cooperation in social groups. Everyone is tempted to make the smallest possible contribution to the group (in this case by bringing cheap water instead of expensive wine) but hopes that everyone else will contribute as much as possible (e.g. by donating wine instead of water). Common interests cannot thrive if every-body acts in this way – just like the celebration in the parable turned into a

washout. However, if everyone contributes something, everyone can benefit – and have a great party.

THERE ARE MANY REASONS TO CONTRIBUTE LITTLE OR NOTHING TO THE COMMON GOOD

The parable of the wedding can be applied to many areas of life. Soccer teams are demonstrably more successful when every player runs for the others, i.e. goes the extra distance to make up for other players' mistakes. Research teams are more likely to bring their projects to a successful conclusion if everyone pulls their weight instead of expecting someone else to put in the spadework. Joint ventures are more likely to be successful if the companies involved coordinate their research and development efforts. Work teams function better when important information is shared and passed on quickly. The list could go on almost

indefinitely, and in times like these, it also includes collaborative research into the development of new vaccines or treatments for COVID-19. Even the attempt to contain the pandemic through social distancing can only succeed if everyone cooperates.

When looking at the bigger picture, the benefits of cooperation in the examples mentioned are relatively apparent to everyone involved. Yet from an individual viewpoint, there are many reasons to behave like a freerider and contribute little or nothing to the common good in the respective situation. After all, we often benefit from other people's cooperation even if we do not behave cooperatively ourselves (e.g. by neglecting our part of the team's work or not providing all the relevant information in the case of cooperative business ventures). This tense relationship between self-interest and the benefit of mutual cooperation is characteristic of any situation that is usually described as a social dilemma. So how do humans develop a willingness to cooperate, and what does this depend on?

It has been shown that cooperation works very well even among children. In our experiments with children aged from three to six, we found that even small children understand that they benefit from mutual cooperation in a group. Children who watch other people cooperating behave more cooperatively themselves. This is particularly true in the case of repeated interactions. If a child had good experiences with another child in the past, they are more likely to behave cooperatively towards this particular child in the future. Apart from actual experiences with another child, even expectations can be enough: children who expect cooperation from other children will behave more cooperatively themselves, even when the other children have not yet proven their willingness to cooperate. There also appears to be a correlation with the degree of cooperation shown by their parents. Cooperative parents have more cooperative children. Moreover, a child's

> willingness to cooperate increases with the level of education attained by their parents. Apparently this is because cooperation is more likely to be normal social behavior among better-educated parents, and this is then reflected in the child's behavior.

IT IS NOT ENOUGH FOR EVERYONE TO KNOW ABOUT THE BENEFITS OF COOPERATION. THE TOPIC HAS TO BE DISCUSSED

Regardless of age, communication between group members is probably the most important factor in cooperation. It is not enough for each member to be aware of the benefits of mutual cooperation. A discussion about them must also take place. Studies in the field of behavioral economics have revealed that showing a video demonstrating the advantages of cooperation to every member of a group before they interact does not improve cooperation within the group. Only when the members talk about the video and discuss the advantages and disadvantages of specific behaviors does their willingness to cooperate increase. Besides addressing the value of mutual cooperation, these discussions also appeal to standards of social fairness. In concrete terms, this means that freeriders (who contribute water instead

of wine) are declared to be behaving unfairly and antisocially. This appeal to social norms during the group discussion together with the mutual assurance that cooperation will enable everyone to achieve the best results changes the other group members' expectations of the cooperation and thus increases their willingness to cooperate.

However, appeals lose their effect over time, which is why incentive mechanisms also have to be used as effective instruments for promoting cooperation. These include rewarding cooperation and sanctioning freeriding behavior. It does not really matter whether these (positive and negative) incentives are provided by the group members themselves or by people outside the group. Incidentally, the results of behavioral economics studies indicate that sanctions work better than incentives in the long term. This is because of an asymmetry that is easily overlooked. Possible sanctions have a disciplinary effect even when they are not applied, as long as the belief persists that freeriding behavior can be punished. Rewards only work if they are applied. However, the use of rewards as incentives gives rise to typically human behaviors like habituation effects, because people soon come to regard a certain level of reward as normal – and, in the individual's view, well-deserved. This is why studies have shown that cooperation levels decline over time if there is a constant flow of rewards. This is also consistent with the evidence that productivity in companies initially increases when bonus payments are introduced, but then declines to the same level as before, usually over a period of two years.

In conclusion, I would like to shed some light on the importance of a factor that for several years was the focus of my own research into cooperation. I specifically studied the extent to which cooperation depends on someone in a group setting a good example. We described this as the definition of "leadership". In terms of methodology, we investigated this factor in laboratory experiments that presented a classic social dilemma. This meant that every single person in our laboratory studies could benefit financially from not cooperating. At the same time, the entire group benefited most if everyone offered their full cooperation. Applied to the example of the Chinese parable at the beginning of this article, this means that everyone benefits the most when each guest brings a bottle of wine so

IN TIME, WILLINGNESS TO COOPERATE WILL DECLINE EVEN IF IT IS REGULARLY REWARDED that everyone can celebrate. However, each individual saves money if they only pour water into the barrel and then drink the slightly diluted wine provided by everyone else.

In our studies, I was keen to find out whether the willingness to cooperate increased if one group member took the lead in deciding how much they were going to contribute, i.e. how far they were going to cooperate, and the other members saw this before making their own decisions. As an example, you can imagine all the wedding guests watching while the first person pours their bottle into the barrel and noting whether it contains water or wine. Only then do they decide whether they would rather contribute water or wine.

All our findings show that cooperation in groups is substantially higher if one or more members set a good example. Group members adapt to the cooperative behavior of the others. In the field of economics, this is known as "conditional cooperation". This means that people are willing to cooperate (bring wine) if they see or at least expect that others will also cooperate. In recent years, the importance of conditional cooperation has been confirmed in studies performed all over the world.

IN TEAMS WITH EGOTISTIC LEADERS, THE TEAM MEMBERS CONTRIBUTE AS LITTLE AS POSSIBLE

We can almost speak of a global behavioral pattern that – depending on the study – can be identified in approximately 30 to 50 percent of the test subjects.

Conditional cooperation is a key factor in effective leadership. Exemplary behavior has a particularly strong impact if it is voluntary. The copycat effect does not function if someone is forced to be cooperative. And if someone sets a bad example, the cooperation in the team breaks down entirely – nobody wants to be exploited by freeriders. Because of the hierarchies within organizational structures, a particularly important role is played by the respective senior member or superior. His or her cooperative behavior is particularly likely to be imitated. In teams with egocentric leaders who often expect cooperation from others but behave like freeriders

themselves, the members contribute as little as possible to the team's success because otherwise they feel exploited. Leadership only functions if the leader's behavior is exemplary; as Mahatma Gandhi once said, "We must be the change we wish to see in the world." On the other side of the coin, cooperation in groups can be severely impacted by the poor example set by a prominent group member. This is why the example set daily by team leaders, directors, and other persons in positions of responsibility is so important.

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You can watch a video clip of a conversation between Matthias Sutter and the author Marc Elsberg on the topic of cooperation at www.mpg.de/wtles (in German)