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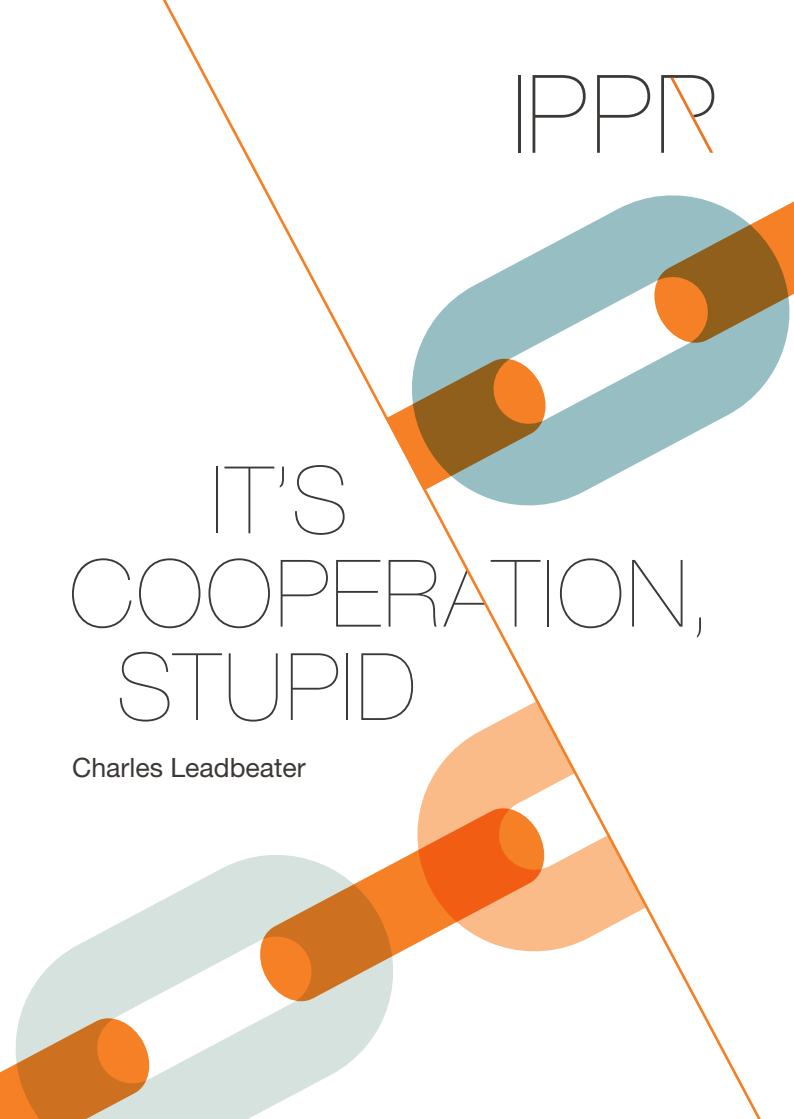

# IT'S COOPERATION, STUPID

Charles Leadbeater

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## WHY RICHARD DAWKINS, THOMAS HOBBES AND MILTON FRIEDMAN GOT IT WRONG

Charles Leadbeater

IN PARTNERSHIP WITH

CO-OPERATIVES UK

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# 1. THE ASSUMPTION OF SELFISHNESS

Imagine you are walking down the street and a stranger stops you to make an unusual proposition. He will give you £100 but on one condition: you have to split the sum with a stranger. If the person you select to split the money with rejects your offer then the deal is off: you have to return all the money to the donor. You stop the next person in the street, explain the situation and make them an offer. What offer would you make? And if you were on the receiving end, what offer would you accept?

If you are a character drawn from the pages of economic textbooks – a rational, profit-maximising machine – then you should calculate that making a relatively low offer, say £5, should be acceptable. It would leave you, the proposer, with £95 and the person to whom you made the offer, the responder, should be happy to have picked up £5 for doing absolutely nothing. For both parties the rational, self-interested thing to do would be to walk off with the money.

Yet that is not what happened most of the time when this scenario was played out in thousands of experiments conducted by social scientists across scores of countries, from villages to cities, pre-industrial to modern societies, among the young and the old. Only about a fifth of people make what would be regarded as low offers: equivalent to £20 or less of the £100 at stake. When low offers are made,

they are usually rejected as unfair – responders prefer to walk away from an offer they consider insulting rather than pick up £20 for doing nothing. In most versions of this experiment, known as the Ultimatum Game, about six out of 10 proposers make offers of more than £40: they make offers that are fair and so likely to be accepted.

The Ultimatum Game is just one piece among mounting evidence that we should jettison the assumption, hardened by layers of economic theory, sociobiology and urban myth, that selfishness is our default mode. It turns out we are not as selfish as we first thought.

The case for the market, which goes back at least to Adam Smith in *The Wealth of Nations*, people's self-interest should be harnessed to produce the public good of higher productivity and greater choice. 'It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner,' Smith warns us, 'but from their regard to their own interest.' Everyone is actuated by self-interest: that is the founding principle of economics.

Self-interest also underpins the case for government that goes back at least to Thomas Hobbes, who warned in *The Leviathan* that without government to enforce rules society would degenerate into a chaotic war of all against all. The state and the market lead to quite different solutions to social problems but they start from the same place: we are born selfish. In the hands of laissez-faire neoliberals, the assumption of selfishness became the lens through which almost all public policy had to be seen.

Their message was that the best way to get things done is to appeal to our self-interest with offers and incentives, financial and material, that can be calculated and weighed. Selfishness became so deeply embedded in our account of ourselves, however, because it was driven in by the intellectual piledriver of sociobiology, with Richard Dawkins at the controls. In *The Selfish Gene*, published in 1976, Dawkins warned:

> 'If you wish, as I do, to build a society in which individuals cooperate generously and unselfishly towards a common good, you can expect little help from biological nature. Let us try to teach generosity and altruism, because we are born selfish. Let us understand what our own selfish genes are up to, because we may then at least have the chance to upset their designs, something which no other species has aspired to do.'

What if Dawkins is wrong?[1] What if most of us, most of the time, want to be cooperative because a uniquely sophisticated tendency towards reciprocity has been written into who we are through a powerful combination of evolution and culture? What if through most of human

1 Since *The Selfish Gene*, Dawkins has tempered his position somewhat, recognising the role of cooperation in evolutionary success.

history, stretching hundreds of thousands of years, the state of our nature was not a Hobbesian war of 'all against all' but a daily routine of cooperative hunting, gathering, food preparation, child-rearing and protection? The assumption of selfishness compels us to look at life through the lens of the selfish minority, the one-fifth of people who make miserably low offers in the Ultimatum Game. What if, instead, we were to look at the challenges our society faces through the eyes of the cooperative majority who make fair offers in the Ultimatum Game?

Humans are more cooperative than other species because we are capable of more fine-grained forms of cooperation: we are prepared to cooperate with strangers, over large distances and times, overcoming obstacles of language and culture. This deeply wired capacity for cooperation will be more important than ever to enable us to create shared solutions to complex challenges, from global financial regulation to ageing and climate change. Yet most of our systems, institutions and models of public policy lock us in to a miserable, impoverished view of ourselves as untrustworthy and selfish. These approaches actively crowd out cooperation, supplanting cooperative solutions with systems that rely on material incentives. They remake the world in their own image.

The argument of this pamphlet is that we should jettison the blanket assumption of selfishness. Instead, we should start from the assumption that most of the time, most people want to be cooperative and that the most

enduring, productive, adaptive solutions will also be the fairest, because fairness breeds cooperation. Only when cooperative approaches manifestly fail should we turn to solutions that hinge on self-interest.

Ideas provide political movements with their shape. We are desperately in need of a different set of ideas through which to see our society's failings and its future. In the 1950s and '60s, public policy was heavily influenced by the ideas of Keynes and Beveridge, the post-war settlement that sought to eradicate unemployment by moderating the instability and inequality of national, industrial capitalism. Since the 1970s, it has been heavily influenced by ideas derived from neoclassical, laissez-faire economics, seeking to raise productivity and widen choice by seeing the market as the solution to most challenges. As we stumble, in equal measures shocked, angered and confused, through the wreckage left by the extreme application of these ideas, we will not find new solutions unless we cast off the assumptions on which those approaches were based. Chief among these is the assumption of selfishness. A new kind of politics will emerge, to mobilise the quiet, widespread anger the financial crash has generated and create a new alliance of interests, but only if it starts from a different set of assumptions. The intellectual starting point should be the mounting evidence that we are, first and foremost, reciprocators and cooperators.

# 2. THE SCIENCE OF COOPERATION

Our true nature is to be selfish. Cooperation, altruism and generosity are habits we learn painfully, by having them imposed upon us by the law, government or church. We cannot rely on ourselves to be cooperative, so we have to create systems that hold our natural selfishness in check.

These were the chief political lessons to be drawn from the sociobiology of the 1970s, the intellectual twin of neoclassical, laissez-faire economics. These two lines of thought reduced us to selfish machines that do nothing unless it offers a financial return and allows us to spread our genes.

The high priest of selfishness was Richard Dawkins, in his short, reductive yet dynamic book *The Selfish Gene*:

> 'Like successful Chicago gangsters, our genes have survived, in some cases for millions of years, in a highly competitive world. This entitles us to expect certain qualities in our genes. I shall argue that a predominant quality to be expected in a successful gene is ruthless selfishness. This gene for selfishness will usually give rise to selfish behaviour.'

As Richard Alexander put it a decade later in *The Biology of Moral Systems*, ethics can only be understood in the

context of a society as a collection of individuals, pursuing their self-interest, propelled by their genes.

The idea is very simple. The fundamental unit of evolution passed from generation to generation is the gene. We are no more than vehicles for genes, which Dawkins describes as the robot replicators inside us. Genes are selfish in the sense that natural selection favours those genes that manage to get the most copies of themselves passed on. Life is a ruthless, unfeeling competition for reproductive success in which empathy is a luxury. Everyone is in it for the sake of the genes they happen to be carrying. Whatever gloss we like to put on it, we are selfish by nature.

Apart from affronting the daily lesson that everyday life depends on a continual flow of give and take, of reciprocal and unasked acts of kindness, there is mounting scientific evidence that this deeply reductive view of the world is wrong.

## Games and fairness

The first set of evidence comes from the social science equivalents of laboratory experiments: games involving money, such as the Ultimatum Game, set up to test how generous and cooperative people are. These experiments show that people are generally fair and generous: they tend to reject proposals which offend norms of fairness, even it costs them to do so, and they are prepared to punish other people who break 'pro-social' norms, even if imposing a punishment means they themselves incur a cost. Yochai

Benkler, Harvard law professor and scholar of cooperation, summed up the findings from thousands of these experiments this way in *The Penguin and the Leviathan*: in general, only 20 per cent and at most 30 per cent of players make offers generally regarded as selfish; 50 to 60 per cent generally make cooperative offers regarded as fair, which are designed to elicit cooperation.

Samuel Bowles and Herbert Gintis, the world's leading researchers into reciprocity, summed up the findings from these experiments thus:

> 'Many economists, biologists and others will assert, as they have for at least a century, that altruism beyond one's immediate family members is highly exceptional and ephemeral. The experimental evidence of the last two decades tells strongly against that view.'
> **Bowles and Gintis 2011**

These social games come in almost as many varieties as baked beans. The Ultimatum Game, which we met at the start, is one of the best-known: a one-off, two-player affair. Another variant, the 'Public Goods Game' – exploring the dynamics of cooperation in groups, over longer periods – is representative of the whole field.

Six players are each given £10 and offered the opportunity to invest in a common pool of resources. The game is played over several rounds. At the end of the game, whatever is left in the common pot will be multiplied threefold

by the experimenter and the proceeds divided equally. The more people contribute, the bigger the eventual pay-off. If each player invests all their £10 and keeps it in the pot in each round then at the end of the game each should receive £30, a gain of £20. But a purely selfish player, withholding their £10 from the pool, might calculate that if each of the other five players contributes £10 then the final pot will be £50. Multiplied threefold, that would amount to £150, and divided six ways the pot would deliver a pay-out of £25 to each of the six players. The five players who invested their £10 would each leave with a gain of £15: not bad. But the selfish player who contributed nothing would get £25 on top of their original £10: they would leave with £35. The incentive to free-ride is financially compelling.

In most versions of this game, people turn out to be conditional cooperators. In most rounds of the game they invest about half of their entitlement, but towards the end contributions tail off close to zero, as people fear their fellow players are reducing their contributions and that they are about to be ripped off. They feel the only way to protect their position is with pre-emptive retaliation: they pull their money out. Everyone is worse off as a result, but that is a price people are prepared to pay to prevent one selfish person walking off with most of the proceeds.

Cooperation can be sustained, however, if the conditions for the game are right. If cooperators can work together, leaving the selfish to fight among themselves, then cooperation proves enduring. Making it easy for people to

build up and display their reputation for cooperation makes it much easier for other potential cooperators to find people to work with. The second condition is that non-cooperators must be punished. If players are told at the end of each round what each has contributed and given the opportunity to fine non-contributors, then cooperation can be sustained. People can retaliate against non-cooperators without ruining the entire game. That is true even if the costs of punishment fall on the punishers, who have to pay the experimenter a fee of £1 to impose a fine of £3. The players still punish non-cooperators because they do not want cheats to get away with it. But for sanctions to be effective people have to sign up to the costs of upholding the law. If there are too few law-upholders in a game then cooperation will collapse.

The Public Goods Game has been played many thousands of times in different settings and it shows that people are generally keen to cooperate. But we are conditional cooperators. The main challenge for public policy is to get those conditions right.

The second body of evidence showing we are more cooperative than widely thought comes from experiments with the behaviour of babies.

## Babies and childcare

An infant who is a little over a year old, who cannot speak and has only a limited grasp of language, confronts an unrelated adult they have met just moments before. The

adult faces a trivial problem: they cannot reach an object they need because their arms are full. In almost 90 per cent of cases the infant will almost immediately help the adult.

To help others so willingly and flexibly requires two capacities that are so fundamental to our make-up that we take them for granted. First, the infant must perceive and understand the adult's goal and see inside their mind to understand what they are trying to achieve. Second, they must have a capacity for altruism, to put themselves out in order to help. Helping with this kind of practical problem is just one form of altruism that young infants display, according to Michael Tomasello, the co-director of the Max Planck Institute for Evolutionary Anthropolgy in Leipzeig, who has spent a lifetime studying altruism among babies.

Tomasello works with infants who are so young they can neither speak nor read: they are the closest we can get to seeing what our genes have provided us with, before culture really gets to work. Dawkins says we are born selfish. Tomasello and his researchers have found the opposite: infants are seemingly innately altruistic; they cooperate with people they do not know. They tend to share goods like toys and food; they help by fetching out-of-reach objects for people; they are informative, pointing to the thing that someone is looking for. Tomasello (2009) argues that all this is the product of a 'natural inclination to sympathise with others in strife' rather than a yearning for praise or rewards. Providing babies with rewards has little impact on whether or not they help. They seem to be naturally helpful, at least most of them, most of the time.

In one experiment, for example, 18- and 24-month-old infants looked on as one adult grabbed and ripped up a drawing that another adult had been doing. As soon as this happened almost all the infants in the test turned to the victim with a look of concern on their face. In a related experiment, the adult grabbed a toy from the other adult and then passed it to the infant to play with. Most immediately returned the toy to the dispossessed victim in an apparent acknowledgment of the unfairness and distress the act had caused. Tomasello concludes:

> 'Infants' naturally occurring empathetic or sympathetic responses to the victim's plight affected their tendency to help. It is this concern and not external rewards that motivates young children's helping.'
> **Ibid**

A special form of this helping behaviour is providing information. Chimpanzees and other apes do not generally point out information for one another; 12-month-old children do. Researchers set up a situation in which 12-month-old infants watched while an adult stapled papers together. The adult then left the room and another adult entered, moved the stapler to a shelf and then left as well. When the first adult returned they searched in vain for the stapler. Almost all the children pointed to the stapler on the shelf: they understood what the adult was trying to achieve, recognised they were being thwarted, realised that they could help, and pointed out where the solution lay.

Other experiments at the Max Planck Institute have compared how human infants and their chimpanzee counterparts share food. Chimpanzees were given an option of pulling either of two chords to get food into their cage. The first chord delivered a tray to their own cage only. The second would deliver food to their own cage and also to their neighbour's cage, at no extra cost. The chimpanzees pulled indiscriminately. Either they did not understand that the other tray went to their neighbour or they did not care. Children from 25 months to school age, when confronted with the same choices, overwhelmingly select the equitable option. They pull both chords.

This capacity for cooperation extends beyond simple experiments like the rope test. Human infants have a greater capacity for more social forms of cooperation. Chimpanzees often perform poorly in challenges that require them to cooperate; often it ends in a fight, and the prospect of the fight seems to make chimpanzees wary of cooperating. Children, on the other hand, will tend to respond generously when challenged to create a fairer distribution of food. Even if one child gets more to begin with, they tend to square things up among themselves. This capacity to work things out as they go sustains the trust needed to keep cooperation going, according to Tomasello. A child knows that even if they start with less food they can make an appeal to the fairness ethic of the other child. Chimpanzees cannot make this appeal and so find cooperation much more difficult.

Tomasello does not claim that all children are all-cooperative all of the time. Nor does he claim that our genes determine our cooperative behaviour. Culture encourages children to become cooperative as well as to be cautious because they might be ripped off. Guilt, shame, reputation, rules, norms, institutions and rewards all play a role in fostering cooperation. Tomasello's point is:

> 'The development of altruistic tendencies in young children is clearly shaped by socialisation. But they arrive at the process with a predisposition for helpfulness and cooperation.'
> **Ibid**

Sex and child rearing is at the heart of Dawkins' theory of selfishness. The point of sex is to pass on your genes. That is why males seek many mates: to maximise their opportunities to spread their genes. Females have to be much more cautious because of the burdens of pregnancy. They look carefully for strong mates, survivors who seem to provide them with the best chance of passing on their genes. That is why, according to the dominant theory of sexual selection, females are impressed by males who can make a good show of looking strong and handsome. Sex is a ruthless genetic game in which competition and disloyalty are constant threats. So far as sex goes, selfishness rules.

Jean Roughgarden, professor of evolutionary biology at Stanford University, argues that females are good at spotting

cooperative and loyal mates. Shows of altruism by males may be as much of a pull as great abs. This is because females are not just interested in the quality of the genes a male brings but how attentive they will be as a parent, thereby maximising the chances of offspring living to adulthood.

Sarah Blaffer Hrdy (2009), professor of anthropology at the University of California, traces the roots of our capacity for mutual understanding to the evolution of cooperative childcare. We breed babies that develop slowly and need a lot of care. Mothers in hunter-gatherer tribes needed help, especially from older women, to cope with child-rearing and supplementing the food brought back by hunters. The babies most likely to survive would have been good at eliciting support, showing pro-social tendencies and emotions. Mothers who had cooperative childcare and cooperative babies would have been able to cope with having more children, so they bred more successfully. According to Hrdy, cooperative childcare explains the importance of older women: they cannot have children themselves but they help out over-stretched mothers. Bands which recognised the vital role older women played in rearing children would have been more successful than those which were genetically ruthless and cast them out.

The final strand of evidence comes from the researchers who have chosen a different route to get a closer understanding of our nature.

## Hunter-gatherers and food

The state of nature, before we invented laws, organised religion, government and institutions, was a condition of relentless competition in which it paid to be indifferent to the fate of others – or so the story goes. Yet when researchers looked at a dozen of the world's last remaining small-scale, largely storage-free hunter-gatherer societies, those that live how all humans lived for hundreds of thousands of years before the invention of agriculture and cities, they found that cooperation was widespread, even with strangers, and depended on quite sophisticated notions of fairness, embedded in culture and norms rather than laws.

Bowles and Gintis worked with researchers to play versions of the ultimatum and public goods games in 15 small-scale societies, across four continents, from the Hadza of east Africa to the Lamalera of Indonesia and the nomadic Turguud of central Asia. They found that self-regarding and selfish behaviour was not the norm; cooperation was the dominant strategy. Among the whale-hunting Lamalera, for example, 63 per cent of proposers in the Ultimatum Game divided the spoils equally, and most of those who did gave the larger share away. In real life, the Lamalera divide a catch with meticulous fairness. Elsewhere, 79 per cent of proposers among the Ache of Paraguay offered 40 or 50 per cent – 16 per cent offered to give away more than half. Food is central to this highly developed ethic of sharing.

Food comes before morals, according to Bertolt Brecht. Morality is a luxury when you are starving. But Brecht was completely wrong. For most of human history the only sure way to get food on a regular basis was to behave in an ethical and cooperative fashion. Sharing the preparation and eating of food is one of the most basic ethical activities we undertake, which is why we are right to worry so much about the decline of real cooking and the family meal.

Detailed studies of the last remaining forager bands, like the !Kung in Africa, show that an individual forager almost never returns home with enough to feed themselves and their dependents every day. On days when there is a shortfall they rely on surplus food gathered by fellow band members. Sharing is an indispensable insurance policy. The Ache, for example, share food in an egalitarian way, regardless of kin ties. Ache families produce less than 1,000 calories per member about a quarter of the time, but after sharing with others only 3 per cent of the time did they actually end up with not enough to eat (Gintis et al 2005).

It is virtually impossible for an individual to hunt large herd game. Hunting large game requires planning, patience, coordination, communication and specialisation: some beat the animals towards others who patiently lie in foxholes dug into the savannah. Those lying in wait have to trust the beaters to do their job; the beaters have to trust the hunters to share the spoils.

Parents share food with children well into adulthood. Families share food. Adults within small-scale societies share food. Within hunter-gatherer bands, children eat more than they produce for about 20 years. This deficit must be financed by other people giving food to young people to whom they are not related. If families had to balance their own budgets then they would have been forced to have fewer offspring or to cast out children to fend for themselves from an early age.

Richard Wrangham (2009), professor of biological anthropology at Harvard, argues that our large brains evolved because our ancestors worked out ways to cook food to make it more digestible and so to provide more energy. Hunting, cooking and eating together required skills of cooperation and rewarded tolerant temperaments. Millions of years ago, our ancestors had to find ways to tend fires together and sit around them without falling out with each other. Those that had the temperaments to manage this were more likely to be able to share food, to grow faster and so to breed more successfully. Those that fell out did not. We are the offspring of successful cooperators: people who could sit around a fire with one another and learn not to provoke a fight but to smile, offer, share and care.

This is how Christopher Boehm sums up our origins, based on academic studies of the characteristics of 154 highly mobile, storage-free forager societies which most closely resemble the conditions of life from roughly 1.6 million years ago to the advent of agriculture about 12,000 years ago:

> ‘These highly cooperative nomadic, multi-family bands typically contain some unrelated families and band size, while seasonably variable, seems to be around 20–30 individuals with families often moving from one band to another. Band social life is politically egalitarian in that there is always a low tolerance by a group’s mature males for one of their number dominating, bossing or denigrating the others … economic life also tends to be quite egalitarian because of nomadism and a strong sharing ethic which damps selfish and nepotistic tendencies.’
>
> **Boehm 2011**

Evolutionary biologists who believe we are driven by the selfish urge to replicate our genes are not put off by evidence of cooperation. They explain it away in terms of self-interest. Much cooperation in nature, including human cooperation, is a tit-for-tat exchange: you scratch my back, I’ll scratch yours. The other explanation is kin selection: we are more likely to be altruistic towards people who share our genes. We are prepared to make sacrifices for siblings, offspring and even cousins, but not for people who are more distantly related.

Tit-for-tat and kinship may explain cooperation among beavers, meerkats, flat worms, vampire bats and starfish, but they do not account for the most common and distinctive forms of human cooperation. Humans cooperate in special ways. We cooperate with strangers, not just our own kin. We form intimate bonds of friendship with people we are not

genetically related to and make sacrifices on their behalf. We cooperate with people in one-off encounters even when there is no prospect of an act of kindness being reciprocated. Animal cooperation by comparison tends to thrive on immediate exchanges that require little patience: humans are able to defer a return and cooperate nevertheless. We will even uphold norms of cooperation when there is no prospect of a direct return to us simply because we believe such norms should be upheld and make for the general good. We have more sophisticated sanctions to promote cooperation than any other species.

We marvel at the cooperative behaviour of meerkats protecting their nests and bees in their hive, but humans are capable of far more complex and remarkable feats of cooperation.

Cooperation does not go against the grain of our nature; it is written into who we are. We are hardwired to care about the wellbeing of others. Our evolutionary success depends on our ability for complex problem-solving, from how to hunt giant mammoth together to organising mass healthcare services – and complex problem-solving depends on cooperation. Martin Nowack, professor of biology and mathematics at Harvard, argues in *SuperCooperators* (2011) that cooperation, along with natural selection and mutation, is the most creative force in biology, especially for humans. That is because while evolution may predispose us towards cooperation, culture builds upon that base, massively multiplying its effects.

## Culture and cooperation

First, communication helps cooperation. The more that people communicate clearly and reliably the easier cooperation becomes. As Robert Wright argues (2000) there is so much communication among humans because there are so many situations in which people cooperate to create a larger pie to share. Our capacity for reciprocal altruism, our capacities to make friends and swap favours without keeping tabs, to form alliances and undertake team activities with common goals, are all aided by our ability to communicate. Language is especially important to indirect forms of reciprocity. Tit-for-tat cooperation – you scratch my back and I'll scratch yours – depends on being able to recognise someone's face. Indirect reciprocity, remembering a favour done long ago, depends on building up a reputation, which requires someone to have a name.

Nowack puts the link between communication and cooperation this way:

> 'Among our human ancestors, social interactions got more and more complicated. When there were more opportunities for deception, manipulation, cooperation and conflict – what we call politics – language became a necessity to gain support of others to make deals, forge alliances and to collaborate … What resulted as each component moved in step with one another was co-evolution, a spiral toward more and more

social complexity as language allowed for even more manipulation and deception but also more collaboration and cooperation.'

**Nowack 2011**

Second, cooperation thrives on an sense of fairness. Our early ancestors could not have prospered without cooperating and they could only cooperate by being fair, which in turn implies a basic moral capacity to care about what happens to others. This capacity to make moral judgments has been explored in depth by experiments conducted by Marc Hauser, director of the Cognitive Evolution Lab at Harvard University (see Hauser 2006). The most famous goes like this.

Imagine you and another person are standing on a bridge over a railway track and you see a railway carriage coming towards you, out of control. The passengers will die when the carriage hits the buffers at the end of the track. You could flick a switch and redirect the carriage down a siding where it would be slowed to safety but only by hitting someone who happens to be on the line. Or you could throw the person standing next to you off the bridge and that would stop the carriage. In utilitarian terms, the net effect of the two actions is the same: one person dies to save many people. When this problem was posed to thousands of people around the world, Hauser found a staggering conformity: almost no one would throw the person off the bridge. We appear to be hardwired to distinguish between an action that saves

people by our personally hurting someone else and an action that saves people because someone is killed as an indirect consequence of our actions.

Hauser and other evolutionary psychologists have conducted scores of experiments like this and reached the same conclusions: humans' evolutionary advantage stems from a shared capacity to make fine-grained moral decisions, and it is this capacity which underlies our ability to cooperate. Hauser argues this is evidence that a basic moral capacity is hardwired into us so we can think about what matters to other people and be interested in their point of view.

Hauser is not arguing that our genes determine our morals. A common capacity for morality and cooperation can play out in different ways in different cultures. Jonathan Haidt, professor of social psychology at the University of Virginia, argues that morality is a bit like tasting food (2005). Our tongues have the same receptors for sweet, savoury, salty, bitter and sour. When we taste something bitter we all tend to pull back; something sweet, and we are all drawn to eat more. Yet every culture has its own cuisine, its own way of teasing and pleasing these taste receptors. The taste receptors may be universal but that still leaves enormous scope for cultural variation. Just so with morality: we have universal receptors – care and harm, fairness and cheating, loyalty and betrayal, sanctity and degradation – which signal issues of moral concern, but each culture makes its own moral recipes from these basic tastes.

Dennis Krebs (2011) argues that our moral senses are like a tool box which allows us to cooperate and to coordinate complex social interactions by being able to take on another's perspective emotionally and intellectually; to defer gratification and resist selfish urges to satisfy our material needs at the expense of others; to find ways to resolve conflict in fair ways that restore group cohesion; and to guard against free-riders, shirkers and cheats while keeping in check the strongest members of a group who might use their power to acquire the lion's share. Morality is written into us by socialisation, culture, reasoning and deliberation, but it stems from evolution and adaptation.

Third, our capacity for acting cooperatively is underpinned by a suite of social emotions – love, gratitude, anger, guilt, shame, righteousness – which often commit us to act in ways that appear irrational from a narrow, calculating, self-interested point of view. We reject low offers in the Ultimatum Game because we are affronted. Guilt helps to restore adherence to social norms and rules; shame is an internalisation of that, an introspective recognition that we have fallen short of standards we accept as our own; righteousness is the sense of self-satisfaction that we get from doing the right thing. We tend to like things that are good for us, at least in moderation, like food and sex. Many studies show that we also get pleasure from being generous, kind and helpful. We like being cooperative and we like ourselves when we are.

## Conclusions

This account of the evolutionary origins of our capacity to cooperate will not persuade everyone. One criticism is that experiments, such as the Ultimatum Game, are too contrived to tell us much about real life. There are limits to these experiments, but that does not mean they are worthless, especially when they have yielded similar results after being repeated thousands of times in many different societies. As Gintis and Bowles point out, these games are not so far removed from the way people regard decisions about pay and fairness, an issue we shall come back to in discussion of bankers and fairness.

Some argue that our cooperative natures are an evolutionary hangover from a period when our ancestors lived in small close-knit groups and it made sense to cooperate. The argument goes that in modern, anonymous, transactional societies this propensity to cooperate is misplaced: we are stuck with instincts that developed in a completely different era. Yet as Boehm and others have shown, our early ancestors living hundreds of thousands of years ago were far more cosmopolitan than many think and chance encounters with strangers were common place.

The claim that our capacity for cooperation is hardwired into us through evolution will alarm people wary of genetic determinism, a response which is recognised by the most sophisticated advocates of an evolutionary explanation of cooperation. They argue that our genes *predispose* us to cooperation: we have strong 'social preferences' to care

about the wellbeing of other people and not just our close family. But those genes do not determine that we will cooperate, or how. What we do with our genetic inheritance depends on our culture and our choices. Peter Richerson, Robert Boyd and Joseph Henrich, leading evolutionary psychologists from the US, are prime exponents of co-evolution:

> 'Innate principles furnish people with basic predispositions, emotional capacities and social disposition that are implemented in practice through highly variable cultural institutions … Our innate social psychology furnishes the building blocks for the evolution of complex social systems, while simultaneously constraining the shape of these systems.'
>
> **Boyd and Richerson 2005**

Cooperation is not always benign. Criminal gangs cooperate, as do members of racist political parties and para-military squads. In the 1940s and '50s, people tended to think a willingness to be cooperative dulled us into deference. People can be so desperate to show they are fitting in that they will cooperate even when they realise they are cooperating with something that involves not telling the truth and acting inhumanly.

By Wright's story in *Non Zero* (2000) more complex, productive, innovative forms of life emerge through the

creative power of cooperation: people find that non-zero-sum solutions, in which there is a pay-off for all concerned, trump zero-sum solutions, in which there is competition over a fixed pool of resources. Wright is inverting Adam Smith's economics: creative cooperation usually expands the resources we have available, whereas competition usually just divides up what we have. Cooperation can be *generative*: it creates more out of limited resources.

Nowack ends his account of cooperation's hidden, driving role in evolution with a clarion call for cooperation – but one which is also a challenge to us:

> 'Mutation and natural selection are not enough to understand life. You need cooperation too. Cooperation was the principal architect of 4 billion years of evolution. Cooperation built the first bacterial cells, then higher cells, then complex multicellular life and insect superorganisms. Finally cooperation constructed humanity … Cooperation can draw living matter upward to higher levels of organisation. It generates the possibility for greater diversity by new specialisations, new niches and new divisions of labour. Cooperation makes evolution constructive and open ended … We need to do even more to create an environment where cooperation can flourish if we are to reap its creative benefits.'
>
> **Nowack 2011**

The question Nowack leaves us with is this: what changes to our environment, culture and institutions would foster the kind of creative cooperation we need to tackle pressing contemporary problems? How do we turn the insights of the new sciences of cooperation into public policy and practical solutions?

# 3. DESIGNING FOR COOPERATION

We live in a world of individualism and choice, markets and consumerism, in which money matters and people want to pursue their own version of the good life, without being hidebound by the ties of tradition and community. Yet we are still more cooperative than we give ourselves credit for. That does not mean we are ultra-altruists most of the time. We are conditional cooperators: when the conditions are right we tend to favour cooperative solutions because they generate more benefits for all involved and they make us feel better. The challenge is to get those conditions right, and for that five components need to be in place and working together. In policy terms, these are the framework conditions that needs to be fostered to enable the emergence of cooperative solutions across society.

## Framing

In a game called the Prisoners' Dilemma, two people are made an offer. If neither cooperates they get £2 each and if both cooperate they get £5 each. Clearly it pays to cooperate. But if one cooperates and the other defects, then the defector gets £10 and the cooperator gets nothing at all. So it pays *more* to be vicious and to defect, so long as you think your partner will cooperate. One twist

on this basic premise illustrates how the way in which an activity is framed may determine whether it is approached cooperatively. A US psychologist named Les Ross played the Prisoners' Dilemma with two groups; each followed the same rules, but one group was told they were playing a game called 'Wall Street' and the others were told the game was called the Community Game. The players in the Community Game cooperated 70 per cent of the time; those in Wall Street just 33 per cent of the time.

The values that frame an activity matter even more than the language. Cooperation thrives on norms of fairness, such as people queuing in line or taking their turn. Cooperation becomes much harder if there are huge disparities in outcomes which seem manifestly unfair. The evidence of the Ultimatum Game is that people reject low offers because they have a finely tuned sense of fairness. Being treated fairly seems to be a good in itself. Cooperation that does not yield fair outcomes will collapse once those being exploited exhaust their stores of goodwill. The Swiss economist Ernst Fehr and his many collaborators have explored why fairness counts in a multitude of games: their finding is that fairness counts independently of what we come away with.

That is not good news for Britain: many people feel life is unfair and the more unfair Britain becomes the harder it will become to sustain cooperation. The implications of this are spelt out by Benkler in *The Penguin and the Leviathan*:

> ‘Whether you are designing a business model, a website, or a legal statute, values are not an afterthought. Fairness is not something you attend to after the practical decisions about how to improve efficiency or innovation or productivity have been made. Fairness is integral to effective human cooperation. We care about fairness, and when we believe that the systems we inhabit treat us fairly, we are willing to cooperate more effectively.’
>
> **Benkler 2011**

Effective sanctions are essential to uphold norms of fairness. Cooperation needs the threat of a hard edge to be sustained. One reason why police dramas are still the staple diet of television schedules, even after the demise of British stalwart *The Bill*, is that they speak directly to our need to believe society is just and fair. The Public Goods Game shows that people are prepared to pay a cost to impose a punishment on free-riders and predators. Not everyone will step forward to deliver punishments, and if the proportion willing to do so falls below a critical threshold then sanctions will come to be regarded as ineffective. If free-riders are not challenged then free-riding quickly becomes tacitly accepted. Once that happens, formal sanctions will be increasingly ineffective.

If cooperation requires the harder edge of sanctions, does that imply the opposite: can material incentives promote cooperation? The evidence is unambiguous:

material incentives usually reduce cooperation. One meta-analysis of 128 laboratory studies found that tangible rewards tend to have a negative impact on cooperative behaviour. People generally think that being paid extra to cooperate debases cooperation by implying that they're only cooperating for the sake of the money. People who regard that as an affront are inclined to stop cooperating to maintain their reputation. Using incentives may work for a limited period but they can have a deeply negative impact in the long term.

Framing matters: if an activity is framed as cooperative, then people will approach it in that light. Fairness is vital: cooperation only thrives when people feel that both the outcomes and the rules of the game are fair. On the other hand, sanctions can be effective in enforcing cooperation, but material incentives rarely promote it.

## Learning

Cooperation works best when there is lots of room for people to learn from their mistakes and from one another. As Nicholas Christakis and James Fowler (2009) point out in *Connected*, their study of the social determinants of health, the risks of becoming obese rise 57 per cent if you have close friend who becomes obese. Just as we learn how to be healthy and unhealthy from one another, we also learn how to cooperate and comply with norms. Complex, mass behaviours, from social habits to the kinds of products

people buy, emerge from how people cooperate, affiliate and emulate (Earls 2009).

Yet too many of our systems are designed on the basis that people are knaves who cannot be trusted: the rules of the game encourage us to see ourselves that way and so we learn from one another and these systems that we should be selfish. The challenge, however, is not to seek to design from on high detailed rules for a perfectly cooperative society. Reliance on formal rules can drive out the day-to-day give-and-take of people adjusting to one another and learning how to get on. One implication of Elinor Ostrom's studies of how farmers and fishermen manage common stocks of resources is that formal systems tend to disable and drive out those norms of reciprocity, local knowledge and problem-solving which set the pulse of the give-and-take of cooperative behaviour (Ostrom 1990). Cooperation works best when it is made easy and attractive for people to put in the effort needed to regulate one another and keep cooperation alive (Gintis et al 2005).

Neither government regulation nor the force of law nor the power of material incentives can work without a reservoir of norms that sustaining cooperation. Punitive sanctions or clues to and rewards for good behaviour are most effective when they are built into the character of social interactions, rather than imposed from the outside. People learn cooperative behaviour from one another. Basic social norms such as a concern for the wellbeing of others and for fair procedures remain essential to sustaining society and enhancing the quality of life. Cooperative solutions work best

where there a significant shared pay-off, but it is impossible to specify in advance through detailed contracts exactly what everyone has to do to make it good. In those circumstances, which apply wherever significant innovation is needed, people have to trust and cooperate with one another.

## Communication

Perhaps the single most important factor in achieving a cooperative approach is whether people are able to communicate with one another. One study in the mid-1990s by US researcher David Sally found that in more than 100 social dilemma experiments, conducted with thousands of subjects over several decades, levels of cooperation rose by 45 per cent when players were allowed to communicate face-to-face. This is partly because communication helps to make cooperation real and personal: the people taking part are more able to put themselves in the other person's shoes. The more our lives are mediated by depersonalised, abstract computer-directed systems the less likely we are to sustain cooperation. When 'the computer says no' there are no appeals to norms of fairness or empathy. Yet the power of social media and the web stems from how people are using technology to turn communication into cooperation and a shared commitment to get things done together. Benkler concludes:

> 'Nothing is more foundational to cooperation than communication. Talk is not cheap; through it we can

> come to define our preferences, goals, and desires in a situation; begin to build mutual empathy; negotiate what norms are appropriate and what course of action fair; and begin to build trust and understand one another … Cooperative systems across the globe have one thing in common: They all depend on communication.'
>
> **Benkler 2011**

Tomasello argues that speech and language probably developed as ways to deepen cooperation, starting out with the crude gestures we used to help one another with useful information. John Searle in *Making the Social World* and Raimo Tuomela in *The Philosophy of Sociality* explore what this means for the way we create a shared social reality. They argue humans are uniquely capable of sharing points of view and goals to create social realities, as in presidential elections, employment contracts and marriages. Searle argues that this social world is created by our shared intent, and what he calls a special set of speech acts, in which we agree to 'declare' a new reality into being, for example, by declaring a couple to be man and wife or someone else to be the duly elected member of parliament for Darlington. We constitute social reality by the way we make these declarations to one another. That is possible only because we have a capacity for shared imagination and intent, to care about the same things and imagine new worlds together. It is not just that language helps us to cooperate in the world, it enables us to create a shared world of social institutions and artefacts.

## Reputation

Cooperation thrives when people are able to build up a reputation for being good cooperators, a reputation that earns them valuable social status. If a society does not enable people to earn such a reputation, because reliance on markets and formal systems has left little scope for cooperation, then it should be no surprise that it withers away. If being a good cooperator does not bring with it some measure of regard and reputation, it will not be sought after.

Reputation-building is easier when cooperative behaviour is observable. If people can make it clear to one another that they are jointly upholding norms of sharing that makes it easier for others to follow suit. If cooperative behaviour is driven to the margins of life or kept hidden then it is far more difficult to sustain. Common pooled resources are much easier to manage when there is effective, cheap, peer-to-peer monitoring of how they are used and shared. People are more likely to commit to conserving scarce resources if they see others publicly committing to do so. Cooperation thrives when people can see one another doing it and when valuable reputations can be built up by engaging in cooperation.

## Membership

Cooperation within a group is enhanced the more the group is brought together in the face of a common enemy – there is a meaningful link between cooperation and violence. Bowles and Gintis' model of cooperation

*depends* on a degree of intergroup rivalry. It depends on norms of fairness and tolerance within groups but also on boundaries drawn around a group to create a sense of shared commitment. That may be one reason why smaller societies living in the shadow of larger, threatening neighbours tend to be innovative: Finland, Israel, Taiwan, Singapore. Innovation often involves teams alternately working in small, close-knit groups and widening out to seek new ideas.

This tension between open and closed aspects of cooperation is one reason why it is not an unambiguous good. Gated communities, religious and selective schools, corrupt bankers and phone-hacking journalists could each claim, in their way, to be cooperative. Even if we are hardwired to cooperate, we still need to debate whether we are cooperative for the right reasons and with the right people. We need to be able to stand back from cooperation as well as to throw ourselves into it. Who are we seeking to cooperate with, and why?

This question is at the heart of the current debate over Britishness. In the past, national identity and a shared common culture has provided an easy answer: we cooperate with people 'like us', who too are British. But as the notion of Britishness has increasingly fragmented and diversified so its common pull has weakened. One of the reasons cooperation is becoming more difficult in the UK is that no plausible alternative has yet emerged to replace or reknit this fractured sense of identity.

## Conclusion

People are more likely to cooperate when:

- the activity is framed in a way that encourages cooperation
- there is a reliable framework of fairness, including effective sanctions against free-riders
- people are able to rely on norms of reciprocity and peer-to-peer learning to enforce sanctions, rather than material incentives and abstract rules, both of which tend to undermine cooperation
- there are lots of opportunities for communication, including face-to-face, to make cooperation feel personal and establish a sense of empathy and shared purpose
- it is easy for cooperators to find one another because they are acting out in the open
- people can build up a valued reputation as people who can be trusted to do their fair share of the work
- people feel that others are part of the same group.

We are conditional cooperators: we cooperate when the conditions are right. Our present over-reliance on impersonal, formal, rule-based systems and material incentives that appeal to self-interest are in danger of extinguishing our culture of cooperation. These systems have become self-fulfilling: they encourage the very self-interested behaviour they are designed to manage.

What we need instead are technologies, systems, public policy and institutions which are designed to draw out our cooperative character. The chief aim of public policy in the decades to come should be to restore those conditions, and the key to that will be translating the design principles for cooperation into policy initiatives to tackle shared challenges.

# 4. COOPERATION POLICY IN ACTION

More than 5,000 enterprises in Britain operate according to cooperative principles. The cooperative sector is growing much faster than the UK economy as a whole. Yet growing the sector of cooperative organisations is just one application of cooperation policy. The point is not to turn every organisation into a cooperative but to show how organisations of all shades could benefit from being more cooperative.

The most important applications of cooperation policy will be in reframing big contemporary public policy challenges. For decades we have been used to addressing problems through the lens of selfishness and the market. What if we turned that on its head and looked instead through the lens of cooperation? This section briefly looks at three specific issues: the riots in England over the summer of 2011, the ongoing debate over immigration, and the reform of the financial system.

## The rioters

The best way to understand the riots – both what went wrong and how best to put it right – is through the lens of cooperation.

The riot of looting that swept through some British cities in the summer of 2011 was a humiliating public collapse of cooperative culture. The riots suggested that a chaotic Hobbesian war of all against all, an orgy of opportunistic,

selfish materialism, is lurking just beneath the urban surface, kept at bay only by the sporadic presence of the police, ready to erupt at any moment to break through the veneer of respectability.

The closed 'sink estates' that bred much of the looting are desperate places where public cooperative behaviour is squeezed to the margins, where churches and heroic youth workers stand isolated against the tide. There is little scope and no incentive for young people from these estates to build up a reputation for cooperation through work or social endeavour. There is little to be gained by being good-natured and kind. However, for a minority of young people, daily social interactions are likely to reinforce one form of cooperative behaviour: gang culture. The lives of young people here are framed by a level of materialism they have little chance to attain and the moral tone set by bankers who pocket massive bonuses, politicians who fiddle their expenses, and journalists who think nothing of hacking into others' phones.

The rioters revelled in their disdain for the norms of civil society, in their lack of shame, which was most shockingly displayed in an incident when a group adopted the guise of Good Samaritans only to rob the student they were pretending to help. A willingness to help strangers, without expecting anything in return, is the hallmark of distinctively human cooperation; the riots were so shocking not because people loaded up with trainers from JD Sports but because they attacked the most basic of human moral norms. The riots

were the product of a protracted collapse in the conditions needed to sustain cooperation, especially in atomised and blasted sink estates. How should a spirit of cooperation be rebuilt?

Cooperation depends on free-riders being punished. So one should not cavil at the punishments handed down to offenders. But in the long run, cooperation will not be rebuilt through sentencing, new rules or heavy-handed policing. In fact, that would lead us further away from a long-term solution. Formal systems and detailed rules will drive out what is needed: renewed cooperative norms and self-governance. Nor does the Labour party's depressingly reductive critique get us very far: the idea that young people became looters because, say, the education maintenance allowance was withdrawn just confirms the idea that life revolves around money. Material incentives do much to harm and little to promote cooperation.

A better place to start would be with the only silver lining to emerge: the reassertion of norms of civil cooperation. Whether in the Turkish shopkeepers who banded together to defend their shops in Stoke Newington; the people who came out together to clean up wrecked high streets; the group who raised money online to reopen a barber's shop in Tottenham; the nostalgic sit-down-and-have-a-cup-of-tea movement – these everyday acts of civil cooperation should set the tone for the long-term public policy response.

One example of what that might mean is the cooperative and community-based policing in Chicago documented by US political scientist Archon Fung (2004). Chicago's

community policy initiative started with the police's realisation that, while they might have resources, it was the people in the community who had the knowledge and motivation to use them effectively. They had to find a way to work together. First, the Chicago police department took some officers off rapid response duty and put them to work as community specialists, on the street, giving them time to meet and talk to local residents. Then, the community specialists began to hold monthly meetings with community figures to share ideas. Through these face-to-face meetings they built up a sense of trust and a focus on their common challenge: the disruptive criminals in their communities. Then, most controversially, the local commander Claudell Ervin invited members of the community, through the churches, to join with police officers in prayer vigils on some of the most dangerous street corners. The vigils were an outstanding success: they focused police and residents on an identity they shared and which underpinned their joint efforts at community policing. Community policing works only when it creates bonds of trust and heightens cooperation – but that in turns means building empathy and solidarity.

Institutions and systems can be designed either to crowd out or to draw in cooperative contributions. External interventions, from police forces and welfare systems, when they are experienced as controlling influences, crowd out intrinsic motivations. Self-determination and self-esteem suffer and individuals respond by becoming less cooperative. The best systems build on intrinsic motivations towards cooperation.

## The immigrants

Controversies over immigration are also fundamentally issues of who we are prepared and able to cooperate with. Anti-immigrant feeling is fuelled by a sense that it is impossible for immigrants to become fully-fledged fellow cooperators. Immigrants live in their own sub-cultures. Face-to-face interactions with people outside their community are rare. It is assumed immigrants cannot speak English fluently and so the communication necessary for cooperation is difficult to establish. The tabloid press paints immigrants as cynical free-riders, taking advantage of our goodwill: benefit cheats and bogus asylum-seekers undercutting local wages and clogging up the NHS. High levels of immigration are said to be creating an impossibly diverse and cosmopolitan urban society, which is straining our capacity for cooperation. If immigration is unchecked, the argument goes, then cooperative, national culture will completely collapse. The dark side of Bowles and Gintis' model of indirect reciprocity is that cooperation within a group is enhanced when the group comes together in the face of a common enemy. For many, immigrants provide just that 'enemy', the catalyst to restore a sense of shared identity.

All political parties now buy into the narrative, to some extent, that immigration is bad for cooperation. So, it follows, to restore our capacity for national cohesion, immigration needs to be strictly limited and free-riders need to be driven out. Yet the success of politicians in Barking and Dagenham, who fought off the influence of BNP in white working class areas close to areas of high immigration,

shows what can be done if the challenge is reframed as one of rebuilding cooperative capacity to match greater diversity. Cooperative coping is not a fixed resource. It is not inevitable that cooperation will be overwhelmed by cultural diversity. It depends how creatively we respond.

A cooperative response would focus on making it far more obvious what contributions immigrants make: the sacrifices they make to come to the UK, the desire they have to buy into British culture. It would create ways for immigrants to build up their reputation as cooperators and contributors, take steps to overcome the barriers of language and communication, and create festivals to celebrate common culture. If need be, all of this can be allied to stricter tests for entry and punishment for free-riders as well.

We cannot turn our backs on immigrants, nor can we turn the clocks back to an imaginary bygone age before Britain was contaminated by foreign influences. Almost everything in British culture bears a trace of somewhere else. We have to find new, more creative patterns of cooperation that give us, and enthusiastic immigrants, a way to join together in a community.

## The bankers

In the Ultimatum Game, which we met at the start, a proposer is given a sum of money, usually about £100, and told to make an offer to another, the responder. If the responder rejects the offer, the whole £100 is lost: it goes

back to the experimenter. In most versions of this game, in most societies, responders reject offers below 25 per cent (or £25 in this case), mainly because they are angered at being treated unfairly. The modal offer is 50 per cent, and sometimes people offer more than that. When asked why they make these generous offers, by and large, proposers say it just seemed the 'fair thing to do'. It is not *only* that the responder is more likely to accept a higher offer. Proposers seem to like being fair and generous. These results even hold in a version of the game known as Dictator, when the responder does not have the option of rejecting the offer: even then, when the proposer has the responder at their mercy, they tend to make fair offers (Krebs 2011). Most people are not cut out to be selfish tyrants.

However some interesting variants of the Ultimatum Game change these outcomes in ways that may explain our predicament in dealing with the bankers responsible for the financial crisis. If the proposer is a computer then people are far more likely to accept a low offer. People do not think there is much point in getting angry with a computer programme that has no sense of social norms. The more depersonalised, rule-governed and computerised our exchanges become, the less likely they are to sustain cooperation. In another twist, if the two players have contested a game of skill to decide who should be the proposer, then the responder is far more likely to accept a low offer. People accept that skilful proposers deserve to keep more of the money. It is not difficult to see how this plays out in our society: if a group of people, bankers for example,

can persuade the rest of us they are super-bright, and that their critical skills are in demand all over the world, we are more likely to accept that they should get huge bonuses while our own real earnings slowly decline.

Finally, if a proposer is making offers to several competing responders, desperate for money, then a proposer can get away with a low offer because they are more likely to find one responder who will undercut their peers.

When the Ultimatum Game is set up as a random encounter, with a fair balance of power, responders reject offers they regard as unfair and proposers generally want to be generous and cooperative. But if the game is run by abstract computer systems or by people who claim to have special skills which entitle them to be financially well endowed, or if the responders find themselves competing with one another to get whatever they can, then the dynamic of the game tilts towards selfish offers being both made and accepted.

Only a minority of people are insensitive, rational calculators who make outrageously selfish, low offers in the Ultimatum Game. Only a minority of people are free-riders in the Public Goods Game, who hope to profit from their fellow players' naive generosity. If this tiny group, who do not abide by common norms of generosity and reciprocity, end up running much of a society, you end up with a society in which bankers are paid lavish sums for taking unsupportable risks and engaging in spurious forms of innovation, designed mainly to benefit themselves, before being bailed out by taxpayers, who then have to bear the cost through years of public

austerity. Put it another way: for the last 15 years, British society has been contesting a mix of the Ultimatum Game and Public Goods Games, which came to an dramatic end in 2008 with the bankers walking off with the spoils, leaving us worse off than we imagined and paying the bill for years to come.

The bankers did not pull off this trick just by being greedy. The global financial markets are awash with computers that trade by algorithm. That helps put the outcomes they generate beyond the reach of morality or norms of fairness. Moreover, people are more likely to accept unfair offers if the proposer claims to have a special skill. The City has invested heavily in a reputation for employing the best and the brightest, people capable of handling huge complexity and pressure. The financial services industry became systematically self-interested; bankers managed to exploit our common decency. It is staggering what they got away with.

In 2007, 40 per cent of corporate profits in the UK came from the finance sector. Most of these turned out to be paper-thin. The largest 1,000 banks in the world reported pre-tax profits of $800 billion in the year 2007/08, an increase of 150 per cent from 2000/01. Yet most of these profits were an illusion, the product of increased borrowing by banks from wholesale money markets, to make risky loans, to people who could not afford to repay them, to buy properties that may well turn out to be virtually worthless. In the final quarter of 2008, the share price of the major global banks fell by around 50 per cent, a loss of market value of $640 billion. The financial system engaged us in a game which it designed to be rigged in its favour.

Three years on and there is little sign of contrition. Yet there are glimmers of a civic response: the Occupy movement might help us to reframe our challenge in terms of reasserting norms of decency, cooperation and reciprocity. This movement is at its most potent when standing up for the norms of civil cooperation that the moneychangers have flaunted.

Self-interest offers no way out of the financial crisis. Only cooperation, in the form of public rescue by citizens, saved the banking system. Only cooperation will save the Greek and Italian economies. Only cooperation between Asia, Europe and the US will save the developed world economies from years of recession.

Cooperation thrives when cooperators can find one another. Yet the modern financial system gave us no option but to be thrust into partnership with an ultra-selfish elite, motivated entirely by money. That is why we need a radical separation of different parts of the banking system. If the casino operations of the banks, the highly speculative trading and investment arms, were split off, then the ultra-selfish could enter into a game against one another. That would leave the rest of us – more risk averse and more cooperative – to work among ourselves.

Cooperation thrives only when people can earn a reputation by being helpful, but the lesson of the respect given to bankers seems to be that reputations are made by being cynical and selfish. The bankers hold public policy to ransom by threatening to leave for Geneva or Hong Kong,

if they are taxed too much or their bonuses are capped. The activities of risk-takers, entrepreneurs and business executives are vital to the country's economic vibrancy. Yet because cooperative business is so vital, so too are the activities of altruists. A relatively small group of super-altruists – volunteers, givers, carers – sets the tone for cooperation across wider society. If we were to lose those super-altruists because they were to withdraw into their shells, then our society's capacity to generate cooperation would be fatally weakened. If we are prepared to use tax policy to reward competitive risk-takers, what kinds of policies should be adopted to promote the equally important super-altruists who are vital to cooperation? Instead of designing public policy to placate Bob Diamond, how about designing it to promote the super-altruists in our midst?

# 5. OUR COOPERATIVE FUTURE

We are not the first generation to worry that selfishness is threatening to overwhelm our capacity for cooperation. Writing in 1790, Edmund Burke bemoaned the sophists, economists and calculators: 'Nothing is left which engages the affection on the part of the commonwealth, so as to create in us love, veneration, admiration and attachment.' Many have followed in Burke's footsteps to argue that modernity has made community seem anachronistic. What Marx and Engels called the 'icy waters of egotistical calculation' left little room for cooperation, which only thrives in small-scale, close-knit, pre-modern societies. Writing in the 1920s, Graham Wallas worried in *Our Social Heritage* that our instinctively gregarious and social nature would not cope with the more intensive demands of a modern, artificial economy:

> 'Men naturally cooperate in a clamorous alternation of the impulse to lead and to follow. Our social inherited expedients of cooperation by discipline and cooperation are still imperfectly worked out and are apt at any moment to break down.'

Robert Putnam's *Bowling Alone* stands towards the end of a long trail of concern that cooperation seems nigh

on impossible in a largely urban, anonymous, diverse, individualistic society that depends on software, systems and standards to process the millions of impersonal transactions we all happily engage in every day. People who say they favour cooperation also have a low tolerance for being taken advantage off, resent free-riders and have a legitimate interest in how their efforts shape the quality of their own lives. We live in a society where people prize both individual freedom of expression and the ability to collaborate and connect.

Yet the time has come for a cooperative correction, to shift the centre of gravity. We have become too dependent on explicit rules, formal systems and material incentives, which act to drive out cooperation. Instead, we need to focus on forms of community governance based on norms and trust, rather than systems and rules, and approaches to public policy which open up the opportunities for cooperation rather than closing them down from the outset.

Cooperation – far from seeming quaint and anachronistic – could come to define the spirit of the times, to be successful and modern, aspirational and dynamic. Backed by many converging sciences, we now understand more about how to sustain cooperation through fairness, communication, norms and reputation-building. The web and social media are working in favour of cooperation, amplifying and reinforcing relationships. Sharing and cooperation are increasingly central to consumer culture – witness the rise of Groupon and Air BnB. Collaboration and cooperation lie at the heart of our most innovative activities

in science, culture and business. Creativity invariably comes from communities that are brought together by a common cause. Innovation cannot be delivered 'just in time', according to a set of rules and a schedule, nor can care and empathy. The reform of the welfare state should hinge on breathing life back into its withered relationships and reciprocity. As the Brazilian social theorist Roberto Unger puts it, solidarity is not a welfare cheque in the post. Meanwhile, the revival of politics probably rests on what the Canadian political philosopher Mark Kingwell calls cooperative citizenship: citizens learning to engage creatively, as much with one another as with government. Political theorists on right and left are showing a renewed interest in everyday civility as the root of democratic self governance, from Philip Blond, the 'Red Tory', to Marc Stears in *Everyday Democracy*.

New forms of cooperation will be needed at every level of our lives, from the global challenges of financial instability, climate change, resource depletion, education and ageing, to the largely national challenges of transforming traditional welfare states, health and education systems to be more effective by connecting them more closely to their clients and civil society. Perhaps most importantly, however, there is growing recognition that cooperation and relationships are essential to leading a flourishing life. Most of what matters most to us – love, care, friendship, respect, trust – come through relationships, activities not done for us but rather that we do with one another.

Gintis and Bowles conclude this way:

‘Far from being an anachronism, community governance appears likely to assume more rather than less importance in the future. The reason is that the types of problems that communities solve, and which resist governmental and market solutions, arise when individuals interact in ways that cannot be regulated by complete contracts or by external fiat due to the complexity of the interactions or the private nature of information involved. These interactions arise increasingly in modern economies as information intensive team production replaces assembly lines and other technologies … and as difficult to measure services usurp the preeminent role, as both outputs and inputs, once played by measurable quantities like kilowatts and steel. In an economy increasingly based on qualities rather than quantities, the superior governance capabilities of communities are likely to be manifested in increasing reliance on multilateral monitoring and risk sharing … It seems likely that extremely unequal societies will be competitively disadvantaged in the future because their structures of privilege and material reward limit the capacity of community governance to facilitate the qualitative interactions that underpin the modern economy.’

Thomas Hobbes argued that we needed the state because the state of nature was a selfish, brutal war of all against all. He was wrong: in our state of nature cooperation was the key to sex, child rearing, food and survival.

Milton Friedman argued that self-interest is fundamental to economics, to spur agents into action. He was wrong: most people, most of the time, are motivated by cooperation and fairness, as well as self-interest. An economy that neglects cooperation and fairness will not innovate and grow.

Richard Dawkins claimed that we should teach altruism and generosity because we are born selfish. He was wrong: most of us are born helpful and generous, cooperation is written into who we are.

Our future rests on our capacity for cooperation, to generate a shared sense of collective self-belief. Fair, relatively non-hierarchical societies will be better at cooperation that those are divided, unequal and riven by divides. The future lies in retrieving and reviving ideas that lie buried. We are reciprocators.

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