



Original Article

How the Public Sector Got its Contradictions – The Tale of the Paradoxical Primate. Integrating the Idea of Paradox in Human Social, Political and Organisational Systems with Evolutionary Psychology.

By

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The specific subject of this article is about contradictions – or paradoxes – in the public sector. But it actually goes much wider to ask some fairly fundamental questions about social sciences in general. And when I say wider, I do mean wider. It will dip into public policy, management, organisation theory, organisational behaviour, and human evolutionary theory and particularly evolutionary psychology. It will also say something about my personal intellectual and political history, because this is inextricably tangled up with the story I want to tell.

The essence of the article is simply stated – it will seek to synthesise ideas from organisational and management theory about paradoxes and contradictions with evolutionary psychology to provide an explanation of the many contradictions and paradoxes that surround and permeate public management.

First, a brief note about the language that I employ. I use the word ‘paradox’ to denote apparently mutually exclusive and contradictory elements of a situation or system that nevertheless do co-exist. As I will explain later, I prefer the term ‘paradox’ to that of ‘contradiction’ be-

cause in the Marxist and Hegelian traditions, which have largely appropriated the term contradiction, it has become inextricably linked to the idea of synthesis – that is resolution of contradictions. My emphasis is on irresolvable, permanent, contradictions and the notion of ‘paradox’ captures this more accurately and strongly (Quinn and Cameron 1988).

An article of this type is an excuse to say something fairly broad about ‘where you are coming from’ – as the Californians would say. As someone with both a non-traditional academic history (which happened by accident) and a non-traditional approach towards academia (which is more a matter of choice) I often have a problem. Academic colleagues frequently ask each other, on first acquaintance, ‘what’s your area then?’ They expect something general like ‘I’m a sociologist/economist/political scientist’ as a reply. My problem with this question is simple – I don’t have an academic ‘discipline’ in this sense, so I have taken to replying half in jest and half seriously, “I’m a militant eclectic.” I gather, incidentally, that my good friend Professor Con-

nolly uses the term ‘fully paid up dilettante’ to convey roughly the same idea.

Imagine my delight therefore to discover a book - by someone for whom I already had immense respect - arguing for a reconciliation between the social and the physical sciences and within each of these great traditions between their various branches. Edward O. Wilson’s ‘Consilience’ was, in my humble view, one of the most important books of the late 20th century and a suitable herald for the next millennium (Wilson 1998).

Wilson laid down a challenge to all scientists – social and physical – to try to reconcile their various traditions both between and within each of the great divides. His plea is an echo of C. P. Snow’s famous attack on the UK’s ‘two cultures’ – of the humanities and the sciences – and a similar plea for reconciliation. This article will I hope be a very small contribution towards starting to explore how such reconciliation might take place.

However, before I start I must issue a ‘health warning’ – as much to myself as to you. The sum of human knowledge is expanding at a phenomenal rate, which makes drawing links between different branches of knowledge, for individuals at least, in some ways ever more tricky. Being a ‘Renaissance person’ was a lot easier in the Renaissance than it is now. Trying to bring together knowledge from different pools risks ridicule from the inhabitants of each of these highly specialised knowledge ponds. So, at the risk of getting splashed from all sides, I’m going to plunge in anyway.

Contradictions in Public Services

When I started studying public policy and management I was introduced by my friend Dr. Jenny Harrow to a useful little theory called ‘domain theory’. Domain theory postulated that what characterised most public services were three distinct domains – the policy, the managerial and the professional – which each had their own inner-logic, working patterns and values and which were in constant tension with each other. The trick, argued the authors of this ap-

proach, was not to suppose we could abolish these contradictions – they were and are permanent features of most professionally dominated public service. Rather, they suggested, what was important was to firstly recognise and understand the differences in working modes. Then you have to work out how best to manage the balancing act and the periodic switches in behaviour that had to be made by successful public managers (Kouzes and Mico 1979; Willcocks 1992).

I can best illustrate this with a scenario I have been using for some years. Imagine a professionally trained social worker who has been promoted to be Director of Social Services in a local authority. On Monday morning our heroine attends a social work seminar on child-protection. She dons her social worker hat, collegial, professional, and collaborative. In the afternoon she has to return to the office to chair a meeting of the department’s management team – here she is in management mode – authoritative, hierarchical and, when necessary, commanding. In the evening she has to attend a meeting of the local authorities Social Services committee where she switches on her political operator programme – wheeling and dealing with the best of them.

This story always strikes a powerful chord with the (probably thousands by now) of public sector managers to whom I have told it. It illustrates just one set of contradictions in public services – there are many others and other ways of looking at them.

The point of this little story is that each of these personas – professional, managerial, political – has to be adopted, appropriately, by the same person, despite their evident contradictions and tensions. She has to be appropriately inconsistent – switching operating modes to suit the circumstances.

My own Ph.D. research looked at contradictory – paradoxical – strategic management practices in public organisations. In a survey of nearly 4,000 senior managers in the UK I established quite clearly that public organisations

routinely adopted quite contradictory approaches to making their strategic decisions – simultaneously deploying incompatible systems that ought to have logically excluded one another but obviously did not in practice (Talbot 1995).

The problem for me is that most of my social science academic colleagues do not look at these contradictions and paradoxes – on the contrary they mostly try to construct logically coherent and consistent models of how things like public services operate, smoothing over or ignoring their blatantly contradictory aspects or at best seeing them as mere dilemmas. Only fairly recently has the study of paradoxes in human organisations begun to take hold (Quinn 1988; Quinn and Cameron 1988; Aucoin 1990; Collins and Porras 1994; Handy 1995; Harvey 1996; McKenzie 1996; Cannon 1997).

Contradictions and Paradoxes

At this point I need to introduce a few definitions. Contradictions, in my view, can come in at least three types: dilemmas, dialectical and paradoxical.

Dilemmas are contradictions that can be resolved by simply making a choice between two incompatible alternatives. This is the most often adopted approach when examining contradictory aspects of public institutions.

The second approach – and type of contradiction – comes from the Marxist/Hegelian tradition and involves the dialectical synthesis of the (contradictory) aspects of two phenomena to produce a third – new – ‘thing’. In the Marxist/Hegelian tradition synthesis is always positive, that is it moves in a ‘progressive’ direction.

There is however a third approach to contradictions which sees them (or at least some of them) as permanent – that is they will not go away. They cannot be resolved either through choice (as with dilemmas) or by synthesis. If choice is exercised in favour of one ‘pole’ of the contradiction the other pole will not be suppressed, it will simply resurface later, or in a slightly different guise.

The simplest example of this is the paradox of control in large, complex, organisations. The centralisation/decentralisation debate has been going on for centuries simply because it is irresolvable. Any attempt to decentralise organisations inevitably gives rise to problems of control and coordination which in turn lead to demands for greater central control. Likewise, centralisation inevitably leads to problems of congested decision-making and poor information that in turn lead to calls for greater local autonomy.

Moreover most ‘reform’ efforts in organisations are couched in terms of logical consistency whilst actually being paradoxical. Thus I have shown in research on the UK Civil Service, for example, that whilst officially they have for many years been ‘decentralising’ they have actually simultaneously been engaged, almost completely unacknowledged, in centralising. What they have shifted is the forms and focus of centralisation/autonomy towards more strategic centralisation and more operational decentralisation, but it is only the ‘decentralising’ bit that usually gets mentioned (Talbot 1997).

Bob Quinn and his colleagues have identified the same phenomenon in the nature of (generic) managerial work. Their ‘competing competences’ approach identified that managers have to be, for example, simultaneously ‘directive’ and ‘facilitative’. Quinn argues that in most cases managers latch onto one of the paradoxical competences excluding the alternative. This enables them to ‘get by’, but really excellent managers are able to deploy paradoxical or contradictory competences appropriately – i.e. at the right time and place, sometimes in swift succession. Really bad managers also deploy the full repertoire of competing competences, but at the wrong time and place (Quinn 1988; Quinn and Cameron 1988).

Porras and Collins similarly identified a set of 11 paradoxes in their research on high-performing companies. They stressed these companies simultaneously applied policies that

were clearly contradictory and yet somehow managed the stress between these paradoxical approaches to generate creative tensions rather than destructive conflicts (Collins and Porras 1994).

There are many other examples from the management and organisational literature that I could cite; the point here is merely to establish the fact that a number of researchers and writers have now identified a number of instances of paradoxical behaviour in organisations. Moreover, contrary to received wisdom these apparent inconsistencies are always destructive but can be positively beneficial to individual managers and organisations.

Paradoxes in human systems are not however confined to employing organisations, public, private or non-profit.

Whilst using the terminology of ‘dilemmas’ rather than paradoxes one fascinating study of the social psychology of everyday life concluded that apparently paradoxical aspects of popular ideology were actually psychological devices for dealing with real paradoxes. Thus popular sayings like ‘too many cooks spoil the broth’ nearly always have a diametric opposite such as ‘many hands make light work’ (Billig, Condor et al. 1988).

In the public policy field Prof. John Stewart, the veteran writer of UK local government, once listed a set of ‘dilemmas’ in policy making systems which included comprehensive vs. selective; uniform vs. diverse; interventionist vs. permissive; centralised vs. devolved; and so on (Stewart 1982). Deborah Stone’s excellent book on ‘Policy Paradox’ analyses – in terms remarkably similar to Bob Quinn’s competing values and competences framework in management – the paradoxes lurking behind most policy choices (Stone 1997). Hugh Stretton and Lionel Orchard’s excellent demolition of public choice theory likewise counters the ‘rational utility maximisation’ hypothesis by suggesting a rather more paradoxical view of human behaviour that informs our political and policy choices (Stretton and Orchard 1994).

I could go on – the list of works looking at the issue of paradox is expanding almost exponentially and one recent summary identified dozens of articles in the management literature alone.

Why Paradoxes?

The question I want to pose now – and one which has not been fully explored in any of the organisation and management literature on paradoxes - is the big ‘why’ question. Why is it that paradoxical political, organisational or managerial behaviour seems to be not merely possible but actually beneficial, in certain circumstances?

If we take Quinn’s paradoxical managerial competences as an example – why is it the case that paradoxical behaviour by managers may help them manage better?

One answer might simply be to do with human diversity – people are different. Some people like to be managed through instructional, directive and authoritative management whilst others prefer facilitative, collaborative, collegial management. This would be a neat and parsimonious solution, but unfortunately it does not correspond to the evidence (or most people’s experience). People may tend towards favouring one way of being managed rather than another but most people are themselves ambiguous and contradictory – wanting to be ‘managed’ one minute and then demanding more ‘autonomy’ the next (or sometimes even simultaneously).

In other words paradoxical political, management and organisational behaviour can work because people behave paradoxically. They want to belong to groups *and* be individuals; they want to be told what to do *and* they want autonomy; they want to collaborate cooperatively *and* they want to compete. Paradoxical management behaviour works when it manages to synchronise with people’s paradoxical expectations of managers.

The next question then is – why is it that people behave inconsistently or paradoxically?

The hypotheses I want to develop – and

hopefully provide an explanation for – are thus:

i) That human behaviour *is* fundamentally paradoxical in nature and this is reflected in human organisations and their management, as well as in human political institutions and public services.

ii) That paradoxical behaviour is not necessarily ‘balanced’ – individuals and institutions can tend towards one ‘end’ of a paradoxical ‘pair’ or related sets of paradoxes, producing configurations of paradoxes.

iii) That any current paradoxical configuration is inherently unstable and while it may remain static for relatively long periods it will inevitably change.

iv) That paradoxical configurations are likely to swing through cycles of change – for example from ‘centralisation’ to ‘decentralisation’ and back again, simply because no ‘choice’ can ever totally suppress one ‘pole’ of the paradox.

v) That the general, inherited, paradoxical behavioural traits of humans are reflected in our society and culture, which always and everywhere are themselves paradoxical.

vi) Finally, and most controversially – I want to assert that paradoxical behaviour is an evolved trait in homo sapiens – part of our evolutionary heritage and universal to the human species.

Human Nature

Debates on human nature have been fraught with ideological and political baggage for centuries. There have been essentially three strands of argumentation –

(1) *There is such a thing as human nature and it is essentially selfish*, individualistic and, if unrestrained, violently self-aggrandising. This is what we might call the Hobbesian view, after Thomas Hobbes and his famous ‘nasty, brutish and short’ epithet for human life in circumstances of unrestrained human nature. In modern times this view has become associated with economics and the view of humans as ‘rational utility maximisers’ who can best be constrained into constructive society through the

mechanism of private property and the invisible hand of the market regulated by a minimal state.

(2) *There is such a thing as human nature and it is essentially cooperative*, sociable, and, unless warped by social systems, peaceable and communitarian – what might be called the Rousseauian view, after Jean-Jacques Rousseau’s view of humans as naturally ‘good’ and compassionate. This view has formed the basis for some forms of Utopian Socialism and some branches of feminism (advocates of matriarchy).

(3) *There is no such thing as human nature* – humans are the product of nurture (individual and social) rather than nature. This has been called the ‘standard social science model’ in recent times, but has historically also been associated with Marxism.

This is where I would like to introduce a little more personal history. I was, for a decade or so in the 1970s, a Marxist of the Trotskyist, new left, variety. It was an article of faith on the left – not just Marxists but virtually all progressives – that there was no such thing as ‘human nature’. Whenever argument flared on this issue the works of anthropologists like Margaret Mead and her famous ‘Coming of Age in Samoa’ were called in aid of the infinite variety of human cultures that ‘proved’ there could be no such thing as human nature. Human behaviour was constrained by social-economic, political and cultural forms not by inheritance. Both individually and collectively any ‘bad’ behaviour was merely the result of inadequate social systems, and new and better ones had to be created either by reform or revolution.

It is worth noting that this view was just as, if not more, determinist than theories of a genetically endowed human nature. Society, socialisation, culture were just as tyrannical in determining how you might ‘turn out’ as genes could ever be. The reason why ‘the workers’ were not automatically and everywhere socialist in their aspirations was because they were brought up in capitalistic, individualistic, com-

petitive, racist, sexist, societies. Some Marxists – such as Louis Althusser and his followers – even developed theories about the ‘ideological state apparatus’ (i.e. churches, schools, and even trade unions) whose function it is to transmit bourgeois culture and values to the masses. The adherents of these types of views of cultural determinism now hurl abuse at evolutionists for ‘genetic determinism’.

It is difficult to convey the fervour with which such beliefs about human nature (or rather the lack of it) were held – you had to be there, as they say. It is still possible to get a flavour of these polemics in the writings of some of the most vociferous opponents of the new science of evolutionary psychology – for example Lewontin, Rose, etc (Rose, Lewontin et al. 1984). In their ferocious assaults on anyone who dares even discuss the possibility that evolution might have something to do with how humans behave they randomly throw out accusations of (right-wing) political or ideological bias – failing to notice the rather narrow political and ideological niche they themselves inhabit. They ignore the fact that while there are some right-wing proponents of evolutionary psychology there are many, many, more who have no political bias or are from the left of the spectrum – e.g. Edward Wilson, Peter Singer and others (Wilson 1995; Singer 1999). A classic case of pointing out “the mote” in someone else’s eye whilst failing to notice to “the beam” in your own, to borrow a religious metaphor.

This can reach ludicrous proportions as can be seen from an article in the ‘Observer’ of February 11, 2001 which had the front-page lead: “[Revealed: the secret of human behaviour](#)”. This was over a story that tried to suggest that the smaller than expected number of genes we have, as revealed by the genome projects, somehow meant that ‘genetic influences’ over behaviour were disproved. This ‘story’ has no basis in the science it was discussing, which frankly tells us little one way or the other about possible genetic influences over either individual or species-level behaviour.

I make these points partly because I used to subscribe to these views. Thus, for me, coming out of such a milieu it was extremely difficult to come to terms with the view that there was a significant inherited, evolutionary, aspect to human behaviour – both individually and collectively. However the accumulated evidence now seems to be overwhelming - that evolution has indeed played an important part in shaping human nature, human behaviour and human societies. We ignore it at our peril.

One highly symbolic sign of the undermining of the cultural relativists occurred in anthropology where Margaret Mead’s work on Samoa has been comprehensively exposed as at best naïve, at worst wilfully ignorant, and in either case plain wrong (Brown 1991).

A more comprehensive blow to cultural relativism was delivered by Brown’s ‘Human Universals’ book that systematically exploded many of the myths perpetrated by the relativists about supposedly diverse aspects of human behaviour (Brown 1991).

The main assault on the ‘there’s no such thing as human nature’ school has come, however, from biology and particularly from the partial fusion between physical-biological science and social science represented by sociobiology and its progeny evolutionary psychology. There is also extensive evidence from behavioural genetics, including twin studies in humans and genetic manipulation studies in other animals and insects. Ethology – studies of apes and primates – has made major contributions as we have come to understand the much more complex mentalities and social behaviours of our nearest cousins.

All these approaches embrace heredity *and* culture and it is simply false to claim that they are purely about genetic determinism. Most serious behavioural geneticists, for example, seem to have gelled around the position that individual genetic inheritance probably contributes around 50% towards framing individual behaviour whilst environment and experience contributes the rest.

For species-level behaviour – the main subject of this article - the effects of genetic inheritance are probably even less direct. Rather species-level instincts provide what I would call a framework or set of building blocks that can be ‘expressed’, to use a phrase from genetics, very differently in different individuals and different societies. Louis Althusser inadvertently provided a useful phrase for this when he developed the notion of ‘over-determination’ (Althusser 1996). As a Marxist Althusser tried to explain the obvious relative autonomy of culture, philosophy, art and other human forms from the economic system which produced them. By ‘over-determination’ he meant that the socio-economic system – feudalism, capitalism, socialism – provided a broad framework within which cultural forms evolved.

It has to be admitted that there have also been those who have leapt to unreasonable conclusions from meagre data from behavioural genetics or evolutionary psychology to suite their particular prejudices. Racist, sexist, and falsely negative conclusions about inherent aggression have been drawn. Most well known perhaps were the popular ‘killer-apes’ books of the 1960s and 70s such as Robert Ardrey’s ‘The Territorial Imperative’ (Ardrey 1966) and recently nonsense like ‘The Bell Curve’ (Herrnstein and Murray 1996). It was this sort of pseudo-scientific rubbish that discouraged me, personally, from studying the possible evolutionary contribution to the understanding of human behaviour for so long. But these are not the dominant voices in the human evolutionary sciences, despite the rhetoric of some of its opponents.

Despite the best efforts of some to rubbish the whole field through ‘guilt by association’ there is an emerging and well-founded consensus is that there is a significant proportion of both individual and species-level behaviour that can be attributed to genetically-based inheritance. There have been significant strides in defining individual traits and instincts, but less in developing a comprehensive conceptual

framework of human species-nature.

Social Sciences and Human Nature

The advocates of evolutionary psychology have proposed that there is a ‘standard social science model’ (SSSM) which has dominated most social sciences. It simply asserts a ‘blank slate’ view of human nature. Humans are born without any substantial individual or species-nature and consequently it is their personal and social experiences that shape them. (For a discussion of the SSSM see (Barkow, Cosmides et al. 1992)).

This is certainly the view of some well known social scientists – anthropologists like Margaret Mead and Clifford Geertz have long defended such views, as have some sociologists, some economists, behavioural psychologists and humanist psychologists, and others.

However I think the assertion that there is a ‘standard’ social science mode, which is widely applied in all social science disciplines to the issue of human nature, is far too generous – most social scientists simply don’t adopt any explicit position on the ‘human nature question’ and try to avoid it.

The reason for this ‘dog that didn’t bark’ is fairly obvious. Let us assume that one takes the SSSM literally. There is no ‘human nature’ and any individual human will develop according to her or his experiences and especially in relation to the family and social culture in which they grow-up. As there are no substantial regularities or restrictions on human conduct (produced by any inherited human nature) the possibilities for human social institutions are infinite and – given many environmental variables – will tend to become more and more diverse.

In these circumstances how can there be any social ‘science’? Science relies on regularities – law-like patterns of causality – for it to work. If there is absolutely nothing of significance in human behaviour that is ‘universal’ to the species and everything is socially and culturally relative then obviously there simply cannot be any meaningful social science.

Any inductive theory, built on careful obser-

vational study, would inevitably be idiosyncratic and un-generalisable. It might apply to these humans, in these circumstances, with this history, but to no others.

Any hypothetico-deductive theory would either have to be extremely limited in their scope or have to be severely circumscribed to specific places, societies, times and cultures. The basis of such theories would be built on the constantly shifting sands of human behaviour and fore-ever doomed to play 'catch-up' with an ever-receding reality.

Some social scientists have happily adopted this complete relativism and embraced it wholeheartedly. Various advocates of social constructivism, de-constructionism, naturalistic enquiry, interpretive method, etc have happily sailed off into the post-modernist realm, or rather multiple realms. While I am happy to accept that some of these approaches have contributed useful correctives to some of excesses of positivist social science ultimately they can only contribute to what Ann Oakley calls "time- and context- bound working hypotheses" about human behaviour. They are forever in danger of disappearing up their own solipsisms.

The remainder – and vast majority – of social sciences have essentially adopted an unspoken agnosticism on the 'human nature' question. They happily churn out theories about societies, cultures, history, organisations, individual psychology, social psychology, organisational behaviour, politics, public administration, management and a host of other topics without ever (or hardly ever) stopping to wonder if their theories can possibly be generalised to all humans and if so, how? Occasionally studies come with 'health warnings' about their cultural-social-historical specificity attached but mostly they are just presented as theories.

If you do not believe this assertion I challenge anyone to go to their nearest academic library and look at virtually any social science textbook. Whether it is on psychology, social psychology, developmental psychology, organisation theory, virtually nowhere will you

find an explicit discussion of whether or not there is such a thing as human nature, and if there is what it is and how it might have evolved from our primate ancestors. One of my former researchers – Jenny Colthard – conducted a brief review of 20 contemporary Organisational Behaviour textbooks for me and found virtually nothing.

There is one social science that has adopted a view on human nature, albeit only implicitly, and that is economics.

'Rational choice' economics has been remarkably successful and invaded the territory of many other social sciences – most notably political science, organisation theory, management, and of course public administration. One of the reasons it has been so successful is that the modern economists have adopted a quite clear view of human nature. They think not only that there is one but they know precisely what it is – humans are 'rational utility maximisers'.

As the modern economists assert that this is a universal human characteristic and is unbound by time and context they must, if only implicitly, accept that it is an evolved, inherited, characteristic. If not, where does it come from? In my view the economists are right to accept that there are universal, evolved, human characteristics that are significant for social sciences. Where they go wrong is in defining what these characteristics are.

So What Is "Human Nature"?

Steven Pinker's popular book *The Language Instinct* consciously and deliberately sets out to rescue the label 'instinct' as a descriptor of what inherited characteristics are (Pinker 1994). 'Instinct' suggests an interesting dual characteristic – it suggests both a propensity to do something and an inherent ability to do it. Thus the 'language instinct' encompasses both a motivation to learn language (initially through imitative sound making) and an ability (physiological and psychological) to both produce and understand language. We now even know where the areas of the brain are located

which deal with language production and understanding (Broca's and Wernicke's areas). There have also been interesting theories advanced for other inherited instincts for mathematics and even, according to one author, spirituality (which comes about as a side-result of creativity and imagination).

The language of 'instinct' that Pinker employs is, I think, useful when it comes to the social-behavioural traits that I am discussing here. Instincts do not imply determinism – Rousseau captured the idea thus: "Nature commands every animal and the beast obeys. Man feels the same impulsion, but he knows that he is free to acquiesce or to resist." (Cited in Schmidt, 1999)

One fundamental aspect of 'human nature' is clearly the human species sociability. Many works describe humans as the 'social animal'. This means much more than that humans (in common with all primates) live in interactive social groups (as distinct from herds, hives and colonies). It means they have a social instinct. This instinct may be stronger or weaker in specific individuals and in extreme cases may be apparently absent or completely suppressed, but in general few would disagree that humans are indeed social animals. Perhaps the best illustration of this is one human universal - social isolation (banishment, 'sending to Coventry', solitary confinement, etc), - which is so widely used as a powerful punishment for transgressions in all human social groups.

So returning to our hypotheses about paradoxical human behaviour we posit that human nature consists of sets of paradoxical instincts. These probably include paired paradoxical instincts for e.g.:

- (1) Conformity and Individualism
- (2) Cooperation and Competition
- (3) Peacemaking and Aggression
- (4) Altruism and Selfishness

This is a limited set and I make no attempt here to claim to exhaust the possibilities. I have also

adopted the convention of only looking at pairs of paradoxical traits or instincts. There may be triplets or even more complex examples. There is also clearly some inter-connection between some of these traits – 'conformity' and 'cooperation' are obviously mutually reinforcing, for example. But this limited set will suffice for our exploration here.

Evolution of Paradoxical Instincts

Why and how could humans have evolved paradoxical instincts? Let us conduct a thought experiment – or as detractors would have it, construct a 'just so' story (after Kipling's 'just so' stories).

In passing it is worth noting that 'thought experiments' have an entirely honourable history – witness the writings of Albert Einstein or Stephen Hawking. The same method can easily be applied – and indeed virtually always has been – to evolutionary theory. What opponents of evolutionary psychology mean when they condemn the working hypotheses developed through 'thought experiments' as 'just so stories' is that they don't like *these* just-so stories. They then usually go on to advance their own hypotheses, without the slightest trace of irony.

So, let us conjecture as follows:

1. Two small social groups of early humans – probably of between 30 and 100 individuals.
2. They are both developing a hunter-gatherer life-style.
3. These groups are developing a degree of cooperation to survive - in hunting, gathering, child-rearing and self-preservation against hostile animals and others primates/proto-humans. This implies development of a culture (social order) of some sort and social instincts, conformity, etc.
4. These early humans evolved a capacity to create tools that required powers of innovation and creativity that are also associated with individual innovation.
5. Group A consists of humans with *predominantly* conformist, cooperative, peacemak-

ing and altruistic instincts.

6. Groups B consists of humans with *pre-dominantly* individualistic, competitive, aggressive and selfish instincts

What would be the likely survival chances and dynamics of the two groups?

Group A would be extremely good at working together and supporting one another. Their obvious weaknesses would be conservatism - a lack of innovation and adaptability - and a lack of aggression for deployment in hunting and self-defence. In a rather tough world they would be vulnerable, especially to aggression from other proto-human groups.

Group B, on the other hand, would be extremely good at being innovative, hunting and in aggressively defending themselves. However, their lack of cooperation and selfishness would undermine even their aggression – by militating against effective group defence or collective food acquisition and even provoking self-destructive internal conflicts.

There is a fairly obvious alternative – perhaps one might even call it a ‘third way’ – and that is a human group with both sets of instincts. Conformity assures social cohesion whilst individualism allows for necessary flexibility and social evolution. Cooperation makes for maximum collective efforts whilst competition provides for innovation. Peacemaking provides for smoothing over inevitable conflicts (e.g. over resources) whilst aggression provides for defence and hunting potential. Finally, altruism assures the continuation of the species (child-rearing being critical in primates) whilst selfishness provides a useful motivational device for acquisitive activity.

A group that had the potential for appropriately deploying paradoxical instincts would have obvious survival advantages over groups that were restricted to more consistent but less adaptable traits. Paradoxical instincts would have provided these early humans with what systems theory has called ‘requisite variety’ – the diverse internal characteristics used to make

any system maximally adaptable to external environments.

The word ‘appropriate’ is key here. It is interesting to reflect for a moment that we do not condemn anti-social behaviour or the actions of the mentally ill as ‘wrong’ but as ‘inappropriate’. The choice of the term ‘appropriate’ reflects the fact that even many self-evidently ‘wrong’ actions – murder, theft, lying – are perfectly ‘appropriate’ in some circumstances, e.g. war.

Let us take a closer look at one set of paradoxical instincts – conformity and individualism. The most famous research on conformity is probably the ‘obedience to authority’ experiments of Stanley Milgram in the 1950s. Milgram, along with many others at the time, sought to explain through his experiments why it was that apparently normal human beings could have participated in the horrors of the Holocaust.

As you probably know, Milgram’s experimental subjects were tricked into participating as ‘assistants’ in ‘experiments’ where they were asked to administer electric shocks to the supposed experimental subjects. Many of them complied with the instructions, even in circumstances where they were clearly inflicting extreme pain on the ‘subjects’ (who were actually actors pretending to be hurt) (Milgram 1997 (1974)).

These experiments are now often cited as examples of human compliance with social, cultural or organisational imperatives rather than any inherent ‘human nature’. The reality of Milgram’s findings is actually more complex.

Firstly, it is important to note that there were a significant minority of Milgram’s victims who refused to submit to authority – a group that are largely ignored in reporting of his research. In fact the whole ‘population’ of victims displayed a spectrum of results from compliance to rebellion, but skewed towards compliance.

Milgram himself was well aware of the diversity of responses (despite the way his re-

search is usually reported these days). In discussing why some people disobeyed he wrote that:

Theoretically, strain is likely to arise whenever an entity that can function autonomously is brought into a hierarchy, because the design requirements of an autonomous unit are quite different from those of a component specifically and uniquely designed for systemic functioning. Men can function on their own or, through the assumptions of roles, merge into larger systems. But the very fact of dual capacities requires a design compromise. We are not perfectly tailored for complete autonomy, nor total submission.

Returning to our evolutionary exploration of human instincts such a ‘design compromise’ could be restated as the evolution of paradoxical instincts. Milgram’s work suggested a skewing of these instincts in favour of ‘conformity’ but such a ‘skewing’ of preferences between say ‘cooperation’ and ‘competition’ or ‘conformity’ and ‘individualism’ makes sense. A bias towards ‘sociable’ instincts but with episodic deployment of more asocial ones could perhaps make a good combination.

I incidentally would also mention that Milgram believed himself that the characteristics he identified were evolutionarily based (p. 147).

Implications for Public Services

By this time you have probably been asking yourselves the ‘so what’ question? What’s all this got to do with public services?

We have already argued that paradoxes are ubiquitous in public services. This is nothing new, if not always widely recognised. One of the founders of administrative theory – the late Herbert Simon – stated in 1957 that: “Principles of administration {are} like proverbs, they occur in pairs. For almost every principle one can find an equally plausible and contradictory principle.”

Simon provided examples, such as “mini-

mise spans of control” versus “minimise levels of hierarchy”. The point about these contradictory principles is of course that, paradoxical though it may be, they are both true. Moreover I would argue they have their roots in human nature.

If humans were generally always compliant to authority then ‘minimise hierarchy’ would present no problem. They would carry out instructions precisely and without question. On the other hand if humans were generally independent creatures then ‘minimise spans’ would make sense because they would need close supervision. If they are *both* compliant *and* independent then we need *both* minimal hierarchy *and* minimal spans. This makes it much easier to understand why we seem to get such conflicting advice on the best way to organise.

A paradoxical approach also helps to explain some of the contradictions surrounding, as well as inside, public services. It helps to understand:

- The seeming incongruity of citizen’s wanting both to pay less tax (when questions are posed in the abstract, for selfish reasons) *and* more tax (when questions are posed in relation to altruistic issues).
- People’s reactions to professionals – simultaneously condemning them for being patronising *and* for not telling them what to do – likewise make more sense.
- The tension between accountability of public services making them cautious and prudent *and* demands for them to be less risk averse and more entrepreneurial.
- The need to create efficient, targeted, functional, specialist organisations *versus* the need to create effective, holistic, multifunctional and generalist ‘joined-up’ services.

There are plenty of other examples which I am sure you could identify for yourselves.

Conclusions

There are a couple of important conclusions that I would draw from this analysis.

Firstly, paradoxical contradictions in public institutions and services are permanent and

have to be managed. We need to avoid the one-sided and unrealistic rhetoric of public policy or services reforms – e.g. ‘decentralise’ or ‘join-up’. We can re-arrange these elements and change the balances between them, but it is simply foolish to believe we can avoid some elements of ‘centralisation’ or ‘specialisation’. The more we try to suppress one aspect of a paradox in favour of another, the more it is likely to come back around in some other form. The more we decentralise, the more concerns will arise about equity and probity or about co-ordination. Any change will inevitably have unexpected consequences, that is unless we learn to stop thinking purely in either/or terms and start to understand the dynamics of paradox.

Secondly, we need to adopt research strategies that recognise the possibilities of contradictory and paradoxical results. Most research designs exclude recognition of these phenomena by posing either/or choices rather than recognising the possibility of both/and results. Thus we often produce misleading results. This tendency is exacerbated by the modern trend towards so-called ‘paradigm shifts’. These usually involve – in politics, policy analysis or management – creating internally consistent ‘new’ paradigms that are counter-posed to equally consistent and coherent old paradigms. In the process the contradictions and paradoxes of both old and new systems are glossed over and the retention of some of the ‘old’ in the ‘new’ ignored.

Thirdly, we need to understand in what circumstances paradoxical elements are ‘expressed’. I deliberately use the genetic term because it suggests the latency of even unexpressed instincts. Patrick Bateson and Paul Martin in their excellent book on the development of behaviour – ‘Design for a Life’ use a beautiful metaphor – the ‘developmental juke-box’ (Bateson and Martin 1999). They suggest that human’s have an innate set of behavioural ‘tunes’ that get selected for – expressed – during their development according to environ-

mental factors. I would simply add that the selection, or expression, of particular behavioural tune is not necessarily permanent and that their alternatives remain as potentialities. Is not the case that all pacifists sometimes long to lash-out or that most warriors sometimes yearn for peace and quiet?

Fourthly, I go back to where I started. I believe some of the major problems in social sciences today are a result of the on-going split between social and physical sciences. Social scientists have only avoided confronting the findings of modern biology, behavioural genetics and evolutionary psychology by remaining in splendid isolation and even ignorance of these developments. This has left us vulnerable to those who have developed more consistent approaches, especially the (one-sided) views of the rational-choice economists. On the other hand, I believe that evolutionary psychologists could benefit from the challenge of the ideas about paradox, derived from organisational theory, which I have tried to develop in this article. It is time, I believe, for a little more ‘militant eclecticism’, more ‘consilience’, and a little less academic isolationism.

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