

## **A Game Theory Solution for a Fractured America**

The U.S. is divided as never before. Partisan polarization has been on the rise for many years now. Anyone who uses American social media knows that the culture has degenerated into a never-ending shouting match over politics, race, ideology and other fault lines. People don't want to work or shop next to Americans from the opposite tribe. They don't even want their kids to marry someone from across the political divide.

This excessive animosity is hurting the country. It's paralyzing the policy, for one thing. The use of filibusters and other veto points in the political system is making it very hard to reform U.S. health care, the tax system and other creaking institutions. In addition, it's probably reducing social trust in the government. Lower levels of trust are bad for economic growth. And to top it all off, partisanship is probably making Americans less happy.

But I believe that a concept from game theory can help reduce partisan rancor. Once Americans of all stripes realize that the other side is never going away, they'll realize that it makes more sense to find a way of living in harmony.

Game theory -- one of the main branches of economic theory -- is often used to make very precise, quantitative predictions, but it's also sometimes useful as a metaphor for human interaction. And the deepest metaphor in game theory is the prisoner's dilemma. In this hypothetical situation, each of two prisoners in separate cells has to decide whether to cooperate with the other, or betray them to the cops. The best outcome overall would be if the prisoners cooperated. But because of the way the game is set up, each prisoner has an incentive to sell out the other.

If the prisoner's dilemma gets played only one time, the dread logic of self-interest prevents the good outcome from ever happening. Each prisoner chooses to betray the other, and so both end up losing out. Even if the game is repeated a finite number of times, the outcome is the same -- betrayal and disaster, again and again. The prisoner's dilemma would seem to be a good reason to be pessimistic about human interaction.

Except that if the game is repeated an *indefinite* number of times, something amazing happens. People start to cooperate. Because they don't know exactly when the game will end, the players can't plan to betray each other at the end. And knowing this, as long as they care about the future, they choose to cooperate again and again -- leaving both parties much better off in perpetuity.

The repeated prisoner's dilemma is a powerful metaphor for real human interaction. If people know that they're going to have to live with each other into the indefinite future, the incentive to fight is reduced, and the incentive to cooperate increases. So to reduce American partisanship and social fracture, it helps to realize a fundamental truth: *Neither side is going anywhere.*

First, take race -- the country's oldest and bitterest divide. On one hand, the country is not going to return to being 85 percent non-Hispanic white. Only three out of five Americans are non-Hispanic whites, and soon it'll be closer to one in two:

The U.S. population is 323 million. That means that there are already more than 120 million nonwhite Americans, and the number will soon be more than 150 million. This is not a small minority that can be ignored, suppressed or waved away.

But white America is also here to stay. Rumors of the demographic eclipse of white people have been greatly exaggerated. For one thing, non-white fertility rates, especially Hispanic fertility rates, have plunged over the last decade, and are now pretty close to white rates:

Also, Hispanic immigration has slowed dramatically. Immigration from Mexico, including illegal immigration, has been in reverse for around 10 years now.

Finally, more Hispanics are identifying as white. Between the 2000 and 2010 Census, approximately 1.2 million Hispanic Americans -- almost 4 percent of the total -- changed their race from "some other race" to "white."

So among reduced Hispanic immigration, reduced nonwhite birth rates and slowly changing racial identification, white America will not vanish. Instead, the nation will remain

about evenly split between whites and nonwhites, with a slowly increasing number of people who identify as two or more races.

The political divide isn't going away anytime soon, either. This should be apparent just from looking at history -- there has always been a left and a right. Even Spain, where a bloody left-right civil war killed hundreds of thousands in the 1930s, still has conservative and socialist parties.

The future of liberalism and conservatism can also be seen by looking at a map. Unlike in the period before the Civil War, when the divide was mostly regional, today's political division is between big cities and small towns. Smaller cities and the rural countryside lean strongly Republican, while urban areas are deep blue, with the suburbs split roughly down the middle. This pattern holds true even in strongly Republican and Democratic states.

Big cities, small cities and rural areas aren't going away anytime soon. Big cities are essential to U.S. prosperity -- the counties won by Hillary Clinton in the 2016 election are responsible for almost two-thirds of the economy. Rural areas and smaller cities are essential, too, because they command natural resources, are attractive places to raise children, and have fewer restrictions on housing development.

In other words, there can be no secession of Red America from Blue America, or vice versa -- the two are inextricably connected and dependent on one another. So all political groups and races in the U.S. need to understand that nobody is going anywhere. This truth runs exactly counter to the apocalyptic thinking currently in vogue in the U.S., where every election is treated as the must-win final battle that will secure the future of the country. Poisonous short-term rhetoric creates the illusion that U.S. politics is a one-shot prisoner's dilemma, where the only rational option is to fight to the bitter end. But it's an illusion. There will be another election after 2020. And another, and another. There is no end in sight.

The U.S. is an indefinitely repeated prisoner's dilemma. Everyone is locked in a room with everyone else, forever. There is no escape, so the only rational strategy is to learn how to get along.