



# CHANGING THE SUBJECT

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HOW NEW WAYS OF THINKING ABOUT HUMAN  
BEHAVIOUR MIGHT CHANGE POLITICS, POLICY  
AND PRACTICE

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BY MATT GRIST

RSA

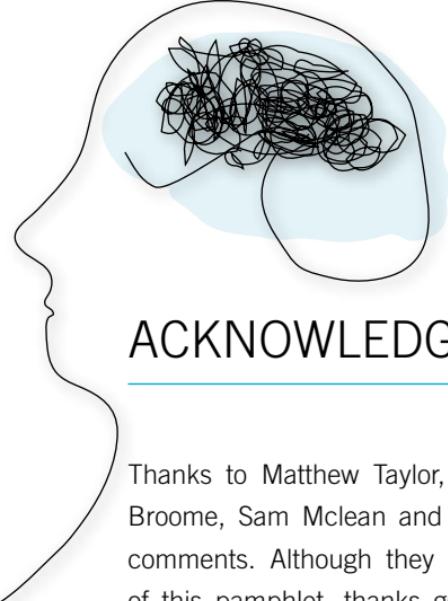
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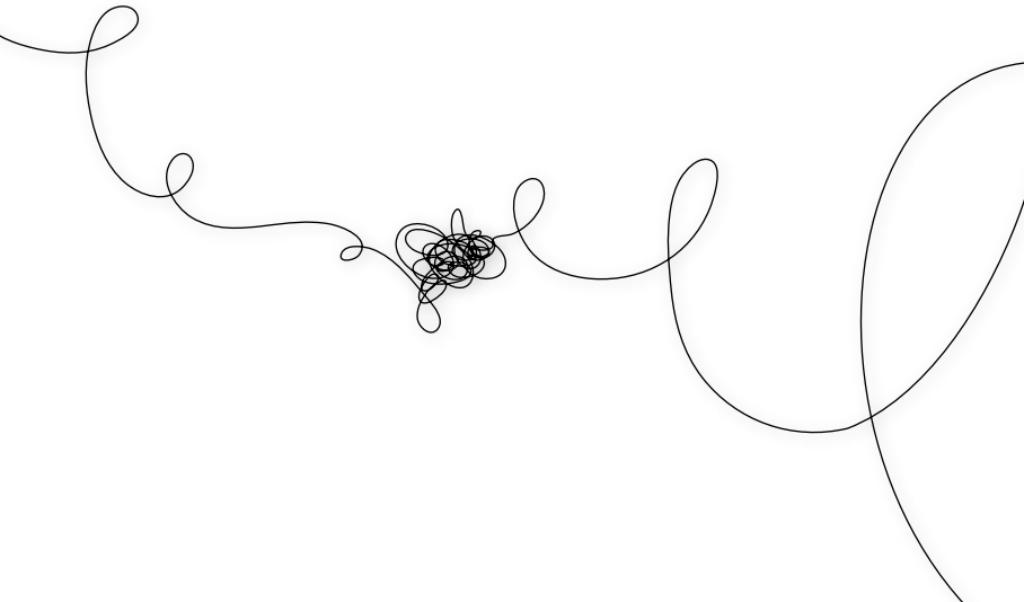


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# INTRODUCTION

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The Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA) was formed in 1754 by William Shipley, a drawing master living in Northampton. His idea was to award ‘premiums’ to support improvements in the liberal arts and sciences, and to stimulate enterprise for the common good. Since its inception the RSA has been committed to furthering social progress with an open, multidisciplinary and optimistic orientation. With its 27,000 Fellows it seeks to foster citizen-led initiatives that respond innovatively to social problems.

In the setting of the early 21<sup>st</sup> century, the task the RSA has set itself is to pursue an approach to social challenges that promotes the following three qualities: active engagement in public decision-



making processes, altruism (putting something back in to society) and self-reliance. We contend that a society that displayed these qualities would be fairer and happier, but also that these qualities are required if we are to respond to the problems we collectively face – problems such as climate change, shifting demographics, entrenched inequalities and community fragmentation. For example, to respond to the problems posed by climate change, it is not enough that governments issue edicts. Citizens themselves must be capable of changing their own behaviour – of acting for the common good, of being personally

responsible for their own actions, and of engaging in social institutions that mediate collective action.

We sum up our aim as contributing to closing the ‘social aspiration gap’ – the gap between the world we say we want, and the world that actually exists due to our actions. For example, many of us would like to live in stronger communities. But does the way we actually live contribute to this goal?

The RSA, through its projects, aims to enable citizens to close this gap. We think there is broad agreement in society that we must make changes. But there are two impediments to turning this agreement into real change. The first is that we may be confused about *how we bring about change* – we may be employing the wrong models to think about how to make changes. The second is that we may be *sceptical about the scope of possible change* – we may feel the changes we want are unlikely to be achievable because of the way we think things work.

A crucial issue here is that of human agency; if we are working with the wrong model of how we make decisions and behave, surely this will inhibit our attempts to translate our social aspirations into reality? Moreover, if we have a restricted view of the ambit of possible human agency we will be sceptical about *what* we can attempt to change. For example, if we believe that people are fundamentally selfish and isolated, we will not put much store in the idea that we can co-operate to evolve responses to shared problems. But if we have a richer view of human agency – for example, one aware of and informed by the prevalence of its ‘pro-social’ tendencies – we might be more ambitious on this front.

This pamphlet is a contribution to removing, as an impediment to closing the social aspiration gap, an unrealistic and narrow view of human agency that people might hold. It aims to bring into public debate new studies on the human brain and behaviour, the results of which offer a more expansive view of human agency. The hope is that this will help us to better understand how to bring about social change, and to be more ambitious about its scope.

Section 1 explores the political sociologist Anthony Giddens' argument (from the early 1990s) for an approach to politics, policy and practice, which incorporates both conservative and social-democratic thinking. A crucial issue Giddens identifies is how we build and maintain the social institutions that enable both collective action and the production of autonomous and responsible citizens. After investigating Giddens' thinking in this area, we argue that new knowledge about brains and behaviour can help us develop such institutions.

In Section 2 the new knowledge about brain function and behaviour pertinent to politics, policy and practice is laid out. At the end of this section some examples of social institutions that successfully produce autonomous and responsible citizens are cited. It is argued that these institutions seem to take into account (whether explicitly or implicitly) the account of human agency these new studies imply. This is followed by some policy suggestions inspired by thinking more broadly about how to apply the new knowledge. These suggestions again reiterate the idea that such knowledge leads politics, policy and practice in the direction of a synthesis of conservative and social-democratic thinking.

Section 3 outlines two common sense conceptions that might stand in the way of the new knowledge actually changing the way people go about doing things. These conceptions are questioned and found wanting in terms of how the brain works. The reader is then informed about how the Social Brain project intends to test the hypothesis that knowledge about how our brains work might impact on politics, policy and practice. Will this knowledge become part of public discourse and thus contribute to generating democratic agreement on how to respond to the pressing problems of our times?

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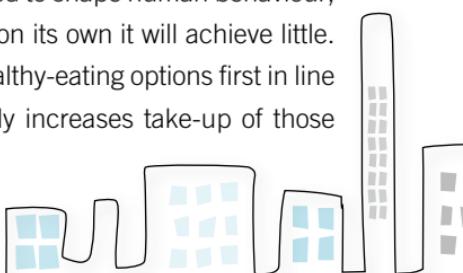
## SECTION 1

# REFLEXIVITY AND THE “REAL THIRD WAY”

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In the final chapter of their book *Nudge: Improving Decisions about Health, Wealth and Happiness*, Cass Sunstein and Richard Thaler state that they hope ‘libertarian paternalism’ will open up a ‘real Third Way – one that can break through some of the least tractable debates in contemporary democracies’. They go on to explain that nudges (changes in the ways choices are presented) can work to shape behaviour in both public and private spheres to the satisfaction of both Democrats and Republicans, in the context of the United States. Their point seems to be that ‘choice architecture’ (an arrangement of choices) is already in place, and so may as well be shaped to bring about beneficial social outcomes (*contra* some Republicans). But also that this should be done in a way that preserves freedom of choice (*contra* some Democrats).

There is much to commend the approach of nudging, but to claim that it opens up a real Third Way is misleading. Nudging is a useful addition to the toolkit that can be utilised to shape human behaviour; it should certainly not be left out, but on its own it will achieve little. For example, it makes sense to put healthy-eating options first in line at the school cafeteria if this modestly increases take-up of those



options. Yet if we really want to halt what appears to be an obesity epidemic, we need much more than this – we need education, good parenting, the availability of sports clubs, adult peer-support groups, the regulation of advertising aimed at children and so on.

But perhaps what we need most of all are people capable of not becoming obese – that is, capable of autonomously running their lives and taking responsibility for their individual behaviour as well as their duty of care to others such as children, and their wider social commitments. To produce a society populated on the whole by people like this cannot be achieved by nudging alone. It can only be achieved by developing the social institutions that sustain such individuals – institutions such as families, schools, associative groups, responsible companies and public services. A real Third Way would consist not so much of libertarian paternalism but of citizens actively engaged with such institutions. The reconciliation at the heart of this engagement is not in the main between free choice and state intervention, or between markets and the public sector. It is between an older kind of philosophic conservatism and a social democratism committed to tackling social injustice. And the purpose of the reconciliation is to produce significant democratic agreement on the social institutions that sustain autonomous and responsible citizens.<sup>1</sup>

This is important because it has become clear that in a modern, globalised economy being in control of one's life across diverse social terrain is integral to economic success as well as wellbeing.<sup>2</sup> Moreover, it is apparent that responding to the shared problems we face as a society requires social institutions that produce citizens ready to take responsibility for their actions. This in turn makes

it necessary that these citizens feel their efforts in this direction will have some effect. For example, we need citizens capable of bequeathing a sustainable world to their children. But in order to keep their side of the bargain such citizens need to be empowered by institutions that make collective action possible. There are already some examples of civic responsibility of this kind – Transition Towns for example.<sup>3</sup> But much more is required – a new revitalisation of local governance and communal interaction is what is ultimately needed, achieved through engaging citizens, businesses, third-sector organisations and public bodies in this common task.

### GIDDENS ON GOING BEYOND LEFT AND RIGHT

To understand the nature of the reconciliation between philosophic conservatism and social democratism that might energise such institutions, it is worth going back to political sociologist Anthony Giddens' thinking of the early 1990s. Giddens saw that moving beyond left and right is not required only to bring some compromise to the political system. Rather it is required because of the kind of people we are, those of us who live in what Giddens terms 'late modernity'.

For Giddens, late modernity is characterised by three major forces – globalisation, 'detraditionalisation', and the transformation of nature from external landscape to humanised system.

Globalisation Giddens describes as concerned with '... the transformation of space and time'. He goes on:

'I define it as *action at a distance*, and relate its intensifying over recent years to the emergence of means of instantaneous global communication

and mass transportation. Globalisation does not only concern the creation of large-scale systems, but also the transformation of local, and even personal, contexts of social experience. Our day-to-day activities are increasingly influenced by events happening on the other side of the world. Conversely, local lifestyle habits have become globally consequential. Thus my decision to buy a certain item of clothing has implications not only for the international division of labour but for the earth's ecosystems.<sup>4</sup>

Partly as a result of globalisation, what Giddens calls a 'post-traditional social order' emerges:

'A post-traditional order is not one in which tradition disappears – far from it. It is one in which tradition changes its status. Traditions have to explain themselves, to become open to interrogation or discourse... In a globalising, culturally cosmopolitan society... traditions are forced into open view: reasons or justifications have to be offered for them.'<sup>5</sup>

Closely connected to the transformation of tradition is the transformation of nature:

'The dissolution of tradition... interlaces with the disappearance of nature, where 'nature' refers to environments and events given independently of human action.'<sup>6</sup>

Giddens is getting at the thought here that the idea of nature as an external landscape beyond human control has been transformed. Nature is obviously still independent of our control – we cannot very accurately predict earthquakes, volcanic eruptions and weather patterns, let alone meteor strikes – but it is, in our day-to-day

experience, largely ‘controlled’ by human technology and abstract systems of thinking. For example, we think about oceans in terms of fish stocks, temperatures and volumes. Very few of us think of them as the terrifying and uncontrollable things they must have appeared to 17<sup>th</sup> century sailors.

All these elements – globalisation, contested traditions and humanised nature – result in what Giddens calls ‘manufactured uncertainty’. This points to the fact that risk in late modernity is most commonly man-made. Global warming illustrates manufactured uncertainty well: we have no real idea how global warming will pan out, both physically and socially. But we are aware that this nebulous risk is of our own making and that in a globalised world many of the choices we make may contribute to it. Similarly, with the more recent example of the financial crisis of 2008, we know full well that the main cause of this crisis was excessive risk-taking by bankers. Yet although the problem is man-made we are still not sure how to solve it. Even the world’s best economists do not know exactly how well the fiscal stimuli used to counter this crisis will work, or what will happen when they are withdrawn. This means the global economy, ostensibly under complete human control, is in fact a domain of potentially dangerous uncertainty.

Giddens adds to these forms of manufactured uncertainty the idea of ‘social reflexivity’:

‘In a detraditionalising society individuals must become used to filtering all sorts of information relevant to their life situations and routinely act on the basis of that filtering process. Take the decision to get married. Such a decision has

to be made in relation to an awareness that marriage has changed in basic ways over the past few decades, that sexual habits and identities have altered too, and that people demand more autonomy in their lives than ever before. Moreover, this is not just knowledge about an independent social reality; applied in action it influences what social reality is.<sup>17</sup>

Citizens who are reflexive are aware of the manufactured uncertainties they face and help create – they are aware that a choice like getting married contributes to the reinterpretation of traditions in their society, that driving their cars contributes to global warming. Also key to reflexivity is the popularisation of (both ‘hard’ and ‘social’) scientific knowledge:

‘In a post-traditional order, individuals more or less have to engage with the wider world if they are to survive in it. Information produced by specialists (including scientific knowledge) can no longer be wholly confined to specific groups, but becomes routinely interpreted and acted on by lay individuals in the course of their everyday actions.’<sup>18</sup>

So we can describe reflexivity as a continual activity of making choices based on an awareness that one’s choices contribute to determining the traditions of one’s society, global social inequalities and global environmental problems – and vice-versa – and that this awareness is also informed by knowledge from the sciences.

There is of course a personal aspect to reflexivity. Giddens describes being a self in late modernity as being the subject of a story, so that a person maintains her identity by choosing to do things that fit a personal narrative in a post-traditional context:

'The reflexive project of the self, which consists in the sustaining of coherent, yet continuously revised, biographical narratives, takes place in the context of multiple choice as filtered through abstract systems. In modern social life, the notion of lifestyle takes on a particular significance. The more tradition loses its hold, and the more daily life is reconstituted in terms of the dialectical interplay of the local and the global, the more individuals are forced to negotiate lifestyle choices among a diversity of options... Reflexively ordered life-planning, which normally presumes consideration of risks as filtered through contact with expert knowledge, becomes a central feature of the structuring of self-identity.'

To see how all these elements of reflexivity fit together, we can take the example of parenting. As a parent, a person inherits a whole web of practices and pieces of knowledge – some personal, some cultural. She can only begin to be a parent by adopting some of these practices and by acting on some of this knowledge. But in a broader sense there is also an onus on her to continually choose which practices and which bits of knowledge best serve her aims and chime with what she has learned from experience. A good parent does not simply do what her parents did. She does some of that, while editing out what she doesn't like and what she knows does not align with new knowledge about child rearing. And in doing this she straddles the personal and public – she adopts certain personal practices and democratically takes a stand on institutional structures that either fit or don't fit with the evolving understanding she has of how best to raise children.

However, we should not solely understand lifestyle choices in the shallow sense that might be implied if they were the preserve of the

rich. By being poor, one is made aware of an enforced restriction in choices, and of how this determines one's 'life-planning'. Furthermore, one is aware of how other people's choices affect one's own impoverished predicament, and vice-versa.

## LIFE POLITICS

Giddens thinks that because of manufactured uncertainty and reflexivity, 'radical politics' in late modernity should be concerned with 'life politics':

'Life politics is a politics, not of life chances, but of life-style. It concerns disputes and struggles about how (as individuals and collective humanity) we should live in a world where what used to be fixed either by nature or tradition is now subject to human decisions.'<sup>10</sup>

'Life politics is about the challenges that face collective humanity, not just about how individuals should take decisions when confronted with many more options than they had before.'

<sup>11</sup>

Life politics complements emancipatory politics. The latter is concerned with freeing individuals from: '... the arbitrary hold of tradition, from arbitrary power and from the constraints of material deprivation'. The former is concerned with citizens choosing how to live in light of reflexive knowledge of how their choices define and are defined by social practices, relationships to nature, and the processes of globalisation. Whereas traditional socialist emancipatory politics saw citizens as buffeted by the impersonal forces of class, religion, and sectional interests, life politics sees citizens at the authors of their own destinies. As Giddens puts it, the central question for the reflexive citizens engaged in life politics is:

'What to do? How to act? Who to be? These are focal questions for everyone living in circumstances of late modernity – and ones which, on some level or another, all of us answer, either discursively or through day-to-day social behaviour.'<sup>12</sup>

So life politics is the politics of choice in a deep existential sense – a politics where one is aware of what it is like to live reflexively in a post-traditional and globalised world. Thus life politics has two main aims – enabling citizens to be able to live in such a world, and enabling them to be able to act collectively to change it. Whether we like it or not, in late modernity citizens need to be able to reflexively chart their way through the choppy waters of a globalised economy. And whether we like it or not, they need to find ways of changing the way they live if they are to counteract problems like entrenched inequality and environmental degradation.

The kind of person enabled by life politics to face up to the challenges of late modernity Giddens calls an 'autotelic' self (borrowing the term from positive psychology):

'The autotelic self is one with an inner confidence which comes from self-respect... a person able to translate potential threats into rewarding challenges... The autotelic self does not seek to neutralise risk or suppose that 'someone else will take care of the problem'; risk is confronted as the active challenge which generates self-actualisation.'<sup>13</sup>

This tells us that an autotelic self is really just an autonomous and responsible citizen – someone capable of reflexively choosing life styles but also responsibly changing them in light of their

damaging effects. This view implies that both rich and poor can only solve their problems by mutually changing the way they live so as to become such citizens. In the case of entrenched inequalities, the poor must be enabled to be more autonomous in order to thrive in the mutable landscape of a globalised and post-traditional economy and society. But the rich must also be enabled to become more autonomous and live happier lives – to wean themselves from excessive consumption and compulsive industriousness, and the stress they bring. In the case of environmental degradation, the rich need to take responsibility for wasteful and unsustainable patterns of consumption. The poor, on the other hand, must be enabled to develop economically without taking on the wasteful consumption of the rich. So tackling entrenched inequality and environmental degradation cannot be achieved by economic means alone. Rather, these goals require democratic agreement on how, as reflexive citizens, we should organise the way we live.

### ACTIVE TRUST AND GENERATIVE POLITICS

In order to respond to the problems of life politics, Giddens thinks we need ‘active trust’. The latter is the kind of trust that is won through dialogue and engagement within and across societies:

‘... trust in others or in institutions (including political institutions) that has to be actively produced and negotiated.’<sup>14</sup>

Without active trust life politics cannot properly get going because its foundations should be in democratic agreement amongst citizens on mutually binding changes in behaviour, for the sake of various

common goods. Essential to generating active trust is what Giddens calls ‘generative politics’. The latter creates collective agreement on how to respond to the shared problems of life politics. It is constituted by the following characteristics:

1. Fostering a ‘bottom-up’ engagement of reflexive citizens in solving their own problems.
2. Creating situations in which active trust can be built.
3. The development of autonomy.
4. The decentralisation of political power – this is required to facilitate bottom-up engagement and autonomy.

It is easy to see that generative politics requires responsible and autonomous citizens. Crucial to this is the development of social institutions that support and produce such citizens. That is, the families, schools, community organisations, political systems, government bodies, public services, companies, self-help groups and single-issue campaigning groups that either support the development of autonomy and responsibility, or act as intermediaries that allow autonomous and responsible citizens to respond collectively to the problems of life politics.

### **THE REAL THIRD WAY**

It is here that we meet the need for a real Third Way as Giddens foresaw it in 1994, the aim of which is:

‘... to help citizens pilot their way through the major revolutions of our time: globalisation, transformations in personal life and our relationship to nature.’<sup>15</sup>

A Third Way approach is required because a combination of philosophic conservatism and social democratism best expresses insight into how the social institutions of generative politics can be supported, developed and reformed. This combination also brings to light two contradictions at the heart of socialism and neo-liberalism. First the contradictions:

Socialism according to Giddens has either failed or become defensive. In former Soviet-Bloc countries it has failed because of its authoritarian aspect – its inability to treat its citizens as autonomous. In western countries it continues largely as a conservative defence of the welfare state. But in defending a purely redistributive conception of welfare, socialism has failed to grasp that in modern reflexive societies, autonomy is central to equality. In becoming dependent on welfare, individuals become unable to direct their way autonomously through a globalised economy, their self-confidence and self-respect sapped. As a consequence of this we have on one side passive recipients less and less socially engaged, and on the other, the rest of society disdainful of their dependency. So this socialist commitment to a certain conception of the welfare state actually undermines social solidarity.

Neoliberalism has its own internal contradiction. Economist and philosopher Friedrich von Hayek's insistence that the state be as minimal as possible was premised on the idea that it wasn't possible for it to know about all the tacit local knowledge essential to understanding the supply and demand of goods between people. Markets are much better suited to this because they are localised and fine-grained enough mechanisms to capture the know-how that is stored in practices and habits, which is crucial to understanding the goods people want.

Centralised intelligence and planning lacks the deftness to come to such an understanding. But markets themselves depend on a kind of practical knowledge – the tacit social norms of trust and fairness that make transactions possible. These norms can be safeguarded legally to a certain extent, but they cannot be produced by legal methods. They can only be produced by the embedding of markets in wider social institutions. Without these institutions the amoral nature of economic contracts cannot act as a bulwark against greed, bad faith and corruption. So those neo-liberals who want to roll out markets into all areas of life run up against the contradiction of undermining the social norms that make well-functioning markets possible.

According to Giddens the lesson to draw from these contradictions is that only insights stemming from a combination of philosophic conservatism and social democratism, centred around the promotion and sustenance of autonomous and responsible citizens, can reinvigorate ‘radical politics’ (a politics that gets to the ‘root’ of contemporary social problems). The following comprise the major tenets of these insights’.

## THE MAJOR TENETS OF A REAL THIRD WAY

### ***1. Scepticism about the perfectibility of human beings and progress more generally***

The idea that people can form perfect social systems is common to both socialism and neo-liberalism. The former held that people could be directed according to expert scientific knowledge, and through this the common good achieved. The latter holds that markets can reach predictable states of equilibrium if they are

unfettered by too much regulation, because individuals possess more or less perfect rationality, have stable preferences and consistently act out of self-interest.

But within the setting of life politics a dose of scepticism about human perfectibility is welcome. This is because such a world is one where citizens negotiate with one another over the risks and harms caused by their collective choices, and much of this negotiation is about damage limitation (limiting damage to the environment, and the ‘social damage’ done by living in modernity as well as by entrenched inequalities). The idea that human systems could be perfected and are set on an inexorable path of progress is at the heart of the issues to which life politics responds. For example, the idea that capitalist growth is unending and will somehow solve environmental problems through technology occludes the fact that it is radical changes in lifestyles that are needed to solve such problems. This blind faith also distracts from damaging social realities, such as fragmented communities.

## ***2. The importance of fostering responsibility to the wider community and to future generations***

Giddens foresees that philosophic conservative concerns over the social harms done by modernity will start to align with social democratic concerns over inequality and green concerns over environmental damage. Social democrats have to realise that there is a link between the fragmentation of community and family life and entrenched inequality – that without strong social support, individuals find it hard to become autonomous citizens, and thus to chart their way through a globalised economy. Green concerns over

environmental damage require citizens prepared to bargain with one another over changes in ways of living that must be made. These concerns especially demand that the better-off accept responsibility for their wasteful and polluting lifestyles and act autonomously to implement changes.

So philosophic conservative ideas that place community and social practice above individual gain seem to align with social democratic concerns over social justice and solidarity – both in terms of tackling inequality and environmental degradation.

### ***3. The recognition of the importance of ‘practical knowledge’ and how it is transmitted***

Conservative political philosopher Michael Oakeshott grasped that what he called ‘rationalist’ conceptions of people as perfectible and predictable calculators of utility were inimical to human flourishing. His brand of conservatism valued the handing down of tacit knowledge through a tradition that protects people from themselves by embedding them in social institutions that help them plan for the long-term, gain autonomy over their immediate desires and become socially responsible. (For Oakeshott, such institutions include the church, Scouts, Women’s Institute, schools and, most of all, the family.) He called this tacit knowledge ‘practical’ - the kind of knowledge that one learns over a long period through sustained exposure to social norms, but also through the internalisation achieved by practical engagement.<sup>16</sup> One might think analogously of an apprentice carpenter learning her trade – she watches and absorbs the standards that are expected of her work, how things are done. But she also learns through her own mistakes until she has gained the autonomy

to take on the responsibilities expected of her. The contrasting notion to practical knowledge is technical knowledge – the kind of knowledge that can be written down and taught didactically, and which involves very little internalisation through practical engagement (the knowledge of the instruction manual and rulebook).

Oakeshott often runs together ‘practical’ knowledge and ‘tradition’ and, as Giddens points out, this is problematic. Oakeshott concedes that traditions should evolve, but that one tinkers with the honed wisdom of ages at one’s peril. But for reflexive citizens in an era of manufactured uncertainty, traditions have to be selected and edited. Oakeshott offers no clue to how this is to be done. Perhaps this quietism itself expresses a faith in the honing process of trial and error that built traditions in the first place, or perhaps it simply expresses the conviction that it is more harmful to tinker with tradition than to suffer its limitations.

What Giddens does take unproblematically from Oakeshott is the importance of practical knowledge embedded tacitly in habits and practices, creating a link between past, present and future. Passing on such knowledge creates the kind of intergenerational bond that, in the face of a blind faith in progress that leads to social and environmental damage, actually promises a more humane set of lifestyle choices. Moreover, acknowledging the importance of practical knowledge means recognising the need to work with existing social practices rather than imposing top-down solutions that reduce autonomy and responsibility. This recognition can serve to empower communities whose practices are endangered either by state intervention or globalised market forces.

#### ***4. The importance of local solidarity building and the decentralisation of power***

Philosophic conservatives argue that political philosopher Edmund Burke's 'little platoons' – families, civic and congregational organisations – are what build associative bonds between citizens. These institutions are the vehicles through which practical knowledge is transmitted, and are essential to producing autonomous and responsible citizens. But they also act as intermediaries, allowing citizens to respond collectively to shared problems.

Giddens sees that in an era of manufactured uncertainty and reflexivity, these traditional institutions cannot blindly assert their authority. However, he also sees that there is a need for such institutions or analogues of them – in a globalised world, it is local institutions that give people self-confidence and self-respect. Again a philosophic conservative commitment to local solidarities is melded with a social democratic commitment to social justice and equality:

‘The question of ‘how to live’ in a globalising milieu where local culture and environmental resources are being squandered has in fact a particular significance for the poor. A battle for autonomy, for self-reliance, is also a struggle to reconstitute the local as a prime way, sometimes the only way, of avoiding endemic deprivation.’<sup>17</sup>

Giddens cites the Grameen Bank in Bangladesh as an example of an institution that builds local solidarities, lending money to the landless poor. This institution provides social support and connects saving to local regeneration and investment, which enhances a sense of

shared autonomy and responsibility to one's community. He also notes that because of strong familial ties, economic development in some Asian countries (Singapore, South Korea) actually reduced inequalities, those ties being much more efficient mechanisms for redistributing wealth than the state or markets.

Perhaps striking a difficult balance, Giddens suggests we both support families and remedy the prejudices they seem to embody: 'the family remains an important protective mantle. An alternative development would seek to sustain family ties while seeking to combat patriarchy and the exploitation of children.'<sup>18</sup> This again incorporates the philosophic conservative commitment to the importance of family with a social democratic concern for social justice.

### **5. Positive welfare**

Giddens sees that the welfare state as defended by socialists is outmoded on three counts. First, it is based on the patriarchal idea of keeping men in full employment, and its benefits are skewed to that end. Second, it can create dependencies and the erosion of autonomy and responsibility. Third, many studies have shown that it is the better-off that perversely gain most from the welfare state.

He suggests we think in terms of positive welfare. This is welfare that aims to enable people to become autonomous – hence Clinton's famous phrase 'a hand-up not a hand-out'. It is welfare provision aimed at the whole person, not just at redistributing wealth: '... a wide notion of welfare, taking the concept away from economic provision for the deprived towards fostering the autotelic self.'<sup>19</sup> This

means welfare that supports people to become autonomous and thus capable of thriving in a globalised economy.

Giddens thinks such welfare will be supported by the more affluent in the context of life politics – that is, in the context of recognising that lifestyle choices have had damaging effects, such as the breakdown of communities and social institutions that supported people. So positive welfare combines philosophic conservative concern over the damaging nature of modernity, with social democratic concern over inequality of opportunity caused by what might be called ‘inequality of autonomy’.

### ***6. Utopian realism***

This signifies the support for and development of achievable ‘alternative futures’ that require potentially quite extraordinary changes, but are realistic because they can be reached by extrapolating from existing social practices. For example, an entire world without gender discrimination in education, reached through extrapolation from feminism and the women’s movement.<sup>20</sup>

This tenet perhaps best typifies the melding of philosophic conservatism and social democratism as Giddens envisaged it. It incorporates both conservative scepticism about human perfectibility and conservative pragmatism about picking manageable political battles. Moreover these battles are fought through shaping practices that already exist and have been generated not solely via the state but in part through voluntary activism. However, the end result of these pragmatic battles, if continually pursued, can be thoroughly radical and lead to major social transformations.

These considerations help us get into view a substantive Third Way as Giddens envisaged it in the mid 1990s. It is quite different from Thaler and Sunstein's libertarian paternalism. The latter combines freedom to choose with the paternalistic guiding of choices through subtle changes in how they are presented. Giddens view was more than: (1) the liberty to reflexively choose how to live (the liberty to be autonomous) in late modernity depends on certain forms of social support, some of which are paternalistic in that they embed individuals within guiding communal practices; (2) reflexively deploying the liberty to choose, commits individuals to restricting their choices for the sake of rectifying and mitigating the damage those choices might cause. As Giddens puts it:

'The issue of reconstructing social solidarities should therefore not be seen as one of protecting social cohesion around the edges of an egoistic marketplace. It should be understood as one of reconciling autonomy and interdependence in the various spheres of social life, including the economic domain.'<sup>21</sup>

## NEW LABOUR'S CIVIC LEGACY

These considerations also allow us to tackle the question, why did Tony Blair's Third Way fail (presuming it did)? One answer is that it didn't. The terrain on which British politics is now fought is that of life politics. To this end political parties strive to do two things. First, they aim wherever possible to grant citizens personal choice. Second, they aim wherever possible to enable citizens to engage in the running of social institutions – whether that be self-directed public services,<sup>22</sup> parental involvement in running schools, or bodies like citizens' juries.<sup>23</sup> In other words, they aim wherever

possible to promote personal autonomy and shared responsibilities – to yoke policy and practice to the reflexivity of citizens (to utilise their abilities to self-author life-stories and collectively respond to shared problems).

Another answer is that despite good intentions, New Labour has failed to generate social institutions energised and populated by reflexive citizens. It has greatly improved personal choice in public services, but it has not fostered social institutions (whether public, private or third sector) that bind citizens together in new forms of solidarity and shared responsibility. (Bodies like citizens' juries are seen to be either window dressing or isolated exceptions to a general command and control approach to policy.) And despite their efforts, New Labour has not reformed democratic institutions so that they engender active trust amongst the public with regard to governance. In fact, the recent MP allowances scandal can be seen as the denouement of a failure to move from the 'static' trust of the post-war settlement to the active trust required between politicians and reflexive citizens (a failure attributable originally to Thatcher's Conservatives but not arrested in any way by New Labour). Finally, despite the rhetoric, community regeneration has not particularly succeeded, and socio-economic inequalities have remained stubbornly entrenched.

There would seem to be a common cause of these failures: that of the conception of human behaviour and agency underpinning policy, the *homo economicus* of neo-classical economics. In viewing personal choice as the only thing that drives the reform of social institutions, New Labour treated people as if they were isolated

and self-interested. Such citizens were viewed as having no need to engage with – through responsibility to themselves and the wider community – the institutions that generate social solidarity. They simply needed to pay for the services they used within the consumerist model. Similarly, wholly rational individuals do not need the support of publicly-engaged institutions and associative groups to aid their decision-making about the issues of life politics. They simply need to be fed information and, given their rationality, correct responses will inexorably follow. Yet people are not isolated and wholly self-interested, they are fundamentally social and care deeply about fairness and the wellbeing of others. And neither are they wholly rational – left to their individual devices they may make bad decisions that economists would consider ‘irrational’.

The nub of all this is that the British political class grasped neither the limits of personal choice nor how autonomy and responsibility are produced – they saw life politics as based around markets, top-down regulation, contestability and bottom-up consumer pressure. A Prime Minister’s Strategy Unit appraisal of public services in 2006 saw nothing much wrong with this approach despite evidence to the contrary, such as demoralisation amongst public service providers.<sup>24</sup> The thinking seems to be: get these factors in the right equilibrium and efficiency, excellence and an empowered and politically engaged public will automatically follow.

New Labour tended to ‘reform’ social institutions along these lines. Take the case of social workers. The government introduced (from the centre, as always) meticulous new checklists and procedures.<sup>25</sup> But what gets lost in such well-meaning reform is the human craft

of social work – both the finely-honed psychological knowledge of frontline staff and the open and supportive self-criticism of peer supervision. In short, social workers were treated as disembodied subjects who calculated risk in algorithmic fashion.<sup>26</sup>

At other times some of Blair's reforms to public services seemed both endless and without clear reason, as if the simple fact of 'reform' and 'modernisation' taking place would solve problems. As a result Whitehall has become bloated,<sup>27</sup> with far more ministers doing far too much micro-management from the centre. When the toolkit of personal choice, incentives, legislation and information fails in one arrangement, it is simply rejigged into another. Against this backdrop, the government's rhetoric about community cohesiveness, 'bottom-up' processes and 'enabling' and 'empowering' rings hollow.

So although Blair's New Labour thoroughly shifted debate to the terrain of life politics, it did so in a one-sided way. Giddens thinking, although perhaps too laudatory of personal choice, resolutely maintained that the key to a successful life politics was a successful generative politics – the active engagement in social institutions that allows citizens to reflexively evolve responses to the problems they face. Without this active 'generative' element, life politics shrinks to the shallow social ties existing between technocrats, markets and consumers – precisely the civic landscape that seems to be the legacy of New Labour. As a result, it is the state that increasingly mediates between citizens in response to the problems of life politics.

Another side to this is that by sticking to the ideology and methods of managerialism and consumerism, New Labour failed to rebuild

social solidarity. The very premise of life politics is that political progress is made by democratic agreement on how to collectively reshape the choices we make, in order to avoid damaging consequences. For example, the government is well aware of how important behaviour change on the behalf of citizens is for combating climate change. But, along with the other major parties, it presents its policies in terms of costs and risks that can be simply paid for, as if no fundamental changes in life style are required. This is both dishonest and ineffective as a long-term strategy.

So the basic mis-step made by New Labour was to meld the wrong conservative elements into the Third Way – in seeking to modernise social democratism through a Third Way approach it listened to free-market economist Milton Friedman rather than philosophic conservative Michael Oakeshott. Giddens in the early and mid 1990s saw the wisdom in Oakeshott's insistence on practical engagement in social institutions, as well as collective curbs on the damaging excesses of modernity. He deemed the former a necessary prerequisite to the production of analogues of the associative bonds of tradition, within the setting of late modernity. Moreover, he saw that if associative social institutions (Burke's 'little platoons' of civic life) did not continually evolve, we would be left with an alienating life politics – one where, in our personal lives, we would be free to reflexively author our own stories but where collectively we would have no voice. And the situation ramifies negatively: without the requisite social institutions producing individuals who are autonomous and responsible (which requires supporting people to be capable of *actively* forming associative bonds), effective solidarities shrink even more. This situation perhaps explains why British people

consistently show themselves to be optimistic about their personal lives but pessimistic about the public sphere.<sup>28</sup>

But Giddens correctly insists on augmenting Oakeshottian conservatism with social-democratic tenets. As has been said, we cannot return unthinkingly to tradition: as authors of their own life-stories, citizens are well aware that Oakeshott's concept of tradition harbours structural impediments to personal autonomy such as gross inequalities, prejudice and vested interests. And Giddens is right to insist that social institutions continually evolve to combat such impediments.

### **CONTEMPORARY BRITISH POLITICS AND A REAL THIRD WAY**

In terms of contemporary British politics, there does seem to be a move towards a real Third Way – one where ‘one nation’ conservatism is melded with progressive commitments. Centre-left thinkers Richard Reeves and Julia Margo have made the case for the possession of character being essential for life chances.<sup>29</sup> On the centre-right, the ‘progressive conservatism’ of David Cameron also seems to marry the production of autonomous and responsible citizens with a desire to combat entrenched social injustices.<sup>30</sup> Cameron has spoken of a ‘post-bureaucratic age’<sup>31</sup> and a ‘thoroughgoing localism’,<sup>32</sup> as well as a ‘morally responsible capitalism’,<sup>33</sup> and of handing power back to individuals and communities.<sup>34</sup> There are many tensions and unexplained policies in this brand of conservatism but it is undoubtedly roughly along the lines of the Third Way as Giddens originally conceived it.

There also seems to be some agreement across the political spectrum on the need to reinvigorate civic life and empower communities through the strengthening of associative bonds. On

the right, Philip Blond has made a strong case in this direction,<sup>35</sup> and on the left, Jon Cruddas has made similar points, citing the need for a new post-individualist settlement between civic society, government and markets.<sup>36</sup>

### NEUROLOGICAL REFLEXIVITY AND A REAL THIRD WAY

But perhaps there is an even more convincing reason for a real Third Way in politics, policy and practice. Matthew Taylor has argued that we are entering what appears to be an era of 'neurological reflexivity'<sup>37</sup> – an era wherein we are beginning to know more and more about how our brains function. There are numerous popular books that lay out the neurology and psychology of decision-making and behaviour. As well as this, neuroscience has become a career of choice in science, just as theoretical physics was in the first half of the twentieth century. But distinct from physics, neuroscience is about something very personal and therefore graspable for all of us – what is inside our heads. Insights into the brain's workings appeal to our sense of personal identity in a way that particle physics doesn't. As we shall see in the next section, these insights corroborate Giddens insistence that we temper social democratism with philosophic conservatism.

When Giddens was writing in the early 1990s, the new knowledge that informs neurological reflexivity was not available, or at least not shaped, as it seems to be now, into an emerging picture of human nature. Giddens based his own argument for the Third Way on lessons from history and the tenets of political philosophy. But the new knowledge that informs neurological reflexivity perhaps provides more convincing support for a real Third Way. This support can take three forms.

First, it seems to *legitimise the idea that people are capable of forming new kinds of social solidarity*, i.e. ones that are charged with responding to the shared problems of life politics. In contrast to the self-interested actors of neo-classical economics, it paints a picture of fundamentally social and often altruistic subjects, very much concerned with fairness and empathic to the plight of others.

Second, it seems to *legitimise the idea that people need the supportive social institutions of generative politics*. Also in contrast to the purely rational actors of neo-classical economics, flesh and blood human beings are not always very good at exercising choice. Neither are personal responsibility and autonomy solely the result of willpower triumphing over circumstance. All these skills and aptitudes require the long-term support that traditional institutions once provided (such as the extended family, the paternalistic firm, Trades Unions groups, schools, organised religions, and associations such as the Scouts and the Women's Institute). We cannot transport ourselves back in time to the 1950s, but we do need either to adapt existing institutions of this kind to suit the modern world (as has been achieved very successfully, for example, with the Scouts and the Women's Institute), or develop new analogues of old institutions.

Third, the new knowledge about brains seems to *provide guidance on how to generate effective new social institutions*. Rather than stick to the toolkit of legislation, information, choice, markets and incentives, the new knowledge can help us rethink public services and democratic institutions, social policies and professional practices, so that they work with and not against the grain of human nature. This isn't to say that this toolkit is to be abandoned,

but that it can and should become part of a wider package of principles and instruments.

So at one level there is legitimisation, at another effectiveness, and at another the desirable social outcomes decided by life politics. One way of describing a real Third Way is as a significant democratic agreement on legitimate and effective approaches to desired social outcomes, since these three levels can come apart. For example, many people think it is legitimate that young offenders be punished and incarcerated for their wrongs – they think this is an effective way of reaching certain social outcomes. But in fact it seems not to be particularly effective in reducing crime and arguably has undesirable social outcomes. On the other hand, do we really want a society where the state lavishes care on people who commit crime, that is, do we want *this* social outcome?

The starting point of a real Third Way is an agreement on a set of social outcomes – the outcomes that the problems of life politics make salient. Its finishing point is a significant and democratic agreement on what are legitimate and effective ways of reaching these latter, through both conservative and social democratic means. The question is, will neurological reflexivity help bring about such agreement?

It is crucial to distinguish here between academics, so-called policy wonks and managerial leaders understanding new knowledge about the brain and behaviour, and the majority of the population understanding it. If understanding remains only within a certain rarified camp, then better-designed services and systems may result, and this seems to be the remit of ‘nudge’ – to educate the

influential and let them guide the rest of us, in as far as they can, to the social outcomes we say we want. But since knowledge of how brains work is so personally relevant, could it become much more widely disseminated? If this were to happen, would it modify common concepts such as 'self', 'responsibility' and 'choice'?

If all this were to occur, it would seem to point in the direction of a real Third Way being the future of politics, policy and practice in British society.

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## SECTION 2

# THE COMPONENTS OF NEUROLOGICAL REFLEXIVITY

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**The plastic brain:** we learn and think through our brains strengthening and proliferating connections between neurons. These are not fixed and can be rewired even in adult life. Moreover, deprived environments seem to damage the ability of the brain to strengthen new connections.

**The social brain:** the ‘self’ as an isolated and disembodied decision-maker in total control of behaviour would seem to be a fiction. A large portion of our behaviour seems to result from automatic reactions to the social situations we are in, as well as a concern to abide by social norms.



**The automatic brain:** much less of our behaviour than we might think results from controlled decision-making; rather it is through our ‘automatic’ brains that we make many decisions.

**The habitual brain:** we quickly become habituated to new behaviour. But also much of our behaviour

results from intuitive judgements that are products of ‘habits of mind’, formed by our automatic brains.

**The pro-social brain:** far from being solely self-interested, humans seem to be inherently disposed to value co-operation and altruism, and to care about harm done to others and issues of fairness.

**The myopic brain:** we are consistently bad at long-term planning and decision-making and tend to focus on experiences that are closest to us temporally, spatially and emotionally (this is why we have developed social institutions that protect us from these shortcomings).

**The happy brain:** although personalities and cultures are highly variable, reliable sources of happiness are quite fixed (doing things for other people, a sense of autonomy, ‘flow’ activities,<sup>38</sup> activities with intrinsic rather than relative value).

## SOME PRELIMINARIES ABOUT THE BRAIN – TWO SYSTEMS WORKING AS ONE

Surprisingly, rather than ‘higher’ social animals acting in accordance with the rational choice model of neo-classical economics, it seems it is ‘lower’ animals such as geese and pigeons that do so. In one experiment, both students and pigeons were rewarded with (respectively) money and food for pressing computer keys a certain amount of times until they received a reward. Some keys led to rewards, others didn’t. The pigeons were better at switching from unrewarding keys than humans, who tended to persevere longer in pressing them.<sup>39</sup> This seems to suggest that the pigeons cut their losses and were firmly fixed on gaining maximum utility, whereas the

humans were distracted by the ‘sunk cost effect’ - the fact that they had invested time in pressing a key meant they were reluctant to move on and see that effort wasted. If all one cares about is getting a reward, this is ‘irrational’ behaviour.

Crudely speaking, the human brain consists of two major systems: the automatic brain and the controlled brain. ‘Lower’ animals behave in accordance with rational-choice theory because their automatic brains are more dominant – their behaviour is driven by simple reward-responses and emotional systems that seek self-preservation and consequently calculate utility to that effect. The behaviour of human beings on the other hand is driven by a much more refined battery of emotions (and a more powerful automatic brain), and through sophisticated co-operation between the controlled and automatic systems within the brain.<sup>40</sup>

Controlled brain processes such as making a conscious decision or devising a plan happen one at a time, and are quite slow and limited in what they can ‘hold in mind’. Conversely, automatic processes are not under conscious control and may occur in parallel (many things can be processed at the same time). This makes automatic processing extremely fast: the controlled system is like an personal computer from the early 1980s, the automatic system like a supercomputer.

We shouldn’t think of these as two separate cognitive systems; controlled and automatic processes work together. Often, through the controlled brain, we set the automatic brain to work, and when the task set is completed, it alerts us to the answer or correct response.<sup>41</sup> In the case of solving a word puzzle, the controlled brain

instructs the automatic brain what to look for, and the automatic brain carries out the search.<sup>42</sup> Various answers may be presented with a feeling of ‘this is right’ (the feeling of ‘insight’), and the controlled brain checks whether they are.

Controlled processes can also constrain or inhibit automatic ones. For example, self-control seems to result in part from overriding automatic desires to seek immediate gratification. Or, when through our automatic brains we become aware of a behavioural response that is based on experience but is unsuitable for a novel situation, we may, through our controlled brains, ‘restructure’ past thoughts and memories to come up with a new response.<sup>43</sup>

Conversely, automatic processes can influence decision-making. In a social psychology experiment, a photograph of a pair of eyes placed above a voluntary payment tin for drinks (tea, coffee, milk) in a staff room increased considerably the percentage of people who paid for their drinks.<sup>44</sup> This was a wholly automatic response to a particular situation that influenced the decision to pay.

Automatic processes can also *disrupt* the harmonious interaction between controlled and automatic brains. In one experiment, subjects were set what is known as the candle problem.<sup>45</sup> This is where someone is given a candle, a box of drawing pins and some matches. The challenge is to fix the candle to the wall so that it doesn’t drip wax on the table. Most people try to fix the candle straight to the wall with the pins or melt it to the wall. Eventually, they come to the right solution, which is to empty the box and pin it to the wall, placing the candle inside it. This requires seeing the box

as something other than a receptacle for drawing pins (so it requires a modicum of lateral thinking). In this experiment subjects who were offered cash incentives solved the problem more slowly than those told simply to solve it as quickly as possible.<sup>46</sup>

Other research has suggested that this is probably because the cash incentive activated crude reward-response circuits in the subjects' automatic brains.<sup>47</sup> This seems to mean that the latter were no longer being smoothly directed to run through different possible solutions by the subjects' controlled brains. Rather, this co-operative process between the two systems had been disrupted by the strong emotion associated with seeking reward. So the cash incentive seems to have made the subjects' 'think' like the 'lower' animals that appear to conform to rational choice theory. When controlled and automatic systems work in harmony, the controlled brain directs the automatic brain and checks what it does for mistakes, somewhat like a chess player making a move in a game. She directs her automatic brain to run through hundreds of different possible moves. Her controlled brain can't possibly do this, as it can only hold in mind between five and seven items, and if it ran through the moves one by one this would take too long. Rather, she says to her automatic brain 'I want to take his rook but not leave my bishop exposed, and I want to box his queen into the corner'. Different moves then percolate into her mind as the automatic brain quickly runs through thousands of different permutations.

## THE PLASTIC BRAIN

The brain works through plasticity – this means that learning, memory and other cognitive and motor functions work by the strengthening

of neural connections through experience. This is often referred to as Hebbian learning, after psychologist Donald Hebb – ‘neurons that fire together wire together’. But the reverse also seems to be true – when neural connections are not strengthened, they are less refined and their signals less strong, meaning they have less influence on behaviour ('neurons that fire apart wire apart').<sup>48</sup> This means that the brain seems to function on a general ‘use it or lose it’ principle. Neuroscientists have documented so-called re-wirings in monkey and human brains that take place over periods of days and weeks, concluding that plasticity is a constant feature of brain functioning.<sup>49</sup>

Although brain functions are generally anatomically located in the same places, every human brain is slightly different. And surprisingly, when a part of the brain is damaged, a function may ‘migrate’ to another area. This can take mind-boggling forms such as blind people whose brain areas concerned with taste can learn to ‘see’.<sup>50</sup> In general, there is constant competition for neural space, putting added pressure on neural connections that are not strongly established through experience.

The neuroscientist Merzenich demonstrated that plasticity does not simply occur in critical periods of childhood, but also into adult life.<sup>51</sup> This means that although brain functions do deteriorate with age, they can still be reformed and strengthened through experience. So the ‘use it or lose it’ dictum applies to adults as well as children.

Other research by the neuroscientist Elizabeth Gould has demonstrated that the production of new neurons (neurogenesis) continues into adult life.<sup>52</sup> It had previously been considered well established that this was

not the case, and that the amount of neurons in adult brains was fixed. This orthodoxy further added to the metaphor of a rigid brain architecture that declines with age and blocks the learning of anything significantly new in adult life. In fact, it seems life-long learning and behavioural change – although not always easy – are very possible.

Gould has also found that stressful and deprived environments retard neurogenesis. The latter, although it is not yet exactly clear how, seems to be connected to emotional resilience and optimal functioning of cognitive abilities.<sup>53</sup>

In a similar vein, a recent study found that when exposed to stressful environments full of noise, electric shocks and bullying dominant males, rats stuck to ingrained habits, becoming less able to assess problems creatively.<sup>54</sup> For example, they would compulsively press a button releasing food pellets they had no intention of eating. But when moved to a benign environment they quickly regained their ability to reassess behaviour and try new things. Although rats are not humans, the basic structure of their brains is remarkably similar. What happened to the stressed rats was that neuronal networks concerned with goal-oriented behaviour weakened, whereas those concerned with habitual behaviour were enhanced. It seems likely that the same pattern of plastic re-adjustment within human brains would occur in such situations.

One crucial implication of brain plasticity is that cognitive and emotional brain processes in children, although innate, do not properly develop without the right kind of nurturing and learning. Children who do not receive the latter are not likely to develop a well-functioning balance between their controlled and automatic brains.

If this happens they may be unable to exercise self-control or take into account long-term consequences, which in turn affects their ability to learn. Their decision-making and behaviour may also be hijacked by fearful and aggressive responses emanating from their automatic brains.<sup>55</sup> Finally, they may not properly develop emotional capabilities such as empathy for others.

## THE SOCIAL BRAIN

The metaphor that dominates liberal political philosophy, and that feeds into neo-classical economics, is that of society being formed by isolated and self-interested individuals who band together in order to better enjoy the fruits of their labour. But this now appears a highly dubious way of thinking about human interaction. Humans are fundamentally social animals. And this sociality is reflected in many brain functions.

We become aware of others because our brains can apply ‘theory of mind’ – this is the cognitive endeavour of attributing thoughts to others. Part of theory of mind consists in thinking about what other people are thinking about other people – ‘what does Jane think about Tom’s behaviour towards Pablo, given that Pablo is upset about his father’s illness?’ This is a very complicated kind of cognition and is, as far as we know, unique to humans. The social brain hypothesis in evolutionary anthropology contends that human brains have evolved to be as big as they are so that we can think about and manage our relationships with other people.<sup>56</sup>

The brain also disposes us to be highly attuned to what other people feel and think. As has been mentioned, when a picture of

a pair of eyes was placed above a collection box in a staff room payments greatly increased, demonstrating how our environment can automatically prime us to act with others' expectations in mind. Other experiments have shown that the same brain circuits activate when we touch our own faces as when someone else touches his or her face;<sup>57</sup> that we automatically imitate the bodily movements of others;<sup>58</sup> that the more a person imitates us the more empathic we think they are;<sup>59</sup> that when someone imitates our behaviour we are more likely to give to charity;<sup>60</sup> and that automatic mimicry makes us more benevolently disposed to other people in general.<sup>61</sup>

The social psychologist Robert Cialdini has shown the power of social norms. He carried out an experiment where he sent out Christmas cards randomly to strangers.<sup>62</sup> The vast majority of them sent one back. Cialdini suggests that our propensity for reciprocity is an automatic reflex based on mimicry, one that underwrites the possibility of stranger-to-stranger co-operation.

Cialdini also carried out an experiment on different methods of encouraging the re-use of towels in hotels. The most effective messages, rather than worthy environmental ones, were those that stated that the previous guests in the room had re-used their towels.<sup>63</sup> The power of social norms and imitation can be seen in recent studies that have highlighted how much social networks influence behaviour. According to one study, there is a strong correlation between whether someone smokes, is happy or obese, and the number of other smokers, happy or obese people she knows.<sup>64</sup> This might seem to lead to a depressing view of human agency – that we simply copy one another and that what matters are the contingencies

of whom we know. But this forgets that agency is involved when people form the relationships they do. And while undoubtedly complicating the idea of behaviour-change by emphasising the importance of social context, such change is still possible: a person is influenced by those around her, but aware of this, she can influence others and become a ‘node’ in the network that starts a cluster of change. Or, alternatively, why not see behaviour change as a social activity, one in which people encourage, support and hold to account, each other’s commitments?

So rather than being isolated individuals who crawl out of the darkness of solipsism to begrudgingly cooperate with others, it seems we are embedded fundamentally in the social world by our brains. We have others constantly in mind when we learn, feel, think and behave in the ways we do.

### THE AUTOMATIC BRAIN

Much of our behaviour is driven automatically even when it appears controlled. In a now famous experiment<sup>65</sup>, Benjamin Libet showed that when we press a button our automatic brain has started the action before we are consciously aware. As has been mentioned, other kinds of brain function that might strike us as solely under conscious control also seem to be automatically driven – such as the ‘light-bulb moment’ of insight.<sup>66</sup>

Antonio Damasio is the most influential scion of Libet’s work. In another well-known experiment, known as the Iowa Gambling Task, he showed that through our automatic brains we identify patterns far ahead of our being aware of them though our controlled brains.

The game went as follows: a player was given four decks of cards, two black and two red, and \$2,000 of cash with which to play. The player was told to turn over a card from one of the four decks and make as much money as possible. But the game was rigged: two of the decks were high risk with big payouts but even bigger losses. In comparison, the other two decks offered steady but small payouts. If only these latter two decks were played, a reasonable profit would be made; if the former two decks were played, a player would quickly lose her stake.

After only 10 turns, players' palms would become sweaty when hovering over the 'bad' decks – an affective signal manifested completely automatically. After about 50 turns, players started to pick the higher-paying decks reliably. But it wasn't until about 80 turns that the players could explain why they had turned to these decks. So before they were aware of it, their automatic brains had started alerting them through signals such as sweaty palms, and by an average of 50 turns their behaviour was responding to these signals. Yet it wasn't until an average of 80 turns that their controlled brains were in on the action. The automatic brain can be this far ahead of the game due to its ability to run through millions of bits of data at once – an incredibly efficient processing system.

In sum, the controlled brain appears to be computationally weaker than the automatic brain. To cite another example, an experienced financial trader may automatically compute complex patterns of information instantly due to the distribution of this cognitive work into specialised systems that can work simultaneously.<sup>67</sup> On the other hand, a controlled activity like exercising self-control is weakened

considerably by distractions or small drops in blood-sugar levels.<sup>68</sup> It seems cognition where controlled thinking takes centre stage is arduous and tiring. In comparison, cognition that mainly utilises the automatic brain is carried out with effortless ease.

Damasio's research has also shown that emotions are central to being rational – that is, to making decisions based on expected outcomes. He found that people with brain damage to areas responsible for emotion could not make basic decisions such as where to go shopping, what night to go to the cinema, and so on.<sup>69</sup> His work suggests that when we learn and memorise something factual, we also learn and memorise an emotion that marks the importance of the fact for us. People with certain forms of brain damage can remember the facts they learn but none of them stand out as more important than others. So emotional responses, far from being irrational, are integral to rational decision-making.

Damasio has likened our emotions to an 'action programme' planted in us by evolution.<sup>70</sup> They are very fast ways of ensuring survival and co-operation. Some emotions, such as fear, are very basic and completely automatic. Others, such as admiration, compassion, shame, guilt and self-respect are complex social emotions that make beneficial interactions possible. Damasio argues that we cannot change the basic package of automatic emotions we are installed with, but we can change the way the package reacts to things we experience. For example, we can train ourselves to overcome fear. But perhaps more importantly, we can refine, strengthen and expand our complex social emotions so that we can live happy, moral and socially fulfilling lives.

## THE HABITUAL BRAIN

As well as formulating automatic emotional responses to the world, the automatic brain works in large part through establishing predictive habits. For example, the dopamine-influenced prediction-error systems that carry out this function are programmed to seek out patterns in the world, predict them, reward correct identifications, and sound alerts when unusual patterns emerge.<sup>71</sup> So, for example, if someone recognises that rabbits appear out of holes at certain times of day, and this enables her to catch some for food, such behaviour will be reinforced by a dopamine reward. Conversely, if someone identifies a troubling pattern of behaviour, like a hungry lion moving towards her, then the same systems will alert her with the feeling of fear, which provokes a change in the level of dopamine transmitted to the conscious brain.

These prediction-error systems are dedicated to managing expectations – they seek to correctly predict what will happen in the world ('if this, then that...') by learning from experience. They are involved in more or less everything we do, from stepping forward and expecting the ground to be in a certain place (sea-sickness is a dopamine alert that such an expectation is not met), to predicting what move a chess-player will make in a given situation. As the neuroscientist Read Montague puts it: 'You're probably 99.9 percent unaware of dopamine release. But you're probably 99.9 percent driven by the information and emotions it conveys to other parts of the brain.'<sup>72</sup>

But our dopamine prediction/error systems can get stuck in various habits – we can get used to picking out certain patterns at the expense of others, and relying on shortcuts that lead to mistakes

(such as indulging in the so-called gambler's fallacy).<sup>73</sup> Most of the time these habits are incredibly useful: they free up the controlled brain for other uses. But dopamine neurons need to be constantly trained and retrained to stop our habits becoming too rigid.

This is because it is no good simply trusting in the efficiency of the automatic brain to predict what will happen in the world. At worst this will lead to stereotyping and prejudice, at best to rote behaviour. Malcolm Gladwell has made Implicit Association Tests famous.<sup>74</sup> These tests flash images and words on a computer screen – say, an image of an old person and the word ‘grumpy’. Subjects are then asked to match image and word. When subjects are asked to make associations they are perhaps not used to making, such as between an image of an old person and the word ‘happy’, their reaction times are often slower. This indicates that it takes effort to make the association rather than it being smoothly habitual.

It is controversial whether these slower reaction times signal prejudice or simply unfamiliarity.<sup>75</sup> Whatever the case, they seem to show the inbuilt dangers of our dopamine prediction/error systems – their tendency to form ‘habits of mind’ that we may not want to endorse (such as thinking all old people are grumpy). If we don’t want to be slaves to such habits we need to continually retrain our reactions and remain self-critical.

With this kind of self-aware training in mind, the Stanford psychologist Carol Dweck has spent decades showing how important learning from mistakes is for educational outcomes. To see how she did this, it is worth a quick review of a series of tests she set for some ten year-olds. In the first test the children were set a fairly simple non-

verbal puzzle. Half of them were praised for solving it by being told they were ‘smart’; the other half by being praised for their efforts. The children were then asked to choose from two sets of puzzles: one difficult, but from which they were told they would learn a lot; the other easier. Ninety percent of the children who had been praised for their efforts in the earlier test chose the hard set, whereas most of the kids praised in the earlier test by being told they were smart plumped for the easy set. The lesson seems to be that if you label kids with a positive identity – that of ‘being smart’ – you encourage them to preserve it, rather than take the risks that would engender a strong ability to take on challenges through learning from mistakes.

In the next test, Dweck gave the children a test that was far beyond their expected abilities for their age. The children praised for their efforts in the original test relished getting stuck in, whereas those told they were smart were easily discouraged. After this test the children were asked to choose between looking over the exams of kids who did worse or better than them. The kids praised for their efforts were more interested in exams with higher scores than their own, the other group of kids in exams with lower scores. The conclusion to draw seems to be that those encouraged to take risks were keen to improve their ability to learn; those told they were smart to reinforce their perceived positive status.

Dweck’s final round of tests were of the same difficulty as the initial test. Those praised for their efforts improved on average by 30 percent. Those randomly assigned to the smart group performed on average 20 percent worse. So encouraging learning from mistakes not only gets kids more engaged in learning, it gets them to perform

better. Whereas failure for the ‘smart’ kids had discouraged them to such an extent that their performance suffered.

The overall lesson seems to be that not being afraid to make mistakes enables people to hone their abilities to learn from experience – to continually train and retrain their dopamine prediction-error systems and to come to see error signals as paths to greater learning, rather than emotions to be avoided. But also, learning through making errors is more active than learning where error making is minimised. Psychologists and neuroscientists have found that this more active learning allows learners to retain more information.<sup>76</sup> They call this the ‘generation effect’ and research suggests the effect is common to other primates as well as humans.<sup>77</sup> This further suggests that active learning through making mistakes is something we are ‘hard wired’ to do.

On a similar note, research by Paul Howard-Jones from Bristol University suggests that children are more motivated to learn to play computer games when outcomes are uncertain. The conclusion to draw seems to be that the dopamine prediction-error systems can be utilised to motivate new learning through rewards and that uncertainty enhances this process.<sup>78</sup> In other words, the brain learns better when challenged to form novel habits.

The traditional metaphor for thinking about training habits is in terms of a rider and a horse. The rider trains the horse and is in complete control of it, directing everything it does. But a better way to think about this relation might be in terms of pilots flying a plane. The vast majority of ‘decisions’ are made by the prediction/error

systems of the auto-pilot computers, with the pilots deliberating about simple decisions (like what to do in the face of a strong headwind), and decisions that are necessitated by something going wrong (like the plane losing an engine or hitting turbulence). The pilots are also aware of the limitations of the autopilot system – that its vast set of responses can sometimes be misapplied. In the same way, the responses of our habitual learning can lead us astray. The goal of the pilots is to know when the auto-pilot system has made a mistake, and to step in, just as the role of deliberation is to learn where to correct the shortcomings of habitual learning and memory.

Another feature of the habitual brain is its strong tendency to ‘habituation’. The release of dopamine from areas of the brain concerned with reward-response behaviour appears to adjust very quickly to new baselines. In several experiments Wolfgang Schultz measured the activity of some of these neurons. He found that when monkeys were learning to expect a squirt of juice after a musical tone, the neurons in play fired rapidly (from a baseline of 3 firings per second to 80 per second). But within several iterations of the sequence of tone and squirt, the neuronal firing fell back to the baseline.<sup>79</sup> The point seems to be that primate brains (including human ones) get quickly excited about new habits, then quickly adjust to them. This may explain in part why it is so hard for people to keep up enthusiasm for behaviour changes they have initiated. For example, it is easy to start a diet, or to join a gym, because at first one gets dopamine rewards that reinforce the forming of a novel habit. But after a short time, this reward will wane and one’s commitment will be tested.

## THE PRO-SOCIAL BRAIN

By getting people to play the Ultimatum Game, economists have found that although there are variations in degree, human beings care about fairness. In the game there are two players. The first, the proposer, is given a sum of money – for example £10. She is then to make an offer to a second player, a responder. If the responder accepts the offer she keeps it and the first player keeps the remainder.

If the proposer were wholly self-interested she would make the smallest offer possible (1p). And if the responder were wholly self-interested she would accept it, on the proviso that something is better than nothing.

Confounding the expectations of neo-classical economists, subjects routinely override their own self-interest for the sake of taking a stand for fairness. It is common for offers to be 30 percent or above, and for offers of less than that to be rejected<sup>80</sup> (research suggests that unfair offers cause feelings of disgust in responders).<sup>81</sup>

Similarly, helpful behaviour without reward, or altruism, is found across cultures. Economists have devised games to study this behaviour – for example in a typical set-up an experimenter endows six players with \$10 each. The players are then offered to invest their money into a common pool knowing that the experimenter will triple the amount in the pool and distribute it equally among all participants regardless of their contributions. If all players co-operate and contribute their \$10, they will end up with \$30 each. However, each player faces the temptation to defect and to ‘free-ride’ on the other players’ contributions

- investing nothing but still receiving a payout. Therefore the ‘rational’ (according to neo-classical economics) if unpalatable strategy is to defect and invest nothing.

In order to stop this free-riding, if given the option, individuals will engage in altruistic punishment.<sup>82</sup> This is where they forego some further cost in order to punish those who cheat and thus sustain the mutually beneficial co-operation.<sup>83</sup> One study also suggests that in the long run people prefer to work in institutions where altruistic punishment is used as a lever on behaviour.<sup>84</sup>

Altruistic punishment usually takes the form of reciprocal altruism - that is, helping behaviour that is motivated in part by the expectation that such behaviour be reciprocated ('I expect you to contribute to the pot in the same way I do, and if you don't I expect everyone else to pay to punish you in the same way I do'). Such behaviour is probably based on an evolved propensity to ensure co-operation in groups.<sup>85</sup>

Engaging in reciprocal altruism is a perfectly rational approach to economic activity, as long as one takes a long-term view of the benefits of greater and more efficient co-operation. But it seems likely that evolution also works by attaching a wellbeing payoff to altruistic behaviour.<sup>86</sup> Some studies have even suggested that (especially for the more elderly) volunteering and regular acts of generosity and kindness not only lead to greater happiness, but also to longer and healthier lives.<sup>87</sup> This would in part explain how altruism can trump kinship ties and extend beyond reciprocal altruism to the so-called ‘pure altruism’ that expects nothing in return.

Behavioural economic research also suggests that people will switch to selfish strategies for interaction if they feel others will not return their altruistic behaviour.<sup>88</sup> For example, in games like the one described above, if the percentage of free-riders reaches critical mass, all players will revert to a selfish strategy and the game will collapse. In other words, to a large extent, in order to act altruistically, one needs to be among other altruists (this is sometimes called ‘conditional altruism’).

Another theory, coming from neuro-biology, suggests that altruistic behaviour is learned through culture rather than solely through ‘game theory’ (the theory of adopting strategies for interaction based on expected outcomes). According to game theory, people will adopt altruism if they expect to gain from it (i.e. people are conditional altruists). But this leaves groups vulnerable to ‘attack’ from free-riders – if enough of the latter refuse altruistic co-operation then conditional altruists will revert to acting selfishly as this then becomes the strategy for interaction that is better for them. Some neuro-biologists have proposed that in order to protect altruism from such attacks, we have evolved to be bound by strong social norms that value altruism for its own sake (‘pure altruism’).<sup>89</sup> This makes it much more robust in the face of free-riding attack. Thus it seems altruism is spread not only through calculating strategies for interaction (as per game theory), but also through learning social norms that are powerfully reinforced by culture. This theory is supported by a recent study, which seems to show that wide and strong networks of social support are what enable altruistic communities, rather than solely the reciprocal altruistic behaviour that conditional altruists expect.<sup>90</sup> A community low on such ‘social capital’ (whether a gated community or sink estate) will be less altruistic.

Neuroscientists have come to understand that the brain, through ‘mirror neurons’, disposes us to care about harm done to others and to put ourselves in their shoes.<sup>91</sup> As has been stated, when another person touches her face, the same part of the brain is activated as when we touch our own faces. This empathic awareness is to a large extent automatic. Although it is not yet clear how full-blown altruistic behaviour emerges from such awareness,<sup>92</sup> the latter seems certain to be crucial.

Recent research by Sarah Blaffer Hrdy proposes that altruism evolved within the context of ‘co-operative breeding’.<sup>93</sup> This is where adults other than mothers care for the young (‘alloparenting’), as well as provide for them. She argues that altruism did not grow up solely in response to inter-group conflict (individuals bonding together to fight outsiders), but also to share the burden of raising human young, who need very intensive care for a number of years. Co-operative breeding would have meant that adults were used to helping one another without reward. But it would have also introduced a novel natural selection process: those children who learned to value altruistic behaviour (such as sharing food), and to view the world from different perspectives, would find greater favour with their multiple caregivers. Blaffer Hrdy’s work supports further the idea that humans are ‘hard-wired’ to be altruistic and that highly-developed altruistic behaviour is fundamental to what marks us out from other primates.

### THE MYOPIC BRAIN

Behavioural and experimental economists have noted that across cultures human beings do not seem to be very good at delaying gratification.<sup>94</sup> If an individual is offered a choice between £50 now

and £100 a year from now, she will most likely choose the £50. However, given the choice between £50 in five years and £100 in six years, she will almost definitely choose the larger amount. This tendency is probably rooted in human evolution – it makes good sense to value what you have or are about to get in an unpredictable world of scarcity and danger. But in the modern, developed world this tendency can be harmful to achieving our goals.

The psychologist Walter Mischel famously carried out an experiment wherein he put four-year-olds in a room with a marshmallow and told them they could eat it now or wait five minutes and have a second. The children that could wait out the time employed strategies to distract themselves such as pretending the marshmallow was really a miniature sun, or singing a song. These same kids were tested again in their late teens and the ones who exercised better self-control as four year-olds continued to do so at this later stage of their lives. They were also more likely to attend university and do better once there, as well as become high earners in adult life.<sup>95</sup>

Mischel has continued to work with the same original cohort and has found that in their 40s, those who showed less self-control as children were more likely to be obese and have drug problems. He is now working with neuroscientists to try to understand the precise brain mechanisms that underpin self-control.<sup>96</sup> Although there are complex factors that feed into a person avoiding damaging pathologies and leading a happy and successful life, it is clear that self-control makes a major contribution.

In terms of the brain, self-control seems to result in large part from the modulation of the emotional signals of the automatic brain by

the rational powers of the pre-frontal cortex, the area of the brain associated with what psychologists call ‘executive control’.<sup>97</sup> All the kids Mischel tested loved marshmallows; they all felt the desire to eat what was put in front of them. But some kids had learned techniques (through parenting and socialisation) that had strengthened the powers of the pre-frontal cortex to exercise self-control.

So just as it aids bringing about beneficial habitual behaviour, self-control is aided by training and retraining the brain – that is, training the way the automatic and controlled brains interact with one another. Self-control is obviously a capability with wider application than simply deferring gratification. An inability to regulate emotional responses can result in impulsive behaviour that leaves an individual prone to aggression, fear, anxiety and compulsion, and so incapable of directing her life autonomously. It can also lead to an inability to feel compassion or empathise with others as there is too much ‘noise’ from emotional surges to consider what other people might feel.<sup>98</sup>

From a sociological perspective Avner Offer has argued that self-control is largely dependent on a person’s access to what he calls ‘commitment devices’: <sup>99</sup> social institutions such as churches, mosques and synagogues, exam deadlines, positive peer-expectations and supportive families. This suggests that the techniques and strategies Mischel proposed were so important for self-control are sustained throughout a person’s life by the availability of commitment devices.

Offer talks of myopia – that people have unhitched themselves from the institutions that are protective against the inherent short-sightedness of the human condition. Commitment devices

counteract these inherent psychological frailties. A relatively rich consumerist world shorn of them apparently yields the opening line of Offer's book, *The Challenge of Affluence*: 'Affluence breeds impatience and impatience undermines well-being.'

Whether or not we agree with Offer's diagnosis – that the erosion of myopia-reducing social institutions results from affluence – the general point about the importance of commitment devices seems to chime greatly with Giddens' insistence on the need for social institutions that encourage and sustain autonomous and responsible citizens. Left to our own devices, we become less capable of doing what we assert is best for ourselves individually, and certainly less capable of doing what we assert is best collectively.

## THE HAPPY BRAIN

Among the key elements to happiness seem to be the following: feeling in control of one's life, doing things for other people (such as acts of kindness), and 'flow' activities – activities in which individuals use their strengths, being simultaneously absorbed in something they are good at, yet challenged to push themselves further.

### ***Feeling in control***

Self-efficacy results from the belief that one can accomplish tasks by one's own efforts, so that one approaches the future with a sense of control. It has been shown to reduce depression, boost the immune system, help with stress management and decrease pain.<sup>100</sup> There is also research that strongly suggests that self-efficacy and self-determination raise wellbeing levels.<sup>101</sup>

But feeling in control should not be thought of as a purely individual characteristic. A study in Switzerland found that those cantons where referenda were used more often to endorse and construct public policy had higher wellbeing ratings. Significantly, it was participation in the referenda, rather than the benefits of the chosen policies themselves, that seemed to increase wellbeing.<sup>102</sup>

### ***Altruism***

Doing things for the benefit of other people or altruism, as has already been stated, seems to yield a wellbeing benefit. Author Jonathan Haidt concludes that this is because as we develop life-narratives we benefit from the deeper meaning that helping others gives to our characters. He suggests it is in maturity that we benefit from altruism, and that older people benefit the most.<sup>103</sup> When we are young, we are so immersed in the social world that we do not need this added dimension of meaning.

Haidt also carried out informal studies of his students, asking them to perform one of four tasks: indulging a sensuous pleasure (eating ice cream for example); attending a lecture they wouldn't normally attend; performing an act of kindness for someone; and relaying gratitude to someone. He found that the indulgence was the most immediately pleasurable activity. But the two tasks involving doing something for others, although the students found them the hardest to perform, had a wellbeing effect that lasted for days.<sup>104</sup>

### ***Flow***

Mihály Csíkszentmihályi coined the term ‘flow’. It refers to the state one is in when one engages one’s strengths in such a way that one

is completely absorbed and time flies by, but also where one is challenged to perform to the best of one's abilities. For example, someone good at football will be in 'flow' during a game, similarly someone good at chess. A surgeon might be in flow while performing an operation, a gardener in tending her garden.

### ***Social connection***

John Cacioppo has researched loneliness for thirty years. He has shown quite convincingly that lonely people are unhappier, live shorter lives and are more likely to be depressed. He explains loneliness as an evolved mechanism that alerts us to a lack of social connection and support, rather like hunger alerts us to a lack of food.<sup>105</sup> The reverse of this claim is that human beings require good quality social connections to others, and in particular to close friends and family, as a fundamental component of wellbeing. He also found that frequency of interaction and feeling connected to larger groups such as clubs or nations are also important factors in warding off loneliness.

### ***Intrinsic value***

There is a common thread to these three sources of happiness – each has intrinsic value, that is, we value the activities, relations and states for their own sakes. Compare the relative value of material wealth and the accumulation of consumer goods, if this is what one is convinced will make one happy: there will always be someone with more wealth or goods, so one can never be truly happy.

It may be that competitive acquisitiveness has served developed societies well, making them wealthy enough to relieve all sorts of social ills. But once such affluence is achieved it seems some

way should be found to rebalance activities towards the pursuit of intrinsic value, if we want to be happier as well as richer.

One might conjecture that we value these activities, states and relations for their own sakes because they all offer a chance to become better at exercising brain functions that are fundamentally human. For example, feeling in control of one's life is an achievement that results from being good at self-correcting the habitual brain, extending the sight of the myopic brain and training the automatic and social brains. Similarly flow activities involve a well-developed working harmony between the controlled and automatic brain systems, which is precisely how, in general, a well-functioning human brain performs. Furthermore, doing things for the benefit of others and feeling socially connected fulfills the potential of our pro-social brains.

### **POLICY IMPLICATIONS OF NEUROLOGICAL REFLEXIVITY**

Modern conservatives have tended until recently to put emphasis on the importance of individual effort and self-reliance in developing autonomy and responsibility (which is quite different from the emphases made by the more psychologically astute Burke and Oakeshott, both of whom saw that autonomy went hand in hand with dependence on social support). Not to say that individual effort doesn't matter, but given what we now know about the brain, this stress seems misplaced. Developing autonomy and responsibility seems to depend in large part on learning through the absorption of social cues in a responsive and enabling environment. Such learning must be sustained and reasonably continuous, for the plastic brain develops neural connections strong enough to support

reliable behaviours only over time. Moreover, stressful and deprived environments (if they are also sustained) really do seem to harm the brain.

So neo-liberal conservatives find themselves with a conundrum: it is benevolent social conditions that foster self-reliance and individual effort, rather than the other way round. Autonomy and responsibility are achieved with and through the support of others. Recognising this interdependence is one reason why Oakeshottian conservatism about how autonomy and responsibility are produced should be melded with social-democratic commitments to tackling social injustice.

On the other hand, left-wing liberals find themselves pushed to accept the traditional conservative value placed on family and other supportive institutions. If the brain is to a large extent inherently automatic and social, then the importance of good parenting and family support cannot be overstated. And, if the brain is also inherently myopic, then institutions that act as ‘commitment devices’ are essential.

So those on the left might need to think more clearly about what it was about traditional institutions that protected us from our automatic, myopic and socially manipulable brains. But they also might need to think about how we can be more ambitious about the progressive possibilities of our social, pro-social and happy brains. Similarly, conservatives ought to think hard about the damaging effects of deprivation, abuse and entrenched inequalities. And they too might think hard about how to recreate the benefits of traditional institutions in a contemporary setting.

The all important point is that our brains will not magically guide us to a pro-social world of autonomous and responsible citizens – our myopic brains actually work against this outcome. The point is rather that our brains are structured so as to be *capable* of operating pro-socially, of gaining self-control and so on. But these propensities have evolved within the setting of culture – it is genes and memes that make us who we are. If we don't develop the right social institutions then we don't counteract the limitations of our brains, nor develop their potential.

So even though our brains have 'hard-wired' propensities, the onus is still upon us to reflexively evolve the social institutions that protect against our myopic brains, and develop our pro-social brains fully. For example, the problem of tackling climate change can really be seen as, writ large, the human endeavour of counteracting myopia through self-control and pro-social commitments.

The insights of neurological reflexivity give us a far clearer idea of how new institutions might be produced to tackle the problems of life politics. For what was useful about traditional institutions was not their simply being traditional, but their taking into account (often implicitly) these insights about the strengths and weaknesses of human nature. New social institutions can succeed if they do the same, if they work with the grain of our brains, and guard against their shortcomings.

Take for example Danish 'Social Pedagogy' \*(DSP) with regard to children in care.<sup>106</sup> In Denmark the proportion of children in care heading into higher education and employment is far higher than the UK. What makes DSP work seems to be its mimicry of good parenting:

children are encouraged to take risks and are given responsibility from an early age. But also, they have (where possible) the same social worker for life. He or she is able to show physical affection as well as admonish and encourage – in other words to show something like the right balance of affection and discipline a good parent would display. So a sustained relationship of mutual trust and respect develops.<sup>107</sup>

This approach seems to take seriously how autonomy and responsibility are produced – through continuous exposure to the right social cues and emotional support, and through repeated activities that allow for learning from mistakes and involve praise for efforts made. Crucially, commitment devices are provided by the social worker, supporting the development of self-control.

In other words, DSP takes what works from good parenting and transplants it to another context, generating an analogous institution. An ambitious progressive aim is achieved – that children in care are enabled to lead happy and successful lives – by means that work with the grain of human nature. It is a progressive institution that seems to work because it is on the right side of neurological reflexivity.

Another recent example of generating new progressive social institutions is the Harlem Children's Zone (HCZ). This comprises an integrated network of community support organisations and schools. A recent rigorous analysis of the educational outcomes achieved by HCZ concluded that: ‘Harlem's Children Zone is enormously effective at increasing the achievement of the poorest minority children.’<sup>108</sup>

What is different about HCZ is its holistic approach to fostering autonomy and responsibility, distinguished by two features. First, it deals with the whole life of a child – including physiology, psychology and the role of parents. As Paul Tough explains in *Whatever It Takes*, his study of the HCZ and poverty and parenting in urban America: Geoffrey Canada, the director of the programme, ‘believed that he could find the ideal intervention for each age of a child’s life, and then connect those interventions into an unbroken chain of support’.<sup>109</sup> With this in mind the programme facilitates pre-natal advice to pregnant mothers, parenting classes, healthy-food buying co-operatives, weekly health visits, pre-kindergarten activity centres (where parents are taught about the benefits of, among other things, reading to their children), excellent kindergarten schools and excellent middle and high schools with full support (breakfast clubs, computer classes, sports clubs, university preparation classes).

So HCZ has succeeded in creating a ‘conveyor belt’ of interventions that gives poorer kids the same or near the same level of support as those more fortunate. This starts with an acknowledgement of the importance of a child’s early neurological development in the form of sustained care and concern from pregnancy onwards. For example, kids from more deprived homes initially came to HCZ schools with an average of 25 hours of one-to-one reading; kids from more affluent homes an average of over 1,000 hours.<sup>110</sup> To counteract this disadvantage, HCZ pre-kindergarteners are enrolled in 10-hour a day programmes that even encompass the learning of foreign languages. The end results of this holistic approach are the startling and unprecedented educational outcomes of Harlem’s

Promise Academy. David Brooks puts it thus in a recent article in the *New York Times*:

‘...the most common education reform ideas — reducing class size, raising teacher pay, enrolling kids in Head Start — produce gains of about 0.1 or 0.2 or 0.3 standard deviations. If you study policy, those are the sorts of improvements you live with every day. Promise Academy produced gains of 1.3 and 1.4 standard deviations. That’s off the charts.’<sup>111</sup>

The second holistic feature of the HCZ programme is that it treats the whole community. According to Linda Perlstein:

‘[Geoffrey] Canada isn’t satisfied with propelling selected children to a better life; his goal is to ‘contaminate’ the entire culture of Harlem with aspirational values, disciplined self-improvement and the cognitive tools to do better than those who came before. That depends on offering services to as many people as possible.’<sup>112</sup>

This chimes with what has been asserted above about the importance of social norms and commitment devices. The HCZ programme puts in place support structures that push an entire neighbourhood past a certain tipping point. Beyond it, the majority want, and are able, to do well at school, be more responsible parents, act altruistically and so on. It’s an example of individuals being prompted and primed by the dominant social norms operative in their community, as well as having their habits changed and built up into new capacities.

DSP and HCZ both potentially promise a break in the cycle of inherited disadvantage: a scenario in which individuals, despite

having abusive or neglectful parents, can live happy and successful lives; a community that, despite entrenched inequalities, can become more self-reliant within a generation. This raises interesting questions about state intervention and welfare dependency: if the intervention builds social institutions that foster autonomy and responsibility, it can be seen as an investment that eventually leads to a smaller state. Is this a social democratic or conservative policy?

DSP and HCZ seem to adopt the Third Way approach of a generative politics mentioned in the previous section. To recap, the tenets of the latter are:

1. Fostering a ‘bottom-up’ engagement of reflexive citizens in solving their own problems.
2. Creating situations in which active trust can be built.
3. The development of autonomy.
4. The decentralisation of political power – this is required to facilitate bottom-up engagement and autonomy.

It seems clear that both institutions require individuals to become reflexively involved in how their own choices have wider impact, and also involve bottom-up engagement and the decentralisation of power. For example, HCZ uses long-established local community groups to involve participants in its scheme and demands considerable engagement from parents and children alike. Similarly, DSP devolves power to local social workers who work in a way that encourages children in care to learn about how their choices affect their outcomes. So both DSP and HCZ foster autonomy and build active trust between participants and those intervening.

But these schemes raise interesting questions about paternalism and autonomy. They both aim to produce autonomous individuals but their methods could be considered paternalistic – HCZ, as has been said, commits pre-kindergarteners from deprived backgrounds to ten hours of structured activity a day. It also imposes strict rules of behaviour in its schools and teaches well-mannered social interactions. But its amazing success seems to imply that paternalism is necessary to foster autonomy (that one has to learn a certain set of skills and habits before one can take control of one's life in a modern globalised economy). However, this is not simply a return to old-fashioned discipline. Parents and children alike know why these paternalistic measures are taken and sign up to them voluntarily.

Of course there may be many hidden causalities that make these new institutions work. Geoffrey Canada for example is an inspiring and charismatic figure. But equally, there appears to be no reason why, in an era of neurological reflexivity, this Third Way approach to generating new social institutions cannot be more widely adopted. Here are nine policy clues to how this might be achieved:

1. *Social deprivation matters* – from simple issues such as children whose parents don't or can't read to them, to more serious problems including stressful and violent environments, it is clear that sustained deprivation really does damage an individual's ability to achieve personal autonomy and wellbeing and to be socially responsible. This damage is not beyond repair unless it is very grievous (we should not give up on people), but as a general phenomenon, it is severe enough to be a harm that gravely concerns society as a whole.

2. *Practical knowledge is important* – whether it be a social worker learning through working alongside an excellent practitioner, or a young person engaging in structured practical activities, repeated observation of and engagement with social norms (until those norms are internalised) is an important part of what produces autonomous and responsible individuals.
3. *Autonomy and responsibility are (social) achievements not givens* – self-control seems to be achieved through learning techniques and habits via the support of social institutions. Similarly, the ability to take on new challenges and constantly correct non-beneficial habits is greatly enhanced through practice and encouragement. And the very plasticity of the brain means that if a form of behaviour is not learnt properly it will have diminished influence or be crowded out by others. This means the person who can direct her life through making choices and taking responsibility for her actions is more akin to the athlete who has trained her body into the right shape (and can keep it there), than a disembodied rational calculator.
4. *Pro-social associative groups should be promoted* – if three of the major keys to happiness are feeling socially connected and supported, feeling in control of one's life, and doing things for other people, then pro-social associative groups not only promote autonomy and responsibility, as well as making available more effective responses to shared problems, they also produce healthier, happier communities.
5. *Activities with intrinsic value should be promoted more widely* – the research shows quite convincingly that once societies have reached a certain stage of economic development, gross inequalities lead to increased social pathologies.<sup>113</sup> This

would seem to be because in this socio-economic setting the over-pursuit of relative goods exposes everyone to ‘invidious comparison’ (notably comparison to others with more relative goods). But it also damages society’s ability to pursue the intrinsic goods of pro-social behaviour as well as ‘flow’ activities that draw on strengths and have their own reward.

6. *Personal choice should not be overextended* – people can learn to choose well through the right kind of capability-building and support, but in some areas of life too much choice is simply not helpful. Either people make bad choices, or those that make good choices are already in possession of the requisite capabilities and support, which means inequalities in access to public goods such as healthcare will likely increase.
7. *Different forms of work and social organisation are possible* – the neoclassical economists’ toolkit of markets, incentives, information and regulation is certainly not obsolete. But many forms of work and organised social interaction need not be based on financial incentives and self-interest alone. People are also naturally motivated by altruism, fairness and empathy for others, and institutions can harness and promote these types of motivation.
8. *A holistic approach to enabling autonomy and responsibility is essential* – people are emotional and social animals as well as rational thinkers. If emotional reactions and social relations are not taken into account then entrenched social problems will persist. For example, education should certainly not only be *about* the emotional readiness to learn, but if the latter is not taken into account then dramatic inequalities in outcomes will never be redressed. Similarly, people live in families, peer groups and communities. If one wants to enable them to

change their behaviour one has to work at the level of these groups (as the HCZ example shows).

9. If altruism depends on individuals feeling their helping behaviour will be reciprocated, and on exposure to a culture of valuing altruism, then *as a society we should think seriously about how we can create the conditions where it is the norm to be altruistic.*

These policy clues hint at what a real Third Way in politics, policy and practice might look like under the aegis of neurological reflexivity. Of course, there is still plenty of room for argument within this broad agreement. But perhaps more importantly, the latter depends on positive answers to the following questions. Will reflexive citizens learn new knowledge about the brain and behaviour? Will they incorporate an awareness of this learning into what they do? Will they change powerful common sense conceptions of who they are? In the next section we briefly describe how the RSA's Social Brain project aims to assess tentatively what the answers to these questions might be.

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### SECTION 3

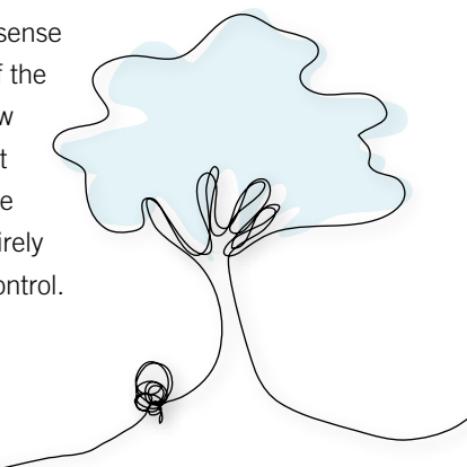
## ASSESSING NEUROLOGICAL REFLEXIVITY

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The way that new scientific knowledge interacts with common practice is hard to predict. Galileo, for example, contributed to the secularisation of Europe. But does knowing that one's big toe is a buzzing mass of particles at the quantum level have much effect on common practice? Perhaps understandably it brings a shrug of the shoulders. As David Willetts put it in response to Matthew Taylor's RSA speech about neurological reflexivity: "we know the sun doesn't really rise in the morning, nor move across the sky, but we still talk in those terms".<sup>114</sup>

Will neurological reflexivity arrive at a similar fate? Will the apparent opportunity for a real Third Way be met with a collective shrug of the shoulders?

There are two very powerful common sense notions that might stand in the way of the public learning and internalising new knowledge about the brain. The first is that performing an action is like switching a light on and off – it is entirely the result of conscious, deliberate control.



The second is that each of us receives sensory data passively, in that this data simply causes perceptions in us. These two common sense notions we can call ‘free will’ and ‘empiricism’.

The significance of free will as it will be discussed here is not the metaphysical question of whether it exists or not. What is at issue is how we think of ourselves as exercising autonomy and responsibility. For we come to radically different conclusions about the legitimacy, effectiveness and desired social outcomes of policies and practices depending on how we think actions are performed.

Similarly, in light of empiricism, we might think of learning in terms of perceptions caused in the brains of pupils by the actions of a teacher, so that everyone perceives the same information in the same way. The image here seems to be that of information flowing directly on to an inner screen, with each person dispassionately decoding it.

Following this model, pupils who learn less well are either less bright or just not trying. But if the processing of information always involves emotions, as neuroscience suggests, this is a false dichotomy. It may be that a person is perfectly able to learn but is either not emotionally ready, or is in some subtle and unconscious way affected by the information relayed. For example, American psychologist Claude Steele has studied ‘stereotype threat’, where some forms of messaging can unconsciously influence performances in tests – for example, when women achieve lower scores in maths tests after they are told the test will assess their innate intellectual ability.<sup>115</sup> Presumably some automatic association is made between being a woman and being endowed with less innate mathematical ability.

## QUESTIONING COMMON SENSE?

The world-renowned British neuroscientist Karl Friston has developed an overarching theory of how perception and action work in terms of brain function.<sup>116</sup> One of his conclusions is that perceptions are not caused in us passively. Rather, the brain continually interprets and contextualises information with a view to acting upon the world. For example, if someone is speaking to you in a noisy bar, your brain strains to contextualise the words as meaning something because you want to understand and respond. Thus you are actively trying to predict what the person will say, so that as Friston puts it: ‘perception is enslaved by action.’<sup>117</sup> As an example, given the contextualising nature of perception, if the conversation had taken place in late 2008 you would have been much more likely to hear ‘credit crunch’ rather than ‘credit brunch’.

Friston’s theory also suggests that the brain is like an onion.<sup>118</sup> On the outside are the layers that respond automatically to the inflow of sensory data. The inner layers are more concerned with learning and memory, and ‘higher’ cognitive processing. At the very core is the pre-frontal cortex, which can think about information sent from any part of the brain (the image of the onion is an aid to thought and is not strictly speaking anatomically correct).

How does this work in practice? As you walk down the street your feet feel the ground and the outer layers of your brain predict where it will be when you take your next step (perception contextualises the world according to the actions the brain is executing at the time). If the ground is not where it is predicted to be your brain automatically generates a signal telling you this. The signal is really

just an alert that there is a difference between the prediction your brain has made and what has actually occurred. The outer layers of the brain feed this signal to the inner layers. This might initiate only a habitual response that is automatic – like instinctively cushioning one's fall when there is an unexpected dip in the ground. But, say the ground is not where your brain predicts it to be for several steps and you know you are in an earthquake zone, then the inner core of the brain contextualises the signals from the outer layers and you start to think about what to do.

According to Friston's theory, at the outermost layer completely automatic sensory processing takes place. At the next layer inwards habitual learning takes place – for example, when the door you push won't open, you pull instead, but you don't think much about this, habit simply kicks in. And at the innermost layer controlled processing – thought and deliberation – occurs. So if the door you come across opens neither inwards nor outwards, you think about trying to locate a key for it.

This means that perception results from a complex, active process of contextualising sensory data, all with a view to pursuing some action or other. But that means that the common sense idea that the world passively causes perceptions in us would seem to be false. Rather, the way the outer layers of the brain contextualise sensory data can greatly affect an individual's ability to learn from perception. If these layers create feelings of fear and anger, for example, or if the information they send is in turn contextualised by ingrained habits, then the potential for processing information will be restricted accordingly.

Friston's theory also seems to imply that the common sense assumption that action is like turning a light switch on and off is false. Action depends on how the brain processes information through feedback loops between its inner and outer layers. Consequently an individual's ability to perform certain actions will depend on how these layers interact. If events in the world are contextualised in terms of, for example, fearful and aggressive emotions, then this will shape the range of actions an individual can perform. But also, because sensory data are perceived and understood in terms of the actions an individual intends to perform, if someone is used to acting aggressively and out of fear, then many aspects of the world will be perceived aggressive or frightening for this reason alone.

### WHERE NEXT?

What Friston's theory seems to support is a view of human agency quite different from the common sense assumptions of free will and empiricism. It brings into doubt the idea that people *start* as isolated individuals assessing information and acting solely by applying their wills. Of course people do assess information and act through willpower. But it seems that both these capacities are thoroughly embedded from inception in the social world, and that they are dependent on the automatic brain processes and habits that shape them. To put it bluntly: it is more that people *end up* assessing information and acting by applying their wills once automatic brain processes, habits and social relationships are brought into a certain poise. Moreover, even when people do become able to do these things, they don't do them as often as they might think.

Given all this, the RSA's Social Brain project aims to carry out research to see whether new knowledge about the brain and behaviour

resonates with people, and challenges their conceptions of common practice. Will they resolutely defend free will and empiricism? Or will they have rejected such notions already? Will the new knowledge amaze or interest them? Will they already know it? Will they simply not care? In short, we want to take some small steps to finding out whether we might be entering an era of neurological reflexivity.

We intend to carry out some workshops where we give various cohorts the opportunity to learn some of the major insights about brains and behaviour and then feed back to us their reactions. This is complicated territory but one thing seems clear: until people understand these insights in the context of the specific problems they face, we will be greatly unsure of what their relevance could be for politics, policy and practice.

Research carried out with US school children by Stanford psychologist Carol Dweck found that teaching a ‘growth mindset’ with reference to neuroscience enhanced the overall educational performance of the children.<sup>119</sup>

Our proposed research is slightly different. We want to see if new knowledge about brains and behaviour can help adults exercise more control over their behaviour both collectively and as individuals. We want to work with people drawn from different communities to see if awareness and application of such knowledge might empower them to be creatively involved in changing their own behaviour. In line with what the new knowledge says about the brain, our research will not only involve teaching and interactive learning, but also practical implementation over time.

We are genuinely open to the possibility that people will tell us they simply don't care about this new knowledge. But this research still seems worth carrying out in order to assess whether neurological reflexivity could fund a real Third Way. The stakes are high: the task is to reinvigorate our social institutions so that we might respond to the shared problems we face today. If we are to do that, we need substantial agreement on how best to do this. Perhaps learning about brains and behaviour will provide such agreement amongst citizens themselves.

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# ENDNOTES

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- 1 It is important that the word institution be understood as a noun identifying something that is sustained through an established activity. For example, churches are social institutions because of churchgoers, parenting is a social institution because of what parents do, school sports days are social institutions because teachers, parents and schoolchildren go along to organise, watch and take part in them.
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