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Social networks can spread the Olympic effect

The classic economic approach of using incentives is not always the best way to change human behaviour, argues Paul Ormerod.

After a summer of sport, the London Olympics and Paralympics have ended and the city is now returning to normal. For London, normal means roads and public transport that are crammed, especially at peak times. It was all very different during the games, when many of the streets and shops in this dynamic city were eerily deserted. What made behaviours change so dramatically? And what lessons can be learned for behaviour change in other arenas?

Congestion was a potential major headache for the organizers of the Olympics. The conventional way to prompt a change in behaviour such as driving is to use incentives, the price mechanism beloved of economists. There is already a congestion charge for vehicles entering the city centre, so this could have been ramped up. And a special levy could have been introduced for travel on public transport.

But the increases in price would have had to be enormous to deter people, so London relied instead on social-network effects. Before the games, a massive publicity campaign focused on how crowded the centre of the city would be. Bus and train passengers, for example, were bombarded at regular intervals with recorded announcements from mayor Boris Johnson that warned just how busy public transport would be, and urged people to avoid them if they could.

The strategy worked — too well in fact — because of feedback effects. People do not receive such warnings as isolated individuals: they discuss them widely with friends and work colleagues. Employers reinforced the effect by promoting special arrangements for home-working and flexible hours. As a result, commuting cyclists had many roads to themselves and visitor numbers at flagship London venues fell by one-third.

Johnson gave us a glimpse of public policy as it could be applied in the twenty-first century, relying on network effects rather than on incentives. In the twentieth century, both social and economic policy in the West were dominated by the principles of conventional economic theory: individuals with fixed tastes and preferences took decisions in isolation, and reacted to changes in incentives. So to achieve a policy goal, politicians would change tax rates and offer subsidies. This model is not wrong. But it is incomplete picture of the way in which the world now operates.

Network effects are not new. Throughout history, a crucial feature of human behaviour has been our propensity to copy or imitate the behaviours, choices and opinions of others. We can see it in the fashions in pottery in the Middle Eastern Hittite Empire of three-and-a-half millennia ago. But we are now much more aware of what other people are doing, or plan to do. For the first time in human history, more than half of us live in

cities, in close, everyday proximity to large numbers of other people. And the Internet has revolutionized communication.

Social networks are often thought of as a web-based phenomenon: Facebook, for example. Such forums can indeed influence behaviour. But real-life social networks — family, friends, colleagues — are even more important in helping to shape preferences and beliefs.

Social problems such as obesity are driven by network effects. It is not that people decide to copy fat friends and eat huge amounts; here, the network effect is one of peer acceptance. If most of your friends are obese, then it is more acceptable for you to put on weight. The problem of worklessness is also driven by networks. My home town of Rochdale, UK, attracted notoriety a couple of years ago when 84% of working-age adults on one council estate were found to be on benefits. Yet estates with very similar socioeconomic backgrounds had

much lower rates, although still high by national standards. The social values of some estates had evolved to make being on benefits the norm.

A great deal of Europe's economic policy can be seen as an attempt by various players to use the social-network effect to get their narrative version of events to 'go viral' and dominate financial markets, almost without regard to objective reality. For example, although the United Kingdom has a higher public-sector debt relative to the size of its economy than, say, Spain, the United Kingdom is perceived as sound and Spain as risky.

Thanks to advances in network theory, we now know much more about how behaviour is spread and contained across networks than we did even ten years ago. Something that is

particularly disturbing for policy-makers is the inherent level of uncertainty: some network effects simply fail to spread, and it is impossible to predict accurately how much traction an idea will get, and how any one event will unfold.

Tackling social, economic and global issues, such as climate change, will require real, fundamental changes to behaviour. To make this a reality, policy-makers, in both the public and the corporate sphere, will need to radically change their view of how the world operates. The inherent uncertainties of social networks make policies much harder to implement, so network theory must come up with effective, practical tools that help policy-makers to achieve their goals. For when they work, as we saw in London, social networks are a powerful and useful way to get things done. ■

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