

Introduction

Games: The Spectrum of Conflict, Competition, and Cooperation

DAVID BLAGDEN AND MARK DE ROND

Games are ubiquitous. They shape our leisure and our work, our governments and our global relations. They shape our families, our love-lives, and, ultimately, our reproduction – just as they do for all social species. Games consume resources, but also generate them; they foster friendships, deepen enmities, and shed light on both.

For many Britons, the word 'games' invokes a particular sort of early-life memory: triumph or tears on some windswept rugby or hockey pitch, perhaps, during the eponymous school sports lesson of that name. Yet they are not mere child's play. The organisers of the 2014 football World Cup estimate that the tournament reached 3.2 billion viewers — some 44% of the world's population at the time — with more than 1 billion tuning in for the final match alone.¹ Almost 14% of the humans then on Earth, in other words, devoted time and more-than-a-little emotion to watching eleven Germans and eleven Argentines chase an inflatable bag between two nets, following rules first codified on Cambridge's very own Parker's Piece.² The global market for video games was estimated at £91.5bn in 2015, meanwhile, with the very frontier of mankind's technological capacity — an area in which Cambridge, both city and university, has long been at the forefront — driven outwards by the pursuit of

¹ FIFA Press Office, '2014 FIFA World Cup™ reached 3.2 billion viewers, 1 billion watched final', 16 December 2015, www.fifa.com/worldcup/news/y=2015/m=12/news=2014-fifa-world-cuptm-reached-3-2-billion-viewers-one-billion-watched—2745519.html [accessed 27 January 2018].

² BBC, 'Cambridge ... the birthplace of football?!', 22 September 2009, www.bbc .co.uk/cambridgeshire/content/articles/2006/06/09/cambridge_football_rules_parkers_piece_feature.shtml [accessed 27 January 2018].



David Blagden and Mark de Rond

ever-more-stimulating computer systems.³ And states vie with each other to host the modern Olympic Games, parting willingly with eye-watering sums for the prestige and esteem associated with such a global spectacle. London 2012's £9.3bn price-tag – hardly inconsequential in a country then dealing with significant fiscal overstretch – pales in comparison with the >\$40bn and >\$50bn that China and Russia, both less developed countries eager for international status, splashed out on Beijing 2008 and Sochi 2014 respectively.⁴

The etymology of 'game' in contemporary usage originates from gamen – Old English for 'joy, fun, amusement' – a term itself derived from Norse and Saxon forebears.⁵ Yet many games are not fun at all: they are played in deadly earnest, and for high stakes. Even the original Olympiads, the progenitor of today's organised interstate sporting contests, were valuable means for rival Greek city-states to assuage political pressure for competition and supremacy while preserving mutually useful military and economic cooperation.⁶ Viewers of the cult US television drama *The Wire*, widely hailed for its Dickensian depiction of crime and poverty in post-industrial America,⁷ will be familiar with the refrain 'it's all in the game'. This wry quip, on the part of drug-dealers and the police officers who chase them, reflects a shared understanding

Newzoo.com, 'Newzoo's top 100 countries by 2015 game revenues', 15 October 2015, https://newzoo.com/insights/articles/newzoos-top-100-countries-by-2015-game-revenues/ \(\cap{accessed 27 January 2018}\)\)\).

* BBC, 'London 2012: Olympics and Paralympics £528mn under budget', 19 July 2013, www.bbc.co.uk/sport/olympics/20041426 [accessed 27 January 2018]; Charles Riley, 'Beijing had few rivals for 2022 Olympics due to cost', CNN Money, 31 July 2015, http://money.cnn.com/2015/07/31/news/winter-olympics-2022-beijing/index.html [accessed 27 January 2018].

⁵ Online Etymology Dictionary, www.etymonline.com/word/game [accessed 27 January 2018].

⁶ Kostas J. Gallis, 'The Games in Ancient Larisa: An Example of Provincial Olympic Games', in Wendy J. Raschke (ed.), *The Archaeology of the Olympics: The Olympics and Other Festivals in Antiquity* (Madison, wi: University of Wisconsin Press, 1988), p. 217; Mogens Herman Hansen, *Polis: An Introduction to the Ancient Greek City-State* (Oxford, Oxford University Press, 2006) pp. 9–10

State (Oxford: Oxford University Press, 2006), pp. 9–10.

Rob Sheffield, '100 Greatest TV Shows of All Time' (#2. 'The Wire'), Rolling Stone, 21 September 2016, www.rollingstone.com/tv/lists/100-greatest-tv-shows-of-all-time-w439520/the-wire-w439640 [accessed 27 January 2018]; The Telegraph, 'The Wire: arguably the greatest television programme ever made', 2 April 2009, www.telegraph.co.uk/news/uknews/5095500/The-Wire-arguably-the-greatest-television-programme-ever-made.html [accessed 27 January 2018]; Charlie Brooker, 'Oh, just watch it ...', The Guardian, 21 July 2007, www.theguardian.com/media/2007/jul/21/tvandradio.guide [accessed 27 January 2018].



Introduction

that both are hostage to forces larger than themselves: to the perverse incentives created by capricious institutions, be they narcotics gangs or law-enforcement bureaucracies, which are themselves responding self-interestedly to far-reaching socio-economic and political failure. During the Cold War, the language of 'games' – usually prefixed by that most horror-invoking term of all, 'war' – even entered the lexicon of diplomacy and military strategy. Yet the exercises and simulations that one side might perceive as merely necessary to preserve defence and deterrence, the other side could easily interpret as signals of hostility and aggression – a dynamic that scholars dub the 'security dilemma's – bringing East and West perilously close to catastrophic conflict.9

The study of games, then, is the study of social interaction in the face of different incentive structures. Whether it be children chasing a ball around a playground or a firm contemplating how to respond to a newly established rival, two chess grand-masters facing each other across a table or Chinese naval officers modelling what to do in some future confrontation with the USA, all are responding interactively to certain incentives under certain conditions. Sometimes those incentives engender cooperation, as when a detective and an informant – who may otherwise despise each other - come together to convict some individual of mutual concern. Sometimes they produce bounded competition, as when Formula 1 teams pour resources into beating each other while also agreeing on the desirability of petrol-driven motor racing in the face of rival electric-powered series' rise. And sometimes such incentives produce open conflict, as when stags' rutting inflicts grievous injuries or even death on others of the same species - deer that, given local proximity, could well be brothers – for the sake of passing on their genes to

The utility and importance of investigating incentive structures gave rise, in turn, to one of the great innovations of twentieth-century social science: the incorporation of mathematically derived 'game theory' into

Robert Jervis, 1978, Cooperation under the security dilemma, World Politics 30(2), 167–214.

⁹ Arnav Manchanda, 2009, When truth is stranger than fiction: the Able Archer Incident, *Cold War History* 9(1), 111–133. Such concerns have returned today, of course, especially in Eastern Europe and Asia.



David Blagden and Mark de Rond

the explanation of human behaviour.¹⁰ With its systematic unpacking of decision-makers' options under various conditions – uncertainty over available pay-offs, imperfect information about others' intentions, ambiguity over the number of future interactions, and so forth – game theory has shed remarkable light on the drivers of conflict, competition, and cooperation. We know more today about the causes of war, the behaviour of firms, the bargaining of legislators, and, indeed, any number of daily individual human choices because of game theory's insights. Yet we also now recognise that certain assumptions underpinning many of game theory's most seminal contributions, such as the assumption of human 'rationality' – where rationality is equated with forward-looking profit maximisation – do not fully reflect human behaviour, particularly the many social and cognitive sources of (dis)utility that people 'play games' around.¹¹ As such, while the term 'game' can be a useful analytical tool and heuristic metaphor, its deployment merits caution.

The chapters in this volume, derived from a lecture series on 'Games' convened by Darwin College at the University of Cambridge during the period January-March 2016, reflect an array of perspectives on the spectrum of conflict, competition, and cooperation - as well as a wealth of expertise on what games look like, how they operate, and how social animals behave inside them. First, former UK Cabinet minister Sayeeda Warsi considers the 'game' of politics – a trait that voters lament, even while placing ever-greater demands on their governmental representatives and its potential to conflict with the personal principles that draw individuals to the calling of political representation in the first place. She concludes that there comes a point where an individual must withdraw from the political game, even if that means forfeiting the governmental power to advance causes that one values, if one is to retain the personal principles and moral code that led oneself to politics in the first place. Second, Nicola Padfield - a scholar who combines legal and criminological expertise with professional knowledge of Britain's judicial and

John von Neumann and Oskar Morgenstern, Theory of Games and Economic Behavior (Princeton, NJ: Princeton University Press, 2007 [1944]).

Donald P. Green and Ian Shapiro, Pathologies of Rational Choice: A Critique of Applications in Political Science (New Haven, ct. Yale University Press, 1996); Richard H. Thaler, Misbehaving: The Making of Behavioral Economics (New York: Norton, 2015).



Introduction

penal systems – scrutinises the 'game-playing' that afflicts the pursuit of criminal justice. She contends that, despite the well-meaning pursuit of reform, the system still too often resembles a game of 'Snakes and Ladders' both for the victims of crime and for the culprits – achieving justice and rehabilitation requires laborious ascent through the system, while it is all too easy to slide into injustice and relapse. Third, A. C. Grayling – a leading philosopher of language, logic, and the history of both – unpacks the thought of Ludwig Wittgenstein, specifically the multiple explicit and implicit games that the great Cambridge logician was playing. While Wittgenstein is known for his introduction of the 'language-game' concept, whereby language derives meaning not from objective referents but from its usage, Grayling shows that Wittgenstein was also playing with the discipline of philosophy itself, seeking to protect the things he regarded as important – ethics and religion – from the encroachments of reductive scientific attitudes.

Fourth, David Brailsford - the principal coach/manager behind unprecedented Olympic success for British Cycling and subsequent Grand Tour success for Team Sky – turns his eye on the games that must be played within elite sport. He concludes that athletes, helped by their coaches and medics, make their biggest strides in performance through playing around with mindset – marginal gains can be found in fitness, equipment, diet, physiological support, and so forth, but the 'inner chimp' must first be willing to undergo privations for the sake of a belief system. Fifth, Frank Ledwidge – barrister and participant-turned-critic in Britain's recent expeditionary wars in Afghanistan and Iraq – eviscerates the UK's post-9/11 return to what was once dubbed 'the Great Game': external powers' direct military involvement in the pursuit of strategic interests in Central Asia. He finds not only that political decision-makers were at fault, as is now ensconced in the popular memory, but also that the British Army's senior officers failed to understand - and therefore failed to appropriately strategise for – the sorts of campaigns they were entering, attributing this failure to a lack of military intellectual culture that he hopes is now shifting. Sixth, eminent neuropsychologist Barbara J. Sahakian - writing here with her research associates Laure-Sophie Camilla d'Angelo and George Savulich – considers ways in which the brain itself can play games with our mental health, an area where



David Blagden and Mark de Rond

human understanding still lags behind our knowledge of physical health. Yet games may also offer a way forward: just as we can train our bodies via exercise to sustain longevity and wellbeing, so too the gaming innovations that Sahakian discusses hold the promise of maintaining and improving brain function, even into later life. Seventh, distinguished zoological ecologist Nicholas B. Davies surveys some of the games that nonhuman animals play, both within generations and across evolutionary time, driven – as humans are too, of course – by the hope of reproductive success. He reveals complex mixtures of cooperation and competition, arms races and innovations, survival stratagems and sexual trickery, to paint a fascinating picture of life on Charles Darwin's 'entangled bank': individuals, societies, and species locked in conflict for the privilege of replicating themselves.

In the end, we come to our final contributor. Thomas C. Schelling did not invent game theory, but he applied its insights widely to many of the most pressing political, economic, and social challenges of the post-1945 world. Already aged ninety-four by the time of his lecture, Professor Schelling agreed to provide us with a short reflection on outstanding questions arising from that most famous and invoked of game-theoretical heuristics, 'the Prisoners' Dilemma'. That reflection – presented here as our afterword – is his final published work: he passed away in December 2016, some nine months after his lecture, at the age of ninety-five. The material is therefore used by kind permission of his widow, Alice, who was an equally vibrant, generous, and insightful participant in debates with students and staff alike during their stay in Cambridge – a city that Tom first visited, incredibly, on the European staff of the US Marshall Plan in the immediate aftermath of the Second World War. While Professor Schelling published widely, on issues from the public-health implications of smoking to the bargaining problems associated with countering climate change, it is for his work on identifying the conditions necessary for peace to hold in the face of conflictual incentive structures against the backdrop of Cold War nuclear confrontation that he will be most remembered. He was accordingly awarded the 2005 Nobel Memorial Prize in Economic Sciences (shared with Robert Aumann) for 'having enhanced our understanding of conflict and cooperation through game-theory



Introduction

analysis'.¹² With major-power relations now once again souring and the associated spectre of military escalation towards nuclear use returning, a generation of students and policymakers who had hoped that Schelling's insights in that domain could be put away forever are now poring once again over his works. It is only fitting, therefore, that the last word in our volume should go to Tom. And it is only fitting, similarly, that the volume itself should be dedicated to his memory.

NobelPrize.org, 'Thomas C. Schelling – Facts', www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2005/schelling-facts.html [accessed 28 January 2017].



1 Personal Principles in the Political Game

SAYEEDA WARSI

If I had been asked to write about games some 30 years ago, you would have received an essay on moves in Monopoly, the language of Ludo, and the detail of draughts. I could have discussed the need to be nimble-footed in netball and hawkish in hockey, but not in my wildest imagination would the discussion have turned to politics. As the second of five girls born into a traditional Muslim Pakistani immigrant family, games and board games were the safe space that was classified as leisure time, and Games in school was the competitive space in which I never excelled. Games were what we learned about in History when we studied the Greeks, where the only areas we seemed to cover were the Gods and the Olympics. Games, in my coming-of-age year at twenty-one, was that amazing Pakistan versus England cricket world cup final with its nail-biting finish and its heroic-looking players. Fast-forward three decades and the word 'games', for me, conjures up images of dark corners, dodgy deals, and disingenuous dialogue. So where did it all go wrong?

Allow me to start with some definitions, some history, and my own journey into politics. Described altruistically by Aristotle as 'of, for, or relating to citizens', politics was the science to create the wellbeing of citizens. In modern terms, the definition of politics has been more broadly cast to include the activities associated with the governance of a country or other area, the debate within political ideologies, or conflict between parties having or hoping to achieve power.

For me, politics represented the journey from activism to application and from interpreting and applying the law to making it. I spent my

8

¹ Ernest Barker, *The Political Thought of Plato and Aristotle* (Mineola, NY: Dover, 1959), p. 10.



Personal Principles in the Political Game

twenties qualifying and practising as a lawyer, specialising in criminal defence, mental health tribunal representation, and human rights law. I learnt the art of making a case to fit the rules, but with the sense that sometimes the rules themselves could be better. I volunteered with the Racial Equality Council and the Joseph Rowntree Trust. I campaigned for greater participation of ethnic minorities in public life. I felt able to reconcile my identity as a British Asian with affection for my Pakistani origin. Although there were still challenges for ethnic minorities in Britain, I felt that we were heading in the right direction. I felt that, although there were laws and rules that could be improved, for the most part living by the rules came easily.

And then the rules of the game changed. Most of us can recall where we were and what we were doing as the horror of 9/11 unfolded. We can recall the imagery of the twin towers falling, but what I also recall is the vivid use of language by politicians. As George W. Bush said, infamous and often quoted though it is: 'Every nation in every region now has a decision to make. Either you are with us, or you are with the terrorists.' This signalled the start of the war on terror, and we still feel the aftershocks of that today.

It was clear that identity was to be redefined. There was less scope for nuance, and what defined 'otherness' was now religion. Having decided that these battles so recently fought seemed too hard to fight again so soon, I left Britain in 2002. I travelled to the villages where my parents had come from in the early 1960s and spent a year there. Among other things, I set up a women's empowerment charity. But, having spent time away, I realised that we all had a responsibility to play a part, however small, in ensuring that the atmosphere of division did not grow. At that time I felt that running a campaign or practising the law was not where real change could be made and that to make long-term change one had to be a part of the place where decisions were made. I therefore threw my hat into the ring to fight for a seat in Parliament, and so the journey into politics began.

George W. Bush, Speech to Joint Session of the US Congress, 20 September 2001, http://edition.cnn.com/2001/US/09/20/gen.bush.transcript/ [accessed 7 November 2017].



Sayeeda Warsi

The Political Journey

The 2005 general election campaign taught me some early and painful lessons about the game of politics. I had understood that the campaign was like sport – a competition – but I also thought, like sport, that the competition was played out in accordance with rules. It is not often that politicians are open about how they got it wrong, but being out of the game allows one to reflect both on one's achievements and on where things could have been handled differently. In preparation for this chapter I have looked back on what I considered to be either my defining personal principles or the moral norms according to which I conducted my professional life, and how I implemented or departed from these in my political life.

The 2005 general election campaign provides me with one such case study. This was my first election campaign. I had never fought a town or council or county election and yet found myself in a potentially winnable seat against an unscrupulous but seasoned opponent, in the glare of the media spotlight and during a politically toxic period. A combination of a lack of experience and a lack of faith in my own judgement in a new forum persuaded me to outsource the campaign message, which resulted in a campaign that was ruthlessly political and not particularly principled. As someone who had been a hands-on lawyer – from the way in which I prepared a defence case to owning and running my own practice – my first mistake was not to own the campaign and determine the local message. A departure from the norm, my core principle, led to a campaign of which I regret parts.

My second mistake was to focus on short-term and personal gains rather than remain true to the definition of politics as of, for, or relating to citizens for the result of citizen wellbeing. The winning became the focus, and so I had started to tread the slippery path of 'the end will justify the means'.

Having, as a lawyer, been rooted in the principle of unbiased independent advice and solutions, it seemed that politics required the opposite. The doorstep conversation always and only presented answers to voters from a right-wing ideological position. This was my third departure from the norms or principles I was committed to in my professional life.