

## Governance for sustainability: not *Homo Unidisciplinus* but *Homes cultivibus*?

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### Abstract

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The explosion of literature on the most appropriate characterization of the human actor in the play of life is as remarkable as it is confusing. The prodigy certainly displays the general properties of structures generated by far-from-equilibrium dynamic evolutionary systems – as an emergent phenomenon. According to this generally accepted character of the system through which humans arose, and by which they are presumably still living and replicating, we should not expect to be able to deduce the critical properties and behaviours of the beast by reducing it to its more or less essential component parts. Rather we need to better understand the processes by which it came to exist. To do so, it may be helpful to reconsider the nature of the patterns its culture exhibits, as a taxonomy of the features and species of its institutions, which should include all the major disciplines by which we seek to examine and understand its behaviours. This paper begins this task, and advances a conjecture as to the evolutionary history of human culture, by which we may better understand why we do what we do, and thus, eventually, how we might come to do it better.

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**Key Words:** Evolutionary taxonomy, Culture, Human Natures.

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### **Introduction**

Jackson (2002) concludes a recent survey of evolutionary psychology with the following challenge to ecological economists.

“Ecological economics faces three possible avenues of response to this stark message (that sustainability does not come naturally). The first is to accept the worldview of evolutionary psychology and to construe its lessons as casting serious – possibly even terminal – constraints on the project of conceiving sustainable development. The second is to accept the worldview of evolutionary psychology, but to search within its constraints for ways of influencing human behaviour towards sustainable development. The third is to question (and perhaps reject) the epistemological basis of evolutionary psychology and the metaphysics that supports it.” (p. 299). “Ecological economics must take some position in relation to models of human behaviour. .. If one accepts the evolutionary psychology worldview, then there is clearly a difficult task ahead in formulating within it a concept of human and social agency compatible with sustainable development. If one rejects the evolutionary psychology worldview, then we are faced with what is perhaps an even greater task: namely, the establishment of an epistemological and metaphysical basis for a more optimistic view of human nature.” (p. 301).

Given the common acceptance of evolution as an explanation of the natural world, and given the acceptance of *homo sapiens* as an integral part of this evolutionary story, it is intellectually difficult, if not impossible, to frame the challenge in terms of Jackson’s third option. Furthermore, serious analysts of the socio-natural interactive system are convinced that the only way of representing this system is as a co-evolutionary system, where (e.g. Ehrlich, 2000) humans and ecologies are interdependent; they co-evolve with both their natures (ecologies) and their cultures. However, Costanza, 2001 (who regards Ehrlich’s exposition as “a ‘must-read’ for anyone claiming even a passing interest in ecological economics”) objects that Ehrlich “gives very little space in his book to the details of how cultural evolution works, and does not attempt to synthesise the research in this area in anything like the completeness with which he treats human

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genetic evolution.” But, Ehrlich and his supporters might well argue, the candidate social science theories and frameworks are just too great and disparate to allow such a synthesis, while Costanza does not indicate that there are any substantive attempts at such a synthesis.

Yet Jackson’s second option, which looks for development within evolutionary psychology and its constraints, is miss-framed – there are clearly other specifics of the species *homo sapiens* which cannot be ignored. Indeed, the growth in candidate theories and worldviews of human behaviour relevant to ecological economics amounts to a near explosion. As Jansen and Jager (2000) remark, editing a special issue of *Ecological Economics* devoted to “exploring interesting possible alternative descriptions of the human actor in ecological economics”: “the various disciplines studying human behaviour, like economics, sociology, anthropology, and psychology, are rather fragmented, offering distinct theories for every topic” (p. 307). It is readily apparent that *homo economicus*, while providing some important insights into human behaviour, is hopelessly incomplete (e.g. Gintis, 2000; Jager *et al*, 2000). *Homo politicus* (e.g. Faber *et al.*, 2002; Nyborg, 2000; Sagoff, 1988), *homo psychologicus* (e.g. Jackson, *op cit.*; Faber *et al.*, *op cit.*), *homo socialis* (e.g. Rudd, 2000), *homo legalis* (e.g. Scott, 1999), all have well supported claims to be represented in a more complete picture of *homo sapiens*.

Jansen and Jager (*op cit.*) conclude that “three factors emerge as important ingredients in more comprehensive descriptions of human actors in ecological economics models: multi-agent modelling; social interactions; mental models (differing world views of sustainable development).” (p. 309). Jansen and Jager (*op cit.*) re-frame the critical challenge for ecological economists as follows: “We hope the examples as described in this special issue will stimulate improvement of the representation of human behaviour in ecological economic models.” (p. 309).

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Meanwhile, both the United States and the economics profession are widely seen as the leaders and champions of the 'world common model'. This formula of liberal, free-trading market economies, coupled with universal suffrage and common law, might now seem incontestable - signaling the end of history? (Fukuyama, 1992, 1995a). If so, then how do we account for the frequent and persistent dispute of this model and with its sponsors? Our clients, our students, and our social science colleagues frequently contest the common model, especially economics and associated 'sound science', as being inhumane, unsustainable, or worse. Post-modernism is rife, whatever else it is. We might disagree fundamentally with post-modernism, but it requires convincing answers for enduring governance and leadership, to say nothing of sensible education. The principal post-modern notion - there are no facts: all realities are merely conceptual or social constructs, and thus subject to inevitable and continual re-interpretation and dispute - is an alternative theory: it all depends.

Policies (and, equivalently, business strategies) are the outcomes of these disputes and associated negotiations. The fundamental aim of policy is to generate a consensus for and pattern of social and organizational authority. Such a consensus necessarily implies a 'meta-narrative' of some form - a story, as a common understanding of the way the world works, notwithstanding the postmodern view that such metanarratives are merely figments of overheated imaginations (e.g. Midmore, 1996). It is these stories that provide policy or strategy with its coherence and legitimacy (or not). Clearly, at least the economic part of our present common model story has not yet achieved this consensus. Perhaps it cannot (e.g. McClosky, 1983; Randall, 1993; Bromley, 1997). For post-modernists, our common model is either a chimera, or else a mere facade for ulterior, even malignant motives. But, as Tweeten and Zulauf (1999) recently remark, (p 1170) "postmodernism is the antithesis of the Anglo-American analytical thesis. Out of the

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resulting dialectical synthesis, however, an enriched new philosophy of science could, and we believe, will emerge.”

This essay is a response to the challenge of developing a more complete picture of *homo sapiens*, concentrating on the possible characteristics of the component specifics of the species (the multi-actors), their interactions and the world views associated with each discipline. The plot concerns the nature and evolution of social authority, as the fundamental basis for leadership and governance, and thus the foundation of our social systems and institutions. The characters are us, and the evidence is our history. The approach is deliberately economical: seeking, as parsimoniously as possible, to discern an underlying pattern to the behaviour and evolution of our major institutions. We deal in order with leadership, competition and governance.

### **Leadership: The nature of Social Authority.**

Authority is the capacity of ideas to influence and, in the limit, control our behaviours. Without a common idea shared between source and subjects, any authority (whether of theory, ideology, person, office or organization) is empty. Our working truths - our world views – are the ideas by which we govern and regulate our own (and, if possible, other peoples’) lives. How and why do we generate (never mind venerate) our authorities as practical, workable and acceptable sources of social truths?

Social truths are clearly of our own making. We may re-interpret the philosophical underpinnings of truth (see, as an economical reference, Edwards, 1967) for the notion of social truth as follows:

- a) correspondence: what will sell to constituents, either through market places or governing bodies, which establish the accepted *rules* of societies;
- b) coherence: what can be established beyond reasonable doubt through logic and science, which establish the *reasons* accepted by societies;
- c) performative: what are taken as articles of *faith*, as self-evident truths;
- d) pragmatic:

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the village, urban, or street *myths*: the habits and conventions inherited from the past and neighbours, without direct or explicit reference to either rules, reason or faith.

We persuade and convince ourselves of social truths through social transactions and negotiations. The principal forms of social transactions have already been identified by Boulding, 1973, echoed by de la Mothe and Paquet, 1996, and also, apparently unwittingly, by Strange, 1994, as: gifts from those who love us; tributes from those who fear us; or exchange with those willing to trade with us. In addition, though, many of our social transactions are practically autonomic: governed by habit, routines, customs and traditions. We use these four basic transaction systems in different mixes and balances, to govern and organize our businesses and societies.<sup>1</sup> How?

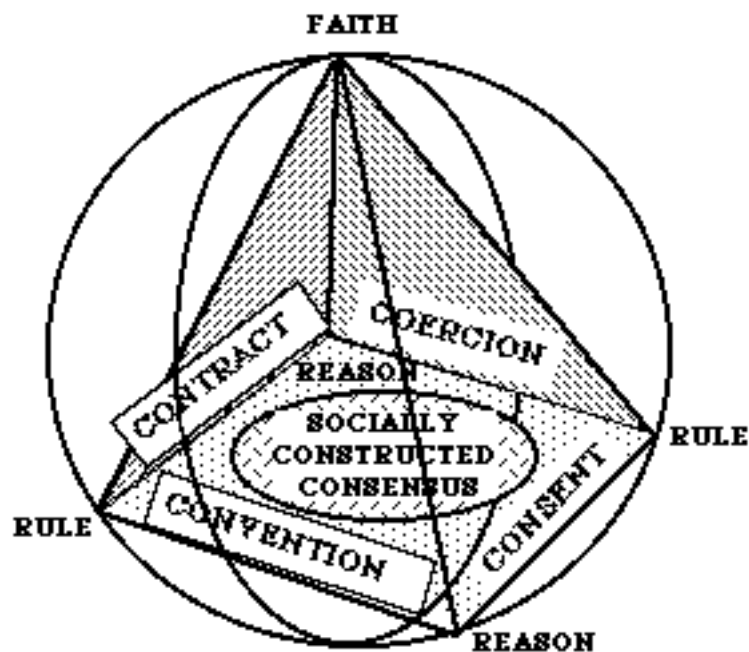
The four negotiation systems - consent, coercion, contract and convention - are each concerned with social interactions and transactions which co-establish accepted practices and more or less reliable expectations of mutual behaviours and responses. Each, then, helps to construct a concept of social truth - a picture of the way the world works and can be expected to continue working.

Each of these transaction systems (as common views of the way the relevant bit of the world works), is necessarily founded on and thus defined according to its reliance on the three cornerstones of faith, rule and reason - the triumvirate of firm foundations for our social truths. Unless agreeably based on these pillars, any society or community will, eventually, question and undermine the social organizers through which we generate consensus and social authority. The balance of reliance among the cornerstone will shape the organizing plane or negotiating agenda, and thus mould the reflection (and refraction) of social truth produced through each transaction system.

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This interactive system can be pictured with each of these four transaction systems as one face of a quadrilateral pyramid. The reflection of these four cognitive planes on the ground where we live then forms our socially constructed vernacular. We use this 'consensus' to build and grow our institutions - our social codes, realities and authorities (North, 1990). The outline logic is illustrated in Figure 1.

Figure 1 A logic of authority



Of course, the characters and the cultures of our particular communities and societies will affect the ways in which we construct our social realities. So, too, will the contexts and circumstances in which we find ourselves, as the product of our own unique histories. These ever-changing four Cs (character, culture, context and circumstance) will cloud and obscure the essential systematics, so the picture implies a continual spin and revolution of our vernacular authorities, as illustrated in Figure 1. Furthermore, the orientation of this construct depends on where you stand. Faith may not be your apex. As the postmodernists argue, give it any spin you like. And then see if you can get away with it.

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*So what?* Take the case of the World Trade Organization. Economic arguments are here characterised as lying on the north-west baseline. Economic faith consists of belief in the rules and reason of economic logic, which leads to competitive markets, free trade and voluntary contract, driven by profit, rent-seeking and, albeit enlightened, self-interest. This view of the world remains somewhat removed from a vernacular consensus, as well demonstrated in Seattle and since. There, the demonstrators exhibited a variety of perspectives more or less identifiable as being south-east of the establishment consensus, complaining that at least their consent to the WTO's largely economic perspective is not to be taken for granted. Meanwhile, international lawyers have us all caught in the vice between the north-east and south-west baselines - the interplay between coercion and convention, with consent and contract squeezed out of the consensus. Authority is contested. Which is socially catastrophic or entirely legitimate, depending on your perspective and position.

The point is, it is natural: authority, such as it is, has evolved to this current state. Winter, 1988, for one, argues strongly that (p 614): "Natural selection and evolution should not be viewed as concepts developed for the specific purposes of biology and possibly appropriable for the specific purposes of economics, but rather as elements of the framework of a new conceptual structure that biology, economics and the other social sciences can comfortably share." In other words, evolution is a sensible basis for a modern-postmodern synthesis. How, then, have our social authorities evolved?

### **The evolution of the Common Model**

Some now suppose that we are at a final cusp of institutional evolution - Fukuyama's (*op cit.*) end of history, with the common model as the final winner. However, substantiation of this claim requires a conjecture about the evolution of our institutions. We can liken North's institutions



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(North, 1990, 1991) to strings of Dawkins' and Blackmore's memes. Dawkins, 1989, coined the term 'meme' for "the idea of a unit of cultural transmission, or a unit of imitation" (p 192). Blackmore, 1999, develops this concept and its implications. Memes, then, are the social genetic codes of behaviour - the cultural equivalent of genes. Institutional and cultural evolution happens through selective reproduction of these memes and their associated memotypes. Like genotypes, they will betray their ancestry. Our history, then, should reveal the evolutionary taxonomy of our major institutional forms - the principal phyla of our social authorities. So, what does our history tell us? Being deliberately economical, I will be brief.

*An evolutionary history of our institutions: a thumbnail sketch.*

Non-living inanimate things simply exist and react to (and thus with) their environments and neighbours. Living systems are different. Living things *mind* what happens to them and *respond* to what happens to them, and generate an evolutionary system as a consequence (Capra, 1996). But human life not only minds and responds to what happens to it; it *cares* about, and *replies* to what happens to it - Max Weber's insight, in a nutshell (Weber, 1922, also Swedberg, 1998). Human life is proactive rather than simply a responsive process, because we perceive a 'self' as distinct from 'other', and thus necessarily consent to others' existence, likely responses, and thus *de facto* rights. Distinct social values thus emerge, and become codified in the emergent phenomenon of early tribal habits, rites and rituals. The innate and autonomic rules of biological survival and reproduction become augmented by conceptual codes and conducts, founded on rudimentary belief. Our early ancestors simply could not have survived and prospered (as they obviously did) in a fundamentally capricious and frequently antagonistic environment without both self-belief and, as a necessary consequence, social (and environmental) belief and trust. Our ancestral hunter-gatherer tribe, therefore, is our most primitive and deeply ingrained institution,

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largely based on faith and consent. Evolutionary psychologists are exploring the implications as we speak.

Of course, consent is not always granted, and the resulting conflicts generate new and competing communities, who fight, flee or submit when meeting with novel circumstances and competitors, much as their animal ancestors do. Consent (love) can often be displaced by hate.<sup>2</sup> Human life, however, has moved beyond simply caring and replying, which arguably many animal systems also display - dogmatic dogs are commonplace. Humans, however, develop cognition - conscious knowledge and understanding. Cognition involves *recognizing* social and natural environments and *relating* to and with this recognition through the development of inferential knowledge about ourselves, our societies and our environments. In short, humans begin to recreate and reconstruct their conflicts, (re) negotiating them, and sometimes managing to resolve them as a consequence.

Inferential reason is used to develop new and conscious social rules. We learned to herd, cultivate, domesticate and become social. We then elevate our inferential reason to a higher cognitive plane and create ideologies from our ideas. And we frequently take cognition, and the necessarily associated communication and interrogation, too much for granted. Diamond, 1997, for instance, argues persuasively that writing was a critical development of farming communities, allowing them to develop and transmit their cognitions more completely and accurately than word of mouth. But many of our current disputes still involve imperfect or differentiated cognition. Nicholson, 2000, for example, explains how many of our managerial conventions fall foul of our evolutionary history and the natural predispositions and attitudes it has generated, through which we still unconsciously filter and focus our signals and communications.

However, once we more or less master cognition, there now emerges the chance of a new phase. We can progress from 'simple' inference to *rationalizing* the way things are and *reasoning* that

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things could be different, by careful deduction. We begin to conjecture, test and invent. Science, and its necessary skepticism of cognition and inference, is born, at least under certain possibly rather specific conditions and circumstances (Diamond, *op cit.*). But, rationalizing and reasoning are more speculative and resource-intensive activities than apparently self-evident inference. They require cultivation as a preceding stage. To progress to this phase requires that we be pretty secure and relatively prosperous in our current existence, with enough spare capacity to devote time and energy to thought and reason. And it breeds a natural arrogance that we can know and do better.

Either scarce resources or community ambitions for more rapid growth will augment our now inherited curiosity, and mate it with either necessity or aspiration, to produce rapid invention. Human history provides ample evidence, strongly suggesting that rationalization and reason only take root and thrive in well-established, mature and relatively secure communities, requiring sustained self-belief as a precondition. Otherwise, societies collapse to tribes - the “Dark Ages”. Recent illustration in parts of the former Soviet Union, and elsewhere, is all too clear to see.

### *The Birth of the Common Model*

However, success as a carefully reasoning society leads us to *expect* that things both can and will be better, and to *rely* on our abilities to make it so. Our institutions can now evolve to a recognizable modern market economy, expecting and relying on outcomes through contracts and formal exchange; specializing, trading and re-inventing (echoing both Weber and Adam Smith). However, as societies become more inventive, adaptive and responsive, so they become more complex and latently chaotic than before.

The diffuse authority of the ungoverned market economy is typically insufficient on its own to be socially sustainable, for two key reasons. First, the long arm of the law is necessarily attached

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to the invisible hand: to protect the specie; to enforce market contracts; define and protect property rights; and outlaw theft (e.g. Bromley, 1997). To implement and enforce contract authority, some government must *coerce* society to conform to social laws and choices. As Dunn (1999) observes: “*coercion* is the core of states.” To be sustainable, such coercion requires that the *requirement* for regulation, law and order in society be accepted and legitimised by the governed.

Equal first, our expectations are frequently frustrated and our reliance misplaced, so we seek redress. We try to alter and manage the capricious and seemingly arbitrary distribution mechanisms of the market to achieve a more stable, sustainable and humane society. Capricious and arbitrary? How many Gates are never opened because of bad timing or misplacement? Our economic theory cannot explain initial endowments of wealth and capital (of all forms). Our theory relies on the continual pursuit of profit and rent, and on the happy accidents of well-fitted inventions, each leading to ‘temporary’ accumulations or differentiated distributions of wealth, which become augmented by life-cycle and inheritance effects - the accidents of birth.

In short, we get to choose whether or not to accept the social outcomes of atomistic trade and exchange, and its associated income and wealth distributions. These choices are necessarily made through the coercive state apparatus. We inevitably *concede* the power to make social or communal decisions (such as the definition of property rights) to some formal social authority: our government. And, for the state to be sustainable, we necessarily have to *respect* this authority and its arbitration of disputes. Williamson, 2000, p 598f, notes that the market theory of property rights, following Coase, needs to take account of the costs and difficulties of organising and implementing the associated transactions. However, these theories necessarily presume that the arbiters and organisers themselves have the confidence and trust of the people involved,

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otherwise neither the rules of the game, nor its various plays, will be legitimised by the participants - the precise complaint of the Seattle protesters.

The methods we use for legitimising social judgments, rules and procedures are evident in our histories. We either more or less willingly submit to autocracy or plutocracy. Or we try to erect a benevolent dictator, and submit to the resulting bureaucracies. Or, perhaps in desperation at the failures of these attempts, we turn to the conventions and constitutions of democracy, and submit to the power of the majority and popular opinion, as filtered and compounded by our ruling parties.

Whichever we choose, the result is an inescapable and concrete mixture of the contract economy and conventional state, underpinned by the circular economic flows and stock accumulations, and their unavoidable mechanics. This concrete necessarily requires the steel reinforcement of public acceptance of coercion - the laws and regulations, the associated taxes and re-distributions - the mechanics of government; the formal and constitutional institutions - the procedures of the state. The common model is born: founded primarily on contract, convention and coercion.<sup>3</sup>

Societies that have reached and more or less matured into the common model stage, however, are convinced that to revert to earlier forms of institutional arrangements are necessarily retrograde. They thus seek to persuade, bribe, and if necessary and apparently affordable, coerce, other (typically materially poorer, and perceived as more primitive and backward) societies to grow up and behave. They are obliged to become the world's policeman and judge. They frequently appear impossibly arrogant, paternalistic or dictatorial in so doing.

Much of the frustration with our modern mixed economies stems from the realisation, conscious or not, that nothing serious can be changed in this complex and interactive amalgam without bringing into question major adjacent and related parts. Institutional change and progress tends to

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ossify for fear of the genuine distrust and uncertainty of revolution. Consequently, public relations and presentation takes over from public participation and substance, as is evident in many current policy debates and exercises of democracy. As Arrow predicts with the impossibility theorem of rational voting behaviour, we go round in circles, while bemoaning the logic of the vortex.

We then revert, naturally, to earlier forms of social institutions - the tribes, communities and societies of our ancestry, but re-dressed and re-formed to fit with the state-economy-democracy triad. Or else, we fight or flee it, in traditional animal response. This, it seems, is as neat and concise an explanation as yet exists in the exploding literature of the twin features of our western common model - globalisation of market/state/law systems and fragmentation of societies and communities into (post-modern) tribes, complete with alienation and exclusion. But this cannot be the end of history. Evolution is an open flow system. The end of history in a flow system is, simultaneously and irrevocably, the end of future as well.

Williamson, 2000, notes that the foundations of our institutions - our informal constraints and habits - are typically taken as given by economists, and are assumed to change only very slowly. Quoting North, 1991, he asks: "what is it about informal constraints that gives them such a pervasive influence upon the long-run character of economies?" (p 111). Williamson goes on: "North does not have an answer to that perplexing question, nor do I" (*op cit.* p596). Yet it is exactly these long-run characters that pre-condition the successes and winning strategies (and, of course, the failures) under the common model. And it is the apparent character of the successful that encourages dissent and prompts dispute with the common model. The evolutionary outline of its ancestry explains its character, and also explains why the informal constraints of consent, cognition and care - the foundations on which the common model is built - are both so influential

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and also so difficult to change - they are the common model's history and ancestry. They are written in our memes.

### **The End of History?**

So what might the future look like? More sensibly, what would we like it to look like? Evolution is an open flow system, and as such, is chaotic and complex. It does not permit prediction or prescriptive management, though is capable of retrodiction, as the previous outline illustrates. It does, however, admit cultivation. Consider the world we apparently seek - one in which there is near universal assent to the common model, converting respect to reverence and providing the foundation of a sustainable common model empire - the very outcome so feared by postmodernists and fellow travelers.

Such unanimous reverence, even if achievable, is not likely to be persitent. As people devote time and energy to contemplation rather than the mundane issues of survival and prosperity, so some will come to *question* society's institutions and practices. Intelligent thought and *re-search* will be undertaken, in the hope of discovery of even more generally beneficial, acceptable and sustainable rules, procedures and institutions - the better common models sought by all of us.

So we begin to research social institutions (our rules) as well as physical and biological support systems, resources or tools. Economics literature is full of such efforts (as recent examples, see Fehr & Gächter, 2000; Ostrom, 2000; Manski, 2000; Thaler, 2000). This research necessarily raises questions about present conventions, and thus the governments, markets and legal systems through which these are expressed. But the evolutionary history has made our institutions ever more massive, thus requiring ever more effort and trauma (and thus wealth and security) to shift or change. In turn, these present systems can only be sustained through the imposition of particular ideologies and principles on the associated constituencies by current leaders and rulers,

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both economic and political - our current authorities. These people and their congregations will typically (as animals) defend and protect their power-bases. Institutional research or thought which does not fit with existing ideologies will tend to be resisted, underfunded or ridiculed - the fate of much postmodernism from the perspective of modern common model authorities.

It is possible, however, to suppose an ideal, though dynamic, outcome in which the population can become convinced that all is for the best in this best of all possible worlds. This, at root, must be the ultimate goal of post-modern thought, rationally intelligent criticism, deconstruction and discourse (if these are not contradictions in terms): to build and grow such a world. What other purpose to intellectual endeavour (other than entertainment or self-aggrandisement) can there be? In such an idealised state, one can imagine a fully committed population, willingly and enthusiastically merging its own self-interests with those of the community in discourse of near unanimous harmony - the communist ideal in a nutshell. Obviously, this is very hard, if not impossible to achieve. Though it still, presumably, is a sensible ambition, as envisaged in different forms by all our various religions. But even then, this is not the end of the story.

In such a condition, a significant fraction of the population would necessarily *imagine* how things might be even better and more harmonious, and would continually seek to *re-create* society and its environments, with the full support and commitment of the whole community in these endeavours. We might, then, be convinced and assured of the benevolence of our world - not as the best of all possible, but as capable of building and growing the best of all possible - secure in the knowledge and understanding of the ways in which our world works compared with all the possible ways in which it could work, and completely self-assured that we and our communities can continue to develop and seek to improve our lives indefinitely.<sup>4</sup>



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Such societies would be characterized by having a common faith in the ultimate benevolence of their communities, and an associated freedom to doubt (and hence question and seek to change) the rules, rulers and power-bases, in the common *belief* and *trust* that such activity will be regarded as perfectly legitimate and respectable, complete with open and transparent means of exercising such activities: in short, a careful and just charity. Lack of trust is widely considered to be an important problem for modern institutions, (e.g. Fukuyama, 1995b), which increases transaction costs and the probability of transaction failures. In this progression, trust, and an associated justice appear as emergent phenomena or responses only at the ‘climax’ phase of the evolutionary progression, itself only sustainable given the continuation of the supporting phases of evolutionary development. We could, perhaps, label such a climax institution as a sustainable culture. Heaven on earth? The final victory of a more common (and more complete) model, the real end of history? Or just the improbable and fragile foundation of a continued (if not more harmonious and sustainable) future?

### **Summary of the Story so far.**

The ‘natural’ progression of social evolution proposed here produces a taxonomy of the essential mechanisms of conscious institutional design - the more common model. The central proposition is that our history, and thus also our future, is explainable as an evolutionary process. There is an identifiable pattern to the flow of our evolutionary history. The structures generated by these flows are identified as the archetypal institutions of each phase or wave. The principles governing its operation are the major characters, responses and motives of people and their communities in each phase, which govern our social choices. The local process of each phase is identified as the result - which generates the archetypal negotiation or transaction system as the pattern of each phase. Table 1 summarises this conjecture.

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**Table 1      A Conjecture of the natural progression of institutional evolution**

<b>Institutional Type</b>	<b>Character</b>	<b>Responses</b>	<b>Result</b>	<b>Transaction System</b>	<b>Motives</b>	<b>Discipline</b>
<b>Natural</b>	<b>Mind</b> Neglect	<b>Respond</b> React	Adapt & Adjust	Food & gene chains	<u>Life</u> (death)	Ecology
<b>Tribe</b>	<b>Care</b> Fight	<b>Reply</b> Retaliate	Hunt & Gather	<b>Consent</b> ( <i>sentient</i> )	<i>Love</i> ( <i>hate</i> )	Anth'pology
<b>Community</b>	<b>Recognize</b> Ignore	<b>Relate</b> Tolerate	Cultivate & Tame	<b>Cognition</b> ( <i>Investigative</i> )	Inference (instinct)	Psychology
<b>Society</b>	<b>Rationalize</b> Reject	<b>Reason</b> Refute	Invent & Reconstruct	<b>Care</b> ( <i>Social</i> )	Charity (bigotry)	Sociology
<b>Economy</b>	<b>Expect</b> Exit	<b>Rely</b> Re-Invent	Specialize & Trade	<b>Contract</b> ( <i>Enterprising</i> )	<i>Barter</i> ( <i>autarchy</i> )	Economics
<b>'Ocracy</b>	<b>Coerce</b> Submit	<b>Require</b> Revere	Institute & Regulate	<b>Coercion</b> ( <i>Conventional</i> )	<i>Fear</i> ( <i>security</i> )	Law
<b>State</b>	<b>Concede</b> Lead	<b>Respect</b> Reign	Govern & Preach	<b>Convention</b> ( <i>Realistic</i> )	<i>Habit</i> ( <i>anarchy</i> )	Politics
<b>Empire</b>	<b>Question</b> Accept	<b>Re-search</b> Test	Exhort & Display	<b>Commitment</b> ( <i>Curious</i> )	Hope (despair)	Humanities
<b>Civilisation</b>	<b>Imagine</b> Play	<b>Re-create</b> Teach	School & Train	<b>Curiosity</b> ( <i>Artistic</i> )	<i>Fun</i> ( <i>spite</i> )	Education
<b>Culture</b>	<b>Believe</b> Doubt	<b>Trust</b> Legitimise	Commune & Cohere	<b>Charity</b> ( <i>Aesthetic</i> )	Faith (distrust)	Aesthetics

Each row (phase) of Table 1 can be thought of as an ‘institutional complex’, with any society made up of assemblies or constellations of such complexes. Each phase is thus best thought of as a ‘meme complex’ - a primary institutional memotype. Each can be thought of as a ‘conceptual organism’ or sub-species, consisting of interactive and mutually supporting systems of motivations, transactions, characteristics and responses. As such each is capable, within limits, of independent recognition and taxonomy. However, like individual organisms of any one ecosystem, all will exhibit local variation, while none is actually capable of independent existence. Each relies on the other for its continued sustenance and reproductive capacity, and their phenotypes adapt to their local circumstances and contexts - their local cultures. All evolutionary sub-systems are inherently and incurably relative. In the final column of the table, each phase is associated with its ‘natural’ social science discipline.<sup>5</sup>

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Even if roughly sensible, the table is misleading. In practice, any community (company, locality, nation, network) is an irreducible amalgam of all of these phases of social evolution - which can be pictured as the necessary spokes in the wheel of social development and progress. The trusting justice and charity of the last phase interlocks with the caring consent of the primary phase. If some spokes are missing or broken, the wheel will be misshapen and progress will be rough and bumpy, if not fatally short. Thus, according to this story, communism failed in practice because it failed to incorporate the key transaction systems of, especially, consent and contract. It was thus unable to develop sufficient commitment or to generate adequate curiosity or charity to be sustainable. Its skeptics were necessarily condemned as heretics; its charity fated to be cynical; its curiosity denied as anti-social; its demise inevitable. Are we so sure that we are really doing any better?

Furthermore, this 'wheel of progress' is organic, not mechanic. It is continually grown and cultured by its makers and participants - the people that make it up. Missing spokes will prompt participants to promote their construction and inclusion. Or, of course, missing spokes may also prompt people to run away and found an alternative society somewhere, or, worse, seek to destroy this one to re-construct another in its place.

Consider the Seattle demonstrations again. The demonstrators exhibited precisely the missing spokes in the present common model: limited convincing care for or recognition of the environment, the poor or under-resourced and disadvantaged; insufficient question of the partial logic and rules of contract and profit; little imagination of how things might be if the WTO ruled absolutely; little belief and trust in charity; and, perhaps above all, no obvious mechanisms for care and reply to the rules of the powerful. The impetus for the demonstrations pre-condition their character, notwithstanding complaints that the demonstrators misunderstand the real nature

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of the common model. In turn, the response of the defenders of the common model reflect the character of the established institutions and authorities. Any outcome, however, will necessarily involve some re-construction of the wheel to ameliorate and reconcile these necessary spokes and their spokespersons.

To be sure, displaying the conjecture in all its bold, simplistic and transparent assertiveness invites ridicule. No doubt you will quarrel with the particular words (and associated concepts) chosen here to outline the nature of human institutional evolution. However, semantics can only make sense when combined with an appropriate grammar. This grammar embodies the evolutionary rules by which the words (and associated institutions) are linked, inter-bred and evolve. In turn, both semantics and grammar are nonsensical without a sensible plot - a story of the way the world works and self-cultivates. The plot of this story has to provide the necessary and proper order in which the institutional phyla are related to and succeed each other in their natural order. Semantic debate is necessary, but not sufficient.

Furthermore, attempts to educate and inculcate the masses to the glories of the present common model will, according to this story, have the opposite effect from that intended - not to unanimous assent to the common model, but rather to its more thorough question and more rapid evolution. This is a counter-intuitive result, strongly suggesting that the logic outlined here is worthy of further consideration.

### **So What? Reconsidering competition**

The common model remains central to this proposed reconstruction of our condition - our history and the basis for our future. Since it is where we are now, how could it be otherwise? It has grown to its present (and, I argue, adolescent and primitive) stage through competition and selection between ideas and institutions. It is the best we have managed so far. It represents the

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set of institutions which have proved most robust, resilient and reproductive in the particular circumstances and contexts of its history. But it is difficult to see it growing up to become genuinely universal, short of a second coming. Unless, that is, we can become more careful about its further cultivation and replication. To do so requires that we reconsider the processes of competition which underly this cultivation and replication of our institutions.

The correspondence between natural selection and competitive economic behaviour is well recognized in the joint development of ecological and economic models. Both theories (or stories) explain how natural systems, which do not care, nevertheless contrive to be prudent by default - Adam Smith's invisible hand in a nutshell. The law of the jungle is not all red in tooth and claw. To be sure, there are brutal bits - eating and drinking are necessarily beastly for the food and drink. But, by and large, natural ecologies turn out to be highly efficient users of natural resources, displaying impressive cooperation, symbiosis, mutual interaction and constrained tolerance. Natural ecosystems specialize and trade (food and energy supplies) to a near unimaginable extent, colonizing and exploiting all available niches.

How do they do that? By economising on purposive effort to best effect - by evolving towards and innovating better fits with a local environment which is partly their own making. Isn't that exactly what markets are supposed to do? Isn't that how we now expect our political economies to work? Certainly, much progress has been made with the economics of public choice on the basis of self-interested competition and self-selection. We have arrived at our present common model precisely through such intuitive processes of institutional trials, selection and competition.

Exploration of the full implications of this perspective on competition is well beyond the confines of this essay. Notice, however, one important implication: the typical benchmark of pure economic competition is not a natural climax condition of the world. Level playing fields are

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not where it's at. Competition thrives on and self-generates diversity, not homogeneity. It generates differentiated products and built environments, not uniform commodities and fields. That is how selection works. Of course, we need common rules for our games of economic advancement - common laws for the respect of property rights and the honour of contracts. But which games we actually choose to play under these common rules are necessarily and naturally different, and also subject to continual change, development and experiment. The more differentiated and diversified become the products and the associated ideas, the more niches are opened up for competition. Monopolistic competition is the climax condition of the economics of our common model.<sup>6</sup> It is the product differentiation or quality dimensions that, in this story, enable elements of care and commitment to be incorporated within conventional contracts. Perfect competition with homogenous products is nasty, brutish and short, as marketing experts and consumers well know, and producers (as well as policy makers and analysts) ignore at their peril.

Both economic and game theories teach us that, given well-behaved games and rules, there is no real choice for rational actors - there is one optimum strategy. But human selection and competition is different: we think we get to choose. It is no accident that the commonly accepted general equilibrium theory of economics remains subject to the Cambridge controversy: that capital cannot be quantified independently of its price, and that, as a result, the theory is either tautological or inconsistent.<sup>7</sup> It is our social institutions that resolve this paradox. It is through these institutions that we legitimise the rents and the rentiers. We, in contrast to our biological ancestors, make our own rules of survival, prosperity and selection. We select which games we choose to play - communism, feudalism, capitalism, tribalism. Starvation is our choice, as Amartya Sen so cogently argues. We necessarily accumulate, exhibit and protect conscious social

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power - the ability to choose - unknown in the natural world. Neither natural selection nor pure markets admit internal command. Animal farms fail because animals cannot exercise social power sensibly, as George Orwell so vividly illustrated. Competitive markets are said to fail when power is concentrated and control is internalised. Animal farms can only work so long as any potential power is naturally dissipated and dispersed. But, then, the notion of a farm fails as well, since cultivation implies some control. This is the key and critical aspect of our free will - our collective control of, and thus responsibility for our own (institutional) selection criteria.

Most of the present debates about the existence and nature of free-will entirely miss this essential point. For instance, Blackmore, 1999: “there is no truth in the idea of an inner self inside my body that controls the body and is conscious. Since this is false, so is the idea of my conscious self having free will.” (p 237). But the whole point of being human rather than animal is that we exert collective control, whether conscious or not, over who survives and prospers and who does not. Our selection processes are no longer natural and exogenous, they are conscious and endogenous. And the ways in which we do this are embodied in our social institutions. These, in turn, are *emergent phenomena*, resulting from human interaction and transaction in a complex and dynamic process that is far from equilibrium (Capra, 1996, Deutsch, 1997). Such phenomena are not reducible to their parts and components, but only manifest as a consequence of the dynamic social processes themselves.

### **So What? Reconsidering Government and Governance**

Governments exist to exercise this social authority. They are a necessary co-invention with human markets, providing the social legitimacy of free will and associated choice of which transactions to accept or reject. Neither can exist without the other, so our synthesis is necessarily of public choice and political economy. Furthermore, governments naturally generate

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oppositions. We have learned that it is better (more efficient, if not more sustainable) to formalise and respect such oppositions, through the practice of democracy, than to condemn them to be covert. But democracy only seems to work when we feel sufficiently wealthy, secure and well-educated to tolerate overt opposition. Otherwise, we necessarily submit to (or seek to exert) some other form of 'ocracy.

Governance, in contrast, is how we choose our governors; how we erect our authorities and elect our leaders; how we breed and cultivate our ideas and institutions - our social selection criteria and rules for behaviour. Up to now, our history suggests that we have been lucky in allowing the social evolution of governance to take a natural, unmanaged course, apparently culminating in economic liberty, universal suffrage and democracy - the common model.

But now we have run out of room for mistakes. There is no longer uninhabited or sparsely populated territory to escape to or expand into. There is no away to throw to. We have to live with, and, if at all possible, from our own waste. And we cannot rule without also being ruled. We run the substantial risk of being ruled by an uninitiated and frequently mis- or under-informed majority, or of repeating the past in seeking to impose minority rules and rulers. Is the common model up to this challenge? Convention says yes: democracy and coercion are necessarily inefficient, but better than all the rest. And surely we can make them better. But to do so requires that we admit to their shortcomings and understand better what it is we are trying to do. Which is what?

### **The trade off between private and social interest**

In essence, we are balancing private and public interests, where each interacts with the other. We are driven by guilt (self-interest) and guilt (public interest), which are essentially the same, except that one has a you in it. Our human free will consists essentially in making this choice. And, the



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richer we become, the greater the scope and responsibility we have for this choice (see, Margolis, 1982).

Self-interests can be roughly characterised according to the simplistic Maslow hierarchy: physiological; safety and security; belonging.<sup>8</sup> Social science literature is more reticent about a corresponding characterisation of public or social needs.<sup>9</sup> Strange, 1994, as one of the thinkers to give socio-political objectives prominence, asserts four fundamental social goals: wealth, security, freedom, justice. However, this characterization appears in danger of mixing aspirations and fulfillment with underlying needs and motives. The security and stability of a social system is inherently dependent on the processes used to achieve balance between private and public interest, and the capacity of the system to resist internal fracture and external threat. In turn, freedom has to do with the extent to which private interests are given free rein within the social system. Since the fundamental role of (collective) free will is to achieve a sustainable balance between private and public interest, it seems sensible to characterize the goals of governance directly as a balance between the two (again following Margolis, *op cit.*).

Efficiency and effectiveness (the primary focus of mainstream economics) is a primary or primitive social need. Once secured, however, our history suggests that we become more concerned about justice and equity, even if only to assure the reproduction of our society without major internal fracture. The naive economic assumption that allocation questions can be divorced from issues of distribution, though powerful, is a critical shortcoming of present policy analysis and management strategy. Over and above justice, we become concerned about sustainability and coherence, as reflected in present heightened anxiety over the long-run sustainability of human organizations and exploitation of the planet's limited resources and waste-disposal capacity, not to mention continued search for the meaning of it all, and for a more common model. Our social

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goals, as Strange's, *op cit.*, quartet of wealth, security, freedom and justice, can thus be seen as the harmonious and simultaneous satisfaction of both self and public interests. Human progress, such as it is, can now be pictured as the growth of these two axes, and of the associated field over which we choose our governance systems, as illustrated in Figure 2.

**Figure 2. Conjecture of Transaction Systems & Private vs. Social Interests**

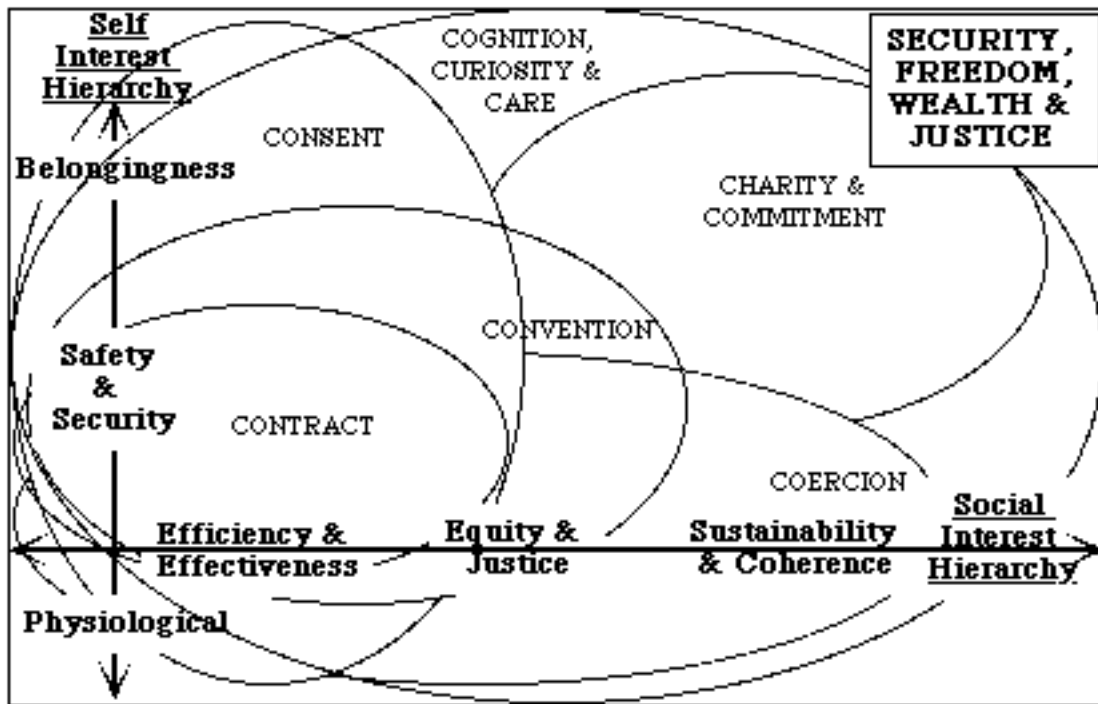


Figure 2 includes a conjecture about the relative efficacy of each of the major transaction systems in achieving our social goals. According to this picture, the present common model, dominated by contract, convention and coercion, has no hope of achieving social harmony. It should be fragmenting and decaying as we speak. Perhaps, as some say, it is and we haven't noticed. If so, how come it appears to be doing so well?

**The common model in practice**

Our common model in practice is still evolving - as it is bound to. Our markets are already learning that organizational survival and prosperity requires much more than simply convention,

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contract and coercion. The fashionable notion of stakeholding means, if anything, that successful commerce requires the continued consent, if not commitment and care, of all involved in the market chain, from raw material supplier through labour and users to final consumer, both present and potential. The final product is no longer, if it ever was, the only thing produced. Ideas about the way the world might be and should be are also produced and sold, inevitably and necessarily packaged with the products, and with their production and transaction processes. And it is these ideas that provide the basis for trust (or not) that commerce is behaving itself, being socially as well as privately responsible. So commerce is beginning to take care to foster and nurture these ideas. Self-interest is necessarily enlightened; if not, then it is ultimately self-defeating. Furthermore, the sustained exercise of market power necessarily involves its dissipation or regeneration, as engineers and physicists have long known.<sup>10</sup> The rules according to which commerce governs itself are continually adapting and developing. Multinationals can only get away with pursuing demonstrably anti-social practices and behaviours, if they are allowed to by their customers and labour forces as the Brent Spar and genetic engineering episodes well demonstrate.

Apart from choosing governments, and trying to seek out those governments we would prefer to live under, we also erect and subscribe to non governmental organizations to assuage our guilt and satisfy our human social instincts - not on the basis of contract but on the foundations of care, commitment and charity. The growth of 'clubs': charitable organizations, interest and pressure groups, NGOs etc. (and all the public-interest dominated and thus altruistic economic activity that goes with them) are expressions of the spokes and species of transaction which are missing from our common model. The richer and more secure we get, the more important and widespread

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these activities become. And the more they are likely to conflict with the established rules and rulers.

Majority rule, or the rules of the presently powerful, cannot resolve these differences, since such rules imply unanimity and homogeneity, denying the engine and motive power of evolution and selection. Both markets and governments can only go so far, and not far enough. We need more competition in our governance systems - more scope for differentiation and adaptation, and more freedom of selection, more freedom to choose. This is the principal point of this essay. We are missing the nature of the patterns that brought us to our current state - there is no common story to go with the common model. The collapse of the Berlin Wall is not simply a demonstration of the power of the market, of the selection process at work. It is, perhaps above all, a challenge to the western world to do better, and thus, necessarily, to understand better what it is and does, and, even more importantly, why.

### **So what, in conclusion?**

Our condition as cognisant and thinking animals condemns us to (or blesses us with) the capacity to choose, largely unknown in nature or in economics, both of which react rationally to external givens and laws, and generate natural selection as a consequence. Human selection, though, evolves to make these choices - to self-select. We do this with our governance systems - our institutions and common models. But the principles of selection still apply. In our human condition, the selection system operates with ideas rather than with physical entities. Those ideas that survive this competition, and happen to take root, we then make real as we seek to practice what we preach and turn our thinking into tools and rules.

But the process requires competition. The question of the sources and processes of competition both in and with the common model has become acute since the collapse of the Berlin Wall. Prior

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to 1989, the alternative was plain to see, and, if necessary, fight. Since then, the challenge comes from within societies subscribing to the common model. Divided, we fall. Integrated and harmonised, we might survive and even prosper.

We rather urgently need to develop manageable ways of fostering competition amongst our governance systems, and of developing trade, exchange and balance between them. Physics (as science) is only partly the answer. We also need metaphysics - a story that makes sense of the rules of grammar and the reason of semantics. And we have been here before. Tarnas (1991, especially p27ff) observes that the Sophists of ancient Greece mediated the transition from an age of myth to an age of practical reason. However, "In such critical circumstances, the philosophical denial of absolute values and sophistical condemnation of stark opportunism seemed both to reflect and to exacerbate the problematic spirit of the times" (*ibid.*, p 29). The Sophists' relativistic humanism, for all its progressive and liberal character, did not then prove wholly benign. Is it doing so now? Post-modernism is a strong echo of these former philosophers: a potential mediator between the age of theoretical reason and a potentially forthcoming age of genuinely practical rationality?

For, without meaning, any story or model is ultimately unconvincing and unsustainable. As soon as we seek to provide meaning, our interpretations will be contested and disputed - unless, that is, we can persuade ourselves to subscribe to the same story. Here, then and at last, is the role for diplomacy, leadership and statesmanship - to cultivate and grow the same essential story, with enough room for diversity and differentiation to permit dissent and continued evolution and experiment. Otherwise, we collapse to coercion and conflict, and the inescapable costs and inefficiencies of suppression and defence.

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This essay does not offer any practical solutions to our present difficulties, no doubt to the chagrin of dedicated practitioners. To expect it to is to misunderstand the nature of rational enquiry. Reason cannot provide answers on its own. It can only re-formulate questions. In so doing, it tells stories of the way the world works. We need such stories before we can come to sensible judgments about what to do next. The present common model story is incomplete and unconvincing. It cannot hope to breed the authority that its proponents seek. It can only breed conflict and further dispute. We need, rather urgently, to develop a better one. So, what does your story look and sound like? If this essay helps you to think about that, and thus be human - it has fulfilled its purpose. Finally, the only test of the conjecture advanced here is to expose it to an intelligent readership and invite criticism and competing explanations of our current condition. Let's see if we can tell a better story.

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### Footnotes:

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- 1 Manski, 2000, in addressing the issues of economic analysis of social interactions, deals with a much larger set of transactions or negotiations. These more detailed and specific interactions may, however, be thought of as species or genus within more fundamental or general phyla of transactions. In the interests of parsimony and of generality, this conjecture is confined to the primary divisions or sub-kingdoms of social interactions.
- 2 Incidentally, there is a curious anomaly in our evolutionary past. Our present human genetic diversity suggests a much shorter history than does our palaeontological record. The proposition advanced to reconcile this discrepancy is that some natural catastrophe(s) - the flood of the testament - severely reduced the population of our early ancestors, and that we descendants are thus the offspring of a much restricted sub-group. Our ancestors, as the victors and survivors, have inadvertently bequeathed us 'natural' feelings and dispositions of dogmatism and superiority.
- 3 You may object that consent is missing - consent being the point of universal suffrage and democratic control. I respond that one cross on, or hole partly in, one piece of paper every few years hardly qualifies as a transaction system for consent. Consent requires that the strength and intensity of preferences be weighed. Democracy cannot yet weigh votes, it can only count them, and cycles as a result, as Arrow showed and Florida illustrates. Convention is a more accurate description of our present democratic transaction systems, bound as they are in constitutions. By convention, we erect our leaders and parliaments to govern on our behalf, while retaining the rights to dissent from their edicts and throw them out of office when we have had enough of them. The ubiquitous resort to pressure groups, protests and social disobedience are the exact responses to be expected from a lack of general consent or to the means of continually granting it. If such protest does not reflect a widespread lack of consent, then it will wither and die - it will not command sufficient popular support to be tolerated. It is not obviously withering; the very opposite. And, if we are not sufficiently antagonised by our conventions to be antipathetic to them, we lapse into apathy. Which is a chronic condition of our present conventional democracies. So I stick to convention, and protest that it is not enough.
- 4 This notion seems very close to Sen's concepts of "capabilities" (e.g. Sen, 1977), which he has argued and promoted so influentially in the evolving practices and strategies of, especially, the IMF and World Bank. It also is a concise expression of the prevailing or governing culture of the Victorians during their hegemony over the western world.
- 5 Three major disciplines are missing from this table - Philosophy, Theology, Science. Philosophy is the study of rationality of cognition, inference and concept - and thus as the all-embracing discipline. If philosophy departments are shut, the lights go out and the heat of enquiry dissipates to entropy. Science (or theology), in this construct, is the implementation of philosophy. If science is shut down, the motors of human (as opposed to animal) life support systems die; unless theology takes its place.

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- 6 The same point is made, in a different way, by Antle, 1999, who reminds us that there are critically important quality dimensions to both demand and supply functions.
- 7 In fact, this criticism applies to all factors of production, and hence to all earnings and factor rents, since the choice of one factor only (capital) to accumulate residual returns (or profit) is essentially arbitrary.
- 8 The Maslow hierarchy is frequently regarded as overly simplistic. However, it suffices here for illustration of the argument. For a discussion of the psychological understandings of egotistical needs and self-interest, see, for example, Steers *et al.*, 1996, p 13ff.
- 9 The social psychology literature does deal extensively with 'helping behaviours', though these explorations are typically restricted to individual behaviours and actions towards other specific individuals, rather than with a generic notion of the public good. However ( Banyard and Hayes, 1994): "there is a growing body of evidence which suggests that altruism may be an important and frequent form of social behaviour which serves to ensure social cohesion" (p 477), while Margolis, 1982, develops an economical theory of altruism, and Frank, 1988, explores the roles of passion and emotion in shaping our transactions.
- 10 There are important implications of the second law of thermodynamics for our understanding of economic mechanisms (see Ayres, 1998, particularly with respect to the possible meaning of sustainable economic systems).