## Chapter One-C

# How Rethinking Our Understanding of the Self and the Social Services a Better Constitutional Theory

Man can do what he wills. But he cannot will what he wills.

Arthur Schopenhauer

## A. Aha Moments and Two Dominant Leitmotifs

### *1. The Unchosen Conditions of Being*

'Meaning makes us'. That bumper sticker flows from two basic propositions. To be crude about it – there's rarely a thought in your head or an action that you undertake that is not directly sourced from neurological hard-wiring, pre-existing cognitive routines and dispositional states, or shared social practices. Let's break that complex proposition into two smaller parts.

We, as a species, tend to overemphasize dramatically the actual space for self-defining choices. In truth, our experience of personhood, of self-consciousness, is a function of a complex set of narratives over which we exercise little in the way of (self) control. Our notion of 'selfness' is a function, a very useful by-product, of a complex array of semi-independent neural-muscular networks that control the body's journey through life. This complex set of dispositional states is a function of both the deep grammar of our brains (and bodies) and the social endowments that have evolved over time to determine various patterns of behaviour. It should be apparent from this brief account that the self or the mind is a valuable abstraction and not an entity that stands back from experience and then dictates to the body what it does in response to various stimuli. Each self, to use Daniel Dennett's felicitous phrase, is just 'a centre of narrative gravity'.[1] Each centre of narrative gravity – each self (you or I) – is a set of different, but overlapping narratives. Each narrative, or storyline, reflects a complex set of experiences and dispositional states organized around a particular form of behaviour. 'I' – Stu Woolman – consist of narratives that flow from my roles as a male, as an academic, as an English speaker, as a son of Ephraim, as a sexual being, as a native American, as a permanent resident of South Africa, as a golfer, as a sleeper, as a cook, as a Jew, as a disabled person, as a friend of Michael, Lisa and Brahm, as a listener, as a teacher, as a New Yorker, as bald, as the Editor-in-Chief of *Constitutional Law of South Africa*. The list of narratives is not infinite. It is, however, almost as long and diverse as my life. The self then is that centre of narrative gravity, that self-representation, which holds together and organizes information, various storylines and dispositional states that make up my sense of 'me'. It is unique. The variety of narratives that make up 'me' is different in a sufficiently large number of respects to allow me to differentiate my 'self' from any other 'self'. It is relatively stable. Though my narratives and dispositional states are always changing, my self-representations enable me to see my 'self' as remaining relatively consistent over time. But again, keep in mind that the self, and its various narratives, is thoroughly a function of physical capacities and social practices over which I have little control or choice.[2] And remember, like a necklace of pearls, this self is delicate.[3] (This general characterization of the self proves uncomfortable for most readers. In Chapter 2, I discuss the neurological basis for what I call 'core temperament' and how it provides for a 'unitary sense of self'.[4])

We, in the western philosophical tradition, also tend to overemphasize dramatically the actual space for rational collective deliberation. We often speak of the associations that make up our lives – that give our individual selves meaning and content – as if we were largely free to choose them or make them up as we go along. I have suggested why such a notion of choice is not true of us as individual selves. It is also largely not true of associational life generally.

As Michael Walzer has argued, there is a 'radical givenness to our associational life'.[5] What he means, in short, is that most of the associations that make up our associational life are involuntary associations. We don't choose our family. We generally don't choose our race or religion or ethnicity or nationality or class or citizenship or sexual orientation. Moreover, even when we appear to have the space to exercise choice, we rarely create the associations available to us. The vast majority of our associations are already there, culturally determined entities that pre-date our existence or, at the very least, our recognition of the need for them. Finally, even when we overcome inertia and do create some new association (and let me not be understood to underestimate the value of such overcoming), the very structure and style of the association is almost invariably based upon an existing rubric. Corporations, marriages, co-edited and co-authored publications are modelled upon existing associational forms. So gay marriages may be a relatively new legal construct – but marriage itself is a publicly recognized and sanctioned institution for carrying on intimate or familial relationships. Even in times of revolution, mimicry of existing associational forms are the norm. That is, in short, what Heidegger meant when he wrote:

> [That shared practices are constitutive of 'being'] implies that the world is already given as the common world. It is *not* the case that there are first individual subjects which are at any given time have their own world; and that the task of putting them together, by virtue of some sort of arrangement, … one would have a common world. This is how philosophers imagine things when they ask about the constitution of the intersubjective. We say instead that the first thing that is given is the common world. … We take pleasure and enjoy ourselves as one takes pleasure, we speak … about something as one speaks.[6]

Social practices are thus very much like the self. They are, for the most part, a function of physical capacities and entrenched group behaviour over which we have little control or choice. Our social world, as Heidegger notes, is already 'given [as] the common world'. (Again: this notion will make many readers uncomfortable. It shouldn't. To the extent that it does, this book is an extended meditation on how we might, individually and collectively, challenge and overcome deleterious social customs, habits and practices, and supplant them with new, improved, experimentally tested systems, routines, praxes, doctrines and institutions.)

As John Dewey pointed out, we often choose to ignore this inconvenient truth. Individuals, and particularly philosophers, have 'arrogated to [themselves] the office of demonstrating the existence of a transcendent, absolute or inner reality and revealing to man the nature and features of this ultimate and higher reality'.[7] As Wittgenstein notes, no such transcendent, higher reality exists. Any given practice, and our ability to master it, comes first: and puts us in unmediated contact with the world.[8] He writes in the *Investigations* as follows:

> To obey a rule, to make a report, to give an, order, to play a game of chess are customs (uses, institutions). To understand a sentence means to understand a language. To understand a language means to be *master* of a technique. (§199) … When I obey a rule, I do not choose. I obey the rule *blindly*. (§219) Would it not be possible for us, however, to calculate as we actually do (all agreeing and so on) and still at every step have a feeling of being guided by rules as by a spell, feeling astonishment at the fact that we agreed? (We might give thanks to the Deity for our agreement.) (§234) … If language is to be a means of communication there must be agreement not only in

> definitions but also (queer as this may sound) in judgments. (§242) … One cannot guess at how a word functions. One has to *look at* its use and learn from that. But the difficulty is to remove the prejudice which stands in the way of doing this. It is not a *stupid* prejudice. (§340) … Speech with and without thought is to be compared with the playing of a piece of music with and without thought. (§341).

What Wittgenstein is saying is: (a) that we already have the material at hand to arrive at verifiable truth propositions about the world; (b) that most of these propositions are shared; (c) that most of them are true; and (d) that mastery of these propositions or capabilities precedes our capacity, or even need, for criticism.[9] Only at the margins, once we have aggressively learned all there is to be learned from one another, do our differences have any meaningful bite.[10] Perhaps Baker and Hacker can explicate, somewhat less elliptically, the order of priority between practice and theory – or more accurately, the manner in which they map on to one another:

> Wittgenstein … emphasized that behaviour is a criterion for possession of an ability, and in the specific case of understanding rules, that how one applies a rule is a criterion for how one understands it. … Using a rule correctly is also a criterion for understanding it (or more generally, how it is used is a criterion of how it is understood.) … Philosophers in the grip of the Augustinian picture [between word and world] are inclined to think that 'ultimately' explanations of expressions by definitions replacing one symbol by others must terminate in an array of 'indefinables'. These expressions, philosophers think, must somehow be *connected with reality*, for it is they that give content to the language. … In [his] criticism of the Augustinian picture, Wittgenstein … stressed … [that] understanding an explanation (understanding a rule) is just knowing how to use the explained word correctly (knowing how to apply the rule.) … Correct uses of a word are criteria both for understanding an explanation of it and for knowing how to use it correctly.[11]

Wittgenstein's astute observation that 'rule' and 'agreement' are cousins and that language, by necessity, requires agreement in both the definition of terms and the judgments that flow from the use of those terms does not forestall error. (Nor can it!) For while we are indeed endowed with a broad array of mutually supporting beliefs, theories, conditions and standards, we can neither claim that this inheritance is a seamless whole nor that all our beliefs are true. Only a hopelessly naïve epistemologist would entertain such a proposition. As Donald Davidson notes: 'Error is what gives belief its point.'[12] Yet as the result of our mastery of a broad array of techniques, we can claim to possess 'endless true beliefs'.[13]

Take two recent examples from the exploration of Mars. Does anyone even partially familiar with the years of work undertaken by a large team of scientists able to land the rover Curiosity on the red planet have any doubt regarding the team's mastery of the most complex equations in math and physics, or the engineering necessary to accomplish the unprecedented event of landing an object of its size or function on our neighbour's surface? Every stage from launch to landing went exactly as expected. Expectation and realization had to mirror one another: anything less would have led to a disaster. Indeed, a basic failure to convert measurements from the Imperial units of pound-seconds into the metric system of Newton-seconds led, a decade earlier, to the spectacle of the Climate Orbiter crashing into the surface of Mars. Human beings make mistakes. But this colossal failure was *not* a function of a failure of human beings to match symbol to reality. To their understandable

mortification, they simply failed to demonstrate mastery of basic arithmetic. (As a result, the Orbiter entered Martian space at an improperly low altitude and disintegrated upon entry into the planet's atmosphere.) The failure of Orbiter may have led NASA engineers to ensure that precision a magnitude of order greater would lead, to the best of their ability, to the success of Curiosity.

Error may arise in practices for another set of reasons. Our practices themselves are not entirely coherent. All traditions, institutions, games and domains of human inquiry are, as Joshua Cohen writes

> … the result, not of legislative design by a single person acting on behalf of a coherent system of values, but of conflicts among individuals acting on behalf of diverse values and ambitions. And unlike the produce of a supreme legislative design, the outcomes of such a history are not likely to be a set of coherent social practices that completely conform to a single scheme of values.[14]

The problem with the theorist who reifies theory is that she mistakes these faults, fissures and heterogeneous layers within a practice as a problem with the practice – and its usefulness – as a whole. No one doubts that Einstein understood arithmetic as we do. Consider Einstein's contributions to the birth of both relativity theory and quantum mechanics. No working physicist argues that Einstein's views were wrong – in the main – about either basis for modern physics. And yet, with respect to an array of particular hypotheses, Einstein's views in both domains have been proven incorrect. (We often forget both how much and how little we understand about the universe around us.)

The final form of bewitchment, against which Wittgenstein warns us, is our widely shared belief that we first form theories and then test these theories against experience. Not so, says Wittgenstein. It is essential – for the purposes of this book – that we get our order of priority straight. Once a practice is established (through trial and error, unconsciously and consciously), we might wish, upon reflection, to test its assumptions through experiments that do or do not confirm aspects of a practice's usefulness. (Curiosity's success constitutes proof of this order of priority and its consequences for virtually all of our endeavours.) That, to put it pithily, is why I place experimentalism at the heart of this theory of South African constitutional law.

## *2. Trial and Error and Feedback Mechanisms*

If we, as individuals, are not the product of freely willed actions by a self-made self, then what is the proper way to understand consciousness and that unitary sense of me *qua* me? As we shall see in Chapter 2, consciousness is best described as a feedback mechanism that gives us fresh opportunities to reflect upon experience and plot more or less optimal courses for action to realize the ends and aspirations that have largely, but not irrevocably, made us who we are.

Let's not overcomplicate matters just yet. Feedback mechanisms feature as a salient construct throughout this work. This book therefore demands a relatively straightforward account of this core concept that leaves readers feeling comfortable with its use within four discrete theoretical domains, as well the manner in which it connects the self to the social, and the self and the social to the political and the constitutional.

Think of feedback mechanisms in terms of the more readily understood notion of 'trial and error'. Individual selves (me's) – populated by radically heterogeneous ways of being in the world – are always experimenting, attempting to divine, through reflection (memory) and action (imagination in motion), what will work with respect to the challenges thrown up by a given environment. Consciousness enables us to focus on aspects of our current environment, and to hold them up for scrutiny, in order to form better responses to immediate and long-term problems. Consciousness thus functions as a feedback mechanism in two inextricably related ways. Conscious reports create a record (though not the only available record) of our responses: the construction of our successes as well as our failures. A record of such errors (memory) enables us to respond differently – assuming we survive the error – the next time that we are faced with an appropriate test of our wiles. Put somewhat differently, consciousness, the tip of our cognitive/neural iceberg, comes into play when 'stimuli are assessed to be novel, threatening or momentarily relevant to active schemas or intentions'.[15] As Newman notes: 'The defining features of stimuli which engage conscious attention are that they: (1) vary in some significant degree from current expectations; or (2) are congruent with the current predominant intent/goal of the organism. In contrast, the processing of stimuli which are predictable, routine or over-learned is automatically allocated to non-conscious, highly-modulized cognitive systems.'[16] Dehanne and Naccache extend these observations by requiring that any theory of consciousness accommodate three critical empirical observations: '(1) a considerable amount of neural processing is possible without consciousness, (2) attention is a prerequisite of consciousness, and (3) consciousness is required for some specific cognitive tasks, including those that require durable information maintenance, novel combinations of operations, or the spontaneous generation of intentional behaviour.'[17] Once we adapt our account of consciousness so that it houses these desiderata, we arrive at the following conclusion. Although the vast majority of cognitive/neuronal processes are and must always be non-conscious, consciousness allows an individual (or networks of individuals) 'to represent a goal and to estimate the outcomes of … actions before initiating them'.[18] The ability to undertake 'trial and error' experiments within the safe and simulated cognitive framework provided by neurological structures is an enormous advance on having to undertake 'trials and errors' in an actual physical environment. Consciousness, as both a feedback mechanism and a simulator of possibilities, enables us to weed out outcomes less likely to be successful in the world and enhances our capacity to flourish.[19]

This description may seem at odds with how we normally think of the conscious and the unconscious. But it shouldn't be – and forget Freudian discourse (commonly misunderstood) for a moment. Over a century ago, Alfred North Whitehead recognized that human civilization advanced by making as many dispositional states and responses to the world as possible unconscious. Why? So that we could attend to new problems as yet unsolved, and whose isolation and solution would enable us to survive and to thrive.

Let's return for a moment to the complicated task of landing the Curiosity on Mars. What a dedicated team of quite conscious individuals committed to the realization of a single (if complicated) mission did was to run simulation after simulation of how each stage of Curiosity's trip and missives back on its findings would work. Experiments – trial and

error with feedback mechanisms in controlled environments designed to replicate what we already knew about space and Mars – enabled the large team of scientists and engineers to separate the chaff from the wheat in advance of the actual launch and the landing of the rover. Were they certain of success? No. But at each stage, from lift-off to landing, they received confirmation of their equations, and the various experiments conducted in advance of real-time events. It's worth recalling John Dewey's words in the Preface: 'We only think when confronted by a problem.' The Curiosity team at NASA was confronted by numerous novel problems. Given the enormous amount of knowledge that we already possessed about the universe – and the unique specifications required for travel from Earth to Mars – they were free to apply their individual and collective consciousness to the solution of each and every problem that would confront Curiosity on its voyage. Most of it may have been banal, but individual stages were unprecedented. And the team could not know – until some seven seconds after any particular event occurred – whether their predictions were correct. Extremely smart, but otherwise ordinary human beings, landed the first truly complicated rover on our neighbour's surface. Trial, some error, but ultimately great success means that when we ultimately seek to land human beings on Mars, we will have already learned what works, and what doesn't. Of course, the current scale is smaller. Novel problems, including the return of a larger ship and the astronauts aboard, will throw up a host of new complications that will require conscious deliberation, simulation and the piecing together of a gigantic puzzle into a single whole.

A constitutional democracy is another kind of feedback mechanism that requires conscious engagement, simulations and the stitching together of a gigantic puzzle into a single, if ever-changing, whole. A constitutional democracy – a polity comprised of millions of complex, radically heterogeneous selves – is constantly experimenting, attempting to divine through reflection and action what works best for its many constituents; what enables each and every one of us to flourish.

## B. Weaving Together the Dominant Leitmotifs throughout the Text

### *1. A Theory of the Self: Flourishing, Not Freedom*

Let me begin with four short stories.

On my way to 23 Forbes Street, Fellside, Johannesburg, in May 2007, I had cause to reflect upon various strands of the argument articulated in this work. The fact that I had an opportunity to engage in some form of reflective activity with regard to this project is hardly remarkable in itself. What is remarkable is that all this sophisticated reflective activity occurred while I drove my car from 82 Homestead Road, Glen Atholl, Johannesburg to the address above. As I pulled up to the house in Fellside, I realized that I had no recollection of actually driving the 6 km between the two residences. I was too busy thinking about problems to be solved. Recall again Dewey's remark. If I was too busy thinking to be aware of the drive, then who, you might well wonder, was driving the car?

Later that same day, as I drove home from the movies, I turned off Glenhove Road in Houghton, Johannesburg and on to the M1 heading north towards Glen Atholl. There was only one problem with this chain of events. I had not wanted to take this turn on to the

highway. I had wanted to go to Fellside. And yet, there I was, headed to my flat in Glen Atholl. Perhaps I was thinking about the movie I'd just seen. I don't recall. My partner, driving in the car behind me, was startled to see me peel off in an entirely unexpected direction. If we are certain that I was driving the car – and let's assume that we are – then how did this error occur? For if we are certain that that I was driving the car, then I am equally certain that the 'decision' to turn on to the highway was not a decision of which I was consciously aware.[20]

Perhaps we have all had similar experiences while driving a car.

Take a more startling account of my 'self' in action. Approximately 15 years ago, during a period of extremely debilitating illness, I telephoned a friend in New York from my office in Johannesburg. The call had been on my list of things to do all week. A normal event in the life of an émigré. Approximately 20 minutes into the call, I had the sense that my friend Adam was preoccupied. His responses seemed both canned and uneasy. As I had not been well for some time, I soon suspected that the problem lay not with Adam, but with me. So I asked Adam: 'Have we had this conversation before?' As it turns out, we had. Adam reminded me that I had called him the day before and that we had covered virtually identical terrain in 45 minutes of conversation.[21]

Let's end this set of stories with something more mundane. Equipped with (something close to) my full set of faculties, and quite conscious of the orators before me in the Moot Court room at the South African Institute for Advanced Constitutional, Public, Human Rights and International Law, I banged my gavel down to signal the end of oral argument in the matter before me. Nothing strange here. Or so it seems. In addition to my role as moot court judge, however, I was also participating in a psychology experiment designed to explore the relationship between conscious awareness, neuronal impulses and physical action. As it turns out, approximately 0.6 seconds prior to my conscious awareness that I was about to bang the gavel to signal the end of oral argument – and 0.8 seconds before the event itself – a set of neuronal impulses in my brain registered my decision to bring argument to a close.

With the exception, perhaps, of the phone call to my friend Adam in New York, the experiences described above all fall within the domain of the normal. In the first two instances, we share an experience of our 'mind' being somewhere else – or more accurately, in the first case, of our mind being, at a minimum, devoted to discrete tasks, and in the second case, of being so devoted to one task, that we make an error with respect to another. Even the third experience can be made to seem more commonplace if we add a condition: the caller suffered from parasomnia (asleep yet capable of habitual physical responses), had been under anaesthesia, or had been inebriated. Although the fourth experience is not really an experience we would normally share unless we were all participants in various psychological experiments, those of us who have played sports that require quick responses are familiar with being aware of our reaction only after we have already initiated – if not completed – the response. (I only become aware that I have lifted my head well after hitting a golf ball, irrespective of the outcome; I have caught a baseball hit so hard from a distance of 20 metres away that I only became aware of the catch when I looked around and then down into my

glove.) This delay, between the readiness potential of neural networks, conscious awareness and, ultimately, physical action, reflects a partial inversion of how we think traditionally of the relationship between consciousness and freedom.[22]

The traditional view of the self, consciousness and free will is one in which the individual actor surveys her options, makes a choice and then wills that choice into being. The four stories that introduce this section challenge an array of beliefs associated with traditional conceptions of the self, consciousness and free will and prepare the ground for theories that run counter to outmoded accounts.

The story of the gavel – retold from the perspective of neuroscience – is that non-conscious brain events that result in a particular physical response preceed conscious awareness of the 'decision' to respond in a particular manner. If consciousness of our action matters – that is, if particular events rise to the level of requiring attention – then we become dimly aware of the content of the unwilled intention and then – wham! – hot on the heels of consciousness, assuming we have it, comes the action itself.[23]

The story of the unconscious driver – an instance in which awareness seems unnecessary – is meant to draw our attention to the multiple narratives or selves that make up the individual – or, more precisely, the multiple processes that we individuals engage in co-temporaneously, only a few of which command our awareness or rise to the level of consciousness. And yet, despite our lack of consciousness (awareness), or perhaps, more precisely, *because of this lack of awareness*, we are able to act all the same.[24] I drove that car though I had no awareness of my actions and possess no memory of the experience.

The story of the errant driver draws our attention to multiple selves engaged in multiple processes co-temporaneously. It also signals another purpose for consciousness: error correction. My consciousness or awareness may have initially been focussed on the movie I had just seen. However, when I was confronted with a situation that demanded attention, namely my turning on to the highway and driving in the wrong direction, that which we call 'consciousness' shifted 'its' object of attention to the road before me. Consciousness forms part of a complex set of feedback mechanisms that enable us to navigate through the world in relative safety. The sensation of singularity, as we shall see, emerges, quite incredibly, from a neurological system that is (1) primarily unconscious, (2) distributed throughout the brain and the body, (3) engaged in multiple, parallel processes, and (4) of enormous, highly under-utilized capacity.[25] The purpose of consciousness on this account is three-fold: (a) 'durable and explicit information maintenance' (b) 'novel combinations of operations' and (c) 'intentional behaviour'.[26]

The story of the repeated phone call is meant to challenge our construction of a self that is unitary, integrated and continuous over time. The gap in consciousness or self that I experienced with respect to the two phone calls is meant to emphasize the more daily and commonplace place 'gappiness' of consciousness and the self. Indeed, the self – for those persons in a fragile, parlous and frightening state – often seems to be no more than the subject of experiences that may be reduced to single mental events. If you prefer metaphor, then these 'sesmets' that constitute the (fragile) self are like pearls on a string.[27] Delicate indeed.

This work is not an exercise in analytic philosophy of mind or a scientific study of consciousness. The purpose of the account of consciousness and the self that follows is to shed light upon – and change the way we understand – such basic concepts in our constitutional lexicon as 'free will', 'individual moral agent' and 'political freedom'.[28] The real upshot of the view of the self or the selves propounded here is that while we may possess far less freedom – of all kinds – than we commonly suppose,[29] we are still capable of flourishing in all ways that genuinely matter to us.[30]

## 2. *A Theory of the Social: Constraint, Friction and Change*

This project was animated, initially, by two apparently disparate lines of thought. The first set of thoughts addressed questions about what it is to be a person, why we have consciousness, how a self is constructed, and the extent to which that self, so constructed, exercises agency. The second set of thoughts addressed the kind of constitutional politics to which the Constitutional Court has committed us under the Final Constitution. Subsequent to those animating lines of thought appeared the express recognition of this work's two dominant leitmotifs: the unchosen conditions of being and the virtues of feedback mechanisms properly understood.

What links these four lines of thought to a reconceptualization of freedom? The modest, naturalized account of freedom offered here first takes cognisance of the limits of individual agency. It then recasts freedom-talk in terms of the less metaphysically problematic concept of flourishing. Having supplanted freedom-talk with flourishing, this book then explains how individual flourishing and group flourishing occur. More importantly, it explains how individuals and groups so thoroughly conditioned and determined by a world of unchosen conditions of being can alter the ends they pursue, as well as the means for pursuing them, through different kinds of feedback mechanisms.[31] These feedback mechanisms allow us to learn from both negative experiences and positive experiences and create new neural and social networks that allow us to create better lives for our individual selves and for the communities to which we belong.

However, a second reason to recast freedom in terms of flourishing obtains: the mediating role that social formations play in the construction of all meaning. It is trite to note that outside society, and without language, flourishing is a meaningless notion. Only in light of the various practices, forms of life, unchosen conditions of being or language games that social groups provide do we become anything that remotely approximates what we understand to be human.

That said, the politics that I derive from flourishing is as *revolutionary* as it is traditional. As I have written elsewhere, our differences do not separate us, or merely require tolerance. They form the basis for a profound recognition that, individually and collectively, we are *radically heterogeneous creatures*.[32] That radically heterogeneous self – and the heterogeneous society in which we all find ourselves (no matter how repressive) – demands a commitment to pluralism, a deep and profound appreciation for difference. From this commitment to pluralism – the politics not of the majority but of the individual – emanates the commitment to democratic solidarity. How so? Once we recognize our own difference, sexual, religious or otherwise, and demand its

recognition by others, we have no coherent choice but to recognize the difference of others. To put it more pointedly, once we recognize the otherness of others and demand such recognition for ourselves, we are committed to a society in which every member can comfortably live out that difference. Does that commit us to socialism or some particular political order? No and yes. Not socialism, but to the politics adumbrated in these pages. That politics of democratic solidarity married to experimental constitutionalism commits us to a political order in which the space we demand for ourselves is roughly equal to the space required by others. If that requires, at this particular historical moment, significant redistribution of wealth, then so be it. The bottom line: once you embrace a commitment to democratic solidarity and experimental constitutionalism, you must be willing to afford others the material and immaterial conditions in which they can recognize and express their difference. Only through such a commitment can we forge a nation that makes good the promise of its basic law. (I address issues of scale and timeline in Chapter 9.)

The radical heterogeneity of the self also points out how change occurs without the attribution of free will. Each dispositional state or role has its own set of demands – its own set of responses to the surrounding environment. Again: I find myself regularly challenged by each of my roles as son, brother, friend, colleague, lover, business partner, professor, disabled person, English speaker in a land with eleven official languages, analysand, editor, author, feminist, golfer, majority owner of a closed corporation and homeowner (just to name a few). Not only does each role or dispositional state itself pose a challenge: the attempt to reconcile all these roles without conflict is simply impossible. Change often comes – is forced upon us – when we must choose the good, the value, or the end to which we wish to give priority in a given set of circumstances. The complexity of, and the friction between, roles does not end with our own selves. We are confronted daily with equally complex, radically heterogeneous selves with whom we must carry out innumerable transactions and who carry out their own roles in ways that invariably pose challenges to our current preferred ways of being. Finally, we are confronted with an environment – neither of our making or choosing – that constantly demands that we alter, ever so slightly sometimes, dramatically at others, who we are and what roles we play. Live long enough and you know how wrong F Scott Fitzgerald was when he wrote: 'There are no second acts in American lives.' The problem – to the extent that there is one – is that the play and the new acts never stop – until the play does, and the acts do, and we are but worm-meat. Disruption is a regular part of everyday life, however much we try to hold change at bay.

Of course, we sometimes find that the roles we play give us little satisfaction, for reasons of which we may only be dimly aware. The trick is to try to lay down new tracks, parallel tracks, to the existing dispositional states, roles and tracks that we currently run along. It can be done. However, the work is often long, arduous and tedious. Ask my analyst. Well don't. She won't tell you a thing. I can say that, without fear of contradiction, ten years of twice-a-week therapy has laid down parallel tracks, tracks that have made me a somewhat happier, healthier and nominally better person.[33]

The rest (and better part) of my theory of the social contains discussions of and/or commitments (both strong and weak) to six linked components: (1) constitutive attachments; (2) spontaneous orders; (3) evolutionary epistemology; (4) cognitive biases; (5)

choice architecture; and (6) social capital (bonding networks and bridging networks). This introduction adumbrates those arguments given full expression in Chapter 3.

As I have already noted, the constitutive nature of our attachments and practices forces us to attend to another overlooked feature of social life. We often speak of the social practices, endowments and associations that make up our lives as if we were largely free to choose them or make them up as we go along. I have already suggested why such a traditional, hidebound conception of choice is not true of our social practices (and our individual selves) and why the revolutionary account serves us best.

Again: constraints on our ways of being in the world – I prefer the word endowments – do not preclude genuine change within the small communities, the large social formations or the bonding networks of which we are a part. It does mean, however, that we must proceed with some humility and great circumspection before we proffer mechanisms that would facilitate optimal forms of change.

Given the aforementioned constraints, this theory of the social holds that constructive, collective action is best understood in terms of 'trial and error'. From simple to complex actions, groups use their cognitive modalities to test their environment, and to come up with the best possible solutions to the problem with which they are confronted. Because much of what we do as associations, communities and networks is neither consciously nor deliberatively determined, one might argue that 'a blind variation and selection retention process is fundamental to all inductive achievements, to all genuine increases in fit of system to environment'.[34]

This account of how trial and error in both cognitive and non-cognitive processes may lead to greater adaptive fit sounds a great deal like a form of evolutionary epistemology. It is. As we shall see in Chapter 3, the attraction of this account is that it simultaneously explains the ineluctability of constraint and the mechanisms for change.[35] Moreover, attending to the mechanisms of change in blind variation and selection retention processes, makes it possible to suggest how experiments (trials with their successes and their failures) take place on rather large playing fields of social formation,[36] and why such experiments are, as Friedrich Hayek described them, largely, but not always, the result of 'human action, but not human design'.[37]

A somewhat more powerful empirical engine for social change has come out of recent work by legal theorist and political scientist Cass Sunstein and economist and behavioural scientist Richard Thaler. For years, Sunstein appeared so consumed by doubt about grand theorizing that it led him to something akin to pyrrhonian scepticism with regard to constitutional theory. Sunstein's scepticism ultimately gave way to empirical analysis.[38] In *Infotopia*, Sunstein develops a powerful critique of deliberative politics as a constructive form of collective decision making. Sunstein identifies four basic forms of contemporary information pooling or aggregation (discussed at length in Chapter 3): (1) statistical averages; (2) deliberation; (3) price or market systems; (4) Internet wikis. Pace being the dominant pre-disposition of constitutional scholars, Sunstein's writings suggest that deliberation may well be the least useful of the four. He writes: 'Most of the time, both private and public institutions prefer to make decisions through some form of deliberation. … Does deliberation actually lead to better decisions? Often it does not.'[39] To explain the failures of deliberation and the promise of

other methods of aggregating information in the pursuit of better decision making, Sunstein explores the consequences of two forces: 'The first consists of informational influences, which cause group members to fail to disclose what they know out of respect for the information publicly pronounced by others. … The second force involves social pressures, which lead people to silence themselves to avoid the disapproval of peers or supervisors. Even if you believe that group members are blundering, you might not want to say a word because you do not want to risk their disapproval.'[40]

Various empirical findings (even those that contradicted Sunstein's earlier assessments) led Sunstein to delve deeper into problems with deliberative political mechanisms and into everyday social biases, aversion, blunders, (false) assumptions, inertia, herd following and temptations that lead all of us to make the most mundane mistakes. Having identified good and bad social choice mechanisms in *Infotopia,* Sunstein produced a work in 'choice architecture': *Nudge.*[41] Although still committed to rooting out biases that lead to suboptimal outcomes, Thaler and Sunstein now show us how to organize social space in a manner that leads to better outcomes without coercing individual choices. As the name of the book suggests, the leitmotif of their work is enabling individuals and groups to change their deleterious choice defaults into more positive choice defaults by setting up a testing environment (an experiment) that should reveal more desirable outcomes at both an individual level and a systemic level. These experiments are conducted by choice architects – anyone who 'has the responsibility for organizing the context in which people make their decisions'.[42] Mothers, teachers, lawyers, engineers, computer programmers, customary leaders, search engine designers, bureaucrats and ballot devisers are all choice architects. Virtually any occupation with responsibility turns the responsible individual into a choice architect. Chapter 3 discloses exactly what some of these choice architects have discovered. One important theme is worth noting now. Choice architects try not to impose a comprehensive vision of 'the good' upon the people who participate in their studies. (In any event, a large body of social research and, in particular economics, demonstrates that most of us do not have genuinely 'true preferences' in many areas of social life, but often have our preferences determined by access and availability. We have, as second class citizens will confirm (and, as a person with a long-standing disability, I count myself amongst them), many *adaptive* preferences.[43]) The choice architect naturally operates with background assumptions about optimal decisions – but even those assumptions can be overturned as the architect 'nudges' groups of (and individual) students into making more optimal choices – 'as judged by the individuals themselves'.[44] A substantial degree of reflexivity is built into the experiments.[45]

Experimentation as a way of engaging the world is *revolutionary*. Not only do experiments and the people who carry them out seek to better understand the world, but, as often as not, people who undertake experiments seek to overturn preconceived and – in their minds – incorrect ways of viewing various phenomena. Some hypotheses turn out to be incorrect. Indeed, the large majority do. The scientific method led one of its avatars, the inventor Thomas Edison, to remark that he learned more from his mistakes than he did from his successes. That said, we might be reading this book in the gloaming or by candlelight had Edison not persisted with his experiments. (Yes: someone else would likely have alighted

upon the same results at a later date, and you might still have the pleasure of reading this work on a Kindle.)

At the same time, the experimentation advocated in these pages has a built-in brake. A conservative streak, if you must. Not every norm or institution can be subject to constant review and reformation. I have suggested several reasons, thus far, for placing brakes on how we engage and experiment upon social phenomena. The first has to do with the construction of meaning for individuals and groups. Meaning, through various endowments, makes us. A just political order recognizes that priority. The various freedoms enshrined in South Africa's basic law do exactly that. The second turns on the manner in which social norms and institutions are largely created. As Hayek wrote, these institutions and designs are primarily the product of human action, not human design. Sunstein's gloss on this agnostic approach to social projects and constitutional theory is to agree, in part, and demur, in part. Like Hayek and Campbell, Sunstein is suspicious of grand theorizing. However, as we have seen, social practices are susceptible to experimentation. For example, given a relatively weak normative goal – say, getting children to choose better food for lunch – we can construct a set of experiments that may help us identify the best way to establish the form a cafeteria lunch line takes. Sunstein, ever suspicious of built-in biases in decision making, identifies several ways in which we can aggregate or pool information and nudge individuals and groups towards taking better decisions without dictating exactly what they do.

That leads us, finally, to another way of understanding individuals, social formations and political institutions that contain (a) the seeds for experimentation and new institution building; and (b) a brake on the manner in which the state undermines existing social networks that provide meaning. This approach to social formations and political institutions goes by the name of social capital theory.

Social capital is – and is a function of – our collective effort to build and to fortify those things that matter. It is our collective grit and elbow grease, our relationships and their constantly re-affirmed vows of trust, loyalty and respect. Social capital emphasizes the extent to which our capacity to do anything is contingent upon the creation and maintenance of forms of association which provide both the tools and the setting for meaningful action. Social capital is often treated as ephemera. That makes sense. It is so hard to see. In fact, it is this elusive quality that makes social capital so fragile. It is made up, after all, not of bricks and mortar, but of relationships and commitments, and the trust, mutual respect and loyalty upon which they are dependent.[46]

A positive spin on social capital can be understood to link up my justifications for flourishing and experimentation in the social realm as follows. Social capital is what keeps our intimate, economic, political, cultural, traditional, reformist and religious associations going. Without it, nothing works. Social capital explains at least part of what is at stake for both individual identity and social cohesion: the constitutive. Social capital recognizes that we store the better part of our meaning in fundamentally involuntary associations. Squander that social capital, nothing that matters *is*. Social capital recognizes both the real and the figurative sense of ownership that animates particular forms of (social) life. If anyone and everyone can claim ownership of and membership in an association, then no one owns it.

Social capital takes seriously the threat of various kinds of compelled association. Trust, respect and loyalty have no meaning where the association is coerced. These several virtues can be earned, but never commanded. No trust, respect or loyalty: no social capital.[47] No social capital: none but the most debased forms of (social) life. Finally, without a comitment to preserving extant sources of social capital, we would lack the requisite conditions for the kind of social and political experimentation that makes genuine flourishing (within a modern heterogeneous polity) possible.

However, not all forms of social capital are alike – nor are they fungible. Moreover, some forms of social capital – or the associations that produce such capital – are a function of discriminatory practices that our Constitution rightly sets its face against.[48] To invoke the virtues of social capital is not to invoke an unalloyed good. Indeed, I shall try to demonstrate how a Walzerian-like understanding of egalitarian pluralism – that rests on nuanced distinctions between differentiation and discrimination, monopoly and tyranny – married to Bishop's rather novel notion of remedial equilibration can move communities away from mores that subordinate some of its members, or leverage their existing stores of real capital so that subordinated members have the ability to exit and to join new sub-publics that would enable these second class citizens to flourish. In short, I suggest how the courts and the state can enable individuals and groups to 'seek justice elsewhere', leave many traditional communities as they already are, and still nudge these communities and the body politic as a whole to consider more equitable and just internal arrangements regarding membership, voice and exit.[49]

For the purposes of this book, and for South African life in particular, two forms of networks (each with different degrees and dimensions of social capital) are of particular import: bonding networks and bridging networks. Robert Putnam puts the difference between these two distinct forms of social capital or social networks as follows: 'Some forms of capital are, by choice or necessity, inward looking and tend to reinforce exclusive identities and homogeneous groups. … Other networks are outward looking and encompass people across diverse social cleavages.'[50]

It's essential to gain a slightly better grasp of these distinctions – as they shall recur again and again with respect to the constitutional boundary drawing that we shall undertake in Chapters 5, 6 and 8 when analysing the respective merits and demerits of such bonding networks as religious and cultural associations and the virtues and vices of such bridging networks as school governing bodies, universities or Black Economic Empowerment firms.

One way to distinguish the two networks would be to 'contrast the strong bonds of reciprocity and care that are found inside families and small communities (what we might call normative bonding social capital) with the [at least initial] self-interested norms that tend to predominate between relative strangers … and through which relative strangers can cooperate successfully (what we might call normative bridging social capital).'[51] But that's just a start. High bonding communities tend to feature well-established, historically entrenched belief sets, shared assets and rather rigid rules regarding membership, voice and exit (and rule-enforcing mechanisms regarding those rules). Bridging networks are often extra-communal and bring together rather diverse groups of individuals in the pursuit of singular, generally self-interested ends. Membership, voice and exit tend to be more flexible in bridging networks.[52]

However distinct these two kinds of social capital may appear on the surface, I am going to argue – in Chapter 3 – that the success of a developmental state such as South Africa depends upon: (a) respect for the significant public goods created by private bonding networks (schools, hospitals, charities); (b) leveraging, as much as possible, admission into bonding networks for persons (and groups of persons) who would otherwise not have access to the goods made available within those networks; and (c) the use of state resources to build linking or bridging networks that, over time, produce social capital that is comparable in nature and quality to that social capital produced in bonding networks.[53] The potential for social and political revolution is truly profound if we understand how bonding and bridging networks actually function.[54]

How do these various dimensions of social theory fit together? All acknowledge the involuntariness of most social formations and the constraints that they impose on individual and group identity. They recognize that our social practices provide stores of collective wisdom about what works and what doesn't work. Evolutionary epistemologists and social capital theorists emphasize the manner in which our forms of life constitute large playing fields against which experiments in life are played out – often unconsciously, quite often without central planning. Choice architects agree that our forms of life constitute large playing fields against which experiments in life are played out. However, they add that we can, quite consciously, construct experiments that act as feedback mechanisms that elicit significant amounts of information about forms of behaviour that no longer work or new forms of behaviour that work 'better'. Second, even if the capacity for critique of our practices can be quite limited (recall Wittgenstein's earlier warning), all of the aforementioned theoretical orientations acknowledge that such space does exist. Third, the grander the collective exercise in experimentation is – the larger and more varied our critical community – the more varied our individual lives are likely to be. The more varied our individual lives are, the more likely we are to find successful models for what it means to be fully human. All of these social theories employ different mechanisms to *nudge* an individual in the right direction as judged by herself or himself. I then marry them to an egalitarian pluralist's commitment to a form of remedial equilibration that requires the state and various sub-publics to assist citizens and denizens into fitting their round pegs into round holes, or whatever shape flourishing takes.

Suppressing for the moment how we go about achieving and measuring success in nudging and in experimentation,[55] this brief introduction to a theory of the social suggests that we can live within communities that determine the greater part of the meaning we make, and still remain committed to the possibility of *revolutionary* change (for the better) within those communities. The next part of the two-fold argument for social revolution runs as follows. First, the more successful models of being in the world made available to us, the more likely we, and our compatriots, will possess a greater range of possibilities for our lived existence. Second, in virtually all states – developed and developmental alike – only with the intervention of the state and other powerful non-state actors will most individuals come

to possess the enhanced material conditions necessary for living out their preferred forms of existence.

### *3. A Theory of the Constitutional: Experimentalism and Flourishing*

In Chapters 4 through 8, this book goes on to explain how a commitment to experimentalism in the political domain, when married to a robust conception of basic entitlements and civil rights, services human flourishing. But let me make clear, again, why human flourishing is the goal of the state – and not freedom. The self is a 'centre of narrative gravity'. It is a place which multiple narratives, not primarily spun by the individual, call home. Not only is the individual not free to choose these narratives, she is generally not 'free', in the common-sense usage of the term, to discard old storylines and to create, out of whole cloth, new storylines. The physical and the social determination of individual action occurs both at the level of individual responses to immediate stimuli and at the level at which we tend to attribute meaning to an individual life. The social – practices, forms of life, ways of being in the world, associations – operates within the same set of constraints. However, as we have also seen, neither the self nor the social is – despite the absence of outré notions of freedom – incapable of *revolutionary* change that enhances the meaning of life.

The ability of individuals, groups and communities to give life meaning – in a variety of different ways – is what I mean by flourishing. (Flourishing in these pages possesses a decidedly modern constitutional – as opposed to neo-Aristotelian – cast.) In Chapters 4 through 7 of this work, I defend the thesis that entitlements and institutions must be set up in such a way as to enhance human flourishing. That will generally mean allowing people to continue to be what they already are – along with provision of the material resources and the immaterial economic, social and political structures necessary to sustain such ways of being in the world. The South African Constitution is designed to do just that. However, flourishing must also require the creation of an array of institutions that enable individuals and groups to undertake 'experiments in life' – along with the provision of the material resources necessary to sustain such experiments. Here, again, appear the two poles of my account of the self, the social and the constitutional: the traditional and the revolutionary. On the one hand, this project recognizes how deeply entrenched our individual sub-routines, our social practices and our political commitments are. The meaning of these routines, practices and commitments *makes* us. At the same time, selves, practices and politics are capable of change. We are capable of error correction. We can change our ways of being to meet, *instrumentally*, changed circumstances in the world. We can, though not without great difficulty, alter 'forms of life' – and their *normative* content – in the world that currently threaten humanity's very existence. As a professor of ethics, governance and sustainable development, I am all too aware of the threats that global warming, endemic poverty, nuclear proliferation and large-scale failure of international financial institutions pose to our continued existence. At the same time, we have a number of organizations, bodies and conventions – some nascent, some quite weak – that we can exploit through collective political action to alter the apparent catastrophes that loom on the horizon. To quote Dennett again:

> There are real threats to human freedom, but they are not metaphysical. There is political bondage, coercion, the manipulation inducible by the dissemination of misinformation, and the 'forced move' desperation of hunger and poverty. No doubt we could do a lot more to combat these impositions on our freedom, were it not for the curious sort of *self-imposed bondage* that we create by the very exercise of our freedom, and in the very acknowledgment of our responsibility for the chains, ropes, strings and threads of commitments (explicit and tacit) that tie us to our family and friends, that tie us to our life projects, and that make us increasingly immobile by appeals to *radical action*.

Experimental constitutionalism dovetails with a very modest, naturalized notion of flourishing and experimental social theory because all three accounts (1) take the radical givenness of existing constitutive attachments seriously; (2) recognize the boundedness of individual and collective rationality; and (3) describe various kinds of feedback mechanisms that allow for error correction. At the level of the state, experimental constitutionalism enables more citizens to see what works and what doesn't. It goes without saying that experimentalism is no cure for systemic failures. Aggregate individual behaviour can lead to outcomes that we all know to be disastrous. Increasing levels of fossil fuel consumption may lead (inexorably) to the destruction of the very environment in which most individuals live.[56] It also goes without saying that experimental constitutionalism *alone* cannot yield ways of being in the world that enhance human flourishing.

And yet, what choice do we have but to give experimental constitutionalism a shot? Its opposite numbers are on ready display throughout the world: dictatorships continue to plague Africa (still others – such as Libya, Mali and Syria – are in a terribly uncertain free fall in Northern Africa, the Maghreb and the Middle East as I write); crony capitalist states have proliferated (and sometimes failed) in the developed democratic world (Greece, Ireland), oligopolic, security states abound (Russia) alongside developing fascist, mercantalist regimes (China), and family-dominated, but democratically fractured polities (India); theocracies have an unhealthy hold on societies across the globe (Iran, Saudi Arabia, Israel, Palestine, Pakistan and Afghanistan); and outright media-driven insanity, along with an unholy alliance between money and politics, have driven heretofore stable states (Italy, the United States and the United Kingdom) to the very precipice of financial disaster. Chapters 4 through 7 describe the rudiments of a social democratic state committed to experimental constitutionalism both because it is the best political model available to South Africa and because the philosophical commitments that underlie experimental constitutionalism are consistent with the most fundamental principles of our basic law.

After laying out the principles of experimental constitutionalism, I then look at how this model of constitutional politics might alter a range of doctrines and the manner in which a number of institutions operate. For those who cannot wait to see how this story ends, Chapters 4, 5 and 6, after setting out the principles for experimental institutional and doctrinal design, offer a number of doctrinal and institutional examples of such design. These South African innovations embrace: (1) a doctrine of constitutional supremacy that maintains a meaningful equilibrium with a doctrine of separation of powers, and thus sets relatively clear guidelines for how authority for constitutional interpretation might best be shared by the judiciary, the legislature, the executive and non-state actors;[57] (2) the use of various standard

judicial mechanisms – such as cost orders, court procedures, amici, expanded constitutional jurisdiction and structural injunctions – to create bubbles of participatory democracy better able (than courts or legislatures) to resolve various kinds of polycentric conflict;[58] (3) an approach to rights, limitations and remedies analysis (such as remedial equilibration) that provides better outcomes than balancing, zero-sum decision making or abject deference to co-ordinate branches of government;[59] and (4) greater roles for Chapter 9 institutions with respect to investigation, information sharing and norm setting.[60] Chapter 6 mines the brief historical record of two important policy areas – Education[61] and Housing.[62] It suggests how the principles of experimental constitutionalism have, sometimes unwittingly, sometimes quite consciously, already been put to work and why we might witness even greater improvement in the Housing and Education sectors if the principles of experimental constitutionalism were employed on a more consistent and explicit basis.

## C. Connections

### *1. Connections: Experimental Spaces*

In some sense, what global neuronal workspace theories, spontaneous orders, nudges and participatory bubbles all share in common is a belief that the information required for polycentric problem solving is rather diffuse and that processes that solicit participation from multiple stakeholders will offer more optimal solutions to everyday problems with which the self, social entities or the state are confronted. All of these approaches resist models of consciousness, social theory or constitutionalism based upon central command and control.

As we shall see, consciousness in global neuronal workspace theory occupies transient locations (in the brain). These locations or neuronal networks are designed to solve the immediate problem that has captured our attention. (Though to be clear: human consciousness – given the limits of speed – attends to problems, and is good at solving problems, that require long-term planning.) Various sensory inputs and a host of potential experts – neural networks – assist (and sometimes compete to assist) in the solution of the problem that has captured an individual's attention.[63] These teams of 'experts' encompass neural networks that possess particular linguistic skills, relevant memories, or trained responses. As Blackmore puts it, the global neuronal workspace 'recruits processors for ongoing tasks, facilitates executive decisions and enables voluntary control over automatic action routines'.[64] After the problem has been solved, the unique neural network responsible for the solution will go silent until it is needed once more.

Spontaneous orders offer a similar characterization of knowledge sharing and problem solving. Markets, for example, require no central planner, no Hercules arriving at optimal judgments, in order to arrive at efficient outcomes. Indeed, limited amounts of information – often captured by price – are sufficient to enable large numbers of participants in a market to assist each other (and sometimes to compete with one another) with respect to the solution of a social problem. However, as soon as the problem is solved, the components of the market – individuals and firms alike – turn their attention to other problems and new solutions.

Nudges possess a family resemblance to neural networks and spontaneous orders. The experiments that realize nudges rely upon a large number of participants in a social formation

to assist (experts) in the solution of a given problem. The important difference from related forms of social experimentation is that choice architects deliberately and consciously create a space within which participants are given incentives, and provide feedback, that encourage them to choose options more optimal for themselves, others and for society writ large.

Talk of participatory bubbles offers more of the same. The physical metaphor of bubbles is meant to convey three qualities of such small-scale institutional processes. First, processes of political engagement by ordinary citizens are understood to be a natural part of on-going social interactions. They originate when challenges to a given political authority accumulate and finally come to a boil: just as bubbles form after pressure builds up in a liquid and escape to the surface. Second, bubbles are meant to suggest limits on the scope of deliberation. Bubbles only enclose a small amount of space – both in terms of the issues contested and the number of participants. Third, most bubbles are ephemeral. After satisfactory resolutions emerge from processes of participatory engagement, the raison d'etre for such political (or judicial) processes ceases to exist. The bubbles burst. Participants can return to their more routine lives. And yet, importantly, the burst bubbles leave behind a residue from which other actors can learn and lessons that may apply to future problems. Indeed, not all bubbles should be treated as ephemera. Certain problems are so complex that the only way to solve them is by permanent experimentation and feedback. We may never truly understand how to best regulate carbon dioxide because new technologies and market forces may alter the manner in which carbon dioxide is produced. A community may not realize the negative consequences of a chosen approach to sulphur dioxide control unless some entity continues to monitor the problem. Only an array of permanent systems, devoted to specific challenges, and designed to encourage experimentation, feedback and information sharing, will allow communities, states and international institutions to stay on top of seemingly intractable problems.

This comparison of global neuronal workspace theory, spontaneous orders, nudges and participatory bubbles reinforce a conclusion already drawn in the Preface and first part of the Introduction. That is this: the gap between *is* and *ought* is not as great as some of my early readers suggested. To the extent that the descriptions of the self, the social, the political and the constitutional are accurate, they are all meant to depict what 'is'. Ultimately, it is the 'fit' of these various descriptions with one another that should count as one of the strengths of the theory of South African constitutionalism put forward in these pages.

## *2. Connections: Competition, Friction and Change*

A similar set of family resemblances are on display in my discussion of neuronal network competition, universal selection theory, libertarian paternalism, and shared constitutional interpretation. What links all four constructs at a meta-theoretical level are the mechanisms for the identification of best practices, and the reflexive nature of the selection process.

With respect to the self and consciousness, neuronal network competition describes the actual competition between different neuronal networks for primacy of place in response to environmental stimuli. As we shall see below in Chapter 2, what we, as individuals, become 'aware' or 'conscious' of is a creation, one hopes, of the neuronal network that best 'fits' the current environment. That does not mean, of course, that such a neuronal network will

remain dominant or always provide the best 'fit'. It may well not provide the appropriate response to the current environment. A new neuronal network will, one hopes, supplant an out-moded network in the face of disruption.

With respect to the social, universal selection theory offers a similar account of cognitive and non-cognitive processes. Some practices better 'fit' the social environment within which they operate. That does not mean, of course, that such a practice will remain dominant or always provide the best 'fit'. A better practice – for the environment in question – may come along and offer the possibility of greater success (or in theoretical domains, greater explanatory power). Moreover, the environment itself may change, altering the desiderata for 'fit'.

Thaler and Sunstein's libertarian paternalism is not as agnostic about individual and social choice as the universal selection theories of Campbell and company. They begin their monograph with a bold assertion:

> The false assumption [about choice, and thus selection over time] is that almost all people, almost all the time, make choices that are in their best interest or, at the very least, are better than the choices that would be made by someone else. We claim that this assumption is false – indeed obviously false.[65]

Moreover, they claim that no one truly believes 'the false assumption' upon appropriate reflection. They then offer an easy example of their thesis: a chess match between a chess novice and a grandmaster. No novice, no spectator, would expect the novice to beat the grandmaster simply because the novice possessed the autonomy to decide which move to make. What is true about individual (and collective) choice is that it improves 'in contexts in which [people] have experience, good information and prompt feedback'.[66]

The relationship between experimentation and feedback is evident in an activity to which we shall return time and again in this work: golf. Though perhaps not the most obvious candidate (to most readers) for an exegesis on the relationship between theory and practice, and experimentation and feedback, sustained improvement in golf – as I shall argue later – requires constant 'nudging' by someone with greater experience – generally a coach. (If skilled, the player over time can become adept at nudging herself. But we shall see why a coach is a preferred source of *experience, good information and prompt feedback* in chapters 2 and 3.) Thaler and Sunstein themselves note how 'feedback' – a term of art for the quality of a golf club (which allows the user to immediately experience whether a stroke was crisply, accurately or poorly struck) as well as the result of any given particular stroke in golf – is a critical component for improvement:

> Learning is most likely if people get immediate, clear feedback after each try. Suppose you are practising your putting … on a … green. If you hit ten balls toward the same hole, it is easy to get a sense of how hard to hit the ball … . Suppose instead you were putting … but not getting to see where [the balls] were going. In that environment, you could put all day and never get any better.[67]

For Thaler and Sunstein, choice architects employ a number of techniques to ensure that individuals and groups flourish.[68] They create spaces that feature incentives to make optimal choices.[69] The spaces must lay out all pertinent information for optimal decision making.[70] The architects must understand the defaults or the heuristics that take the inherent bias

toward repetitive behaviour (laziness) into account so that the default or the heuristic in a system is set toward the outcome likely to enhance the individual's and the group's welfare.[71] They must construct feedback mechanisms that allow individuals: (a) to learn from their behaviour and to make better or more optimal choices when faced with an identical or a similar setting in the future,[72] and (b), in a related manner, to send clear error signals so that, again, individuals see what works and what doesn't.[73] They must take great care to frame complex choices in a manner that enables participants to compare, rather easily, potential outcomes. Finally, choice architects cannot be normative agnostics. They must have some conception of a more optimal outcome. Why? They must be able to nudge the chooser toward choices that they might have been less likely to make. Consistent with the overall theme of this work, the more Millian 'experiments in living' we undertake, the more likely we are to find a way of being in the world that better 'fits' with our preferences (something we often know only after we have tried out a new way of doing things). The better the nudges, the more likely we are to flourish. (Of course, the feedback will tell us quite a bit about the normative content of the nudge. So nudges too are subject to revision.)

With respect to the constitutional, 'shared constitutional interpretation' offers a comparable account of the development of constitutional doctrines and political policies. What we want from courts – that set constitutional doctrine – and co-ordinate branches of government – that set various policies – is the best possible 'fit' in the political and social environment within which they operate. A court's gloss on a constitutional norm or the policies pursued by a particular government will not always provide the best 'fit'. That would assume an unchanging environment. What we hope for from a politics of experimental constitutionalism is the ability of all branches of government – aided by an informed, engaged citizenry and a reasonably competent bureaucracy – to remain open to understanding our basic law differently and to devising policies most likely to realize our preferred (and adaptive) ends.

What links neuronal network competition, libertarian paternalism and shared constitutional interpretation is a commitment to the notion that choices at the level of the individual, the social and the constitutional are largely about fit, at the same time as that fit remains open-ended, partial and occasionally, sub-optimal. At each level, there is a constant interrogation of means and ends (reflexivity) and a commitment to rolling best practices that offer the greatest opportunity for flourishing over time.

## *3. Connections: Radically Heterogeneous, Determined Selves and Lives Worth Valuing*

The theory of the self (or selves) offered in these pages takes a number of different forms. Each form has as its goal the displacement of the dominant Cartesian notion of the self as a fully integrated, rational, freely willed chooser of its ends. However, each of these theoretical displacements of the Cartesian notion of the self (with its folk psychology of freedom) takes place at a different level of generality.

The account of the determined self takes two forms. The first account of the determined self is a standard materialist argument. The determined self is subject to the same laws of cause and effect as all other corporeal entities. According to this incompabilist position on free will, it is

impossible to be both a physical entity subject to the same deterministic framework as all other physical entities and an incorporeal entity that freely wills its actions in an otherwise determined physical universe. The second account of the determined self concentrates on providing an explanation for how consciousness, the experience of an integrated, choosing, unified self and a subjective experience of free will arise out of a thoroughly determined physical entity. A significant amount of space in Chapter 2 is devoted to the current neuroscience of consciousness because this new discipline provides the best explanation of what consciousness is and how it operates. This empirical account of consciousness offers the best hope of breaking the tenacious hold that the folk psychology of free will *qua* freedom has upon us.

The account of the conditioned self also takes two forms. At the level of the individual, the account of the conditioned self explains how our physical and social endowments create a variety of roles or dispositional states that cohere – or overlap – in a manner that enables (some of) us to experience a sense of integrity or singularity. The point again is to narrow dramatically the space for freely willed action by calling attention to the extent to which our actions are determined by the social endowments with which (or into which) we are born and the physical endowments with which we are graced (or burdened). This account places particular emphasis on the extent to which pre-existing forms of 'meaning makes us'. At the level of the social, the account of the conditioned self – described by Michael Walzer in terms of involuntary association and the 'radical givenness' of the self – explains how the meaning of an individual life is determined by the variety of communities into which the individual is born and the extent to which what gives meaning to our lives is determined and not freely willed. Walzer's account of the conditioned self serves as a bridge from the discussion in Chapter 2 with respect to the constraints that exist with respect to the self to the discussion in Chapter 3 regarding the constraints that exist with respect to the social.

The discussion of the multiple self or the divided self serves the general assault on the folk psychology of free will in a number of different ways. Dennett's characterization of the self as a centre of narrative gravity, with its emphasis on how different selves co-exist within a single corporeal individual, and Baars' global neuronal workspace theory and its description of the actual architecture of the brain, explain how consciousness and our multiple selves emerge. They work together to displace the Cartesian view of the self as a fully integrated, rational, freely willed chooser of its ends. However, the multiple self or the divided self does not simply offer a materialist account of consciousness and an argument against the folk psychology of freedom. It also offers, as Amartya Sen and Michael Walzer contend, a means for understanding how change (and thus the subjective experience of freedom) is possible in a determined and conditioned self. As Walzer notes, the 'self divides itself among its interests and roles … among its identities and among its ideals, principles and values'.[74] Walzer writes that there is, amongst these roles, identities and ideals

> no linearity, … and no hierarchy. The order of the self is better imagined as a thickly populated circle, with *me* in the centre surrounded by my self-critics who stand at different temporal and spatial removes (but don't necessarily stand still). Insofar as I am receptive to criticism, ready for (a little) castigation, I try to draw some of the critics closer, so that I am more immediately aware of their criticism; or I simply incorporate them, so that I become a worried self. I am like a newly

> elected president, summoning advisors, forming a cabinet. Though he is commander-in-chief, his choices are quite limited, his freedom qualified; the political world is full of givens; it has a history that pre-dates his electoral triumph. My inner world is full of givens, too, culturally bestowed or socially imposed – I manoeuvre among them insofar as their plurality allows for manoeuvring. My larger self, my worried self, is constituted and self-constituted by the sum of them all. I am the whole circle and also its embattled centre.[75]

Walzer's 'me' sounds much like Dennett's centre of narrative gravity. Dennett's cente of narrative gravity captures many of the same qualities as Walzer's 'thickly populated circle'. As I noted in the discussion of 'the social' above, radical or revolutionary change occurs as a result of the friction between the various selves that make up the 'thickly populated circle'. So here we have an account of change that is not contingent upon the existence of rational, freely willed chooser of its ends. On this account, change flows from a radically heterogeneous self – the Whitmanian 'I am Large' self – in which different roles, identities and ideals serve as critics that support different, and sometimes incompatible, ways of being in the world.[76] These (self)critics do not merely offer us different ways of pursuing the same ends. They offer us different ends. The radically heterogeneous self makes sense of this book's commitment to the centrality of *trial and error*: success stories remain dominant so long as they bring the thickly populated circle success. Errors or failures elicit criticism from within the thickly populated circle. And with such criticism, perhaps, comes change. (Of course, experimental selves and thickly populated persons will also experience critique from without, and learn from other experimental selves and other thickly populated persons. This form of critique and learning, as we have seen, occurs within both the social domain and the constitutional order.)

I hope to show, in the pages that follow, how each account of the self – the determined self, the conditioned self, the multiple self, the divided self, the radically, *socially*, heterogeneous self and the radically, *naturally*, heterogeneous, determined self – undermines the Cartesian view of the self and supplants it with an account that possesses greater explanatory power. However, while these various accounts of the self largely sing off the same hymn sheet, they also work at different levels of generality. That is, they reinforce one another, but are not reducible to one another. No attempt is made, therefore, to capture the social theory of the self that Walzer offers in terms of the neuroscientific theories of the self that Baars, Naccache or Churchland proffer. So, just as we do not expect the laws of biology to be reducible to the laws of chemistry – even when they have the same objects under scrutiny – so too is it wrong to expect that the language of contemporary social theory is somehow reducible to the ostensibly more basic language of contemporary neuroscience. It is sufficient that they do not contradict one another.

## D. Tweaking Constitutional Doctrine: Constitutional Court Cases Revisited and Revised

In Chapter 8, I revisit twenty of the most important cases to be handed down by the South African Constitutional Court over the past decade. This re-engagement with the facts and norms underlying this score of decisions allows us to reconsider the outcomes in light of the precepts of experimental constitutionalism and flourishing. The Constitutional Court's

persistent emphasis on freedom-talk, rather than flourishing, and on the deference reflected in an arid separation of powers doctrine, rather than a more fluid inter-institutional and inter-personal theory of experimental constitutionalism, continues to have untoward consequences for our constitutional jurisprudence. What may be most fascinating to readers with respect to some of the most recent cases reconstructed is that a gratifying pattern has emerged. The Constitutional Court has adopted some facets of experimental constitutionalism (without ever describing it as such or assessing the long term effects of this mode of adjudication and politics). We can glimpse a Court that, as of early 2012, wants to 'learn aggressively' – as my friend Professor Frank Michelman has put it – not just from the parties before the court, but from individuals, communities, networks, associations and institutions with an interest and some insight into the facts and norms at play in a given matter. I would love to be able to say that less theoretical ground now separates my theories and the Court's practices than when I first began this endeavour (a controversial thesis). You certainly won't hear that from the Court. And the judgments can't speak for themselves. As to the virtue of my approach, by the end of Chapter 9, you will have made up your own m-m-m-m-minds.

## Endnotes

1. For more on the self as a centre of narrative gravity, see D Dennett *Consciousness Explained* (1991) 167–171; D Dennett *Sweet Dreams: Philosophical Obstacles to a Science of Consciousness* (2005). The path-breaking experiments of empirical psychologists Benjamin Libet and W Grey Walters provided Dennett with a well-established framework for understanding delayed conscious awareness of 'unconsciously' initiated action. In layman's terms, these experiments showed how what appeared to be 'conscious, freely willed action' could, in fact, be functions of pre-determined, unconsciously initiated neural networks. See, eg, B Libet 'The Experimental Evidence for Subjective Referral of Evidence Backward in Time: Reply to PS Churchland' (1981) 48 *Philosophy of Science* 182; B Libet 'Time of Conscious Intention to Act in Relation to the Onset of Other Cerebral Activities (Readiness Potential): The Unconscious Initiation of a Freely Voluntary Act' (1983) 106 *Brain* 623; WG Walters' *Presentation to the Osler Society* (1963) as reported in D Dennett *Consciousness Explained* (1991) 167–171. Some readers might want to know how one would explain the fact that while a baseball travels the 60 feet and 6 inches from pitcher to hitter in 0.45 seconds, Libet's experiments seem to reflect a much more generous period of 0.8 seconds between readiness potential and action. The explanation is agent priming. Constant habituation enables actors to shorten dramatically the period between non-conscious intention and action. Well, that may be fine for hitting a baseball (or even a more quickly delivered serve in tennis), but how does that work for such ostensibly high level cognitive activities like writing a symphony, a novel or a response to David Bilchitz? See S Dehaene & L Naccache 'Towards a Cognitive Neuroscience of Consciousness: Basic Evidence and a Workspace Framework' in S Dehaene (ed) *Cognitive Neuroscience of Consciousness* (2001) 1, 13: 'High level processes may operate unconsciously, as long as they are associated with functional neural pathways either established by evolution, laid down during development or automized by learning. Hence there is no systematic relationship between the objective complexity of a computation and the possibility of it proceeding unconsciously. For instance, face processing, word reading, and postural control all require complex computations, yet there is considerable evidence that they can proceed without attention based upon specialized neural subsystems. Conversely, computationally trivial but non-automized operations, such as solving 21–8, require conscious effort.'

2. See R Dawkins *The Selfish Gene* (1976); R Dawkins *The Extended Phenotype* (1982). Dawkins provides useful accounts of how patterns of learned behaviour – memes – replicate themselves over time through individuals, groups and societies.
3. The theory of self developed in these pages does not assume a unitary supervisory 'self' over time. See D Parfit *Reasons and Persons* (1984); D Parfit 'Divided Minds and the Nature of Persons' in C Blackmore & S Greenfield (eds) *Mindwaves* (1987) 19. For the classic statement of such a disaggregated view of self, see D Hume *A Treatise of Human Nature*: *Being An Attempt to Introduce the Experimental Method of Reasoning in Moral Subjects* ((1739)(eds) DF Norton & MJ Norton, 2000)) ('[W]hen I enter most intimately into what I call *myself,* I always stumble upon some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I can never catch myself at any time without a perception and can never observe anything but the perception.')
4. From the experience of having lost almost all of the selves listed above, I know that, during this period of debilitating desuetude, I experienced a tiny, but still extant, conception of 'me'. It occurred most often in conversations with my friend Robert Greenblum, and our longstanding ability to make each other laugh. He got 'me' as I got 'him'. Laughing with him created conditions that enabled me to retrieve, or at least experience, that 'core temperament'. The neurological basis for this unitary sense of self can be traced in part to the activity of the dorso-medial frontal lobe. See VS Ramachandran *The Tell Tale Brain: A Neuroscientist's Quest for What Makes Us Human* (2011) 265. Many families bemoan the fact that while a family member who suffers damage to this portion of the brain continues to be capable of carrying out virtually all high-level cognitive functions, she is no longer 'herself'. Ibid. Most of us are familiar with the story of railway foreman Phineas Gage, who, in 1848, had a crowbar driven through his skull (and left prefrontal lobe) and survived. He not only survived but continued to function. However, the damage to his brain was so profound that his friends no longer recognized him as the person they once knew. See, further, A Damasio, B Everitt & D Bishop 'The Somatic Marker Hypothesis of the Brain and the Possible Functions of the Prefrontal Cortex' (1996) 351 *Philosophical Transactions of the Royal Society of London – Series B, Biological Sciences* 1413.
5. M Walzer 'On Involuntary Association' in A Gutmann (ed) *Freedom of Association* (1998) 64, 67.
6. M Heidegger *Lectures on the History of the Concept of Time* (1926).
7. J Dewey *Reconstruction in Philosophy* (1920) 23. See also W James 'Does Consciousness Exist' in *Essays in Radical Empiricism* (1912)(James contends that consciousness is not a thing, but a process, that there is no 'aboriginal stuff or quality of being, contrasted with that of which material objects are made, out of which our thoughts of them are made … [T]he entity known … as consciousness … is fictitious, while thoughts in the concrete are fully real. But thoughts in the concrete are made of the same stuff as things are.') See also W James *The Heart of William James* (R Richardson (ed))(2011).
8. L Wittgenstein *Philosophical Investigations* (1953).
9. See S Woolman 'Language, Power and the Margin: Eliot's Philosophy of Language, Wittgenstein on Following a Rule, and Statutory Construction in *Thembekile Mankayi v Anglogold Ashanti Limited* (2012) 128 *South African Law Journal* 434. Here, I re-articulate the rather banal – but too often ignored – proposition that most beliefs that human beings hold are true, and that distortions occur at the margin. Were it otherwise, translation that occurs every day would be impossible, and we would find it similarly impossible to navigate our way through a world in we were constantly misunderstood – or not understood at all. This proposition does not merely hold for homogeneous societies. In the radically heterogeneous and stratified society in which I live, South Africa, I can move between townships such as Alexandra to wealthy peri-urban areas in nearby Sandton to my extremely diverse setting at the University of the Witwatersrand without experiencing misunderstanding. The moral salience of everyday life here in Johannesburg – where every exchange (not matter how small) carries a moral charge – has taught me that most 'misunderstandings' are wilful (and flow from distortions of power).

10. We would do well to follow Wittgenstein and his efforts in *Philosophical Investigations* to draw us back to the everyday world. Much of that effort takes the form of his desire to demonstrate how we have inverted the order of action and language: 'A picture [has] held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably (§115). … What *we* do is to bring words back from their metaphysical to their everyday use. (§116) … . Now, however, let us suppose that after some efforts on the teacher's part [the student] continues the series correctly, that is, as we do it. So now we can say he has *mastered* the system – But how far need he continue the series for us to have the right to say that? Clearly you cannot state a limit here. (§145) … The grammar of the word 'knows' is evidently closely related to that of 'can', 'is able to'. But also closely related to that of 'understands' [and to] '*mastery*' of a technique.' (§150) (Emphasis added).
11. GP Baker & PMS Hacker *Scepticism, Rules & Language* (1984) 115, 117, 119, 122, 123.
12. D Davidson 'Thought and Talk' *Inquiries into Truth and Interpretation* (1984) 155, 168.
13. Ibid.
14. J Cohen 'Review of Michael Walzer's *Spheres of Justice: A Defense of Pluralism and Equality* (1986) 82 *The Journal of Philosophy* 457.
15. See JB Newman, BJ Baars & SB Cho 'A Neural Global Workspace Model for Conscious Attention' (1997) 10 *Neural Networks* 1195.
16. JB Newman 'Reticular-Thalamic Activation of the Cortex Generates Conscious Contents' (1995) 18 (4) *Behavioral and Brain Sciences* 691.
17. S Dehaene & L Naccache 'Towards a Cognitive Neuroscience of Consciousness (supra) at 1.
18. Ibid at 30.
19. Dehaene and Naccache are quick to point out that this ability to check one's immediate responses and to come up with what one believes to be an optimal response should not be confused with being able to 'freely will' a response in the standard compatibalist sense. As Spinoza wrote: 'Men are mistaken in thinking themselves free; their opinion is made up of consciousness of their own actions, and ignorance of the causes by which they are conditioned. Their idea of freedom, therefore, is simply their ignorance of any cause of their actions.' *Ethics*, II, 35. (How consciousness has emerged, out of numerous non-conscious neuro-muscular systems and biological and socially constructed dispositions – as the wetness of water arises out of the aggregation of $H_2O$ molecules – is something that must be left to future interrogations by scientists in various domains of inquiry.)
20. What happened, as we shall see in Chapter 2, is that I experienced 'brain freeze'. In the first example, no cost attached to the occurrence of brain freeze. With respect to everyday events, our brains often get 'lazy'. We assume (not consciously) that an ordinary cognitive process can be undertaken without reflection. Then, some other process (or self or dispositional state) commandeers our conscious awareness. We discover, much to our horror, that this new chain of conscious thought has crowded our other processes, and led us into a preformative error. As a Republican aspirant for the US Presidency, Rick Perry, discovered in 2012, his inability to recall (in front of roughly 40 million viewers) one of the three federal agencies he had promised to eliminate if elected was probably caused by the distractions of a nationalized televised debate and an assumption that he could recall his 'script' without difficulty. His pushing of one cognitive process off the stage, while another attentive process took over (say, engaging in eye contact with another contender Ron Paul), probably cost him the nomination. In short, as neuroscientist's explain, the prefrontal cortex, with the assistance of the medial temporal lobe, normally bears responsibility for the retrieval of memories and simple dispositional routines. Stress – quite high in a debate – can interfere with the medial temporal lobe's retrieval function or the hippocampus' role in memory retrieval. During more monotonous activity, such as driving, MRIs have shown that the brain does indeed get 'lazy' and falls into a 'default mode network'. T Parker-Hope 'Rick Perry's Brain Freeze' *The New York Times* (10 November 2011). Defaults are a colloquial way of describing what the social science and philosophical literature call 'heuristics'. See G Gigerenzer 'Moral Intuition = Fast and Frugal Heuristics' in W Sinnott-Armstrong (ed) *Moral Psychology, Volume II – The Cognitive Science of Morality: Intuition and Diversity*

(2008) 1. Heuristics can be far more dangerous than the examples of brain freeze offered above. Gigerenzer discusses the infamous case of a Nazi officer, well aware of the atrocity that he was about to commit, who extended the following offer to his men: 'Those of you who do not wish to participate in this action are excused.' Only a few men took up this offer. The heuristic that led them to stay in formation had little to do with evil and everything to do with the fact that this brigade, drawn from the same police force, had learned to stick together. That 'thick blue line' was one of their most powerful heuristics or defaults. Had the officer posed the problem differently – 'You are hereby relieved from any obligation to carry out this task, however those who wish to do so may stay and participate in these brutal executions' – the response might have been different. Why? The default has been changed. Under the alternative proposition, the officer would have released the men from their existing heuristic of solidarity, foregrounded the mass killing that would soon take place, and strongly insinuated their culpability in that slaughter.

21. It is important to note at the outset that my views of the self – the limits of consciousness as well as the plasticity of the brain – are drawn from personal experience. (My experience does not, of course, make my conclusions any more or less true.) My own experience of cognitive dysfunction, the awareness of my own inability to form coherent thoughts or to recall simple words or names of friends and colleagues – as any person with something akin to the incipient stages of Alzheimer's disease can tell you – is truly chilling. The self is fragile – a string of pearls. I have been fortunate to have people assist me in putting Humpty Dumpty back together again. It is equally chilling to watch persons one loves – such as my Uncle Harry – experience severe post-stroke aphasia. Depending on the area and extent of brain damage, someone suffering from aphasia may be able to speak but not write, or vice versa, or display any of a wide variety of other deficiencies in language comprehension and production, such as being able to sing but not speak. I myself lost the capacity to sign my name correctly; a capacity that returned as my health improved. My Uncle Harry fades in and out – he recognizes me (I think) – but cannot say my name in my presence (without my brother's prompting). My experience, and that of my uncle, suggests how complicated and diffuse the neural organization of language is. It seems clear to me that language, and the thought that goes with it, is not the product of some small, circumscribed region of the brain. As we shall see in Chapter 2, we require five main categories of neuronal systems to collaborate for the self and consciousness to function: (1) 'perceptual circuits that inform about the present state of the environment'; (2) 'motor circuits that allow the preparation and controlled execution of actions'; (3) 'long-term memory circuits that can re-instate past workspace states'; (4) 'evaluation circuits that attribute [percepts] a valence in relation to previous experience'; and (5) 'attentional or top-down circuits that selectively gate the focus of interest'. The interaction of these five kinds of neural systems requires no central co-ordination. Instead, neural networks are established for the purpose of conscious action by virtue of their adequacy with respect to the demands of the environment and the task at hand. It is clear that my uncle and I possess varying degrees of consciousness and selfhood. Whether the plasticity of my brain will ever allow me to connect (with ease) names with faces or whether my uncle will regain his powerful capacity for original and humorous thought remains to be seen. But that we each have complex spatially distributed neural networks in need of repair – or rewiring – I have no doubt.

22. As I noted above, and discuss in Chapter 2, the work of empirical psychologists Benjamin Libet and W Grey Walters has provided a well-established framework for understanding delayed conscious awareness of 'unconsciously' initiated action. See B Libet 'The Experimental Evidence for Subjective Referral of Evidence Backward in Time' (supra) at 2; B Libet 'The Unconscious Initiation of a Freely Voluntary Act' (supra); WG Walters' *Presentation to the Osler Society* (supra). I am indebted to John Ostrovick for sharing his work on this subject with me and for his explanation of the findings. See J Ostrovick 'The Timing Experiments of Libet and Walters' (2004)(Unpublished manuscript on file with author.) Libet's experiments demonstrate that a readiness potential – 'a change in the voltage in the brain' – occurs 0.6 seconds before what we describe commonly as a conscious awareness and 0.8 seconds before action. Only conscious awareness prior to readiness potential would demonstrate

consciously willed action. Again, no empirical evidence exists for such awareness. WG Walters' experiments bolster conclusions about non-conscious determination of action and the importance of maintaining an apparent causal connection between awareness and action. Walters' subjects were brain surgery patients asked to press a button to change a viewing-slide at any time. The button, however, was not connected to the slide projector. Instead, the slide projector was rotated by an amplification of the readiness potential signal from the patient's brain. Walters' subjects reported the experience of an unsettling form of precognition – on the part of the projector. That is, they found that the slide projector had rotated the slides prior to their conscious intention to press the button. Indeed, the significant time gap between non-conscious readiness potential, slide change and intent consciousness was sufficiently large to cause the subjects to report that they were concerned that 'they might, accidentally, advance the slide twice'. See Ostrovick (supra) at 8. See also WG Walters (supra) at 171.

23. The ability of a hitter to connect solidly with a baseball that travels the 60 feet and 6 inches from pitcher to hitter in a mere 0.45 seconds, while Libet's experiments reflect a much more generous period of 0.8 seconds between readiness potential and consciousness, is explained by agent priming. Constant habituation enables actors to shorten dramatically the period between non-conscious intention and action. But even time overtakes that old trick. In 2011, Derek Jeter, age 37, and one of the best hitting and fielding shortstops in baseball (history) found that he could not hit for power. Why? Age. Everything was slowing down – except for the world around him. M Sokolove 'For Derek Jeter, on His 37th Birthday' *The New York Times* (23 June 2011), available at www.nytimes.com (accessed on 30 June 2011). Robert Adair, author of *The Physics of Baseball* (3rd Edition, 2002), notes that it takes a ball traveling 90 miles per hour *400 milliseconds* to travel the 56 feet from the moment it is released from the pitcher's hand to the time it arrives at home plate. During the initial period of the ball's flight, sensory cells in the retina must 'encode information and send it to the brain'. *75 milliseconds gone*. The ball has travelled nine feet. The brain must then relay signals to the spinal code to initiate muscle response. Usually, the legs initiate a stride, if the batter intends (unconsiously) to hit the ball. Quite tellingly – without knowing the science of baseball – Jeter tried, this year, to hit without a stride. He was, without awareness of the underlying physiology, trying to buy a few extra milliseconds. After the legs begin their stride, arm muscles and the upper torso bring the bat around. Here's the thing. By the time the ball has travelled 30 feet, it's too late for the batter to make any adjustments at all to the plane of his swing. Believe it or not, the batter might as well have his eyes closed for the remainder of his swing and the ball's journey home. Now you might understand why pitches that 'break late' – pitches whose 'radical' movements are delayed until the ball is near home plate – make batters look terribly foolish. The time for adjustment has long past. Even if habituation, careful study of a pitcher's tendencies and strengths, understanding the pitch count and the game situation give the batter a clue as to what to expect, and milliseconds to (unconsciously) adjust, all things being equal, the battle still favours the pitcher. Now add age. By 37, eyesight, visual processing and fast-twitch muscles are all in decline. Work out all you like. All it takes to turn a solid line drive into a weak, dribbling, worthless, foul ball is .01 seconds. And so, Derek Jeter, one of only 28 major league players in the history of a 125-year-old league to have collected 3, 000 hits, one of a tiny percentage to possess a lifetime batting average above .314, was hitting a meagre .260 through the middle of 2011 and ranked near the bottom of the league in statistics that speak to his ability to hit with power. Conscious adjustment is generally unlikely to make a palpable difference. Every pitcher noted Jeter's age, his average, his attempts to compensate – and throws the ball where he is now far less likely to hit it. If consciousness is best understood as a feedback mechanism, then Derek Jeter's most important feedback mechanisms – sight and fast twitch muscles – have begun to abandon him. Consciously, he knows that time is catching up. (As this book went through its natural editorial phases, Jeter managed to raise his hit average for the 2011 season to .298: a significant feat. And so, though he hit a measly six home runs, it's clear that Jeter still remains capable of making some adjustments. By 2012, he had largely righted his ship. He has maintained his ability to hit

for average, .321, though not for power. Jeter, it seems, did a little extra studying himself to tip the scales back in his favour at age 38.)

24. See S Dehaene & L Naccache 'Towards a Cognitive Neuroscience of Consciousness: Basic Evidence and a Workspace Framework' in S Dehaene (ed) *Cognitive Neuroscience of Consciousness* (2001) 1, 13.
25. See BJ Baars 'How Does a Serial, Integrated and Very Limited Stream of Consciousness Emerge from a Nervous System that is Mostly Unconscious, Distributed, Parallel and of Enormous Capacity' in GR Bock & J Marsh (eds) *Experimental and Theoretical Studies of Consciousness* (1993) 282. See also BJ Baars *In the Theatre of Consciousness: The Workspace of the Mind* (1997) 142.
26. S Dehaene & L Naccache 'Towards a Cognitive Neuroscience of Consciousness: Basic Evidence and a Workspace Framework' in S Dehaene (eds) *Cognitive Neuroscience of Consciousness* (2001) 1, 9–12. See also A Damasio *Self Comes to Mind: Constructing the Conscious Brain* (2010).
27. See G Strawson 'The Self' (1997) 4 *Journal of Consciousness Studies* 405.
28. At least part of the reason most of us continue to adhere to a conception of free will is that we view human behaviour in terms of 'agents' and other phenomena in terms of 'causation'. The former concept is a fundamentally ethical precept. It enables us to attach responsibility for actions to particular individuals and groups. The latter concept is a physical precept. It enables us to discuss and analyze regularities. The refusal to see human behaviour in terms of determined cause and determined effect is the only way in which a full-blown theory of free will gains any purchase. See JCC Smart 'Free Will, Praise and Blame' (1961) 70 *Mind* 291. These basic errors do not mean that the notions of praise and blame that attach to human action serve no purpose. It is simply not the purpose that we most readily suppose. They are primarily mechanisms for social control. Reward reinforces the inclination towards certain behaviour. Punishment creates disincentives. The efficacy of reward and punishment is not contingent upon the existence of free will.
29. The argument, as it is developed in Chapter 2, is not just about the meaning of freedom and the meaning of consciousness. Rather the argument is that the mistakes we make about the nature of 'consciousness' share a strong family resemblance to the mistakes we make about the nature of 'freedom'. See D Dennett *Sweet Dreams: Philosophical Obstacles to a Science of Consciousness* (2005). To correct a misunderstanding of the one may lead to a correction in a misunderstanding of the other.
30. Flourishing has always been at the heart of contemporary liberal constitutional thought. John Locke's *A Letter Concerning Toleration* (1689) speaks directly to one dimension of human flourishing: religious faith. Flourishing largely owes its current revival in the philosophical literature to the neo-Aristotelian turn of Martha Nussbaum's writings. See, eg, M Nussbaum *Love's Knowledge* (1991). The notion of flourishing defended in these pages is, perhaps, closest in form to the capabilities approach of more recent work by Nussbaum and development theory first expounded by Amartya Sen. See A Sen 'More Than 100 Million Women are Missing' (1992) 37 *New York Review of Books* 61; A Sen 'More Than 100 Million Women are Missing' (1992) 367 *The Lancet* 185; A Sen *Development as Freedom* (1999). Sen contends that the conditions for flourishing – an open and democratic society based upon dignity, equality and freedom (in the language of the Final Constitution) – are, rightly understood, meant neither to achieve definitive outcomes nor to prescribe a univocal understanding of 'the good'. What these semi-covalent values do require – as conditions for flourishing – is a level of material support (eg, food) and immaterial support (eg, civil liberties) that enable individuals to pursue a meaningful and comprehensive vision of the good – as they understand it. Sen *Development* (supra) at 75.
31. See D Dennett *Freedom Evolves* (2003).
32. S Woolman '"I am Large": Sachs, Whitman and Democracy' (2010) 25 *SA Public Law* 58.
33. J Schedler 'The Efficacy of Psychodynamic Psychotherapy' (2010) 65 *American Psychologist* 98, 98 ('Empirical evidence supports the efficacy of psychodynamic therapy. Effect sizes for psychodynamic therapy are as large as those reported for other therapies that have been actively promoted as "empirically supported" and "evidence-based." In addition, patients who receive psychodynamic therapy maintain therapeutic gains and appear to continue to improve after treatment ends.') See,

especially, F Leichsenring & S Rabung 'Effectiveness of Long-Term Psychodynamic Psychotherapy: A Reply' (2009) 301 *Journal of the American Medical Association* 932; F Leichsenring & S Rabung 'Effectiveness of Long-Term Psychodynamic Psychotherapy: A Meta-Analysis' (2008) 300 *Journal of the American Medical Association* 1551. But see BD Thombs, M Bassel & LR Jewett 'Analyzing Effectiveness of Long-Term Psychodynamic Psychotherapy' (2009) 301 *Journal of the American Medical Association* 930 (Criticizing the methodology of the Leichsenring/Sabung study.) Of course, laying down new tracks does not mean the current winner remains the dominant dispositional state. As Dennett notes, Driver and Vuileumier's work on 'the fate of extinguished stimuli shows that "multiple competitions" … leave not only singles winners but lots of powerful semi-finalists or also-rans, whose influence can be traced even when they don't achieve the canonical – indeed operationalized – badge of fame: subsequent reportability (consciousness)'. D Dennett *Sweet Dreams* (2005) 139–140 citing J Driver & P Vuilleumier 'Perceptual Awareness and Its Loss in Unilateral Neglect and Extinction' in S Dehaene (ed) *The Cognitive Science of Neuroscience* (2001) 39. Indeed, after years of therapy, these regularly contested elections are what 'conscious experience' feels like. On some days, the neuronal tracks laid down at infancy, and later during a period of physical desuetude of varying degrees of severity, can make life feel overwhelming. So it goes. However, after years of cutting edge medical treatment, continued rehabilitation and grit and determination, other days approach normality and last for longer fed by the recognition that my current level of disability does not mean that small tasks and large projects cannot be pulled off.

34. D Campbell 'Blind Variation and Selection Retention in Creative Thought as in Other Knowledge Processes' (1960) 67 *Psychological Review* 380.

35. See KM Kim 'DT Campbell's Social Epistemology of Science: Vicarious Selection, Epistemological Fallabilism, and Sociology of Scientific Validity' (1997) 3 *Evolution and Cognition* 75; KM Kim 'Nested Hierarchies of Vicarious Selectors' in C Heyes & D Hull (eds) *Selection Theory and Social Construction* (2001) 101. See also HJ Eysenck 'Creativity and Personality: Suggestions for a Theory' (1993) 4 *Psychological Inquiry* 147.

36. See G Cziko 'Universal Selection Theory and the Complementarity of Different Types of Blind Variation and Selective Retention' in C Heyes & D Hull (eds) *Selection Theory and Social Construction* (2001) 15, 18. See also D Campbell 'Evolutionary Epistemology' in PA Schlipp (ed) *The Philosophy of Karl Popper* (1974) 421.

37. FA Hayek 'The Use of Knowledge in Society' (1945) 35 (4) *American Economic Review* 519, 520. See also FA Hayek 'The Results of Human Action, But Not of Human Design' *Studies in Philosophy, Politics and Economics* (1967) 96, 97.

38. Sunstein's (public) turn appears to begin with a study published in the *University of Virginia Law Review* about how initial political differences or similarities of three judge panels in US Circuit Courts led to different kinds of decisions and extremely different kinds of judgments. The differences did not turn on deliberation as much as the predispositions of the judges and the tendency of personal biases to be reinforced by like-minded judges and to be challenged (and diminished) by judges of different political stripes. A panel made up entirely of judges appointed by Democrats tended to produce quite progressive decisions. A panel made up entirely of judges appointed by Republicans tended to hand down quite conservative judgments. However, decisions handed down by panels made up of both Democrats and Republicans, in 2 to 1 break-downs, tended to be more moderate in outcome. See C Sunstein, D Schkade, & L Ellman 'Ideological Voting on the Federal Courts of Appeals: A Preliminary Investigation' (2004) 90 *University of Virginia Law Review* 304. See also C Sunstein, D Schkade, L Ellman & A Sawicki *Are Judges Political?* (2006).

39. Sunstein *Infotopia* (supra) at 11. In their interesting thought experiment on giving voters a day to discuss issues and candidates, *Deliberation Day* (2004), Ackermann and Fishkin do not pay sufficient attention to the limits of such Socratic interaction. The real value of such interaction likely lies in the greater normative legitimacy that flows from participation in such a deliberative practice. As any professor can tell you, students – like the voters in whom Ackerman and Fishkin place such

faith – are often great at articulating their opinions, but quite limited in capacity when it comes to absorbing the points being made by others. Drawing out opinions is not enough – some form of mediation is necessary. (Or at least that is what I tell myself before and after class.) Thaler and Sunstein's 'choice architecture' constitutes but one form of such mediation.

40. Ibid at 14. See also S Woolman, E Fishman & M Fischer 'Evidence of Patent Thicket Effects in Complex Biopharmaceutical Technologies' (2013) 53 *IDEA: The International Journal of Intellectual Property* 1. Eliot Fishman, Michael Fisher and I have identified similar kinds of failures in deliberation when it comes to patent thickets or anti-commons effects in the biopharmaceutical industry. Several reasons exist for the failure of perfectly 'rational' actors to deliver well-designed intellectual property to downstream markets: (1) high transaction costs, (2) the heterogeneous interests of rights holders, (3) cognitive biases of licence holders and (4) attributive biases of the participants. In sum, human beings generally tend, just like ordinary owners of upstream biomedical research patents, to overvalue their own contributions and property. See also SM Maurer 'Inside the Anticommons: Academic Scientists' Struggle to Build a Commercially Self-Supporting Human Mutations Database, 1999–2001' (2006) 35 (6) *Research Policy* 839; RR Nelson 'The Market Economy and the Scientific Commons' (2004) 33 (3) *Research Policy* 455; M Heller & R Eisenberg 'Can Patents Deter Innovation? The Anticommons in Biomedical Research' (1998) *Science* 280 (5364); OE Williamson 'The Economics of Organization: The Transaction Cost Approach' (1981) 87 (3) *American Journal of Sociology* 548.
41. R Thaler & C Sunstein *Nudge: Improving Decisions about Health, Wealth and Happiness* (2008).
42. Ibid at 3.
43. Ibid at 5.
44. Ibid at 11.
45. Thaler and Sunstein call their social theory 'libertarian paternalism'. First, the 'libertarian aspect of our strategies lies in the straightforward insistence that people, in general, should be free to do what they like … . When we use the term libertarian to modify paternalism, we simply mean liberty preserving'. Ibid at 5. Second, the 'paternalistic aspect lies in the claim that it is legitimate for choice architects to try to influence people's behaviour in order to make their lives longer, healthier and better. In other words, we argue for self-conscious efforts, by institutions in the private sector and also by government, to steer people's choices in directions that will improve their lives. … Drawing on some well-established findings in social science, we show that in many cases, individuals make pretty bad decisions – decisions they would not have made if they had paid full attention and possessed complete information, unlimited cognitive abilities and complete self-control'. Ibid at 5.
46. See D Halpern *Social Capital* (2005) 11–12.
47. A Baier 'Trust and Antitrust' in *Moral Prejudices* (1995) 95, 96, 98, 128–129.
48. See D Bilchitz 'Should Religious Associations be Allowed to Discriminate?' (2011) 27 *South African Journal on Human Rights* 219**.**
49. See S Woolman 'Seek Justice Elsewhere: An Egalitarian Pluralist Reply to David Bilchitz on the Distinction between Differentiation and Domination' (2012) 28 *South African Journal on Human Rights* 271.
50. R Putnam (2000) *Bowling Alone: The Collapse and Revival of American Community* 22–23. See also R Gittel & A Vidal *Community Organizing: Building Social Capital as a Development Strategy* (1998).
51. D Halpern *Social Capital* (2005) 20.
52. Lists of nouns and adjectives – culled from the social capital literature – also provide a handy way to distinguish one kind of network from the other. Bonding networks are often said to embrace parents, siblings, love, care (as well as the withdrawal of affection), neighbourhoods, workplaces, shared customs (as well as exclusion from the community), nation, religion, ethnic group, patriotism, loyalty, honour and trust (as well as excommunication or criminal sanction). Bridging networks are often said to encompass acquaintances, colleagues, shame, reputation, links, generosity, mutual respect, diplomacy, negotiation as well as wartime allies.

53. South African political scientist Ivor Chipkin has argued that social cohesion is essential for long-term economic stability in South Africa. See I Chipkin 'Social Cohesion as a Factor in Development' Symposium for Office of the President (11–12 June 2007); I Chipkin 'Social Cohesion as a Factor in Development' in K Gupta, G Svendsen & P Maiti (eds) *Social Capital, Volume II* (2008) Chapter 8. For another version of this argument, see I Chipkin & B Ngqulunga 'Friends and Family: Social Cohesion in South Africa' (2007) 34(1) *Journal of Southern African Studies* 310. Brahm Fleisch and I have offered a similar argument in a favour of viewing school governing bodies as a critical fourth tier of governance – critical in the sense that SGBs enable parents and learners to determine the shape of the school community and through collective action create a sense of community that heretofore did not exist. See S Woolman & B Fleisch *The Constitution in the Classroom: Law & Education in South Africa, 1994–2008* (2009). But see B Fleisch & S Woolman 'The Problem of the "Other Tongue": Official Languages, Equal Citizenship and an Integrated South Africa' (Legal Resources Centre Conference on Law and Education, November 2012, on file with author.)
54. Understanding social capital or associational life as generic terms is insufficient for the radical aims of this project. Bridges must be built between associations that wield enormous amounts of power and associations that do not. See M Edwards *Civil Society* (2004) 47 ('Large differentials in the power of associations to make their voices heard, advance their own agendas and consolidate their own interpretation of shared norms in the public sphere are the enemy of the good society, and of democracy. That is why reducing inequality is a crucial part of any solution to the civil society puzzle.') Powerful social networks with pernicious ends are the social capital equivalent of 'group-think' institutions that tend to produce biased or pre-ordained results. Neither experimentalism nor flourishing can occur within such frameworks.
55. The notion of an experimenting society and the social science that supports such a notion is developed at length in Chapter 3. It is largely parasitic on Donald Campbell's efforts to describe the role of the social scientist in constructing assessment criteria that would make the various experiments in an 'experimenting society' meaningful. See D Campbell & MJ Russo *Social Experimentation* (1999). These principles are consistent with the notions of legal and political institutional design expounded by Michael Dorf in his work on experimental constitutionalism. See, eg, M Dorf 'Legal Indeterminism and Institutional Design' (2004) 78 *New York University Law Review* 875; M Dorf & C Sabel 'A Constitution of Democratic Experimentalism' (1998) 98 *Columbia Law Review* 267.
56. See R Hamman, S Woolman & C Sprague (eds) *The Business of Sustainable Development in Africa: Human Rights, Partnerships and Alternative Business Models* (2008).
57. See M Dorf & B Friedman 'Shared Constitutional Interpretation' (2000) 2000 *Supreme Court Review* 61; S Woolman 'Application' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, OS, March 2005) Chapter 31.
58. See A Fung & EO Wright 'Deepening Democracy: Innovations in Empowered Participatory Governance' (1998) 29 (1) *Science & Society* 5; O Fiss 'The Supreme Court 1978 Term Foreword: Forms of Justice' (1979) 93 *Harvard Law Review* 1.
59. See S Woolman & H Botha 'Limitations' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, OS, March 2006) Chapter 34.
60. See J Klaaren 'South African Human Rights Commission' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, OS, December 2005) Chapter 24C; C Albertyn 'Commission for Gender Equality' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, OS, December 2003) Chapter 24D.
61. See S Woolman & M Bishop 'Education' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, RS4, December 2011) Chapter 58; S Woolman & B Fleisch 'Democracy, Social Cohesion and School Governing Bodies' (2008) 20 (1) *Education and the Law* 56; S Woolman 'Defending Discrimination: On the Constitutionality of Independent Schools that Promote a Particular, if not Comprehensive, Vision of the Good' (2007) 18 *Stellenbosch Law Review* 31; S Woolman & B Fleisch 'South Africa's Education Legislation, Quasi-Markets and School Choice' (2006) 24 (2) *Perspectives in*

*Education* 1; B Fleisch & S Woolman 'The Constitutionality of Single Medium Public Schools' (2007) 23 (1) *South African Journal on Human Rights* 34; S Woolman & B Fleisch 'South Africa's Unintended Experiment in School Choice: How the National Education Policy Act, the South Africa Schools Act and the Employment of Educators Act Create the Enabling Conditions for Quasi-Markets in Schools' (2006) 18 (1) *Education and the Law* 31; B Fleisch & S Woolman 'On the Constitutionality of School Fees: A Reply to Roithmayr' (2004) 22 (1) *Perspectives in Education* 111.

62. See K McLean 'Housing' in S Woolman & M Bishop (eds) *Constitutional Law of South Africa* (2nd Edition, OS, July 2006) Chapter 55; K Rust 'No Shortcuts: South Africa's Progress in Implementing its Housing Policy, 1994–2002 (Institute for Housing of South Africa, 2003)(Manuscript on file with author).

63. Indeed, Baars recognizes that the notion of a 'theatre audience' is far too passive to capture the engagement various parts of the brain and neural processes will have with the conscious contents of the global workspace: '[T]he global workspace resembles more a deliberative body than a theatre audience. Each expert has a certain degree of "influence", and by forming coalitions with other experts can contribute to deciding which issues receive immediate attention and which are "sent back to the committee". Most of the work of the deliberative body is done "off-stage" (ie, non-consciously). Only matters of greatest relevance "in the moment" gain access to consciousness.' See Newman, Baars & Cho (supra) at 1132–1133. Consciousness is not a particular thing or even a particular kind of feeling, but rather the architecture that enables discrete and disparate neurological processes to solve a host of pressing (but also important medium term and long term) problems. Baars' depiction sounds virtually identical (with far greater understanding of the actual mechanics) to the description of consciousness (articulated in the footnote above) by William James over a century ago. Pragmatism describes the self, the social and the constitutional in a manner that James, Dewey and Pierce anticipated, but lacked the tools to investigate and to prove.

64. Blackmore *Consciousness* (supra) at 72.

65. Thaler and Sunstein (supra) at 9. Following the early work of Charles Taylor, I make the same argument at great length in Chapter 1B, fn 7.

66. Ibid (emphasis added). It doesn't take much to see that Thaler and Sunstein's emphasis on experience, good information and prompt feedback fits the experimentalist model that undergirds each section of the book and the work as a whole.

67. Not exactly true. You can listen for the ball entering the cup without looking. It's a common form of putting instruction and improvement. I use it. The reason: it keeps one's putter on line. But the example is close enough for our immediate purposes. As a golfer who uses the game as a metaphor for the relationship between theory and practice, I appreciate Thaler and Sunstein's acknowledgement of the role of 'feedback' in the game. But they obviously don't play the sport. Any golfer willing to put in the time to learn how to putt better may actually spend a day just working on the rhythm of the putting stroke or finding a comfortable way to hold the club that generates either a pendulum-like motion or a more classical motion in which the club moves on an arc. A golfer looking for consistency might actually spend time just rolling the ball in order to train herself or himself to do something better – and out of habit – under the pressure of actual play. Or she may spend a long session working with tools designed to ensure a pendulum stroke – and never hit a ball. Hopefully, I can nudge Thaler and Sunstein toward a better understanding of golf over the course of this book. But even here, they are close enough to the mark. All the practice in the world *without* a ball (and without watching how a ball moves on a green) will never make one a good putter. Following Wittgenstein, mastery of this technique is not reducible to a few rules or drills – it's about feel, feel that comes through tens of thousands of putts. Eventually, your body offers feedback for all the information required to make a good putt. (Feedback is also a common expression used to describe the ability of a golf club to inform the player about how cleanly or solidly the ball was struck.)

68. On the proximity of my account of flourishing to Thaler and Sunstein's commitment to libertarian paternalism, the following can be said. First, we all hold the preferences of individuals and groups to

be a primary source of value and concern. At the same time, as we recognize that such preferences are somewhat plastic, even when they make us who we are. Second, the paternalism Thaler and Sunstein defend is not dramatically different from my commitment to flourishing. I am interested, like Sen or Nussbaum, in ensuring that people pursue lives worth valuing: whether through the maintenance of existing arrangements, the creation of more hospitable social formations or the improvement of the material conditions of being. The 'paternalism' of which Thaler and Sunstein write promotes bounded 'choice'. It does not determine (entirely) the ends people pursue, nor does it control (expressly) the means for their realization. It does however coax them toward more optimal ends and the manner in which they pursue them. Neither Thaler or Sunstein speak of the preferences (they analyze) as beyond reformation. However, they do suggest that appropriate forms of information aggregation (or even, on occasion, reliance on people with greater expertise, say a chess grandmaster) have something to say about the quality of the lives that we pursue.

69. Markets often offer useful ways of aggregating information that would otherwise remain 'trapped' within individual or collective holders of both express and tacit knowledge. They do so in the form of a 'price'. The price elicits information about the value of a good by prompting individuals to purchase the good at a price (relative to comparable goods) that reflects its quality or the efficiency of manufacture. At the same time, producers of a good, armed with information about its construction and associated costs, receive immediate information about the 'value' of the good in the marketplace in the form of how many units purchasers wish to buy. Firms generally then have to work at producing or distributing the good more efficiently to get it to market at a lower cost or they may have to improve its quality in order to attract more consumers. Or they may create something new, that executes a task more effectively.

70. The relationship between a person's choice and their ultimate welfare is known as mapping. Price alone does not enable us to make optimal selections when the understanding of the various goods is clouded by technical information beyond our ken. Can a man with prostate cancer really understand the trade-offs to be made between three forms of treatment: seed radiation, surgery, and watch and wait? (My late father couldn't.) Given the close proximity in outcome, after some twenty years of study, one must ask what it means to take a 33% risk of incontinence or impotence from surgery and an increase of life expectancy of 3.2 years over the alternative benefits of radiation? Given that the 'watch and wait approach' does not have 'specialists' – a doctor with a clock? – how is a patient to determine its respective value and risks vis-à-vis the other treatments? In such circumstances – and cell phone costs in South Africa are currently a good example – a map ought to set out for the user exactly what the fees are for each use – an sms or an international call. Such information would, in turn, enable the user to choose the best plan and make the most efficient use of that plan. As most cell phone users in South Africa know, contracts rarely come with detailed maps and, more importantly, cell phone companies rarely provide information (maps) regarding the relative cost of each cell phone function. Indeed, the companies, along with an incompetent regulator (ICASA), have a vested interest in maintaining the ignorance of its users. Thaler and Sunstein claim that maps in such instances would force such information into the open, and allow users to make better informed choices. Put slightly differently, their choice would map rather directly on to their optimal 'consumption' experience.

71. Defaults are what we usually do – or put more strikingly, what we do when we fail to think critically or creatively about what we do. Defaults reflect instances in which the decision-maker does not truly engage in critical reflection on the choice or the challenge before her. Given how powerful defaults are in our lives – when we do not actively assess ostensibly competing outcomes or goods but simply do what we always do (watch the same TV programme or take the same route to work) – it is essential for 'choice architects' to set the defaults in the optimal fashion. That is, choice architects should set up their system in such a manner that the default – the failure to choose – actually results in the best possible outcome (in so far as the architect can determine it). As noted above, defaults are

a colloquial way of describing what the social science and philosophical literature call 'heuristics'. See G Gigerenzer 'Moral Intuition = Fast and Frugal Heuristics' (supra) at 1.

72. Feedback: in short, we want the systems we operate to tell us when we are performing well and when we are performing poorly. Feedback is a leitmotif of any experimentalist system – such as the constitutional experimentalism advocated in these pages. If we are to create a political system predicated on rolling best practices, then we need to know what works best over both time and in an array of different circumstances.

73. A constitutional experimentalist must expect that a system that allows for an array of alternative choices and solutions will produce erroneous (or suboptimal) results. We want to be aware of such results so that we do not repeat them in the future or when the stakes are far higher.

74. M Walzer *Thick and Thin: Moral Argument at Home and Abroad* (2002) 85.

75. Ibid at 98–99.

76. Walzer interestingly juxtaposes his thickly populated, divided self with what he calls the 'thin self' or the 'dominating self'. He writes: 'The religious or political fanatic is the obvious example: god-possessed or ideologically driven. … We must imagine it dominating other self-critics, repressing alternative possibilities within the self. No one growing up in the modern world is, as it were, linear before the fact. Only repression will make us so. I am not going to try to describe here the psychological mechanisms of repression. (I argued [elsewhere about ] … the role of fear in shaping a singular national identity.) I only want to insist that such mechanisms must be at work in every person whose "true character" or "normal condition" is singular and absolute. Within every thin self, there is a thick self-yearning for elaboration, largeness, freedom.' Ibid at 99–100. What is particularly apt, for the purposes of this work, is Walzer's connection of the divided critical self with the kind of roughly egalitarian, pluralist democracy defended in these pages. Walzer writes that 'divided selves are best accommodated by complex equality in domestic society and different versions of self-determination in domestic and international society. … Even in my normal condition, I hear voices, I play parts, I identify myself in different ways – and so I must aim at a society that makes room for this divided self'. Ibid at 103–104. Walzer's views are confirmed to a large degree by the neuroscience and the experimental philosophy canvassed in Chapter 2, and, in particular, the discussion of 'radically heterogeneous, naturally, determined selves' and a subset of that category, 'naturally determined selves'.